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1853.

Journal

ASSOCIATION MEDICAL JOURNAL,

EDITED FOR THE

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION,

BY

JOHN ROSE CORMACK, M.D. EDIN.,

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SOCIETY OF LONDON; MEMBER OF THE ACADEMY OF SURGERY OF MADRID; ETC. ETC.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. I.

LONDON: FRIDAY EVENING, JANUARY 7, 1853.

NEW SERIES.

FELLOW ASSOCIATES,

A FEW words explanatory of our editorial plans will be naturally expected, and are most willingly tendered. Yet, in offering them, we must be allowed to say, that it is not by present promises that we wish our scheme of management to be judged. We well know, that actual performance can alone afford a correct view of the scope and spirit of a literary undertaking, and that even a well drawn and truthfully intended prospectus often misleads the most attentive reader. For this cause, therefore, we now beg formally to enter an appeal from the present to the future.

Twenty years ago, THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION held its first meeting at Worcester, at the invitation of its founder, Sir Charles Hastings, who then and there rallied around him some of the most eminent physicians and surgeons practising in the provinces. The foundations were broadly laid upon the principles of justice, honour, and fraternity; and time has shown that they were as securely as they were wisely planted. During the long period which has elapsed since our Association was established, the medical profession has undergone great and striking changes in its educational and social aspects: the apothecary of the olden time has gradually been displaced in almost every town and village by the well-informed practitioner: the highest accomplishments are no longer the monopoly of a few; and there is scarcely a place in the kingdom in which even the poorest cannot command the services of men more competent to grapple skilfully with the emergencies which occur in the practice of medicine, surgery, and midwifery, than the foremost physicians and surgeons of no very remote a period. Along with the improvement in skill, there has also been an evident advance in the tone of the profession. While we willingly admit that this wonderful reformation has chiefly resulted from the licensing boards having step by step enlarged the course of study required from candidates, and rendered more searching the examinations to which they were subjected, we are equally convinced that the proceedings of the Provincial Association have in no small degree contributed not only to accelerate the happy changes to which we have adverted, but by manifesting them to the public, to give to the profession a social status and a political weight which it never previously possessed. At this moment, unchartered though we be, our influence is as powerful in high places as that of any of the old medical Corporations; and it is well known that no measure of medical reform could pass through Parliament, which was opposed by the Provincial Medical and Surgical Association.

From the first, but especially in later years, the Association has exercised an invigorating and purifying influence within its own ranks, and has often extended these benefits to the profession at large. Members guilty of irregular practice and unprofessional conduct, when discovered, have been energetically proceeded against; and some offending

brethren have been admonished, while others have been expelled, or have been allowed to resign to save themselves from this extreme penalty. The anniversary general meetings and the district branch meetings have greatly strengthened feelings of harmony and good-will, by bringing into personal contact brethren who would otherwise have remained widely separated from each other by space and the engrossing duties of practice; and in this way the pleasant friendships of youth and early manhood have been perpetuated, while many new and endearing ties of amity have been formed and cemented. The publications of the Association have also greatly promoted a spirit of scientific inquiry, original research, and accurate clinical observation. These, and such like, have been the noble objects for which the Association has uniformly contended, and in behalf of which we trust it may ever unflinchingly and zealously exert its power.

But it is not only in the provinces of England—the original sphere of its operations—that the influence of the Association has been seen: its operations upon professional circles, and upon the public mind, have recently been as powerfully felt in the metropolis, and in Scotland, as in the English counties. One, indeed, of the most signal benefits which the Association is now conferring upon the profession is the extensive union which it is establishing among all the loyal sons of physic throughout the British empire, who are willing to enlist under the catholic colours of legitimate medicine. Our Association repudiates all party, sectarian, and selfish objects; and in proof, as well as in pledge, of the respect which is paid to this maxim, it is only necessary to mention that our list includes members from all parts of England and Scotland, practitioners of every class, and professors of almost every school.

To many, we fear, the statement of facts which we have now made may have appeared unnecessary and tedious; but we have deemed it better to run the risk of being blamed for commencing our labours with an address distinguished chiefly by its dryness and common-place, than to be accused of failing to record at the very outset what we believe to be the principles entrusted to our defence, and by acting in accordance with which we desire to seek your approbation. And here it may be well to state, that we interpret the motion adopted at Oxford, in July last, in favour of publishing the journal weekly in London, in place of fortnightly at Worcester, not as an expression of opinion in favour of radical changes, as was feared by some, who, for a time, doubted the soundness of that decision: but simply as a strong declaration of the necessity which the progress of events had imposed upon the Association, of pursuing the line of duty which had hitherto been acted upon, with that augmented vigour which a wider sphere of action required—a vigour which could only be effectively developed by greater frequency of publication, and by the possession of a literary and scientific centre in London, where editorial resources are more abundant, more varied, and more easily available, than in any other city in the world.

While, therefore, you are this day addressed from another

locality, and by another representative, there is no call to transfer your allegiance to another cause. On the contrary, you are invited to rally more closely than ever around the same worthy banners under which you have for the last twenty years, so consistently, so gallantly, and so victoriously contended. You are invited to assist us, while we endeavour to defend and to extend the good cause; so that, ere long, our Association may embrace within its pale every legal practitioner of medicine who is adequately impressed with the awful responsibility of his calling, and who desires to see a strong and impregnable wall of partition built up between the sons of legitimate physic and those marauding bands of impostors, whose only real medical creed is lucre, and who, under various sectarian denominations, recklessly traffic in the health and lives of a medically ignorant, and therefore easily deluded population.

As regards the character and arrangement of the materials which it will be our weekly duty to bring under the notice of our readers, we purpose to speak in future articles. This much, however, we must now premise, that we intend to adopt, as nearly as possible, the following programme, which was published by the Journal committee appointed at Oxford.

- I. LEADING ARTICLES.
- II. ORIGINAL COMMUNICATIONS.
- III. BIBLIOGRAPHICAL NOTICES.
- IV. PERISCOPIC REVIEW.
- V. REPORTS OF SOCIETIES.
- VI. ASSOCIATION INTELLIGENCE.
- VII. NEWS AND TOPICS OF THE DAY.
- VIII. OBITUARY.
- IX. APPOINTMENTS.
- X. EDITOR'S LETTER BOX.
- XI. ADVERTISEMENTS.

We confidently hope to be able to make the Journal what it ought to be—a luminous and practically available epitome of the medical science and literature of the age—such as men of learning and leisure may read with profit and pleasure, and which will supply, in a well-digested form, to our more toilsomely occupied majority, all that they have time to peruse, or can conveniently procure.

Under no pretext whatever, by name, allusion, or innuendo, shall we ever discuss, in our editorial articles, the alleged misconduct of any member of our body. The Association has laws and ethical tribunals before which such charges can be promptly brought, and impartially investigated. Until an associate be actually convicted of unprofessional conduct, it is assuredly the duty of the editor of this journal to take no part, for or against him, and also to save him from the publication of *ex parte* statements, which have often injured even the innocent. When the reports of cases involving ethical questions are officially transmitted to us by the general or local secretaries, they will be printed in that department of the Journal which is devoted to "Association Intelligence".

If disputes should at any time arise regarding the administration of the laws, or regarding points of order in the conduct of public business, we shall (editorially) withhold all expression of opinion. In such matters, it is clearly the duty of the Association or of its Executive Council, and not of the Editor, to adjudicate.

The ORIGINAL CONTRIBUTIONS published in each number will consist of a conscientious selection from those

which are sent to us. If contributors concentrate what they have to say, by avoiding surplussage of words, and needless prefatory compilations, they will find that their papers are especially welcome. Elementary lectures we do not intend to insert. Short and pithy papers on practice and pathology are what we chiefly require; for it is only by being well supplied with such articles, that we can give to the original department of the journal the necessary elements of practical value and interesting variety. Able and elaborate articles we will do our best to print when we can; but we must frankly state that we do not think that long papers can be published with any advantage, except in occasional volumes, or what would perhaps be better, in periodical parts of Transactions. If five or six hundred members were voluntarily to subscribe a few shillings annually, such quarterly or half-yearly parts as we refer to, might be punctually supplied to them. In this way, there would be no additional tax levied upon those who did not wish the Transactions; and what appears to us a matter of great importance, the weekly journal would be kept free from matter which, though of sterling value, might not always prove of general interest.

The BIBLIOGRAPHICAL NOTICES will be analytical, descriptive, or critical, according to the nature of the work. It is not intended to publish elaborate essays under the name of Reviews.

The PERISCOPIC REVIEW will necessarily vary in value, according to the abundance or scarcity of materials: but it will represent all languages and all departments of medical science. We cannot better explain what we wish it to be than by quoting the following passage, and saying that we intend to urge strongly upon those who are to co-operate with us in preparing the periscopic articles, that the nearer they approach to Dr. Gooch's standard, the nearer will they attain complete success.

In the preface to his "*Account of some of the most important diseases peculiar to Women*", he says:—"Do not attempt to dispense with reading, but dispatch it as speedily as is consistent with accuracy. Keep a note-book, read the most esteemed original writers upon the most important subjects of your art, and while reading them, note down briefly those points which you wish to remember, so as to have no occasion ever to look into the book again. Provided you get the points of the work, the more briefly you do it the better: if you are skilful at this, you will find that a page will hold a pamphlet, and twenty pages will hold a bulky volume: if you read German, read Richter's *Bibliothek Chirurgisch*, for he is the greatest master of the art of condensed analysis. Thus, your manuscript volume will become a bibliotheca of your branch of medicine, and you will never afterwards have occasion to consult the books themselves. There are some writers whom it would be wrong to abandon thus; master minds, whom we return to again and again, not merely for the knowledge which they contain, but to observe how their minds worked, and the older we grow the fonder we become of them: such, in England, are Harvey on Physiology, and Sydenham on medicine; but few such minds appear in any branch of knowledge; and with most of them, when you have squeezed out the juice, you may safely throw away the rind."

In conclusion, it remains for us to say, that we trust that our scheme of management may not be judged of by this imperfect sketch, but by the scope of the annual volume. If we have written somewhat dogmatically, we have not

done so from an over-weening confidence in ourselves, but from a deep conviction of the necessity of laying down, at the very outset of our labours, the principles upon which we intend firmly to act. Mistakes—and perhaps serious ones—we may sometimes unwittingly make; but the history of every literary undertaking will bear us out in the assertion, that the occasional errors of judgment committed by a conscientious and unfettered editor, are far less injurious than the undecided tone, and uncertain policy, which arise from divided responsibility, even when that responsibility is shared among the ablest and the best of men.

Our determination is to do our utmost, and on that plea we crave your co-operation, your sympathy, and your generous indulgence.

JOHN ROSE CORMACK.

THE BENEVOLENT FUND.

THE recent accession of new members has been so great, that it would be wrong to allow the first number of the New Series of the Journal to appear without some allusion to the BENEVOLENT FUND—that jewel in the crown of our Association.

The Benevolent Fund was originated in the year 1835—36, and was finally adopted and recognised by the Association at its annual general meeting; it being justly argued, that the Association, without a Benevolent Fund, would be as defective as must be the character of every individual, who, in the arrangement of his income, does not make provision for that charity which is the “bond of perfectness”.

Cradled in adversity, the Benevolent Fund struggled on in comparative obscurity through the first nine years of its existence; but, in the last six years, under new auspices and a new committee, it has flourished, and produced happier results.

Its simple object is, to afford *temporary* relief to distressed medical men, their widows, or orphans; to step in where no other society can be available; to give that aid which shall raise the sinking practitioner from crushing difficulties—shall rescue the widow from indigence—shall snatch the family from starving—shall foster those provident feelings which secure independence to the broken spirit, and afford time for the restoration of the fallen fortunes of the distressed, by means of their own industry, directed by their restored energy and integrity of character.

The relief of the Benevolent Fund is confined to the regularly-educated medical man, to cases of actual distress, and to those of irreproachable moral character. Besides these, no other passports to its aid are required; and in cases of actual emergency, the Treasurer has the power to advance a small sum for *immediate relief*, without waiting for a grant from the Committee.

The average income of the Benevolent Fund, arising from *subscriptions*, during the first two years of its operation, was £22:10; that of the last year was £655. In the first eight years, sixteen cases were relieved; in the last year, aid was given to sixty-five cases; besides which, annuities were granted to six parties, at a cost of £105 per annum. The annuities arise from the interest of the accumulated donations, which is therefore certain and unchangeable. The invested capital of the Fund now amounts to upwards of £3,000. Thus the Benevolent Fund is supported by *donations* which accumulate, and by *subscrip-*

tions which are expended in the relief of temporary distress; thus affording an opportunity to every individual to select the mode of charity best suited to his inclination and his purse. The number of subscribers during the first two years was twenty-three; in the last year it was nearly *fourteen hundred*.

These contributions are perfectly *voluntary*; but we cannot take leave of the subject without reminding our readers that the Fund is an *integral* part of the Association; that its income is insufficient to meet the demands upon its purse; that it has an inalienable claim upon every member of the Association; and that it behoves *each*, when he remits his subscription to the general fund, to give also to the benevolent fund according to his ability, and according to the “riches of his liberality”. Subscriptions are at all times thankfully received by its valuable and devoted Treasurer, Mr. NEWNHAM, of Farnham, Surrey.

MICROSCOPICAL DISCOVERY IN ITS BEARINGS ON PATHOLOGY AND PRACTICE.

In these days there is little need to enlarge upon the advantages to be derived by pathologists from the use of the microscope. In this, as in other branches of study, knowledge is indeed increasing, the chief risk being lest it should outrun wisdom, and lest we should come to esteem the acquisition of facts more highly than the use of them. As each new El Dorado is opened up, men rush to the diggings, often much overvaluing the nuggets which they disinter; and now that “histology” has become a household word, and that every one has a microscope, the reputation of the instrument is in no small danger of suffering from the blind worship of its devotees. The mode of using it is explained in thick octavos; to the microscopical anatomy of man extensive works are dedicated; and the toilworn practitioner shrinks from the gigantic study of the *infinitesimal petit*.

In our student days we once were honoured by an invitation to a metropolitan Microscopic Soirée; we went high in hopes of greatly adding to our store of useful knowledge,—when lo! the entertainment consisted chiefly of an elaborate exhibition of many lice from various brutes: our own hair stood up for an instant with instinctive repugnance, and for that evening we sickened at the microscope. Our mature judgment indeed will not rashly cast a slur on the study of the *Pediculi*, which no doubt has many points of interest; but we venture at least to suggest that there are other subjects in which medical men have a deeper interest; and thus it is, that while we consider it an essential part of the plan of this Journal to exhibit the advances of microscopical investigation in their bearing on pathology and practice, we deem it needful so to sift and winnow the ample reappings of our microscopical friends, as that no one of our readers shall have reason to think that time wasted which he may have spent in the perusal of our summaries.

Medical men, who prosecute earnestly one special path, be it in the laboratory or through the lens, are apt to give to the result of their investigations more than its due weight in a practical point of view, and to become one-sided and bad practitioners. All things continually studied tend to magnify themselves unduly,—and this the more, the smaller they naturally are: and thus cells and fibres come to loom so

large, as to shut out from view the great principles of pathology, and the old diagnostic land-marks of our practical forefathers. We trust that in the papers which this article introduces, we shall be able to avoid these errors; and to connect the new facts and the new means of diagnosis which the microscope is ever opening to us, with the old truths, and with the old characteristics of disease.

Our plan will be briefly this—*To give from time to time notices, as succinct and clear as may be, of the progress of microscopical discovery, chiefly in its bearings on pathology and practice.* We may analyze the novelties which a new work contains, or we may group together a series of scattered facts on some particular subject, and if need be, make the matter plainer by woodcut illustrations; but our main object throughout will always be to connect the new with the old, and both with those principles of pathology and points of practice which may be rendered weightier and more precise by the additions which we notice.

Some may feel that these sentences speak but a cold prologue to this department of the Journal; but we hope that our readers will ere long admit that our summaries of microscopical discoveries can speak well for themselves. We think that their chance of acceptance will not be less because that they present themselves modestly, and because we do not declare that along *this path alone* must he advance, who would carry forward the flag of medical science, by rendering the discrimination of disease more accurate, or its treatment more successful.

MEDICAL HISTORY A NEGLECTED BRANCH OF MEDICAL EDUCATION.

OF the various improvements in the prevailing systems of medical education which are required, in order to secure the healthy advancement of our profession, none greater could be mentioned than that of affording to our younger brethren some ready means of obtaining an adequate knowledge of THE HISTORY OF MEDICAL SCIENCE.

It is at once a remarkable and a painful fact, that nine-tenths of the profession are almost wholly uninformed on this important subject. A few great men in the History of Medicine may, it is true, now and then be mentioned, as Hippocrates, Galen, Harvey, and Haller, but then they are only noticed in connexion with universal history, precisely as Plato, Aristotle, Bacon, and Franklin, are noticed; and in this sense, the names of both groups of philosophers are equally familiar to general and to medical scholars. In like manner also, a few leading facts are known, with reference to the labours of the illustrious medical men of past ages; but here, in most cases, such knowledge ceases. Estimates, as to the influence which these men have exercised on worldly matters in general, and on medical matters in particular, are never made, and what is still worse, a few of the more familiar names in the past records of medicine, are allowed to stand forward, as embodying all that has been useful, and all that has been great.

It seems indeed, as a rule, to which of course there are many worthy exceptions, that medical men of this country and this time, act on the strength of the modified proverb, "sufficient for the day is the knowledge thereof"; and thus we behold, that whilst they gather into their

mental garner, with determined eagerness, new harvests of unwinnowed information, they sensitively shrink from every scrap of antiquity.

Is there not something radically wrong in this line of action? Is it right that the ancient archives of medicine should be left unsearched? Are there no great truths to be learned from such venerable records? Is there not, in the total neglect of studies which relate to the medical annals of past times, a danger that the present age of medicine shall become conceited, self-complacent, and shallow? And, lastly, is it not very unjust to forget the labours of our great medical fathers, merely because those fathers are dead, and "unavoidably prevented" from being present to defend their rights? We think the true answer to each of these questions will occur to every intelligent and truthful reader.

But many will ask, How is the study of medical history to be introduced into medical education? and will inquire if the curriculum of the medical student is not already overcrowded with studies universally admitted to be essential? We could settle these objections at once by one short sentence—*let the period of medical education be made longer*; but as this is of course quite a wild proposition, very unpalatable to students, and still more unpalatable to boards of examiners, who banquet on the half-cooked medical dishes under which the table of society groans, we drop it with becoming haste, and observe that there are two periods when the knowledge, for the value of which we now contend, might be obtained.

First.—The study of the history of medicine could well be taken up at the time when youth is preparing to enter on his strictly professional course of study; while thus learned it would form a most useful element in what is called the classical or preliminary examination of students, now becoming so common. Secondly.—It might most usefully be obtained after the student has passed through every dreaded ordeal, and while he yet waits in his study ready to run a tilt with disease or death, whenever the gentle public may deign to call him out to contend as their champion against such formidable foes.

But what results are to follow the study of medical history, inquires the "practical man"? We have not now the space wherein to enumerate all the results, but we may glance at some of them. The power of making great generalizations in matters pertaining to medical science, is one.—A knowledge of the influence of medicine on the world at large, is a second.—The justice which should be rendered to our laborious medical predecessors, is a third.—The important lessons of honour, integrity, industry, and in fact of every virtue, which would flow from the study of the characters of those predecessors, is a fourth;—and so we could fluently proceed through many columns.

We advocate the study of medical history, then, and we shall in future articles continue to do so, since we are deeply impressed with the immense benefits to our profession which must flow from its general cultivation. We are, perhaps, the first medical journalists who have thus specially directed attention to the subject, but we have no misgivings as to the soundness of our views, or fears as to final results. If the attention of the profession be kept judiciously directed to the matter, we doubt not, that ere a quarter of a century has elapsed, the value of the study of medical history will be duly appreciated, and that though an embryo now, it will be "a giant in those days".

THE STUDY OF EPIDEMIC DISEASES.

AT p. 22 will be found a very important letter from DR. GAVIN MILROY, in which he suggests a method by which the organization of the Association might be made subservient to the elucidation of the Natural History of Epidemic Diseases. We cordially concur in the views so well expressed by DR. MILROY; and we take the earliest opportunity of stating, that it will afford us much pleasure to register, classify, and publish in a convenient form, the epidemiological and meteorological information which may be transmitted to us. At present we have not space to enlarge upon this subject; but we propose to return to it in an early number, when we also hope to be able to submit the details of a plan by which the proposal of DR. MILROY may be effectively carried out.

ORIGINAL COMMUNICATIONS.

OPIUM IN IRRITABLE AND ANÆMIC STATES OF THE BRAIN IN FEVER.

By HUMPHRY SANDWICH, M.D., Physician to the Hull General Infirmary, and Lecturer on the Practice of Medicine in the Hull School of Medicine.

"THE employment of opiates in cerebral affections," says Dr. Holland,* "is a question of much interest and various difficulty"; and "there is great scope for further research on this subject, as on all that relates to disorders of the brain, and a strong presumption that opium is capable here of larger and more beneficial application than has yet been given to it". His subsequent remarks, in the same article "On the Use of Opiates"; embrace, but are not restricted to, its use in fever, and may be consulted with advantage. Meanwhile, the profession owe Dr. Latham a large debt of gratitude for his masterly sketch of those irritable and anæmic states of the brain in fever, which demand the cautious use of this powerful narcotic. His brief but comprehensive paper on the subject, published twenty years ago,† is still a beacon to guide us in a path, which his observant genius first irradiated.

The class of cases of purely irritable states of the brain is to be discriminated, as Dr. Latham shows, less by any series of symptoms flowing from the brain, than from the single symptom of a state of protracted wakefulness. Nor is the wakefulness pathognomonic *per se*, but to warrant the use of opium, it must occur in combination with an irritable state of the nervous system, induced either by depressing moral agencies, or by the physically exhausting one of alcohol. The fever may be mild, and "exhibit a sort of contrast with the existing affection of the brain"; or it may correspond in severity with the sensorial disturbance up to a certain point, and then the symptoms referable to the brain outrun the febrile phenomena. In the latter case, though vascular over-action may have been kept in check by general or local bleeding, still the sensorial disturbance progresses. "As other symptoms are relieved, the delirium is even aggravated." We are thus presented with two forms of irritable brain in fever,—the one being marked by simple wakefulness with no other cerebral symptom, and the other by wakefulness coupled with symptoms of high sensorial excitement. Both varieties are "incident only to those, whose habits and mode of living have been calculated to do an abiding injury to the nervous system, and who have been long actually suffering from such injury".

The same acute observer, however, recognizes another variety of sensorial disturbance in fever, which is obviously associated with anæmia. We shall quote his words:

"Again, I have seen the sensorial affections incident to fever, which require opium for their cure, manifest themselves in another form. There has been high vascular action from the first; and large depletion has been required to subdue it and to guard particular organs, and especially the brain, from injury. Under such treatment, all has gone on successfully, and the

patient has reached the point of convalescence, with a soft pulse, a cleaning tongue, no pain, and refreshing sleep for two or three days; when suddenly (the tongue, the pulse, and all other circumstances continuing the same) some strangeness of manner has arisen, and then the wildest delirium, and then the unrestrained passage of the evacuations. I have known the transition from such a state of *convalescence* to such a state of peril, take place in a few hours; and I have known the patient again brought back to a state of convalescence in twenty-four hours by a moderate dose of opium. This is a rare form of disease, but one in which, when it does occur, opium is eminently indicated."

Now here was an anæmic condition of the brain, but not to so frightful an extent as in the case to which I beg leave now to call the reader's attention; and I may add, that its very extent suggested, not "a moderate dose of opium", but the liberal use of the remedy.

CASE. Mrs. T., a rather delicate woman, about thirty years of age, fell into fever during the second week of November 1848, when near the close of the third month of pregnancy. Her abode was in the vicinity of open and offensive ditches; and it was soon evident that the attack would prove severe. The case ran on nearly three weeks, with symptoms of grave and increasing disturbance of the sensorium, and other indications of low typhoid fever. By careful management, indeed, had she not been pregnant, the disease might probably have evinced no symptoms of more than usual danger. On the 2nd day of December, the irritation of the great nervous centres palpably interfered with gestation, and abortion was the speedy consequence. The process unhappily was accompanied with a very profuse hemorrhage, which ceased indeed with the expulsion of the fœtus and placenta, but which in twelve hours had brought the patient into imminent peril. Along with continued sensorial disturbance, there were the signs of incipient collapse, as manifested by a rapid and fluttering pulse, unequally diffused animal heat, and laborious respiration. Moderate stimulation by wine had been latterly allowed; but it now became necessary both to give ammonia, and augment the dose of alcohol. The extreme restlessness, subsultus, and other alarming symptoms demanded, however, a cordial, on which more reliance could be placed than even on the stimulus of brandy. Life, in short, was now in extreme peril. Calling to mind the marvellous examples of the virtues of opium in uterine hemorrhage *without fever*, as recorded by Dr. Stewart in the *Medico-Chirurgical Transactions*,* as well as its power to sustain life in the fearful struggles of angina pectoris, and reasoning from the analogy of its virtues *in fever*, when the circulation is at the same time depressed by antimony, as also in delirium tremens, when excessive and habitual intoxication may be presumed to have exhausted the vital energies of the brain, I determined on an attempt to steady the heart, restore the capillary circulation, and calm the irritation of the nervous centres by a full dose of opium. Mr. Millin, the surgeon with whom I was attending in consultation, fully concurred with me in these views. We accordingly gave a draught containing a hundred drops of laudanum. The effect justified our most sanguine hopes. Sleep ensued, the circulation rallied; every symptom of cerebral irritation subsided, fever broke up, and convalescence was speedily established.

The present short practical paper contemplates chiefly that condition of the brain in fever, in which an anæmic state of its vessels warrants us in availing ourselves of the stimulant properties of opium, with a view to maintain the equilibrium of the cerebral circulation. In such cases the use of the drug is salutary, chiefly as it favours an amount of congestion essential to healthy sleep. Not that its effects on vascular structure are its only merits; for it is fair to argue with Dr. Holland, that as "narcotic substances have effects, locally applied, on nervous sensibility", so also "there can be little doubt, that in sleep it is the same singular influence, extended more widely over this part of organization, and reaching through the cerebral part of it, the higher faculties of our being".† But in anæmic conditions of the brain in fever, the use of opium seems to be salutary, we repeat, chiefly as it favours an amount of congestion essential to healthy sleep. "It is certain, that the states of sleep and coma frequently graduate into each other, in such way as to show that the proximate physical conditions are nearly the same in both"; for "one degree of pressure seems essential to perfect and uniform sleep, while a greater degree, without other alteration of state, assumes more or less the character of disease".‡ While such changes of the circulation in the head are obviously

* Holland's "Medical Notes and Reflections", p. 436 (1839).

† Dr. F. M. Latham on the Use of Opium in Fever, in London Medical Gazette, vol. x, p. 10 (1832).

* Vol. iv, p. 358.

† Holland's "Medical Notes and Reflections", p. 445.

‡ Ibid. pp. 450-1.

concerned in influencing the functions of consciousness and volition, it is equally manifest that an anæmic state of the vessels is precisely the one calculated to disarm the narcotic of its dangerous properties. But for that anæmic state, the cerebral capillaries might be goaded on by a full dose of opium into fatal coma. The necessity of a healthy amount of congestion and consequent pressure, however essential to the production of sleep, may be inferred also from considerations regarding the nutrition of the organ. "The sleep of animals", Dr. Carpenter tells us, "consists not in a state of diminished energy of the nutritive functions, but in the cessation of the sensorial activity, dependent upon a suspension of the functional power of certain parts of the nervous system, during which there is reason to believe that the nutritive and reparative operations of those organs go on with even augmented rapidity".* The value of sleep in this view, and the importance of a healthy circulation of the materials for nutrition, considering the wasting effects of sensorial hyper-activity in fever, are self-evident.

On witnessing such striking displays of the remedial virtues of opium, as in the case related above, one is fain to break out with Sydenham "in praise of the great God, the giver of all good things, who hath granted to the human race, as a comfort in their afflictions, no medicine of the value of opium, either in regard to the number of diseases that it can control, or its efficacy in extirpating them!" After all, most of its value depends on the discrimination with which it is prescribed. When injudiciously administered, as in sthenic cerebral excitement, or in the improper arrest of diarrhoea in certain states of fever, it has been observed to produce phrenitis, epilepsy, and coma; so also, when indiscriminately prescribed in delirium tremens, its employment has occasionally been followed by apoplexy. Great and marvellous, therefore, as are the virtues of opium in a variety of diseases, and admirable as are its soothing qualities in several of the forms of cerebral disorder in fever itself, yet let no man venture to prescribe it for the latter (whether in large or small doses) in the dark or at random. It is a sharp-edged tool, and of such fearful potency, that, if it fulfils not a curative intention, it will probably destroy life. There is no instance, in the whole range of practical medicine, more imperatively demanding a sure diagnosis. In short, our warrant to prescribe it hinges on our ability to ascertain precisely that condition of the brain which alone will admit of its safe employment.

It was a rare sagacity which led Dr. Graves to employ tartar emetic in combination with opium in those cases both of idiopathic fever and delirium tremens, in which the narcotic would probably stimulate to over-congestion of the brain, but for the depressing action of the mineral on the heart and capillary circulation. This complex practice finds its parallel in the analogous operation of opium in states of anæmia in fever.

Medical science is more advantaged, perhaps, by defining the circumstances to which our known remedies are applicable, than by exploring the resources of nature for others. Not only is great discrimination necessary in deciding on the cases which demand the use of opium, but also in regulating the doses adapted to each variety. Little can be added to Dr. Latham's admirable directions. Our rule of conduct, indeed, is suggested by the degree of sensorial excitement. "Simple wakefulness may be gently lulled to sleep by a few drops of laudanum, but wild delirium requires to be mastered and (as it were) forced into repose by a much larger dose." Opium, however, goes much farther; and, therefore, a much less dose is required in quelling asthenic sensorial disorder, combined with fever, than when it exists alone. Five minims in the milder cases, and twenty in the graver, may be considered minimum and maximum doses in fever. Much, after all, must be left to our vigilance in watching its effects, and to our discretion in judging when to desist, and when and in what doses to repeat the remedy. There are yet other "cases where the indications for the employment of opium are doubtful". We shall describe the variety of sensorial disturbance in fever in Dr. Latham's own words:—

"Wild delirium, and long wakefulness, and a circulation weak and fluttering, seem to call for a considerable dose of opium. Yet, withal, there is a *certain jerk* in the pulse, so that we cannot help suspecting that the blood vessels have something to do with the sensorial excitement. Under such circumstances, I have certainly seen twenty minims of laudanum produce tranquil sleep, from which the patient has awoke quite a new man; but I have also seen the same quantity produce a fatal coma, from which he has never been roused."

Dr. Latham's recommendation, therefore, is, in so dubious a case, to avoid "striking a heavy blow in the dark", and to

administer a small dose at intervals of an hour or two, "so as to stop short of actual mischief at the first glimpse of its approach, or be led by a plain earnest of benefit to push the remedy to its full and consummate effect". Judicious as is this advice, we cannot but think, that on this mode of treatment of cases, in which, on Dr. Latham's own shewing, "the indications for the employment of opium are doubtful", any practice which aims at once to keep down vascular action and soothe the nervous system is a real improvement. And such, we need scarcely add, is the complex method of Dr. Graves.

It only remains that we should revert to the *anæmic* type of sensorial disturbance in fever. In that milder variety of it which, as described by Dr. Latham, we placed in contrast with a much graver form, "a moderate dose of opium", he tells us, suffices to change a state of peril to one of convalescence. But his remarks do not contemplate so frightful a form of anæmia in fever as that of which we have given an example, and which might result equally from a large intestinal, nasal, or bronchial hæmorrhage, as from uterine. He speaks of heroic doses of opium only "in extreme cases of delirium tremens", while twenty minims of the tincture, he asserts, are quite sufficient for the purpose of subduing "the very same symptoms, carried to the greatest extremity, when combined with fever." But while "a moderate dose" suffices to relieve the less urgent anæmic forms of the disease, the case related above as having occurred to my own observation, seems to sanction a bolder practice in the perilous cases of an extremely ex-sanguine condition of the brain in fever, coupled with the exhaustion resulting from protracted sensorial excitement.

ON THE USE OF CHLOROFORM IN OPERATIONS ON THE EYE.

By WHITE COOPER, F.R.C.S. Eng., Ophthalmic Surgeon to St. Mary's Hospital, and Senior Surgeon to the North London Eye Infirmary.

IN common with many others, I for some time hesitated before using chloroform in extraction of cataract, from a fear that the object of the operation might be defeated by the eye receiving injury during the return to consciousness, or by vomiting afterwards. It appeared to me, however, so deserving of a trial, that nearly two years ago I first employed it, and since that time have availed myself of it very frequently in operations on the eye, including sixteen cases of extraction of cataract, nine of artificial pupil, four of foreign bodies in the eyeball, and two of tumours in the globe, besides numerous needle cases. Several of the cases have been published in the *London Journal of Medicine*;* and among the gentlemen who witnessed the more difficult operations, I may mention Mr. Barnard Holt, Mr. W. F. Barlow, Mr. Holmes Coote, Mr. Charles Hawkins, Mr. G. Pollock, Mr. J. R. Lane, Dr. Toogood, etc. Having had this experience, I propose to offer a few observations, which may be found practically useful.

The advantages obtained by the use of chloroform in operations on the eye, are, a perfectly quiescent condition of all the muscles, whether of the globe or the lids, absence of congestion of the eye, and mental tranquillity for the patient. To the operator, the perfect repose of the eye affords a manifest advantage, the various steps of the operation being performed with as much facility as in a demonstration on the dead subject; the risk of prolapse of the iris (which is usually caused by muscular action) is greatly diminished, and the corneal flap can be accurately adjusted.

Under ordinary circumstances, the very act of raising the lid and fixing it, causes a sympathetic rush of blood to the eye; which vascularity is increased during the various stages of the operation. When the patient is unconscious, nothing of the sort happens. I have repeatedly completed the extraction, leaving the eye as free from congestion as before it was commenced; and the same has been noticed by gentlemen who have witnessed my needle operations at St. Mary's.

There is perhaps no operation more dreaded by nervous persons than that of extraction, from an exaggerated idea of the sensibility of the eye. The knowledge that the operation will be performed without the least suffering, inspires such persons with confidence; and the joyous state of mind which all patients experience on awaking from sleep and finding the operation concluded and the eye bound up, is highly favourable for recovery. And now as to the proceedings.

* Carpenter's "Principles of Physiology, General and Comparative", p. 78.

* "Cases of Foreign Bodies in the Eye", vol. iv, p. 301; "On Cysts in the Interior of the Eye", vol. iv, p. 787.

I strongly advise that in operations on the eye under chloroform, there should be at least one competent assistant besides the operator and the administrator of chloroform; each of these has his own department to engage his attention, and it is most embarrassing to have the patient partially recover and struggle just at a critical moment. This occurred in the first extraction under chloroform performed by me; and, as it was the first case of the sort in which Dr. Snow had administered the vapour, the patient had not a sufficient dose. It unfortunately happened that the gentleman who was to have assisted me was prevented keeping his appointment, but I imagined that the doctor and I could manage the lady ourselves: in due time, she appeared completely insensible, but just as the section was being satisfactorily completed, the patient threw her head on one side and tried to sit up; the consequence was, that the operation was impeded, considerable prolapse of the iris took place, and a closed pupil was the result.

The patient should be recumbent. In that posture he can rest quietly after the operation, and is more manageable during the period of excitement than when sitting in a chair. I have tried the administration of chloroform on a handkerchief, and by means of Dr. Snow's apparatus, and decidedly prefer the latter. When the handkerchief was used, it was in my way; and the fumes of the chloroform annoyed me,—matters of importance in such a delicate proceeding as extraction. A full dose of chloroform is necessary, and the patient should not partake of food for five or six hours prior to the operation; but he may swallow a few fragments of ice just before it is commenced, and again as soon as consciousness returns. This (which I believe was first suggested by Dr. Simpson of Edinburgh) allays any tendency to vomit. I prefer operating in the afternoon, as the soporific effect of the chloroform continuing, generally ensures a good night; but the hands must be secured, and the patient carefully watched, as under ordinary circumstances.

With regard to the operation itself, it is important to have the point of the extraction-knife as sharp, and the edge as keen as possible. If there be the least *hanging*, the eye will be pushed before the knife, from the utter passiveness of all the muscles, and unless the operator is prepared for this, there will be great probability of the counter-puncture being made too near the centre of the cornea, whereby the section will be too small.

During extraction, as ordinarily performed, the lid is dropped as soon as the section is completed, and a pause takes place to permit the eye to become quiet. Under chloroform this is unnecessary: there being no spasm, the curette may be used, and the cataract pressed out the moment the section is completed. When the lens has escaped, the eye presents a curious appearance, always supposing enough chloroform has been administered; the muscles being passive, the iris falls back in a concave form, and the cornea having no support, sinks, becoming as wrinkled as a shrivelled apple. The eye having been gently cleansed, and the lids dried with a soft rag, the upper lid should be lifted by the lashes and brought down over the cornea; then two broad strips of adhesive plaister should be crossed over the eye and cheek, a bandage applied, and the patient left quiet for half-an-hour or an hour, after which he can be removed to bed. When all fear of vomiting has subsided, the plaister may be taken off: but it must be thoroughly softened with warm water, and lifted with the utmost caution and gentleness, so that there be no dragging on the lids. The subsequent proceedings differ in no respect from those practised after the operation as ordinarily performed.

In these remarks I have especially mentioned Extraction, but the general directions are equally applicable to all operations on the eye; and I may add, in conclusion, that when operating on an eye in a state of inflammation, as in the extraction of a foreign body, a shot, a fragment of steel, or copper cap, the value of chloroform cannot be too highly estimated.

12, Berkeley Square, November 1852.

ON FIXED AND LONG-CONTINUED PAIN IN BONE.

By HENRY LEE, F.R.C.S. Eng., Surgeon to the Lock Hospital, Assistant-Surgeon to King's College Hospital, etc.

In the concluding volume of the *London Journal of Medicine*, I ventured to offer some observations on, and to relate some cases of, fixed pain in the tibia, which had been relieved by perforating the bone with a trephine. The cases appeared

naturally to divide themselves into two classes, namely, those in which the pain depended directly upon the pressure of confined matter, and those in which some other source of irritation, situated within the bone, had kept up a chronic inflammation of the part.

The following case, which has since come under my care, appears especially interesting, as partaking of both the above forms of disease; the pain having fixed itself in the part before there was reason to suspect the formation of matter, and having continued for some time after the pressure of the confined fluid was artificially relieved.

An apology will scarcely be wanted for drawing attention to the details of such cases, as the utility of surgical interference is far from being universally acknowledged. Even in a work of much authority, by a distinguished professor of surgery in Edinburgh, as late as the year 1847, we find it stated that the cases where the operation of trephining the tibia is necessary, must be extremely rare, as no case had presented itself to the professor's notice during a long and extensive practice.

CASE. During the last summer, a gentleman of a highly nervous temperament applied to me, having suffered, for between two and three years, very severe pain in his left leg. At that time there was an oval swelling over the centre of the tibia, evidently depending upon an enlargement of the bone; and about three inches lower down, was a second smaller projection, apparently of the same nature. The bone in both these places was very tender to the touch, and the upper enlargement presented at one point a sense of fluctuation, as though a small quantity of fluid were contained between the periosteum and the bone. The necessary examination of the leg was followed by a considerable increase of aching pain. When requested to point out the part where he experienced most suffering, he would pass his hand generally over the lower part of the tibia, but would not point out any one spot as habitually more painful than the rest. He however thought that the upper swelling was more sensitive at night, and the lower one during the day when the leg was hanging down. He stated, that twelve years previously, he had taken large quantities of mercury for an affection of the throat, which there was no reason to believe was of a specific character. At that time his mouth was kept sore for five months, and he took occasionally as much as twenty-five grains of blue pill a day. Six years after this he had the small-pox, which left him much debilitated.

In the year 1849, he became subject to a very severe cough, for which he consulted Dr. Golding Bird, and there was reason to believe that a small cavity had formed in one of his lungs.

During the early part of the following year his ankles became swollen, and a pain settled in his left shin. About a fortnight after the first appearance of the pain, he struck his leg severely. The pain then became suddenly increased, and continued without intermission for many weeks. At length, the pain in the leg subsided, and he passed three months in tolerable comfort; after this, however, all the former symptoms again returned, in consequence, as he supposed, of having taken a very long walk.

In the spring of the year 1851, the leg was struck a second time, and the pain then became of a much more severe character than it had previously been. From this period the pain was so severe as to prevent his sleeping at night. Between six and eight o'clock in the morning, the limb generally became bathed in perspiration, and he would then fall asleep. This was the only rest he got, except when under the influence of the iodide of potassium, which had been prescribed for him by Dr. Golding Bird. After he had taken five or six doses of this medicine, his pain was usually relieved, and he slept tolerably well; but as soon as it was discontinued, the pain returned with all its former severity. Not wishing to take the medicine unnecessarily, he tried more than once to do without it, and had, under these circumstances, passed as much as a month without any sleep, except the short nap that he got between six and eight o'clock in the morning. He was, therefore, driven latterly to have almost constant recourse to his medicine, and took from eighty to a hundred grains of it a month. At length he found, although the pain was relieved, that his gum-became spongy and apt to bleed, and in other ways it became apparent that the continued action of the medicine was exerting an injurious effect upon his system. It was under these circumstances that, with Dr. Golding Bird's concurrence, he came to me to ascertain whether any more permanent relief could be afforded by surgical means.

The existence of pain in the part previous to the reception of the first injury, the tenderness of the bone, and the evident

affection of the periosteum, rendered it probable that this was not an ordinary case of abscess in the tibia. Having shortly before had a somewhat similar case, in which the pain was relieved, although a very small quantity of matter was evacuated, I recommended that the tibia should be trephined.

The operation was accordingly performed on the 27th of September. The patient having been rendered insensible with chloroform by Dr. Snow, a trephine, five-eighths of an inch in diameter, was applied over the centre of the larger projection about the middle of the tibia. The surface of the bone was here found to be soft, but its substance was hard as ivory, and it was with much difficulty that the trephine was made to perforate it. The original cavity of the bone was found to be occupied by dense bony structure, so that a cylinder of solid bone, an inch in depth, was removed, without any cavity or cancellous structure being exposed. The centre of the portion of bone thus removed was found, when subsequently more carefully inspected, to be softened to a very limited extent.

A smaller trephine, three-eighths only of an inch in diameter, was then applied over the second projection lower down upon the tibia. The bone here was much softer, and before the instrument had penetrated half an inch, a small cavity was opened containing some thin brownish-looking matter. This cavity was examined with a probe, and extended a little way up the centre of the bone.

The smaller trephine was now again applied about midway between the two former openings. The bone here was softer than in either of the other situations, and the instrument entered its substance readily. It had penetrated about three-fifths of an inch, when a considerable quantity of reddish matter oozed up by its side, and the trephine entered a distinct cavity in the bone; a probe introduced through the aperture passed up to the neighbourhood of the first opening made by the larger trephine. This was therefore enlarged, and a communication established between it and the opening last made. The cavity exposed by the second application of the trephine appeared not to communicate with the other. Had it done so, the matter would have passed through it, and not have been forced up by the side of the trephine when applied the third time. The two collections of matter, in all probability, corresponded to the two distinct injuries which the part had sustained.

For some days after the operation, the patient suffered severe pain in the leg, but nevertheless occasionally got some natural rest at night. On the 2nd of October, he for the first time experienced an interval of complete ease. The pain, when it recurred, had now changed its character. It was rather an excessive smarting than the dull aching sensation formerly experienced.

On the 6th of October, the pain from which he had so long suffered had entirely subsided, but he complained of an increase of the smarting sensation upon the surface. He was directed to apply some flannel sprinkled with chloroform over the leg, but experienced little relief from its use. On the 7th, he had some remission from the smarting pain, but it returned again on the 8th. On the 9th, he continued tolerably easy, but the pain again recurred on the following day. On the 11th, a fortnight after the operation, he was free from pain, and slept well, although the parts were still tender to the touch. On the 19th and 21st of October, he continued free from pain.

This patient continued under observation during the month of November, after which he left town. There had been no return of pain at that time, the swelling of the leg had gradually subsided, and he slept soundly at night without any medicine. There was every reason to believe that he was permanently relieved of a complaint which had for so long a period caused him so much suffering.

In cases like the preceding, where a continued pain fixes itself in a bone, and where its nature cannot be satisfactorily ascertained from the symptoms, an exploratory operation may be necessary. The interior of the bone may be occupied either by pus, or by some more solid morbid deposit, or by scrofulous matter, or by a piece of necrosed bone. In such doubtful cases, I have been led to prefer, in the first instance, a trephine of a small diameter to one of a larger size. A portion of bone is by this means more quickly removed, and the opening made more readily heals. Should the first application of a small trephine not discover the disease, a second or a third opening may be made in the bone without inconvenience.

The accompanying wood-cuts (which were introduced to illustrate some other points, in a paper in the *London Journal of Medicine*) will show how advisable it may be that in some cases the crown of the trephine should be applied over a very

limited surface, and in others, how necessary it is to use the instrument a second time.



Fig. 1. Abscess in Tibia, opening into knee-joint.



Fig. 2. Abscess in upper end of Tibia, containing putrid pus and dead bone; trephined unsuccessfully. The cavity lined by a dense membrane.

In determining the precise spot at which the trephine should be first applied, the most projecting and most sensitive point is to be selected. But it will sometimes happen that a considerable portion of bone is equally enlarged, and that no one part is particularly tender to the touch. A slight increase in the temperature of the skin, which can be appreciated by the touch, will then in some cases indicate the proper situation for the operation.

13, Dover Street, Piccadilly, Nov. 1852.

CLINICAL REMARKS UPON THE EFFECTS OF THE BATH THERMAL WATERS IN THE TREATMENT OF CHRONIC RHEUMATISM.

By JAMES TUNSTALL, M.D., Physician to the Eastern Dispensary of Bath, and formerly Resident Medical Officer of the Bath General Hospital.

I AM perfectly aware that, in bringing under the notice of my professional brethren the good effects of a course of the Bath waters, in the treatment of Chronic Rheumatism, I run the risk of being accused of telling a thrice-told tale; it will be said that every medical man knows that these waters have been unduly celebrated, and that at present they have no reputation whatever: this, however, has been the case in reference to all our British springs. I hold it to be a duty to the profession, that those who practise at our Spas, should occasionally bring forward the result of their practical experience in the employment of these valuable remedies. I am persuaded that much

of the discredit cast upon our native springs, and the extraordinary virtues attributed to those in other countries, has arisen, in a great degree, from the fact, that British physicians have hesitated to make use of the abundant materials at their command. This omission arises, in a great degree, from the very natural, but, I conceive, mistaken notion, that, by so doing, they would incur the suspicion of writing to advance their own individual professional renown. The result of this diffidence has been, that patients are in the present day sent to Germany to procure that relief which their predecessors obtained at home; and this disinclination to impart a knowledge which only experience can supply, has led to a comparative ignorance on the part of British practitioners, not only of the chemical qualities of our native springs, but also of their effects in the treatment of disease. Such neglect of these remedial agents does not obtain abroad: there every physician is in some degree acquainted with the composition and mode of action of the various mineral waters; the literature of the profession is rich in works upon the subject, and the crowded state of the various watering places shows the importance ascribed to them in continental medicine.

Dr. Fuller, of St. George's Hospital, in his valuable work on Rheumatism, Rheumatic Gout, and Sciatica, just published, thus alludes to this subject:—"The vast importance of the total change of scene and air consequent on a visit to the English or continental watering-places, can hardly be over-estimated: a new stimulus is imparted to the system, the organic functions receive an impulse which cannot be imparted to them in any other way, and remedies which have proved unavailing at home, very shortly become active agents for good. . . . Observation has convinced me, that he who is tormented by rheumatic gout in a chronic form, will usually experience more relief from a month's residence at Bath, than from a much longer sojourn at any other watering-place." My own experience fully corroborates these remarks of Dr. Fuller.

It will readily be admitted, that acute rheumatism, while it is one of the most common, exceeds almost all the ordinary febrile affections, in the protracted character of its convalescence; while the amount of permanent loss of power and deformity which usually attend it, render it one of the most intractable and unsatisfactory diseases. It may indeed be said to become chronic by wearing itself out; the patient's strength and vital power being reduced to a state of debility scarcely permitting inflammatory action.

If we are called in to see a patient in the first stages of chronic rheumatism, we see that a general want of tone pervades the chylipoietic viscera; the circulation is languid, the blood vitiated and carbonized; the secretions of the skin and kidneys are changed in their sensible appearance and chemical character; the muscular and fibrous structures gradually becoming impeded in their functions, deposits of extraneous matters, solid and fluid, take place in the neighbourhood of the joints, with a slowly progressing contraction of the muscular fibres of the extremities, and great nervous debility.

The object of my present remarks is to show that, in the Bath waters, we have a remedy, which possesses the power of arresting the further progress of an insidious malady, by improving the patient's general health and bodily powers. Before I proceed to this part of my subject, let us, for a moment, inquire what circumstances give rise to these *sequela*—a very great portion of which occur after the more acute symptoms have been subdued, and the practitioner has taken leave of his patient.

We have undoubtedly many preventible causes in action. How useless it is to advise our patient to move about and use his limbs, if he has been for weeks confined to his bed in a constrained position! It would be as absurd as for a surgeon to allow the lately fractured arm to remain in a sling, after perfect bony union had taken place; our duty in either case is to direct passive motion, until the strength of the patient enables him to move the limb himself. In the same way that the surgeon, after a fracture, restores the use of the fractured limb, by graduated exercises, both active and passive, so ought the physician, in the convalescence from acute rheumatism, to see the use of the limb restored as much as possible, and not permit his patient to produce rheumatic anchylosis, by bandages and other contrivances, without a warning; or to cripple along upon crutches because he has neither the will nor energy to persevere in the recovery of his limbs by the use of moderate exertion. Far better is it to cross the room by the help of the chairs and table, than to drag through a weary mile, bandaged up, on crutches.

In the treatment of gout and chronic rheumatism, there are many evils to contend against. I have said that numerous pre-

ventible causes combine to produce morbid effects. Thus, the practitioner is consulted by a patient, exhausted in nervous energy by the long continuance of disease, incapable of the least exertion, and too enervated to perceive its necessity; a case in which active remedies, general and specific, have ceased to produce good effects; where opiates and other sedatives, useful in the earlier stages, are now productive of mischief: he sees with regret the habits of the sick room, its improper diet and stimulants still forming a part of the daily routine of a passive existence: the patient complains to him of enlarged, tumefied, and painful joints, loss of appetite, and sleepless nights.

In such a case, what is to be done? He prescribes a tonic, and orders gentle movements of the affected limbs. His medicines are regularly administered, but his directions are not complied with, from the fear of producing pain: the case gradually approximates to complete loss of power in one or more joints; then anxious to abolish the associations of the sick room, he advises his patient change of air.

Now I am inclined to attribute much of the suffering in these unfortunate cases to the patient's extreme nervous debility, producing a disinclination to convalescence: in other words, that the partial immobility induced by the acute attack, has engendered a fear in the patient's mind lest movement should reproduce pain and inflammation. This fear is shared and encouraged by nurses and attendants, who, instead of assisting the patient to leave his recumbent position, and move his limbs, do all in their power to render it unnecessary, and thus, by mistaken kindness and pitying solicitude, aggravate sufferings which they are most anxious to alleviate.

It is in these cases that the Bath thermal waters produce such beneficial effects. The immersion of the whole body in a warm, tonic, and exhilarating fluid, highly charged with carbonic acid gas, in a bath of sufficient capacity to permit free muscular motion, soon restores the nervous energy, improves the quality of the blood, and, by promoting the circulation of the capillary vessels, strengthens the joints, and restores muscular vigour. The salts which these waters contain are peculiarly grateful to the dyspeptic stomach; the iron, from its extreme subdivision, is, I make no doubt, completely taken into the circulating system, so that while their internal exhibition improves the biliary, renal, and cuticular secretions, they produce little or none of the usual effects of iron upon the alimentary canal.

As I do not desire to overburthen these remarks with cases, I shall select two only from my note-book, as types of those in which this treatment proves successful.

CASE I. Mr. P. T.—, aged 25, came to Bath in October, 1850, having had an attack of acute rheumatism in the previous June. At this time there was considerable lameness in the right lower extremity, with enlargement and stiffness of the ankle joint, the patient limping along by the aid of a stick. The limb, in walking, was perfectly straight, from the want of the *voluntary* effort to use either the knee or ankle. Satisfying myself that the heart was unaffected, and that the lameness proceeded in a great degree from the habit acquired in the early period of his convalescence, I directed him to abstain altogether from walking abroad, until he could cross his chamber without his stick. I ordered him to drink the waters at their source twice a day, and to apply the hot douche to his limb three times a week. In a month he returned to London, perfectly recovered.

I have but few remarks to make on this case, but I feel persuaded, that had he remained at home, no treatment, however judicious, would have been successful. The use of the limb would have been lost for the want of the voluntary effort; nay more, had he continued his crippled gait a few weeks longer, permanent lameness would have resulted; for nature will pursue her vital actions, and if, after rheumatic inflammation has been subdued, motion is restricted or suspended, the natural secretions become excessive, from not being required for their legitimate functions. Thus, in this case, the tendons of the posterior surface of the limb would have become contracted, and the ankle joint the seat of a permanent rheumatic deposit, in consequence of the whole work of the limb being thrown on the anterior femoral muscles.

CASE II. Mr. B.—, aged 61, a farmer from Devonshire, consulted me on the 11th of June, 1851, stating that he had had repeated attacks of rheumatic gout, which had entirely deprived him of the use of his lower limbs, so that he could only move from room to room by means of his hands and knees. The patient was of the lymphatic temperament; his nervous system was greatly depressed from long continued disease. The circulation, however, was regular, but languid. I examined him in

the recumbent position, and found that he could, in that position, freely move his limbs, which were free from contractions or gouty deposits. I could detect no pain nor tenderness in the spine, nor any evidence of internal structural malady. The bowels were in good order, the urine healthy and secreted in proper quantity, the appetite good, and digestion well performed.

My opinion of the case was, that it was one of extreme nervous and muscular debility, produced by a perseverance in the use of *colchicum*, long after the more acute symptoms of gout had been overcome; that in fact it was a complication of arthritic disease with slow, narcotico-irritant poisoning. I advised him to bathe three times a-week, and to drink the waters twice daily at the spring. I put him upon a generous diet, and ordered him to spend several hours daily in the open air, and to abstain altogether from medicines. He continued this plan until July 12th, at which time he was able to stand with the assistance of the table, and to walk a few steps supported by two persons. I then directed him to go to the sea-side for six weeks, and to return to Bath in September. He returned greatly improved in every respect, and again commenced the use of the waters, obtaining so much benefit, that on the 31st October, he returned home perfectly recovered.

This, though a severe case, is but the type of many frequently met with in this city, in which the long perseverance in the domestic use of *colchicum* produces so complete a prostration of strength, that to move a limb, or even change the position in bed, is attended with fainting fits and profuse perspiration. I remember many years ago, a case in which sudden death occurred from syncope caused by the long-continued use of this remedy, which being easily obtained, and much commended for its specific effects, is constantly taken by many gouty persons as an innocent remedy.

To show how completely we may be foiled in our diagnosis, by this pernicious practice of domestic medication, I will here mention a case which came lately under my notice.

I was consulted a few days since by a gouty subject, who complained of chronic pyralism accompanied by several anomalous symptoms, for which at first sight, I could assign no sufficient reason. Upon questioning him closely, he told me that for two years past, he had been in the habit of purchasing *potassii iodidi* 3j, which he dissolved in a pint of water, of which he had during the whole of that period taken a wineglassful twice a day, he having been recommended to try it by a neighbour.

It is this indiscriminate medication that environs the Bath thermal treatment with so many difficulties, and which not unfrequently brings discredit on the springs themselves. I last week met a medical gentleman, who told me he was taking three doses daily of *colchicum*, and was then about to take a bath. I am fully persuaded, that if we wish the waters to produce good effects, their judicious employment requires no medicinal interference; and that they are a very powerful remedial agent in the hands of the physician, whose duty it clearly is to watch their effects in the same way that he would those of any other medicine, and not by over-anxiety for his patient's recovery, to interfere with them by prescribing remedies often useful alone, but incompatible with the rational employment of the Bath waters.

Bath, December, 1852.

ON THE SOURCE OF HÆMORRHAGE IN CASES OF PARTIAL SEPARATION OF THE PLACENTA.

By F. W. MACKENZIE, M.D. Lond., Fellow of University College, etc. etc.

THE precise source of hæmorrhage in cases of this description, whether from the uterine or placental surface, does not appear to have been very accurately ascertained. By some authorities, it is believed that the blood flows exclusively from the great venous and arterial openings in the lining membrane of the uterus, which are laid bare by the separation of the placenta; by others, that the discharge issues principally or entirely from the vascular openings which exist on the exposed surface of the placenta; whilst others regard the hæmorrhage as having its origin partly in the maternal and partly in the placental surfaces. The following quotations from writers of acknowledged celebrity will confirm the general accuracy of this statement, and explain the motives which suggested the investigation, the results of which it is the more immediate object of this paper to make known.

"It is," observes Dr. Robert Lee, "from the great semilunar,

valvular-like, venous openings in the lining membrane of the uterus, and of the arteries which are laid open by the separation of the placenta, that the blood alone flows in uterine hæmorrhage."—*Lectures on Midwifery*, p. 361.

In criticising the opinion, that the hæmorrhage comes from the exposed placental surface, and the statement of Dr. Simpson, that he knows no reason, anatomical or otherwise, for alleging that the open placental orifices do not bleed, Dr. Ashwell remarks:—"It would have been well if these orifices and their capacities had been demonstrated. I have never yet seen them, although I have subjected numerous placentæ to examination, both before and after injection; nor have I been more successful when I have carefully peeled off an adherent placenta after death. It is, on the contrary, easy enough to show to the satisfaction of the most incredulous, the great openings existing in the lining membrane of the uterus, exactly opposite the attachment of the placenta, and which are covered by interposed decidua. Into many of these, the tip of the finger may be inserted, while their course and extensive communications with the uterine sinuses, full of blood, is evident at a glance. Surely, such an organization affords the clearest proof of the source of the hæmorrhage in placenta prævia. By some unfortunate accident, the placenta and the intervening decidua are detached, and as the uterus is full of blood, there is no barrier to prevent its escape; in moderate amount if the detachment be slight, but excessive in quantity if the separation is considerable and attended with excitement and hurry of the heart's action."—*Medical Gazette*, Nov. 7th, 1845.

"That the blood is not poured out of the placenta," says Dr. Chowne, "is obviously suggested, by considering what the effect upon the child would be, of profuse hæmorrhage derived from those vessels upon which the sustenance of the ovum depends. Hæmorrhage occurring under such circumstances, the child would be subjected to a two-fold privation. First, in being abridged of its natural supply by a quantity equal to all that should be furnished to it through the detached portion; and, secondly, in the exit and waste of even that curtailed quantity which enters the placenta by the attached portion, and is by some supposed to make its escape by the detached portion. Reverting to the terrible hæmorrhages that sometimes take place while the child remains secure, and is born even vigorous and strong, I am led to regard the sufficient way in which it is nourished as evidence, that the blood effused is not poured out of the placenta."—*Lancet*, August 28th, 1847.

In opposition to these views, we have the following opinion expressed by Dr. Simpson. "I know of no reason, anatomical or otherwise, for alleging that the open placental orifices do not bleed; and, on the contrary, I believe with Dr. Hamilton and others, that the discharge issues principally or entirely from the vascular openings which exist on that exposed placental surface. In cases in which the placenta is partially and repeatedly detached before labour begins, (as happens frequently in placental presentations,) before each attendant attack of hæmorrhage is arrested, the vascular system of the separated portion of placenta seems to require to become blocked up and impervious, with coagulated and infiltrated blood. This obliteration of its vascular cells prevents the further circulation of maternal blood through the detached part of the organ, and hence prevents also the further escape of it from its exposed surface. Each new detachment gives rise to a renewed hæmorrhage, which again ceases on the sealing up of the vascular system of the detached part. . . .

"In common cases of unavoidable hæmorrhage, the amount of the attendant flooding seems to be as much regulated by the quantity of placental surface still remaining attached to the uterus, as by the quantity already separated from it; the degree of flooding depending as much or more upon the extent of the means of supply of blood, as upon the extent of its means of escape. And in proportion as we approach nearer and nearer a total separation of the placenta, the number of its afferent utero-placental vessels is diminished, till at last, we find that when the one organ is once completely separated from the other, the flooding is instantly moderated, or entirely arrested; for the placenta ceases to yield any discharge of maternal blood, as soon as its own supplies from the maternal system are thus cut off by the dissection of all its organic and vascular attachments with the uterus."—*Medical Gazette*, Oct. 10, 1845.

The third opinion regards the hæmorrhage as having its origin, partly in the uterine and partly in the placental surfaces. On this point the following authorities may be quoted.

"In all cases of floodings," says Dr. Radford, "which occur during the latter months of pregnancy or in labour, several effects are produced by this accident: firstly, the utero-pla-

central vessels are lacerated; secondly, the large venous openings are exposed; thirdly, sometimes, and indeed, not unfrequently, there is laceration or disruption of the placental structure, whereby the ramifications of the umbilical arteries and veins are more or less torn through. There are, then, always two surfaces exposed, upon each of which vessels are laid open, which sometimes pour out blood in such torrents as to deluge the bed, and the floor of the room, and places the life of the woman in the greatest jeopardy, and, indeed, sometimes destroys her by the first gush. When the placenta is only partially separated, the blood which is lost, is chiefly venous, and mostly comes either directly from the great venous apertures, or indirectly in its course from the placenta. . . . But, when the organization of the placenta is broken into" (as it is argued is the case in *Placenta previa*), "the blood now comes from the foetal vessels, and cannot long flow without causing the death of the child."—*Lancet*, Feb. 27th, 1847.

"Let us suppose a case," Dr. Murphy observes, "in which the placenta is completely attached to the mouth of the uterus, and that labour has just commenced: what takes place? The first effect of the pains must be to break the vessels passing from the margin of the os uteri into the maternal portion of the placenta. The curling arteries of the uterus are closed by coagula formed in their torn coats; they cannot, therefore, pour out much blood; such is not the case, however, with the large uterine veins when they are broken across: one fragment is an opening that communicates with the large net-work of veins in the uterus; the other leads directly into the cavernous structure of the placenta: through both these orifices blood may be discharged, being in the former case venous blood, flowing in a contrary direction to its course from the uterus, and in the latter, arterial blood, passing directly through the cavernous structure of the placenta, and escaping from the broken openings on its surface."—*Lectures on Midwifery*, p. 331.

These quotations need not be extended; the foregoing are sufficient to show that the opinions of obstetric pathologists by no means coincide in regard to the source of hæmorrhage in placental separations, and doubtless this discrepancy of opinion has in a great measure tended to those very opposite rules of practice which have been inculcated by different writers. It occurred to me, that some light might be thrown upon this question by selecting an animal, the organization of whose placenta approximated nearest to that of the human female, exposing the uterus at the full period of gestation, and detaching portions of the placenta, so as to observe the actual source of hæmorrhage. This experiment I was enabled very satisfactorily to perform with the kind assistance of Mr. Marshall, of University College Hospital, and the following particulars comprehend a summary of the facts which were observed.

A large pregnant bitch, which it was calculated was within two days of the full period of gestation, was placed under the influence of chloroform, and the uterus was then fully exposed by an incision, made in the course of the linea alba, from the sternum to the pubes. The uterine tissues were now carefully divided over one of the placenta; and at right angles with this incision another was made along the border of the placenta, so as to admit of an easy separation of the two organs. It was observed, that the portion of the uterus in apposition with the placenta was highly vascular, and bled freely upon being divided; this, however, soon moderated, and then the separation of the placenta was commenced. The moment it was begun, profuse hæmorrhage, of a bright arterial colour, took place in a continuous stream from the uterine surface, which had been previously adherent to the placenta. No bleeding whatever took place from the placental surface; and on continuing to detach further portions of the placenta, it was observed that each successive detachment was attended with increased hæmorrhage from the uterus, but none from the placenta. In due time, the placenta was entirely detached, but the blood still continued to flow from the uterine surface only.

A second observation was now made with another placenta, and with the same results. No hæmorrhage whatever was observed to take place from the detached placental surface, whilst blood poured profusely from the uterine, increasing as the detachment continued.

In a third instance, the placenta was abruptly torn away from the uterus, but blood continued to flow freely from the denuded uterine surface after the separation.

In a fourth case, the placenta, foetus, and membranes were together removed from the uterine cavity. The investing portion of the uterus contracted immediately on their removal, but still a large quantity of blood was poured out from that portion of its interior to which the placenta had been attached.

The following observations were also made in the course of this experiment, which it may not be uninteresting to subjoin. i. On detaching the placenta from the uterus, a number of white, elastic, filamentous-looking bands were observed to pass from one organ to the other. These were probably the utero-placental arteries: they were easily torn across, and their divided extremities would seem to close up and retract immediately upon being divided, as their orifices were not afterwards perceptible, nor did any blood issue in jets from the denuded uterine surface. ii. The blood, as I have remarked, which came from the uterus, flowed in a continuous stream, and was of a bright arterial colour. iii. Except from the divided edges of the uterine wound, and the denuded lining membrane of the uterus, no blood escaped from this organ. iv. Although no hæmorrhage came from the detached surface of the placenta, whilst the organ was entire, it was yet found on tearing or lacerating it, while it was partially adherent, that blood flowed from the torn or lacerated parts; but this was to a very inconsiderable extent, and instead of being of a bright arterial colour as was that which flowed from the uterus, it was of a dark purple or bluish tint. It should be added, that each foetus was alive during these observations, and continued to live for some time afterwards.

Thus it would appear in the canine species, that the source of hæmorrhage, in cases in which the placenta is partially detached, is exclusively the denuded uterine surface, so long as the placenta is entire; that the blood escapes in a continuous stream, and is of a bright vermilion tint; that no blood comes from any other part of the interior of the uterus; and that although a certain amount of blood may escape from the placenta, if lacerated or torn while still partially adherent to the uterus, this is comparatively small in quantity, and of a dark venous character.

How far these observations apply to cases of partial separation of the placenta in the human subject, is a question to which we can scarcely give a positive answer, until the structure of the placenta of the bitch has been further examined, and compared with that of the human species: more particularly as regards the disposition of the blood-vessels in its maternal portion. We know, for instance, that in the human placenta, the utero-placental arteries open into large cells formed by the inner coat of the vascular system of the mother, and that between these a free intercommunication exists; whereas in the bitch the venous vessels of the maternal part of the placenta do not constitute a cellular or cavernous structure, but in form and distribution resemble ordinary veins. It remains then to be ascertained, before the value of these observations can be determined, whether there be a free lateral communication between these veins throughout, so as to permit the blood injected into them, where still connected with the uterus, to escape at the place where they have been opened by detachment.

Whilst, therefore, I regard these experiments as interesting in themselves, and as affording, in the general analogy which subsists between the structure of the placenta in the two cases, some support to the doctrine that these hæmorrhages have exclusively a uterine origin, I must not be understood to affirm, that they are positively conclusive on this point. As I have already remarked, some further investigation into the structure of the placenta of the bitch is necessary, to enable us to assign to them their true value and significance. This I propose to undertake; and I will communicate the results in a supplementary paper.

Chester Place, Hyde Park Gardens, London, December, 1852.

PECULIAR CASE OF ACCIDENTAL UTERINE HÆMORRHAGE.

By I. HARRINSON, Esq., Surgeon.

(Read before the Reading Pathological Society, Oct. 27, 1852.)

ON Sunday, July 11th, 1852, at half-past 11 o'clock, a.m., I was called to Mrs. G—, Queen's-road, aged thirty-six years. She was a well-developed woman, having tolerable health, and was about seven and a half months advanced in her third pregnancy. She had suffered less during the present than her former pregnancies.

From her distressed condition, I could only gain the following particulars as to the method of her seizure. She was sitting in her kitchen, between 9 and 10 o'clock, a.m., preparing some culinary compound, when she suddenly felt faint; her bowels were twice moved in quick succession, and severe pain in the ab-

domen immediately succeeded. At half-past 10 o'clock I found her lying on a sofa, complaining of faintness and of extreme pain in her abdomen. She fancied that labour was coming on. There was no discharge. Some brandy was given, and she rallied. I requested that she should be got to bed, and promised to see her again in an hour.

On my return, she was more distressed, more faint, and in more pain; in a few words, she was in a state of collapse.

On examination externally, the abdomen was very tense, and the seat of pain was principally at the fundus of the uterus, which reached and occupied the epigastric region. The pain was that of distension, of bursting, and indescribably distressing.

On examination *per vaginam*, I discovered the cervix uteri not obliterated, the os uteri just admitting the finger, the membranes unruptured, and the head presenting.

Amid the enveloping agony, she was now and then slightly conscious of the pains of labour.

I determined at once to rupture the membranes, which was readily accomplished. The waters flowed profusely and clear; there was not a trace of blood. About this time she had a convulsion, during which life appeared to be all but extinguished.

Dr. Cowan now saw her, soon after 1 o'clock, p.m. After a careful examination, we agreed that a grave accident had happened, but could not determine its precise nature, nor its seat; nor whether it was perforation or rupture of some abdominal or pelvic viscus.

From, however, the condition of pregnancy, and the absence of any other recognized disease, we felt justified in thinking that the uterus must be the organ involved, and that rupture, partial or complete, of that organ had probably occurred.

The indications appeared to be, to relieve the pain, and to keep up the failing powers as well as possible, which were attempted to be fulfilled by opium and by brandy. One drachm of tincture of opium was given immediately, and brandy and water at frequent intervals. There was an almost incessant cry for cold water, which was ungrudgingly supplied.

Three o'clock, p.m. Much the same; no relief. The same dose of tincture of opium was repeated. The os uteri was progressively dilating.

At 5 o'clock Dr. Cowan again visited her. I proposed that we should spare her little remaining strength, by now completing labour with the perforator and the forceps; premising, of course, that that could be done readily and with safety. Dr. Cowan agreed. The head was perforated and extracted with little difficulty. In a short time, one hand being kept firmly applied to the abdomen, the body readily escaped. Without waiting to separate the child, the hand was still kept on the abdomen, and I was surprised to find that it had scarcely diminished in size or in tension.

Firm pressure was kept up, and I was about to observe to the nurse that we had one or two more children to come, when one of the most fearful gushes took place I ever witnessed. Placenta, clots and fluid blood, to the amount of some quarts, were expelled at the same instant. The uterus was at once carried down into the pelvis, and there fixed with the hand. There was no further escape of blood. The uterus showed no disposition to relax, nor did it apparently in the slightest degree.

She was immediately relieved of that dreadful feeling of distension, and lay easy for a time. Anticipating what was to follow, while I was guarding the uterus, the nurse was employed in giving as much brandy and water as she could get down. Another drachm of tincture of opium was given. It was now about half-past six o'clock. After a short time the restlessness increased; she tossed about incessantly, and the extremities became cold. At eight o'clock she apparently fell into a quiet sleep. At half-past eight o'clock, Dr. Cowan again saw her. It was agreed to let her sleep a little longer. She slept, but it was the sleep of death. At ten o'clock her breathing was observed to change, and in a few minutes she died, twelve hours from the time she was first seized.

Autopsy performed next morning. Dr. Cowan was present. The uterus was found well contracted: no blood was discovered within it. No appreciable disease in any organ.

I may here remark, that the cord was twice round the neck of the child, and was very short. I much regret that I did not measure it. There was no disease of the placenta.

What occurred, then, to produce so lamentable an accident, undoubtedly was, a sudden separation, probably nearly entire, of the placenta from the uterus; and the only discoverable cause, an unusual shortness of the umbilical cord, and that twisted round the neck of the infant.

In the retrospect of such a case, a few points present themselves for consideration. Could a more accurate diagnosis have

been arrived at? and if so, could the treatment have been materially modified?

To describe her condition in a few words, it may be said, that she was in a state of collapse, with extreme pain. These symptoms, however, would equally belong to perforation or rupture of any of the abdominal or pelvic viscera, or even to the rupture of an aneurism.

The only characteristic I could name, would be the state of the abdomen. It was distended to the utmost; was dull on percussion; and had an unusual, peculiar, doughy feel.

Her strength was supported after the most approved methods, and opium, that sustainer of the vital energies, was carefully administered. Labour was accomplished as soon as the state of the uterus allowed. When the uterus was emptied, no further discharge was permitted.

No example at all similar has occurred to me before. No writer that I can find has described one exactly corresponding; and some authors do not even name the possibility of such an occurrence. Dr. Robert Lee, in his "Clinical Midwifery", Dr. Copeman in "Crosse's Midwifery", Drs. Churchill, Ramsbotham, and Blundell, etc., give good cases and descriptions of "*accidental uterine hæmorrhage*", as ordinarily happening; but I can find no author giving an account on the diagnosis of such cases as the one related, where no discharge appears externally.

Reading, October, 1852.

BIBLIOGRAPHICAL NOTICES.

THE NATURE, SYMPTOMS, AND TREATMENT OF CONSUMPTION: being the Essay to which was awarded the Fothergillian gold medal of the Medical Society of London. By RICHARD PAYNE COTTON, M.D., Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. pp. 286. London: 1852.

DR. COTTON'S object has been to present a practical exposition of phthisis, derived from personal observation. His work is divided into three parts, severally treating of (1) the Nature; (2) the Symptoms; and (3) the Treatment of Consumption.

I. NATURE OF CONSUMPTION. In chapter 1, Dr. Cotton points out the relation of phthisis to tubercle as that of cause to effect. By the term phthisis he understands a peculiar morbid condition, which involves, among other consequences, a tubercular state of some of the internal organs. This view he believes to be of great practical importance; for it is the *phthisis* that destroys life; and it is this which must be met by remedies. Of the intimate nature of phthisis, we know very little; but Dr. Cotton dissents from the opinion that it is a poison-disease, and also denies that it possesses any contagious property.

In chapters 2, 3, and 4, we find the following subjects treated of: Mode of Origin, General Characters, and Minute Structure of Tubercle; the Situation of Tubercle; and the Curability of Consumption. The author, allowing the *possibility* of a cure in the last stage of phthisis, believes that in most of the supposed cures, there is merely an arrest of the disease. He has no doubt that recovery may take place in the earlier stages, by removal of the tubercular deposit, or by calcareous transformation.

In chapter 5, the Identity of Consumption and Scrofula is insisted on; and is supported by a consideration of their intermixture in families, their frequent co-existence in the same individual, their mutual convertibility, and their interchangeability, or power of alternation.

In chapter 6, the author treats of the Relation of Consumption to other Tubercular Diseases; especially tabes mesenterica, hydrocephalus, and chronic peritonitis.

Chapter 7 treats of the Relation of Consumption to Diseases of a Different Character. Dr. Cotton discards the idea of any disease, as ague or rheumatism, being antagonistic to phthisis. *Fistula in ano*, believed by some to be very frequent, "was met with, in 1000 cases, only three times; and although this must be taken with some reserva-

tion—since the majority of the patients were in an early stage of phthisis, while fistula is more likely to be met with at a later period—it still affords sufficient evidence that the common opinion regarding its frequency is incorrect.”—(p. 49.) When it occurs, Dr. Cotton believes it to be sympathetic, and has observed the tubercular disease to be kept in check by it.

Chapter 8 treats of the Predisposing Causes. Under this head the author reviews the influences, real or alleged, of age, sex, stature, constitution, temperament, hereditary transmission, occupation, climate, irregularities of living, intemperance, neglect of personal cleanliness, irregular or insufficient food, inactivity, insufficient clothing, mental influence, dyspepsia, chest-disease, and the form of the chest. We quote a few paragraphs to show his opinions.

“The disease is most frequent between the ages of twenty and thirty—more than 30 per cent.” (of the 1000 cases observed) “having occurred within this period: the next age most favourable to its development is from thirty to forty years; the next to this is from ten to twenty years; and after the age of forty its frequency gradually lessens, until, as we approach the ‘three-score years and ten,’ few cases present themselves.”—(p. 55.)

“It can no longer be doubted that, at least in and around our metropolis, consumption is more frequently to be seen in males than in females.”—(p. 57.)

“I have hitherto failed to observe amongst consumptive patients an excess of what might be called one particular temperament. The colour of the hair and skin—the development of the subcutaneous tissues—the condition of the abdominal organs—the state of the nervous system—all of which are looked on as the indices to temperament, do not appear to me to offer the slightest assistance in the diagnosis of phthisis, nor to bear any necessary relationship to the disease. Consumption does not, as is commonly supposed, show any preference to those whose gentle nature or mental endowments claim a more than usual amount of admiration: it is true that these are too often its victims; but the practical physician finds that the pleasing form and brilliant genius are not oftener its prey than are the unattractive, or the feeble in intellect; and he has to encounter murmuring and discontent, scarcely less frequently than he is called on to admire cheerfulness and resignation.”—(p. 60.)

“The *mechanical* origin of consumption ‘in needle-makers, miners, glass-cutters, etc.’ has been much over-rated, and it may fairly be questioned whether such trades might not be carried on with impunity, if greater respect were paid to sanitary regulations. It is the impure air—the confinement—the unnatural posture—the deficiency of light—together with the mental and physical depression to which they are subjected, which render our labouring classes so prone to phthisis.”—(p. 64.)

In chapter 9, Dr. Cotton speaks of the Exciting Causes. Severe or long-continued predisposition may develop consumption without the supervention of an exciting cause; or one predisposing cause supervening on another, may act the part of an excitant. But certain inflammatory states of the chest, catarrh, influenza, fever, pregnancy, lactation, etc., have more or less exciting influence: and some of these causes are commented on by the author.

With regard to the much-disputed question as to the influence of pregnancy on phthisis, Dr. Cotton believes that in the absence of a phthisical predisposition, pregnancy has no tendency to lead to phthisis. He does not “remember ever having observed a case of phthisis among those who have had large families, except in conjunction with hereditary tendency or other equally evident predisposing cause. But in cases where there is a phthisical liability, hereditary or otherwise, there is much fear of the disease being called into activity by the process of gestation, especially if it should occur either very frequently, or at too early an age.”—(p. 95.) The author is satisfied that, as a general rule, females predisposed to consumption, but not actually consumptive, are more liable than others to become mothers; but, when the disease has commenced, the liability to pregnancy is diminished in proportion to the advance of the malady.

Lactation generally aggravates consumption: and long-continued nursing—especially common among the poorer classes, is most energetic in this, and even in sometimes

giving rise to the disease, not only in persons predisposed to it, but in those who are apparently free from hereditary taint.

II. SYMPTOMS OF CONSUMPTION. In chapter 1, of this part, Dr. Cotton gives a general description of the several stages. He describes (1) the period preceding the formation of pulmonary tubercles; and (2) that subsequent to their development: the latter being divided into three stages: viz.; that of miliary and crude tubercle; of softening; and of expulsion and the formation of cavities.

In chapter 2, we find a more Particular Description of the Prominent Symptoms. Under this head are noticed the phthisical aspect, the pulse, phthisical cough, and its diagnosis from cough from other causes, expectoration, hæmoptysis, dyspnoea, pain, loss of weight, perspiration, diarrhoea, hectic fever, œdema, delirium, meningitis, cerebritis, softening of the brain, bronchitis, pneumonia, pleurisy, pneumo-thorax, low inflammation of the pharynx, dyspepsia, incurvation of the finger nails, and the brick-red or blue streak on the gums.

The physiognomy of phthisis is contrasted with that of malignant disease, anæmia, etc. We exhibit the differences, as stated by Dr. Cotton, in a tabular form.

	Complexion.	Features.	Eye.	Countenance.
Phthisis	Generally sallow or pearly white.	Sharpened.	Bright and intelligent, yet expressive of languor.	Mixed anxiety and animation.
Malignant affections	Peculiar opaque and muddy hue.	Less prominent.	Dull and sunken.	Depressed.
Anæmia	Dead white, rarely sallow.	Rounded, face puffy.	Heavy and inexpressive.	Depressed, but not anxious.
Chronic disease of digestive organs	Pale or yellow.	Sharp.	Languid.	Depressed.

As consumption advances, the aspect changes in degree; but the physiognomy of phthisis is not always plainly marked, and sometimes it seems to indicate a much more advanced state of disease than really exists.

The frequency of the pulse is regarded by Dr. Cotton as most useful in prognosis: increased rapidly being a very unfavourable symptom, while diminution, or non-acceleration in frequency, render the prospect brighter. The phthisical cough, like many other symptoms, must be taken in connection with others to be of value: it is closely resembled in its character by the gastric or stomach cough, the hysterical cough, the catarrhal cough, and the bronchial cough.

Hæmoptysis was observed in 53·6 per cent., or rather more than one-half of the patients: but, making allowance for its occurring subsequently in some cases, and being forgotten or not noticed in others, the author would suppose that “not much less than two-thirds of all consumptive patients become, at one period or another, the subjects of hæmoptysis.”—(p. 123.) It is slightly more frequent in males than in females. With regard to its value in prognosis, Dr. Cotton observes that “the cases in which hæmoptysis occurs usually prove the most favourable, and the most chronic: but this, of course, applies only to those in which the loss of blood is moderate, and the patient able to bear it. When the hæmorrhage is excessive, or when it happens in weak or timid persons, it is usually a very serious, and sometimes even a fatal symptom.”—(pp. 125-6.)

The notices of the other symptoms of phthisis are instructive, and will repay perusal. The absence, however, of any reference to the state of the catamenial functions in phthisis is an omission. One more quotation from this chapter we will make.

“A low inflammatory condition of the pharynx is not an unfrequent attendant upon phthisis, and sometimes appears among its earliest symptoms. It usually commences at its posterior wall, and has a tendency to spread, not only over the whole pharynx, but also into the larynx, laying, in many cases, the foundation of what is termed laryngeal phthisis. The mucous membrane presents, at first, a number of dark or vivid red

patches or streaks, which gradually coalesce; a yellowish tenacious mucus soon appears upon its surface; the tonsils become enlarged, and the uvula is elongated. If the mucous follicles upon and behind the tonsils be now carefully examined, they are often seen to contain a yellowish white substance, apparently of a scrofulous nature, which, becoming expelled, frequently leaves behind it small ulcerations. These ulcerations sometimes spread, and involve a considerable portion of the pharynx, especially at its posterior part. The epiglottis, meanwhile, frequently becomes red and congested: the laryngeal mucous membrane participates in the attack; and the general symptoms of laryngeal inflammation—of which more will be said elsewhere—make their appearance. In many instances, the diseased action remains limited to the pharynx; but in those cases where it extends to the larynx, it sometimes altogether leaves the pharyngeal membrane.”—(pp. 157-8.)

In chapter 3, Dr. Cotton describes the different forms of Consumption: viz.; acute, chronic, (which he subdivides into *florid* and *languid*, depending on the physical condition of the patient) the phthisis of children, and laryngeal phthisis.

Chapter 4 treats of the Physical Signs, which are described according to the stages in which they occur.

III. TREATMENT OF CONSUMPTION. In the first chapter, under the head of Preventive Treatment, the author speaks of the method of guarding against consumption (1) in healthy persons: and (2) in persons predisposed to it, or otherwise unhealthy. We recommend his concise remarks on this subject to the careful attention of our readers. There is much truth in these sentences. “There is no position in life, whether rich or poor, which might not be deprived of one-half its productiveness of disease, by a proper respect to sanitary and moral laws.”—(pp. 189-90.) “Enough, perhaps, has been said, to show how greatly the preservation of health and the avoidance of tuberculous diseases are within our own control; and that even when consumption is actually threatened, much may be done towards keeping it in abeyance, if not actually escaping it.”—(p. 195.)

In chapter 2, Dr. Cotton describes the Treatment of Phthisis before Tubercle is deposited. Under proper diet and medicinal treatment—in which latter steel and cod-liver oil are especially useful—he is perfectly satisfied that this stage will, in many cases, entirely disappear.

In chapter 3, we find some observations on the Treatment of Phthisis after Tubercle has been deposited. Change of air and scene, fresh air and exercise, thorough mental relaxation, the use of nourishing diet, tonics, and local counter-irritation, variously modified according to special circumstances, are considered by the author as the principal remedies. Of the alleged specific action of sea air, he is doubtful. The indications of treatment are pointed out to be—

To restore the health and vigour of the body;

To relieve the different symptoms as they arise; and

To check the further progress of the local or pulmonary disease.

Chapter 4 is devoted to the Treatment of the Various Forms of Consumption; viz.: acute phthisis, and laryngeal phthisis. Dr. Cotton speaks highly of the system of *topical medication* of the larynx, of the safety and usefulness of which he has been convinced by Dr. Horace Green, of New York, the principal advocate of this treatment. In the operation, the tongue must be pressed downwards and drawn forwards, while a sponge is introduced into the larynx, moistened in a solution of from gr. x to 3ss. of crystals of nitrate silver in an ounce of distilled water. But, as this method may cause unpleasant sensations, Dr. Cotton frequently *drops* the solution through the glottis by means of properly constructed forceps with a sponge at the end: and Dr. Theophilus Thompson has invented a small syringe for the same purpose.

In chapter 5, Dr. Cotton gives a more particular description of the Chief Agents employed in the Treatment of Consumption. He enters very fully into the subject of change of air and climate; and brings forward arguments in support of the following statements:

“1. That change of air and scene is one of the most important elements, both in the prevention and treatment of consumption; and in an early stage of the disease, when the strength will permit, may, as a general rule, be sought in the spot most agreeable to the taste of the patient.

“2. That after tubercular softening has commenced, and, for still stronger reasons after cavities have formed, the patient should not leave his native shore.

“3. That it is unnecessary, at any stage of consumption, to seek a foreign residence, as England offers advantages equal to, and in many respects greater than, any other country.”—(p. 241.)

He brings evidence to show, not only that no climate can be considered free from phthisis, but even that Madeira, the South of France, Italy, and other places to which phthisical invalids are commonly sent, not only do not deserve their high reputation, but that some of them even exert an injurious influence. He continues:

“But it would be in vain for me to assert that the health may not be benefited by a winter residence in some of these districts; since numbers who have made the experiment, under proper conditions, are known to have returned with their strength renovated, and their tubercular disease, perhaps, arrested. I would only state, as my firm belief, that the same effect might equally have been gained in these cases, *could the patients have been induced to think so*, by the judicious selection of some place in the southern parts of England. There are some minds so constituted, that the monotony of an English country town, for the whole winter, would be intolerable, whilst the gaiety and novelty of a foreign residence would compensate for nearly every deprivation; and it may be right to indulge the tastes of such patients, if it can be done with safety: but the great mass of invalids, more especially females, may, I am convinced, find themselves, at every season of the year, equally well, and far happier, in their own country.”—(pp. 253-4.)

Some observations on cod-liver oil, other animal and vegetable oils, iodine, tonics, and other remedies, employed in phthisis, terminate the volume: which we with pleasure recommend to the perusal of our readers, as a faithful and succinct record of practical experience and observation.

DE LA CONTAGIONABILITÉ DE LA PHTHISIE PULMONAIRE, FONDÉE PRINCIPALEMENT SUR DES FAITS PRATIQUES. Par J. DE MUYNCK, Docteur en Médecine, etc. pp. 94. Gand: 1852.

(ON THE CONTAGIOUS NATURE OF PULMONARY PHTHISIS, FOUNDED PRINCIPALLY ON PRACTICAL OBSERVATIONS. By J. DE MUYNCK, M.D. Ghent: 1852.)

Dr. DE MUYNCK cites many of the older authors, who have given evidence in favour of the contagious nature of consumption; and further seeks to establish his views by reasoning on the observed phenomena of the disease. The following brief extract contains, we think, the pith of what he intends to convey.

“The facts which I have pointed out, and the reflections which naturally flow therefrom, justify the following conclusions:—

“1. All cases of phthisis resulting from specifically vitiated organisation—those, in fact, which arise from a peculiar virus, or a profound and continued change in a system of organs, are contagious and hereditary.

2. All those cases, on the contrary, which are accidental, or produced by a local cause, and which are not accompanied by a diathesis, cannot be communicated in either of these ways.”—(p. 73.)

Dr. Cotton, in his work on phthisis reviewed above, refers the cases of alleged communication of phthisis by contagion to mental impressions, principally of fear. The influence of the mind must always be remembered in attempting to decide the question of contagion.

We recommend Dr. De Muynck's work to the perusal of those who may be interested in the investigation of the subject on which it treats.

ESSAY ON THE ACTION OF MEDICINES IN THE SYSTEM; or, "On the Mode in which Therapeutic Agents introduced into the Stomach produce their peculiar Effects on the Animal Economy". Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for 1852. By FREDERICK WILLIAM HEADLAND, B.A., M.R.C.S., etc. 8vo., pp. 346. London: 1852.

THE subjects discussed in this Essay lie at the foundation of rational therapeutics, and yet there is too much of truth in the observation of Mr. HEADLAND, that "on no question, perhaps, have scientific men differed more than on the theory of the action of medicines." With a view to provide a remedy in some degree adapted to the removal of this reproach, the author of this elaborate essay has presented us with an arrangement, which certainly has the merit of clearness and perspicuity. The language employed is plain and simple, and can scarcely fail of being understood; while the copiousness and variety of the materials give evidence of diligent and judicious gleanings. The work is on a level with the science of the day, and indicates a philosophic tone of thought equal to the logical disposition of the propositions which it brings before the reader.

After some introductory remarks, and a short review of what has already been written on the subject, Mr. Headland embodies his own views in ten leading propositions, which form the bulk of the book: he concludes with some interesting observations on the action of a few of the more important medicines. We shall give the reader the propositions in detail, with a few remarks as we proceed; then the classification founded upon them; and lastly, we shall notice a few of the author's observations on the action of particular drugs.

Proposition 1. That the great majority of medicines must obtain entry into the blood or internal fluids of the body, before their action can be manifested.

This is attempted to be demonstrated by four considerations: 1. That a medicine introduced into the system elsewhere, acts in the same way as when introduced into the stomach. 2. That continuity of nerve is not necessary for the propagation of such effects; but vascular connexion is necessary. 3. The circulation of the blood is sufficiently quick to account even for the operation of those poisons which act most rapidly by influencing the nerve-centres. 4. The great majority of medicines have been detected in the blood, and found in the secretions formed from it.

These arguments are founded on well-known facts, and on special experiments conducted by M. Magendie, Sir B. Brodie, and M. Ehbort, on the Woorara poison; on various experiments by Dr. Blake, M. Volkmann, Hering, Mr. Allen, M. Runge, M. Ragsky, Drs. G. Bird, Tiedemann, Gmelin, Wöhler, and Garrod; and from them the author concludes, that, before the proper and peculiar and specific action of a medicine can be manifested, it must pass into the blood. He does not deny, however, that some effect may be produced by the introduction of certain medicines into the stomach, before their absorption, and by virtue of the nervous irritation which they excite; and this effect, he allows, may even be fatal.

Prop. 2. That the great majority of medicines are capable of solution in the gastric or intestinal secretions, and pass without material change, by a process of absorption, through the coats of the stomach and intestines, to enter the capillaries of the portal system of veins.

This is illustrated by an inquiry into the nature and function of the gastric and intestinal secretions; the laws of endosmotic absorption, and their fulfilment in this case; and the mode by which the great majority of medicines are reduced to a state of solution, which is necessary before they can be absorbed. The author rejects the endosmotic theory of the action of saline purgatives, first proposed by M. Pousseuille, and afterwards adopted by Liebig, Pereira, Golding Bird, and others, and with it the practical inferences which the two latter writers have drawn from it.

Prop. 3. That those medicines which are completely in-

soluble in water, and in the gastric and intestinal juices, cannot gain entrance into the circulation.

To establish the proof of this proposition, the author introduces some experiments of his own, with a view of disproving the possibility of the absorption of insoluble substances. These experiments must, however, be repeated in various ways, before the results can be considered satisfactory. Negative evidence is at best imperfect and fallacious, and avails little when positive facts appear to be opposed to it.

Prop. 4. That some few remedial agents act locally on the mucous surface, either before absorption, or without being absorbed at all; that they are chiefly as follows:—A. Irritant Emetics; B. Stomach Anæsthetics; C. Irritant Cathartics.

It will be perceived, that the foregoing propositions relate to the action of medicines after their introduction into the stomach, and before their passage into the blood. The two next propositions concern the action of medicines after their passage into the blood.

Prop. 5. That the medicine, when in the blood, must permeate the mass of the circulation, so far as may be required to reach the parts on which it tends to act. There may be two possible exceptions to this rule: A. The production of sensation or pain at a distant point; B. The production of muscular contraction at a distant point.

Prop. 6. That, while in the blood, the medicine may undergo change, which in some cases may, in others may not, affect its influence. That these changes may be: A. Of combination; B. Of reconstruction; C. Of decomposition.

The remaining four propositions contain a classification of medicines, in which they are divided (according to the author's views of their mode of operation) into hæmatics, or blood-medicines; neurotics, or nerve-medicines; astringents; and eliminatives.

Prop. 7. That a first class of medicines, called *hæmatics*, act while in the blood, which they influence. That their action is permanent. That of these, some, called *restoratives*, act by supplying, or causing to be supplied, a material wanting, and may remain in the blood. That others, called *catalytics*, act so as to counteract a morbid material or process, and must pass out of the body.

Prop. 8. That a second class of medicines, called *neurotics*, act by passing from the blood to the nerves, or nerve-centres, which they influence. That of these, some, called *stimulants*, act so as to exalt nervous force, in general or in particular. That others, called *narcotics*, act so as first to exalt nervous force, and then to depress it; and have also a special influence on the intellectual part of the brain. That others, again, called *sedatives*, act so as to depress nervous force in general or in particular.

Prop. 9. That a third class of medicines, called *astringents*, act by passing from the blood to muscular fibre, which they excite to contraction.

Prop. 10. That a fourth class of medicines, called *eliminatives*, act by passing out of the blood through the glands, which they excite to the performance of their functions.

These four classes of medicines Mr. Headland proposes to subdivide as follows:

CLASS I. HÆMATICA.

DIV. I. RESTAURANTIA.

Ordo 1. Alimentaria.

- " 2. Acida.
- " 3. Alkalina.
- " 4. Tonica.
- " 5. Chalybeata.
- " 6. Solventia.

DIV. II. CATALYTICA.

Ordo 1. Antiphlogistica.

- " 2. Antisyphilitica.
- " 3. Antiscrophulosa.
- " 4. Antiarthritica.
- " 5. Antiscorbutica.
- " 6. Antiperiodica.
- " 7. Anticonvulsiva.
- " 8. Antisquamosa.

CLASS II. NEUROTICA.

DIV. I. STIMULANTIA.

- Ordo 1. Stimulantia Generalia.
- " 2. Stimulantia Specifica.

DIV. II. NARCOTICA.

- Ordo 1. Inebriantia.
- " 2. Somnifera.
- " 3. Deliriantia.

DIV. III. SEDANTIA.

- Ordo 1. Sedantia Generalia.
- " 2. Sedantia Specifica.

CLASS III. ASTRINGENTIA.

- Ordo 1. Astringentia Mineralia.
- " 2. Astringentia Vegetabilia.

CLASS IV. ELIMINANTIA.

- Ordo 1. Sialogoga.
- " 2. Expectorantia.
- " 3. Cathartica.
- " 4. Cholagoga.
- " 5. Diaphoretica.
- " 6. Diuretica.

That this classification has its imperfections, cannot be doubted; and indeed the very nature of the subject prevents the possibility of a wholly unobjectionable division being made. We are, nevertheless, much indebted to the author for a framework, adapted to the present aspect of therapeutics, calculated to guide observers, and to facilitate the study of the action of medicines.

The last chapter of the work is in some degree explanatory of the table, as it shows that some medicines may be numbered under distinct heads, having a distinct action in different stages of their progress through the system. Thus, mercury, as an antiphlogistic, belongs to the class i., div. ii., ord. i.; as an antisymphilitic, to class i., div. ii., ord. ii.; as a cathartic, to class iv., ord. iii.; as a cholagogue, to class iv., ord. iv. This view is at once philosophical, simple, and practical. The medicines which are considered worthy of special notice in this chapter, are, cod-liver oil, sulphuric acid, potash, quinine, iron, antimony, mercury, iodine, colchicum, arsenic, ammonia, strychnia, chloroform, opium, hydrocyanic acid, aconite, digitalis, and tannic acid. Although we cannot agree with everything the author advances, yet, as a whole, his review of the action of these important agents is one of the most interesting parts of the work: it will tend in some degree to explain and harmonize the conflicting views, concerning the temper of familiar medicines. The following remarks on calomel illustrate this tendency:

"Some have, without sufficient reason, assumed calomel to be a sedative when given in large doses. To act in this way, very large doses have been recommended and given in fever and malignant cholera. Calomel is naturally an insoluble substance, and in these cases the function of absorption is at the very lowest ebb; so that it is probable that the large doses are often left unabsorbed, and pass out of the bowels very much as they entered, producing scarcely any more effect than so much chalk." (P. 316.)

We are somewhat disappointed in the account given of the action of iodine. The author faithfully details the contradictory opinions of different writers, but offers no opinion of his own; nor does he attempt to reconcile these differences. If all that is said of iodine be true, large doses are dangerous, and small ones are useless. Some practitioners have known it to cause absorption of the mammae and testes; but M. Magendie states, that he has never known such a thing to occur. By many it is believed to cause emaciation; but the last-mentioned author has observed, that strumous patients frequently become fattened through its employment. "The therapeutic actions of iodine have been ascribed by Dr. Billing to a contraction of the capillary vessels; by Dr. Pereira, to a liquefaction of the blood; by others, to a direct stimulation of the absorbent system." The consequence of this discrepancy is, that iodide of potassium is prescribed by different practitioners in doses varying from two or three grains to as many drachms, for all sorts of diseases.

Mr. Headland's book is a text-book of the action of medicines. It is a well timed publication; for now it is too much the fashion, even in the profession, to undervalue drugs; and there cannot be a question that the really important articles of the *materia medica* will rise in esteem, just in proportion as we become enlightened as to their mode of action in the human economy.

We conclude with an extract from the introductory remarks of the author:

"There have been, more or less, in all ages, two systems or schools of medical treatment, of which the one prevails among ignorant men, and in rude states of society, but the other requires a higher degree of enlightenment. These are the empirical and the rational systems. The first is founded on simple induction. By accident or by experience it is found that a certain medicine is of use in the treatment of a certain disorder; it is henceforth administered in that disorder; and on a number of such separate data an empirical system is constructed. It naturally requires for its elaboration a comparatively small degree of knowledge.

"Now, this observation of facts is indispensable as a beginning, but something more is required. We must not be satisfied with taking them separately, but we must proceed to compare together a large number of facts, and draw inferences from this comparison. And our plan of treatment will become rational, when, on the one hand, from an accurate knowledge of the symptoms of diseases, we are better enabled to meet each by its appropriate remedy; and, on the other hand, when, from some acquaintance with the general action of a medicine, we are fitted to wield it with more skill and effect, and to apply it even in cases where it has not yet been proved beneficial. Thus, for the proper perfection of medicine as a rational science, two things are in the main needed; the first is, a right understanding of the causes and symptoms of disease; the second, a correct knowledge of the action of medicines. Should our acquaintance with these two subjects be complete, we should then be able to do all that men could by any possibility effect, in the alleviation of human suffering. This sublime problem is already being unravelled at one end. Diagnosis and nosology are making rapid strides; and perhaps we shall soon know what we have to cure. But at the other end our medical system is in a less satisfactory condition; and though some impatient men have essayed, as it were, to cut the Gordian knot, and have declared boldly on subjects of which they are ignorant, yet it must be confessed, that in the understanding of the action of medicines, and of their agency in the cure of diseases, we do not much excel our ancestors. While other sciences are moving, and other inquiries progressing fast, this subject, so momentous in its applications, has, in spite of the earnest labours of a few talented investigators, made, after all, but small progress. Let but those who feel this want bestir themselves to remove it, and it will soon be done. Those doubts and difficulties, which are now slowly clearing away before the efforts of a few, will then be finally dispelled by the united energies of all; and instead of our present indecision and uncertainty on many points, we shall find ourselves eminently qualified to wage the conflict with disease, being skilled in that science whose name bespeaks its peculiar importance, the science of *Therapeutics*." (P. 3.)

WHAT TO OBSERVE IN MEDICINE; or the Means of Improving it, as a Science and an Art: with the duties of the Medical Profession to their Patients, the Public, and themselves. An Introductory address to the Harveian Medical Society, delivered at the commencement of its Twenty-Second Session, Oct. 7th, 1852. By JAMES BIRD, M.D., F.R.C.S.Eng. 8vo., pp. 25. London: 1852.

DR. BIRD's address breathes an excellent spirit; and is well calculated to excite to scientific inquiry, and brotherly harmony in the profession.

Combination for scientific investigation is strongly insisted on by Dr. Bird as the only means of attaining great results. This opinion we hope to see gaining ground every day within our Association, so that it may soon do more than it has yet achieved in the way of collecting, classifying, and generalizing the results of individual experience.

Dr. Bird, after giving a brief outline of the intricacies and requirements of medicine, pursued both as a science

and as an art, thus refers to the value of medical association in pursuing medical inquiries :—

"To unravel one and supply the other, must be the business of a lifetime; not of one, but of many individuals in succession; who, selecting a well-digested plan of experimental medicine, for collecting facts on which to found general principles and rules of art, must labour, with a sincerity of purpose, to obtain common grounds for comparing them in all countries; rejecting those that are doubtful, and perfecting all those that are incomplete or carelessly observed. In the absence of any association, or scientific centre of common intercourse, where the united efforts of the enlightened medical men of Europe and of England might be made tributary to this great object of our profession, we should like to see all the scientific medical societies of this kingdom and of Europe organized into an association, for carrying out this most legitimate and important inquiry. Looking at other scientific departments, and contemplating what great and noble things have been accomplished by the union of wealth and enterprise, I do not despair of yet seeing the establishment of such an union of zealous medical investigators of the truth, before the burning light of whose labour the glare of false systems will be extinguished."

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

THERAPEUTIC USES OF THE BARK, LEAVES, SEEDS, AND ROOT OF THE COMMON ASH (FRAXINUS EXCELSIOR).

In a work recently published by Dr. OTTERBOURG,* some interesting remarks are made upon the use of the *leaves* of the ash in gout and rheumatism. It appears, that since these leaves were introduced into the *materia medica* of Germany in 1841, by Rademacher, they have enjoyed a very considerable reputation for remedial powers in the diseases just named. Apparently in ignorance of the therapeutic reputation which ash leaves had obtained in Germany, two French physicians, Drs. POUGET and PEYRAUD, published a paper in the *Union Médicale* for Nov. 27th, 1852, in which they detail various cases of gout and rheumatism cured by the ash leaves; and among the cases of gout described is that of one of the authors, Dr. Peyraud. The value of the *bark* of the ash is of older date, and is better known. A few remarks, founded upon the works referred to, and upon information gleaned from other sources, may be useful to many of our readers, who, in hospital, dispensary, or union practice, may be often glad to be able to substitute cheap and indigenous remedies for costly drugs, whenever equal advantages can be obtained from the former.

THE BARK of the *fraxinus excelsior* is bitter and astringent. Its febrifuge action is undoubted; and so long ago as 1712 it received the name of European cinchona. It has been employed in the form of tincture, decoction, infusion, and powder. The dose is rather larger than of the corresponding preparations of cinchona. The infusion is as good a form as can be adopted. We may remark, that the retail price of the bark in Covent Garden Market is two-pence per ounce.

THE LEAVES are said by some to be purgative; by others they are declared to have no such effect. From their general similarity of appearance, they are sometimes substituted by the druggist for senna leaves. The London seed-vendors generally have a supply of ash leaves, but they inform us that they are seldom asked for, and that they do not know the therapeutic virtues on account of which their customers purchase them. We believe that an investigation of the medicinal properties of ash leaves would, if properly conducted, yield some useful results; for, in various parts of this and other countries, they now are and long have been used successfully in various traditional nostrums.

In 1842, Dr. Peyraud had his first attack of gout, which was severe, and lasted for twenty-five days. During the three following years, the attacks increased in frequency and severity. Having derived little benefit from the remedial means which he had resorted to, he listened to the suggestion of one of his patients, an inhabitant of the department of Dordogne in France, who advised him to try an infusion of ash leaves, informing him,

at the same time, that his forefathers had been cured by this prescription, and that many of the country people got rid of "their pains" by employing it. Dr. Peyraud took the infusion of ash leaves, and from 1845 to 1849 had no fit of gout. He then had an attack, which yielded in five days to the infusion of ash leaves, used under the observation of Dr. Pouget. These circumstances recalled to the recollection of Dr. Pouget a fact which he might otherwise never again have considered. It was this,—that when he was a physician at Sorèze, in 1824, the peasants of that place had spoken to him of the great power which an infusion of ash leaves had in driving away pains. He afterwards discovered that it had been used forty years ago as a gout specific by the peasants of Auvergne.

A commercial traveller, who had been gouty for twenty years, and had saturated himself with the syrup of Boubée and other vaunted specifics, consulted Dr. Pouget. At this time, he was an almost constant prisoner in his room with successive attacks. After eleven days use of the infusion, he was able to walk two *kilomètres* (one and a quarter English mile); in fifteen days he resumed his journeys, and was able to travel without suffering, by diligence, from Bourdeaux to Quimper.

Several other cases are detailed, some of them acute, and others chronic. Articular rheumatism, in numerous instances, was also benefited by the infusion of ash leaves.

Drs. Pouget and Peyraud thus sum up their opinions as to its efficacy and mode of administration:

"The powder (infused) of ash leaves is perhaps a true specific for gout and rheumatism, combining with the most powerful curative action, the immense advantage of giving rise to no dangers nor inconveniences, such as result from the use of colchicum. Having no purgative properties, it may be taken in any condition of the digestive canal. It causes neither nausea, sickness, general discomfort, nor depression. Experience enables us to state, that generally, under its use, at the end of four or five days, and sometimes sooner, the pain, redness, and swelling have sensibly diminished in intensity, or have even disappeared."

The method of administration is thus minutely described.

1. Each dose of the powdered leaves ought to be infused for three hours in boiling water.
 2. Before this infusion is taken, it requires to be sweetened to taste, and strained through a linen cloth.
 3. In acute gout, and especially at the commencement of the attack (whether with or without fever), two doses of the powder ought to be infused in three cups of water; one to be taken at bed-time; the second, early in the morning; and the third, between breakfast and dinner. The medicine, in diminished doses, requires to be continued for eight days after the symptoms have disappeared.
 4. In chronic gout, a cup of infusion ought to be taken night and morning, for a long period. Fits of gout may be more or less indefinitely postponed by having recourse to this treatment, say for eight or ten days in every month.
 5. In acute rheumatism, the infusion greatly assists the action of other medicines which are commonly used; and it is particularly beneficial in removing articular swellings. It produces equally good results in chronic rheumatism, whether articular, muscular, or nervous.
 6. During the use of the remedy, it is not necessary in any way to change the mode of living, nor to adopt any special regimen, so long as the laws of sound hygienics are observed.
- Speaking of the dose and method of administration, Dr. Otterbourg says: "Several times during the day, thirty-two grammes of ash leaves may be taken, infused in a sufficient quantity of hot water. In muscular pains, and in rheumatism of the scalp, this is an excellent means of cure."

From various works we have gleaned the following notes regarding the bark, leaves, seeds, and root.

PLINY ascribes numerous medicinal virtues to ash leaves, and speaks of them as a specific for the bites of serpents. (Lib. vii, c. 13.) BOUREGARD, a surgeon of Rochelle (*Anc. Journ. de Méd.*, vi, 233), and others, have cited cases from their own practice in corroboration of this statement. WILICH and others speak of the tonic properties of ash leaves. PÉLÉTIN and GILBERT recommend them in scrofula. TABLET, in 1711, declared them to be equally purgative as senna leaves, but less liable to cause griping. COSTE and WILLEMOT found them less aperient than senna leaves, one-third more being required as a dose. They state, that the evacuations were sooner completed, and that, along with their purgative properties, they have a diuretic action. HOOPER, in his *Medical Dictionary*, has the following notice: "The bark, when fresh, has a moderately strong bitterish taste. It possesses resolvent and diuretic qualities, and has been successfully administered in the cure of intermittents. The seeds

* *Aperçu Historique sur la Médecine Contemporaine de l'Allemagne. Paris: 1852.*

are occasionally exhibited as diuretics, in the dose of a drachm." The vermifuge action of the bark is mentioned by several authors, and BERGIIUS says, "Sunt qui multum sperant de cortice fraxini, in lacte vel aqua cocto, adversus vermes, atque etiam contendunt, hunc corticem sæpe vermes pepulisse, ubi alia fellunt." (*Tomus* ii, p. 832. *Stockholmia*: 1778.) According to Martin-Solon, the decoction of the root is purgative and emetic. (*Bul. Gén. de Thérap.* i, 163.) MÉRAT and DE LENS, in the *Dict. de Matière Médicale*, give the fullest notice which we have seen of the medicinal properties of the different parts of the ash. At the end of their article, the following authorities are cited: Schroer (J. C.) *Description du Frêne avec l'Énumération de ses Propriétés Médicales* (en Allemand), etc. Francfort-sur-l'Oder: 1700, in 8. Helvig (G.) *Diss. de Quinquina Europæorum, sive Cortice Fraxini*. Grypswaldia: 1712, in 4. Schreger (B. N. G.) *Diss. de Corticis Fraxini Excelsioris Naturæ et Viribus Medicis*. Lipsiæ: 1794, in 4. There is no reference to *fraxinus excelsior* in Woodville's *Medical Botany*; and Decandolle, Richard, Stephenson, Churchill, Duncan, and Pereira, make no mention of its medicinal properties.

Additional information is obviously required regarding the medicinal properties of the bark and leaves of the common ash. Can any of our readers contribute towards supplying this deficiency? Under certain circumstances, the leaves, it appears, are purgative, and in others astringent: this, and various points connected with the physiological effects produced on different organs, evidently demand experimental elucidation. The discrepancy of opinion among observers may be explained by the experiments having been made with leaves gathered at different seasons. MÉRAT (*Dict. de Mat. Méd.*) advises that the leaves be gathered when in full vigour, and carefully dried for winter use; but in summer they may be used green.

DANGEROUS SALIVATION FROM THE ECTROTIC TREATMENT OF SMALL-POX BY MERCURIAL OINTMENT.

DR. GEORGE PATERSON, of Tiverton, has published in the *Monthly Journal of Medical Science* for Dec., 1852, a case of this description, lately treated by himself and Mr. Mackenzie, of the same town. He remarks, that, although this method of treatment has been much lauded both at home and abroad, no case of its producing salivation has till now been placed on record. Mercurial ointment thickened with starch, as recommended by Dr. Hughes Bennett,* was for several successive days smeared over the face, and allowed to remain in contact with the skin. The quantity employed amounted to not more than one ounce and a half. A week after its use had been discontinued, mercurial salivation, ulceration of the gums, etc., showed themselves; and they seem to be correctly referred by Dr. Paterson to the use of the ointment, and not to the consequences of the disease for which the patient was under treatment. The concluding paragraph of Dr. Paterson's communication is as follows:

"There are circumstances in which it becomes a duty to relate the opprobria, not less than the successes of our practice; and the present appears to me to be a case of the sort. It reveals a risk from a particular mode of treatment, pursued in strict conformity to the instructions of those in whose hands it has proved successful, the possibility of which every one would of course admit, but which appears to have been treated of, even by authorities opposed to the practice, as scarcely worthy of being taken into their account. I am far from wishing to say, that a new practice is to be judged and condemned by the untoward accidents of a single case; but I cannot help looking upon mercurial salivation as so great an evil, when superadded to the already existing local irritation and swelling of the face and mucous membrane, which usually occur in severe cases of small-pox, that the risk of its occurring in even a single instance may well affect the general question of its safety and expediency; and that more especially, when we find the drug, as in this case, accumulating and lying latent in the system, and its specific effects manifesting themselves suddenly and with unusual severity some days after its use had been given up, and after all cause of apprehension on the patient's account, either from this source or the original disease, seemed to be at an end."

* Reports of M. Briquet's having used this preparation successfully in the hospitals of Paris, induced Dr. Bennett to try it in two cases in the Royal Infirmary of Edinburgh, according to the subjoined formula:—R. Ung. hydragryi ʒi; Pulv. amyl. ʒij. M. To be smeared over the face night and morning. Dr. Bennett's remarks on the ectrotic treatment of small-pox will be found in the *Monthly Journal of Medical Science* for January 1850, p. 60.

CALOMEL AND SODA COMBINED AS A CATHARTIC.

DR. HUNT states in the *Boston Journal* (vol. xlv., p. 161), that the purgative power of calomel is remarkably increased by the addition of bicarbonate of soda. He says, that two grains of calomel, combined with from ten to twenty grains of soda, purges efficiently without griping. When the bowels and liver have been well acted on, the combination loses its purgative power, and ought to be discontinued. Dr. Hunt believes that bicarbonate of soda has some power in preventing calomel from acting on the gums.

CHLOROFORM IN COLIC, PARTICULARLY IN LEAD COLIC.

DR. ARAN, of Paris, warmly recommends the internal administration of chloroform in repeated doses of from ten to twenty drops, in colic, and particularly in lead colic. He says, that it relieves the spasm more effectually than opium or belladonna, and moreover possesses the great advantage of being more safely repeated than either of these medicines. A hundred and fifty drops may, according to Aran, be given in twenty-four hours; and we have no doubt that even a larger quantity, though seldom required, may be safely administered, as chloroform is very quickly eliminated from the system. In corroboration of the value of chloroform in colic, the writer of these lines adds his experience of its efficacy in his own case. He had suffered the most excruciating pain in the back and abdomen for twenty-two hours, accompanied by incessant vomiting, which opium and hydrocyanic acid failed to mitigate: indeed, they were rejected as soon as taken. A dose of twenty drops of chloroform was then taken, well mixed in a little water. After this, there was no more sickness, and almost instantaneously the pain began to abate, and in ten minutes had entirely subsided. Upon a return of the pain, some hours afterwards, it was again and finally removed by a smaller dose of chloroform. The necessary purgatives were afterwards easily retained, and the cure completed.

PAGLIARI'S HEMOSTATIC.

This nostrum has recently excited a great deal of attention both in France and Italy; and from the reports of Sédillot and others, we are inclined to think that it may really be possessed of considerable power in staunching blood from small or retracted vessels to which the ligature cannot be applied. When the hemostatic is added to blood in a glass vessel, a dense blackish mass is formed.

For some time, Pagliari concealed the composition of his nostrum; but he has now published the following as the formula according to which it is prepared: Take eight ounces of tincture of benzoin, one pound of alum, and ten pounds of water; boil them together, and stir the compound for six hours in a glazed earthen vessel, adding water so as to supply the loss by vaporization, and to allow ebullition to continue. Afterwards, filter the fluid, and preserve it in stoppered bottles. Its taste is styptic, its odour aromatic, and its appearance like limpid champagne.

ACTION OF SULPHURIC ACID.

In the *Archiv. f. Phys. Heilk.* for 1851, Dr. MIQUEL states, that when a *gramme* (15½ grains) of sulphuric acid is administered daily, in a very diluted form, it produces a decided increase in the soluble salts of the urine. From this observation, he infers, that the mineral acids diminish the proportion of the saline ingredients of the blood.

MICROSCOPICAL DISCOVERY.

THE PACCHIONIAN BODIES.

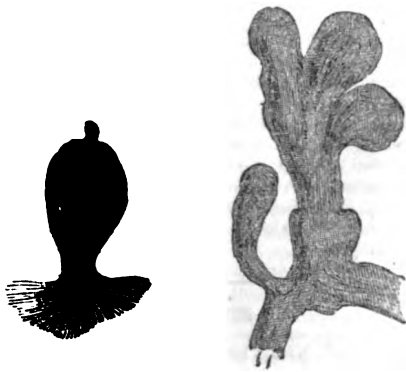
Self-evident though the axiom be, that makes the study of morbid anatomy dependent upon a correct knowledge of healthy parts, the instances are not infrequent in which pathological errors have been committed from mistaking a natural for an abnormal structure. Perhaps the so-called glands of Pacchioni have given rise to one of the most glaring instances of such error: first described by the above named anatomist in 1705, their structure, and their relations to disease of the membranes of the brain have usually been much misunderstood; and physiological conditions having been erroneously supposed to be morbid, the natural consequence is, that what is really the result of disease has been overlooked. Professor LUSCHKA (*Müller's Archiv.* 1852, p. 101) has recently studied the Pacchionian bodies, and the following is a summary of his results.

The bodies in question, which are found closely connected

both with the cerebral and the parietal arachnoid along the course of the longitudinal sinus; held by Soemmering to be granules of fat, and by Rokitsky and Hyrtl to be the products of inflammatory effusion,—are in reality normal, as might *a priori* be supposed from their being found in all persons of all ages, although they may readily be confounded with actual inflammatory exudation under or upon the free surface of the membrane.

The Pacchionian bodies are found *only* near the mesial line, and are unconnected with disease of the subjacent pia mater, which is not found to adhere more closely in their vicinity than elsewhere to the arachnoid, from which latter membrane the granules in question cannot be torn, and of which they are indeed regularly-formed offsets.

Pacchionian Bodies of the Cerebral Surface. On tearing off portions of the arachnoid from the mesial edge of the cerebral hemispheres, it separates easily from the pia mater, and carries with it the Pacchionian bodies, which appear under the lens as shaggy projections of its proper substance, of various form and size, as well as of very different number in different heads. They are usually smaller and less distinct the younger the individual, their size varying from that of a poppy seed to that of a millet seed. Their colour is grey or whitish, and their structure usually firm and fibrous; they are covered with a scanty epithelium, and contain no vessels. The curious cactus-like forms of these bodies are seen in figs. 1, 2.



Figs. 1, 2. Pacchionian bodies, after Luschka; 30 diameters.

Pacchionian Bodies of the Parietal Surface. The fibrous web of the dura mater, where it forms the longitudinal sinus, presents many irregular interstices over which the arachnoid is stretched, and into which it partly sinks. From these points, where the serous membrane is unsupported by the fibrous tissue, spring the Pacchionian bodies, presenting, as on the surface of the hemispheres, various shapes; pressing backwards through the dividing fibres of the dura mater upon the skull, and even into the canal of the sinus, and projecting forwards upon the surface of the brain, so as to come in contact with the Pacchionian bodies already described as springing from the cerebral arachnoid.

In the young they are usually less prominent, and of



Fig. 3. Pacchionian bodies, after Luschka; 30 diameters.

simple shape; but in some cases, especially in subjects more advanced in life, they assume very complex and often regularly beautiful forms, (fig. 3,) and in this case they interlace so closely with those springing from the cerebral arachnoid, that on removing the dura mater, both folds of serous membrane come away together, an occurrence often erroneously attributed to pathological adhesions.

Morbid Conditions of the Pacchionian Bodies. The most remarkable of these is hypertrophy, observed chiefly in old persons; in consequence of which, masses of considerable size are formed, and, pressing into the longitudinal sinuses, sometimes seriously impede the current of the blood. At other times small tumours are produced, which are often mistaken for fungus of the dura mater, and which we ourselves have once or twice noticed as the apparent cause of sudden death by their pressure on the surface of the brain, a pressure the force of which was manifested by their having formed deep pits in the skull above, all but penetrating its substance.

The Use of the Pacchionian Bodies is unknown. It can only be guessed that they may in some way protect or strengthen the veins, as these enter the longitudinal sinus, in man, the only animal in whose head the bodies in question have been detected.

MUSCULAR STRUCTURE OF THE IRIS.

Many opinions, as our readers must be well aware, have been held with regard to the motions of this remarkable structure, some attributing them to vascular erection, others to muscular contraction; and though physiologists are now, we believe, pretty well agreed that the latter is the true explanation, it is interesting to have further anatomical proof of the fact. Mr. J. LISTEN, having had an opportunity of examining a portion of healthy and perfectly fresh human iris, removed in forming an artificial pupil, has succeeded in detecting those elongated "fibre-cells" which are characteristic of unstriated muscle. Prosecuting his researches upon the eyes of various animals, he has displayed the sphincter muscle in the form of a distinct circular belt of fibres, lying upon the posterior face of the iris. In the human subject, it is about one-thirtieth of an inch broad, is thickest at its outer part, and thins off towards the pupil, the margin of which it forms as a sharp edge, covered upon its anterior surface only by some vessels ramifying in delicate membranous tissue. The action of this annular muscle is of course to contract the pupil.

The dilating fibres of the iris cannot be made out so distinctly, and must be carefully distinguished from the blood vessels and nerves of the organ. They appear, however, to pass from its whole circumference towards the outer edge of the sphincter muscle, with which they become blended, and in which they are lost. They are straight throughout the greater part of their courses, but interarch anteriorly with one another, and with the circular fibres, the most external of which are thus rendered less parallel to one another than those forming the pupillary border.—*Journal of Microscopical Science*, No. 1, 1852, p. 8.

PHYSIOLOGY OF THE NERVES.

It is in all probability chiefly by a closer study of the central and peripheral terminations of the nervous tubules that our acquaintance with their physiology is to be extended. The ganglionic centres, on the one hand, in which they take their rise, and which no doubt are the sources of their peculiar power; and, on the other, the wonderfully constructed organs in which they terminate,—(or *vice versa*, according as we speak of motor or of sensitive nerves;)—must, when thoroughly understood, reveal to us more of the hidden properties of nervous structure than can ever be gathered from the study of the mere connecting cords, however complex their arrangement, or however remarkable their course.

Dr. A. WALLER has published (*Müller's Archiv*. 1852, p. 592,) some interesting experiments on the results of dividing the roots of the spinal nerves in various animals, particularly in dogs and pigeons. He found in the first place, that after cutting any nerve across in a living animal, the fibres below the point of division gradually lost their structure, and wasted away or were disintegrated; a result only the same as that often observed on a comparatively great scale in the case of the optic nerve of a blind eye. He found also, that when reunion of the divided ends took place, it was followed by a gradual reproduction of the tubules throughout the whole course of the nerve.

Now, if a ganglion of grey matter intervene between the

point of section and the periphery, this wasting of the tubules *does not take place*, showing that these ganglia are indeed centres of nervous power and nutrition. Thus when both roots of a spinal nerve were divided, both of course wasted down to the ganglion; but *below* the ganglion the fibres belonging to the *anterior* root alone wasted, while those belonging to the *posterior* root, reinforced by new fibres arising from the ganglionic grey matter, retained their integrity of structure, though of course the connexion of the sensitive peripheral parts with the cerebro-spinal axis was suspended till union of the cut ends took place. If the *posterior root alone* was divided, the motor root being left entire, no wasting whatever could be observed in the mixed nerve, all its tubules retaining their structure, and of course the motor powers of the limb remaining perfect. On examining the ganglia in the last case, three or four months after the section, Dr. Waller succeeded in making out the difference between the wasted and disorganized tubules belonging to the posterior spinal root, and those others, perfect and uninjured, which, originating amid the ganglionic matter, were passing down into the mixed nerve.

STRUCTURE OF THE SENSITIVE PAPILLÆ OF THE SKIN.

Our knowledge of the way in which the nerves of sensation terminate in their respective organs is as yet very inexact, and the structure of these organs themselves has been in many respects but imperfectly made out. All acknowledge in the ear, and in the eye, a curious and complicated apparatus suited to receive the impressions of the special object of each of these senses; but in respect of the other three senses, such a relation is less perfectly understood. The researches of Todd and Bowman on the tongue, have however done much to advance our knowledge of the organ of taste; and RUDOLPH WAGNER, (in Müller's *Archiv.* 1852, p. 403,) has given interesting drawings and descriptions of certain peculiar bodies, called by him *corpuscula tactus*, in the tactile papillæ of the skin.

Fig. 4 represents one of these papillæ of the usual well-known form, from the anterior surface of the end of the little finger. It is represented as denuded of its epidermis, the surface of the papilla presenting slight inequalities where the lower layer of epidermic cells had rested, and its substance containing some nucleated fibres. Two nervous tubules are seen rising into it, and terminating in the oval "*Tacthörperchen*" which forms the apex of the papilla, and is embedded in its substance.



Fig. 4. Papilla and Corpusculum Tactus, after Wagner. 400 diameters.

This body has not been isolated, and having been studied only in sections such as those we have copied from Wagner's plate, its intimate structure is not exactly known. Kölliker maintains, that it is composed of a central axis wrapped round with elastic fibres, and distinct dark striæ are certainly observed to cross it in various directions, while small corpuscles are not unfrequent among them. Wagner is quite satisfied, that the nervous tubules actually enter this *corpusculum tactus*, though the exact mode in which they terminate is undiscovered; he has not been able to find any looping of the nerves, though there are other papillæ in which looping *vessels* are easily seen. (Fig. 5.) It is very remarkable, that capillaries and nerves do not appear to coexist in the same papilla, so that those which contain a looping vessel are destitute of a *corpusculum tactus*, and *vice versa*. This appears to us so extraordinary, as to require confirmation; but, if Wagner's account of the structure of the organ of touch prove to be accurate, an interesting addi-

tion will have been made to the physiology of the senses, even although the mode in which these rounded bodies subserve the transmission of accurate tactile impressions to the nerves, may not be better understood than the precise function of the cochlear or vestibular nervous apparatus in the ear. Wagner supposes,



Fig. 5. Papillæ and Corpuscula Tactus, after Wagner. 400 diameters.

that his *corpuscula tactus* on the surface, and the Pacinian bodies more deeply seated, absorb all the terminal filaments of the sensitive nerves, and thinks it possible that they may be connected severally with different modes of sensation; one with the appreciation of heat, for instance, and the other with touch, properly so called. At all events, that the peripheral extremities of the sensitive nerves should terminate in distinct *organs*, and not be merely lost in *tissue*, is a result which ought not to prove surprising.

SURGERY.

DIVISION OF NERVES IN FACIAL NEURALGIA.

In neuralgia, especially of the face, division of the affected nerve has been recommended and practised by many surgeons: as Mr. Haighton, Sir Astley Cooper, etc. The plan practised has been the division of either of the branches of the fifth nerve, at the point where they come out in the face; and some have removed a portion of the nerve. M. Roux's plan, which we will presently describe, differs somewhat from these.

For an outline of the views of various authors, and some very judicious remarks on the subject, we would refer our readers to the late Professor Samuel Cooper's *Surgical Dictionary*, article NEURALGIA. The following observations by Dr. Watson (*Lectures on Physic*, 3rd edit., vol. i, p. 712) are worthy of attention.

"One of these topical expedients, which promised well when first thought of, is the division of the trunk of the painful nerve, so as to cut off the nervous communication, through that main channel at least, between the painful part and the brain. This was originally proposed by Dr. Haighton, and was at first attended with some little success; but in a great number of instances it has signally failed, as indeed might have been expected. In one case, the several branches of the fifth pair were cut by Sir Astley Cooper; but in vain. When there is any reason to think that the disease has a constitutional origin, or even a local *distant* origin, the division, or even the excision, of a part of the nerve must be perfectly useless.

"Nevertheless, there are cases in which the division of the nerve, or some other surgical operation may be required. If you can make out that there is any tumour pressing upon or adherent to some part of the nerve; or if some foreign body, as a splinter or a shot, should be ascertained to be in contact with the surface of the nerve, or to be entangled in its substance; the tumour or the foreign body may be removed by the knife, with the strong expectation that a cure will be thus effected."

DR. JULES ROUX, of Toulon, in a memoir published in *L'Union Médicale* for Oct. 5th, 12th, 26th, and 28th, 1852, describes a new process for performing resection of the nerves in facial neuralgia. He observes that the following means have been recommended, when medicine has proved powerless to arrest the disease: 1. Section: 2. Cauterisation: 3. Resection. Simple

section of the nerve, as advised by Maréchal, André, Boyer, etc., is too often unsuccessful in preventing a return of the disease, when the divided nerve has become reunited. The same remarks apply to subcutaneous division, notwithstanding the assertions made by M. Bonnet of Lyons.

Light and frequently repeated transcurent cauterisation of the skin, as practised by M. Valleix, is useful, but not always successful.

Resection or removal of a portion of the nerve is held by Dr. Roux to be most frequently successful: but it is not infallible. He has arrived at the following conclusions from an observation of eleven cases, in which he performed resection of the trifacial nerve:

1. In facial neuralgia, resection of the nerve behind the painful branches, or between the terminal branches and the origin, may triumph over the disease.

2. A cure may be effected, even when some neuralgic branches have been left behind the excised portion, on the part of the nerve nearest its root.

3. When two or three branches of the trifacial nerve are affected in succession, the resection of the branch which was first affected is often sufficient to cause the disorder to cease.

4. Under other circumstances, when the branches remain still painful, it is necessary to operate on two of them.

5. After resection of a branch of the trifacial, the pain, though abolished in the terminal branches, may still continue behind the part operated on, and in other branches proceeding from the nerve.

6. Neuralgic sensations, similar to those felt after amputation of limbs, may appear at a longer or shorter interval after resection has been performed.

7. The loss of sensation in certain parts of the face, which follows resection of the branches of the trifacial, is likely to disappear some months after the operation, without recurrence of the neuralgia.

8. When, after resection of the infra-orbital or mental nerve, for instance, pain reappears behind the part operated on, one branch only may be affected, the cure remaining complete in the others.

9. When both sides of the face are neuralgic, resection of the nerves of one side has no effect on the neuralgia of the opposite side.

The only two cases of resection which Dr. Roux finds described, are related by M. Bérard in the *Journal des Connaissances Médico-Chirurgicales* for 1835, p. 441.

Dr. Roux's new operation is founded on the principle, that the nerve must be sought for in the bony canal through which it passes, or at the foramen from which it emerges. He proposes that, the patient having been put under the influence of ether or chloroform, a curved incision, with the concavity directed upwards, should be made through the soft parts down to the bone. The foramen is easily found: 1. By anatomical knowledge of its position: 2. By hæmorrhage from the artery which accompanies the nerve: 3. By passing a probe into it: 4. By the nervous filaments which can be seen in its vicinity: 5. By the pain, if the patient is not sufficiently under the influence of the anæsthetic. Whenever practicable, he exposes the canal in which the nerve runs by means of a trephine; and then excises a portion of the nerve, from three to five millimètres in length (from about one to two inches). He then applies the cautery, at a white heat; and sometimes also pushes back the end of the nerve with a blunt probe. Before dressing the wound, he detaches the periosteum round the foramen, in order to be certain that no nervous filament has escaped. The hæmorrhage produced is in general readily arrested. After the operation, there is always local paralysis of sensation: and sometimes also some paralysis of motion; but this is slight, and disappears in time.

M. Roux describes his methods of operating on each of the branches of the trifacial.

Resection of the inferior dental nerve in its canal. A flap is made, commencing from the anterior edge of the masseter, in front of the facial artery, and extending to near the mental foramen. The canal is opened by a small trephine, and the piece of bone raised. The blood is wiped away, the nerve exposed, and excised by means of scissors or a bistoury in the whole extent which has been laid bare: and the cautery is applied. Sometimes the dental canal is double; but then there is only a thin osseous plate between the two canals. The hæmorrhage from the inferior dental artery is but slight, and is easily arrested by cauterisation, or by the introduction of a few filaments of charpie.

Resection of the mental nerve. The foramen having been exposed, Dr. Roux excises as much of the nerve as can be found,

and introduces several times the cautery into the foramen, as far as the branch of the dental nerve which goes to the incisor teeth. If the foramen is too small to admit this, he finds it necessary to apply the trephine, and excise and cauterize the inferior dental nerve in its canal, before its division.

Resection of the infra-orbital nerve. This is performed by excising as much of the nerve as is exposed, and introducing the cautery into the foramen, or into both, if, as sometimes happens, there are two.

Resection of the supra-orbital nerve is performed in an analogous manner.

Resection of the superior and posterior dental nerves. The operation is here more complicated, from the deep situation of the nerves. The upper lip must be well supported, the gingival fold incised, and the antrum of Highmore trephined behind the canine fossa: the gum, and, if possible, the lining membrane of the sinus, must be raised: finally, the segment of the maxillary tuberosity, where the dental canals are present, must be removed. In this way, the operation seems simple and free from danger.

Resection of the anterior half of the inferior dental nerve: M. Beau's process. The operation is performed as in Dr. Roux's process; then the ends of the nerve, appearing at the hole made with the trephine, and at the mental foramen, are seized, and the nerve between them pulled backwards and forwards, so that the connexion with the dental branches is broken, and the nerve pulled out through the mental foramen.

Resection of the posterior half of the inferior dental nerve: M. Beau's process. A trephine is applied below the sigmoid process, and below the second molar, and the intervening portion of nerve is extracted. Dr. Roux, allowing that this process is ingenious, fears that it may give rise to inflammation and diffuse suppuration.

The following is an analytical table of six cases operated on by Dr. Roux:

No.	Name.	Age.	Parts affected.	Duration of Disease.	Nerves divided.	Time after operation.	Result.
1	D.	74	All the branches of 5th pair on both sides.	30 years	Right inferior dental and infra-orbital.	15 months	No return in infra-orbital: return in dental after six months.
2	C.	68	All branches of 5th pair on right side.	15 years	Right infra-orbital.	8 months	Complete cure.
3	J.	69	Ditto.	34 years	Ditto, and mental.	8 months	Do.
4	D.	63	Ophthalmic and superior maxillary on left side.	8 years	Left infra-orbital.		Failure. Patient has been much relieved by transcurent cauterization.
5	G.	25	Infra-orbital & mental nerves of right side.	5 years	Nerves affected.	7 months	Cured.
6	S.	70	All branches of 5th pair on right side.	22 years.	Mental and inferior dental.		Do.

A case of severe neuralgia of the inferior dental nerve, is re-

ported in the Hospital Mirror of the *Lancet*, for October 23, 1852, as having been successfully operated on by Mr. FERGUSSON. He performed subcutaneous incision of the nerve at the point where it emerges from the mental foramen on the right side. Some weeks after the operation, the patient went out, cured, at least for a time.

ASSOCIATION INTELLIGENCE.

NOTICE TO MEMBERS:—PAYMENT OF SUBSCRIPTIONS.

MEMBERS who have not yet paid their Subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Treasurer (Sir CHARLES HASTINGS), or to the Secretary of the Association, at Worcester. Gentlemen, joining the Association, are required to observe the 24th rule, which states, that "each member is to pay one guinea annually; and that the subscription commences on the 1st of January in each year, and must be paid in advance."

JAMES P. SHEPPARD, Secretary.

ADDRESS ISSUED BY THE JOURNAL COMMITTEE IN SEPTEMBER LAST.

The Committee appointed at the anniversary of the Provincial Medical and Surgical Association, held at Oxford, July 21st, 1852, with full powers to make the necessary arrangements for editing and publishing the Journal in London, avail themselves of the earliest opportunity of submitting to the profession the following scheme of publication, and of earnestly requesting co-operation and support.

Of the great superiority of such a periodical, both as regards economy and independence, over every similar undertaking of a merely commercial character, there cannot be any reasonable doubt; and the opportunity now presented of raising the standard and improving the tone of our medical periodical literature is one we should eagerly embrace.

The Committee are glad to be able to state, that the New Series will have the support of a greatly augmented staff of London and provincial contributors, the proprietors of the *London Journal of Medicine* having consented to withdraw their periodical, and to transfer their influence to the JOURNAL OF THE ASSOCIATION; while in Dr. CORMACK they have found an Editor, whose long experience, acknowledged talents, and high literary qualifications, eminently fit him for the post.

It is intended that the new Journal, while it retains its original character as the organ of the Association, should secure, at the lowest possible expense, all those advantages which a weekly periodical is capable of affording; and that it should, by presenting a faithful Digest of Medical Literature and Science, as well as an attractive summary of Professional News, render the purchase of any other periodical a matter of choice rather than of necessity.

The contents of each number will be usually classed under the following principal divisions:—

- I. LEADING ARTICLES.
- II. ORIGINAL COMMUNICATIONS.
- III. BIBLIOGRAPHICAL NOTICES.
- IV. PERISCOPIC REVIEW.
- V. REPORTS OF SOCIETIES.
- VI. ASSOCIATION INTELLIGENCE.
- VII. NEWS AND TOPICS OF THE DAY.
- VIII. OBITUARY.
- IX. APPOINTMENTS.
- X. EDITOR'S LETTER BOX.
- XI. ADVERTISEMENTS.

The Annual Subscription to the Association is One Guinea; which, in addition to the supply of the Journal, postage free, includes the other privileges of membership. All legally qualified members of the medical profession (*being regular practitioners*) are eligible.

The necessary information may be obtained by applying to the General Secretary, JAMES P. SHEPPARD, Esq., Worcester; to any of the local Honorary Secretaries; or to Dr. CORMACK, Putney, London.

In conclusion, the Committee would simply observe, that if the profession prove true to its best interests, the scheme which they have now the honour of proposing must result in effects of great and lasting importance.

CHARLES COWAN, M.D., Chairman.

London, Sep. 20th, 1852.

NEW SERIES OF THE JOURNAL.

THE JOURNAL COMMITTEE, appointed at Oxford, have decided that the usual size of the Journal shall be twenty-four pages; but that, when there is a pressure of advertisements, or of important matter which cannot be conveniently delayed, a larger sheet may be occasionally afforded.

CHARLES COWAN, M.D., Chairman.

METROPOLITAN COUNTIES BRANCH:—FIRST GENERAL MEETING.

LONDON, DEC. 22, 1852.

NOTICE. Members of the Association residing within the county of Middlesex, and such parts of Essex, Surrey, Herts, and adjoining counties, as are not included in any existing Branch, are requested to attend the First General Meeting of the METROPOLITAN COUNTIES BRANCH, to be held on Tuesday, January 11th, 1853, in the Hanover Square Rooms, at half-past Two o'clock P.M. Members are invited to bring their medical friends with them.

T. OGIER WARD,
Hon. Sec. to the Provisional Committee.

NOTICES BY THE EDITOR.

MEMBERS and others are requested to send books, manuscripts, and letters for the EDITOR, to his residence, Essex House, Putney, London; or to the office of the Journal, 87, Great Queen Street, Lincoln's Inn Fields, London.

Dr. CORMACK will attend at the office, to receive members, every WEDNESDAY, from four to a quarter past five, p.m., when not unavoidably prevented by other duties.

The commercial business of the JOURNAL is transacted by the publisher, every lawful day, at the office, between the hours of nine A.M., and seven P.M.; and, to prevent delays or mistakes, it is particularly requested that all advertisements and letters connected with the alteration of addresses, or with the commercial department, be addressed to the publisher, Mr. THOMAS JOHN HONEYMAN, and not to the editor.

RECENT DISCUSSIONS IN THE BATH AND BRISTOL BRANCH. We have received many letters upon various topics connected with the case of BOURN v. COX. We cannot, without the authority of the Council of the Association, insert any of them, as they refer to personalities. We will transmit these letters to the Council, should their respective authors wish us to do so.

EDITOR'S LETTER BOX.

PROPOSAL TO RENDER THE ORGANIZATION OF THE ASSOCIATION USEFUL IN THE STUDY OF EPIDEMIOLOGY.

LETTER FROM DR. MILROY TO THE EDITOR.

SIR,—On perusing the Prospectus of the New Series of the Journal, it has occurred to me that it might be made the channel of much valuable information on a subject which has not hitherto received the attention which its importance deserves, viz.: the NATURAL HISTORY OF EPIDEMIC DISEASES. This work can, of course, only be carried out by a number of observers in the different parts of the kingdom accurately noting down a few simple facts at the time of their occurrence, and transmitting them to you, for the purpose of being registered and made public at periodic intervals in the pages of the Journal. Such information would form a new, and, as seems to me, a very valuable feature of the Journal of an Association whose members are wide-spread over the country, and which has already done good service to the profession in matters requiring extensive co-operation.

The object contemplated is to ascertain and record the leading circumstances connected with the development and spread of Epidemic Diseases; and the following points have suggested themselves to my mind, as among the most important to be attended to in conducting such an inquiry:—

The exact date of the occurrence of the first case of an epidemic disease (whether the case terminated favourably or otherwise) in any town, district, or locality. It is of the ut-

most consequence to determine this point with undeniable accuracy; unless it be so, the most important link in the chain of evidence respecting the origin of the epidemic will be wanting. Too much stress cannot, therefore, be laid upon the exact determination of the day when the first patient sickened. Along with the name, age, and occupation of the person, the locality of the abode, its sanitary condition, the number of the inmates, etc., should be given. Then, too, was he a stranger who had recently arrived from some other place, or was he a resident who had not been away for a length of time? If the former, was the disease with which he has been attacked, existing in the place whence he came? when did he leave it? and when did he take up his present abode?

The exact date and locality of the *second* case. Did it occur in the same house with the first? If not, what is the distance between the two? Had there been any communication, direct and personal, or indirect and intermediate, between the patients? Second-hand information upon this point should seldom or never be received; to be trustworthy, it must always, if possible, be derived from the patients themselves by the medical attendant, who has thus an opportunity of ascertaining, by cross-examination, its credibility. Hearsay evidence upon such matters as the present is much more likely to mislead than to be useful. When communication is alleged or suspected, it is well to ascertain how other persons, who may equally have communicated with the first patient, have fared. Were they subsequently attacked, or did they escape? Did they convey the disease elsewhere? Did the medical attendant suffer? etc. If a similar line of inquiry were pursued respecting the next case or two, a good and sure foundation would be laid for observations on the future course and extension of the disease, and a very material step be taken in the solution of the interesting problem. How did it originate? Was it distinctly traceable to material introduction *ab extra*? or did it develop and introduce itself, we cannot tell how? Mere speculations and conjectures upon such a topic are to be avoided.

I would here suggest, in passing, the importance of medical observers keeping their minds more free, than perhaps they usually are, from any preconceived opinions as to the part which Contagion, that is, transmissibility from the sick to the healthy, plays in the appearance and diffusion of epidemic diseases. It may be that some diseases, not usually regarded as propagable in this way, are so to a certain extent; and that other diseases, acknowledged by all to be so, have nevertheless the power of developing and diffusing themselves irrespectively of any direct and traceable intercommunication. At all events, there can be no doubt that a series of accurate observations in numerous districts over the kingdom, continuously recorded for a few years in succession, would throw much light on this and other vexed questions in medical science, and would probably lead to greater uniformity of opinion on matters in which the credit and usefulness of our profession, as well as the public welfare, are involved. The great object to be had in view is to collect a large number of authentic and well-sifted facts, without regard to any doctrine and hypothesis for the present. What has been done for meteorology and astronomy by the concurrent observations of inquirers in different and distant localities, must be done by epidemiological students, before we can hope to attain to the discovery of any general truth respecting the laws which regulate the outbreak, course, and spread of zymotic disorders.

The mention of meteorology reminds me to suggest that it would add much to the interest and value of accurate data on the points already mentioned, if short notices were given at the same time of the state of the weather, etc., immediately preceding as well as accompanying the appearance of such diseases, and the seeming influence which atmospheric changes and peculiarities had upon their type, severity, and duration. Then, too, it would be highly interesting to know whether any blights or murrains existed about the same period, and to learn something about their nature and leading characters.

Sometimes the outbreak of an epidemic is preceded by the unusual prevalence of other disorders, or by a notable change in the ordinary characters of endemic diseases. Thus, diarrhoeal and dysenteric complaints have often been observed to usher in an epidemic invasion of bad remittent fever, in countries where this is endemic; and cholera, it is well known, has very generally gone before the manifestation of the developed pestilence; while the remarkable alteration in the type of the ordinary fever of Brazil, which had been observed for three or four years (I believe) prior to 1850, forms one of the most interesting facts connected with the history of the recent appearance of yellow fever in that country. It is, therefore, of consequence that attention be drawn to what precedes as well as to what accompanies the ap-

pearance of epidemic disorders, more especially when these are only occasional, and recurrent at distant intervals of time.

It is obvious that, if once a system of regular observation and record were established in different parts of the country, many points of great interest would stand a fair chance of being more satisfactorily cleared up than, as far as I know, they have hitherto been. Thus, the average duration of epidemic outbreaks in a locality; the ratio of seizures to the population, and of deaths to the numbers attacked; the influence of topographic and domiciliary conditions, in private life as well as in public institutions, on the results; the probable duration of the incubative stage, and the comparative frequency of secondary attacks; the intervals between successive outbreaks of different epidemics; the seasons of the year at which they usually appear; their migratory course and geographical distribution, etc., would all eventually come in for their share of elucidation. The exceeding value of the Registration, as carried out during the last fifteen years in England and Wales, is recognized by every one interested in the advancement of medical science, and in the promotion of the public health; but by itself it is necessarily an imperfect record, as it forms but a part of a larger and more comprehensive scheme of inquiry. Might not the plan suggested above be usefully supplemental and ancillary to it, as regards that most important class of diseases known by the general appellation of zymotic? As I have already remarked, it can only be made effective by the concurrent labours of numerous observers, steadily continued for a length of time, and regularly made known by periodic publication.

I remain your obedient servant,

G. MILROY.

London, Dec. 15th, 1852.

THE MEDICAL BENEVOLENT COLLEGE.

LETTER FROM DR. BARKER TO THE EDITOR.

SIR,—To defend a benevolent institution against objections brought forward by one of the most benevolent and noble-minded men in the profession, is a rather singular task. It is not pleasant to differ, even in opinion, from one for whose character we have the highest esteem; but benevolence itself may err in its plans, and this, we believe, is the case with regard to the views of MR. NEWNHAM, of Farnham, respecting the proposed "Medical Benevolent College". It is evident, from his letters published in the Journal for Oct. 13th and 27th, that MR. NEWNHAM partially distrusts the plan of the College, and would, in opposition to it, press on our notice the claims of the "Medical Benevolent Fund". Now, the simple difference between ourselves and MR. NEWNHAM is, that we do not see the necessity of any such opposition; we say, "Success to the Medical Benevolent Fund", and also, "Success to the Medical Benevolent College". There will be ample room for both, and we have a trust that both will be liberally supported. It has been observed, that a little difference in character may strengthen a friendship between two persons. Now, the difference between these two institutions is, we think, nothing more than will admit of perfect amity and beneficent co-operation. Each has some advantages which the other does not possess. They may be considered rivals, but only in the glorious endeavour of doing the utmost possible amount of good; and here, the more spirited the rivalry, the better for both. Let every benevolent man support both institutions if he can; or, if he can only give his aid to one of them, whichever that may be, he may rest assured that his patronage is bestowed upon a most worthy object.

Having made these few general remarks, I will venture to notice more particularly the doubts which MR. NEWNHAM expresses concerning the plan of the Medical Benevolent College. The most tangible of the objections mentioned in the letters, is that against the investment of so much money in "bricks and mortar"; or, in other words, in building, according to the plan laid out for the Benevolent College, *first*, an Asylum, or Home, for one hundred pensioners, being duly qualified medical men or their widows; *secondly*, a School, in which a liberal education will be given to one hundred boys, the sons of duly qualified medical men; and *thirdly*, a Chapel. Such is the scheme contemplated by the benevolent mind of MR. PROPERT, and now, by his unwearied exertions, brought so near to a successful issue. Between this plan and that of the Medical Benevolent Fund, the difference is simply this, that the latter gives an annuity, while the former proposes to give an annuity *with a house*. The money invested in "bricks and mortar", if invested in *consols*, as MR. NEWNHAM prefers, would surely go partly to pay rent when distributed in annuities; but excepting the case of a lavish expenditure in building, which will certainly not take place, we cannot

see any force in the objection raised against spending a portion of the funds in providing houses for those who require them; and we maintain, that, with due regard to economy, a smaller outlay in building will be required, than if money were to be invested in consols, for the purpose of supplying each annuitant with the rent of an equally commodious house.

MR. NEWNHAM implies a distinct objection against the plan of the College, when he speaks of "home" as the only place for the development of the "sympathies of relative kindness and the affections of a family". This objection would have weight if it were a part of our scheme to discourage all assistance at home; but this is far from being the case. Undoubtedly, there will be cases where, on account of particular family ties, removal from home would be objectionable; but what follows? Simply, that these are the cases for which the modes of relief adopted by the distributors of the Fund will be especially applicable. On the other side, we must remember, that many medical men, in the time of affliction and adversity, would prefer removal from the scenes of their former prosperity. Here we think that the remarks of MR. NEWNHAM only serve to show how desirable it is that we should have *two* benevolent institutions, ruled by the same spirit, but so far differing in character as to accommodate the two classes of recipients. We might here notice several points, to show that MR. PROPERT's plan will afford a "home" such as many will be glad indeed to find. We might speak of the true "*otium cum dignitate*" which the decayed medical man will here find in his removal from painful associations and contrasts; of social intercourse with genial minds; of the gathering of friends and relatives around the asylum, and the formation of new friendships in the neighbourhood; of settling children within an easy distance; and, lastly—no trifling feature in the beneficent scheme—the delightful absence of all care about rent and taxes!

The town in which I reside, Bedford, is a favourable place for showing the advantages of such "homes" as are to be provided in the College. Here I do not speak on mere theory, but am daily witnessing the happy results of a plan similar to that proposed by MR. PROPERT. I know that in such "homes" as we have here, the annuities granted by a noble charity may be expended with the greatest advantage; and I can safely say, that I have never seen or heard of any of the supposed probable disadvantages to which MR. NEWNHAM has alluded.

The respected Treasurer of the Benevolent Fund objects also to the "canvassing system", though it has been found to work well in other institutions. The influence of wealthy patrons in securing elections, is one of the modes of charity, liable, indeed, to some exceptions, but, on the whole, good, as calling forth such an amount of active interest and support as could not be expected on any other plan. The rule, that a subscription gives to the subscriber a voice in the election of recipients of the charity, and that the number of votes will be in the ratio of amount of subscription, is so gratifying to many wealthy patrons, that I will venture to say that, if this mode of election were discarded, a great amount of pecuniary support would be withdrawn. We may regret the fact, but we must allow it to be quite reasonable that patrons should expect to have some control over the distribution of the funds, to which they liberally contribute. As MR. NEWNHAM says, "Man's motives are seldom, if ever, perfectly single". Well, then, we must not expect anything superhuman, but must simply endeavour to call forth the greatest amount of human benevolence, and be very thankful for it. We must remember, also, that there will be an executive council for regulating the qualifications of candidates—ultimately, in all all probability, to have the entire control of the admissions; and I see no reason to apprehend that the discontent and other lamentable results, predicted by MR. NEWNHAM, will be likely to attend the elections.

Another objection is founded on the "pride" of our profession. I am not aware that in this quality we abound more than our legal or clerical brethren, among whom institutions like that now in question have succeeded well enough.

After all these misgivings, MR. NEWNHAM wishes that the experiment may succeed; but this kind wish is expressed in what we must call a faint-hearted style, as in the same breath he advises his readers to "be cautious"; to remember, that, though the College "has a name", it has "as yet no local habitation"; that "its advantages are all hypothetical"; and "they have not yet been proved". This is certainly a rather cool mode of wishing success to a scheme. With regard to the College, MR. NEWNHAM has indeed "dropped the character of the advocate".

Esteeming, as I do most highly, the character of the Christian Treasurer of the Benevolent Fund, I have still ventured to make the above remarks, because I believe that, in zeal for his fa-

vourite institution, he has been led to depreciate a plan which, under God's blessing, promises to have an immense amount of good as its result.

With all the general remarks on the duty of benevolence, and with the excellent advice addressed to young professional men on prudence and foresight, all who have read MR. NEWNHAM's letters must heartily concur. Our first duty is to prevent calamity; our second, to afford relief. However we may insist on providence and self-help, we must also remember that benevolence must always have a part to play in the affairs of this life. The relations of mankind to each other can never be reduced to a simple debtor and creditor account in a commercial sense; but the Giver of all good things, to whom nothing can be immediately returned, has commanded that our debt to Him shall be ever practically acknowledged in acts of charity towards our necessitous brethren.

To dwell on the peculiar trials and claims on sympathy which may be found in our profession, is not required, after the faithful picture of hard struggle and failure given in one of the letters, and evidently drawn from the life. With such cases so frequently coming under our notice, who can doubt that there will be ample scope for exertion in both the institutions now compared together? What we want now is, not any further discussions on their relative merits, but friendly co-operation and a determination to support both, as far as our means will allow. Private and special exertions, such as were lately employed in a case of great affliction and distress occurring in this town, cannot be expected to succeed so well in all cases. Hence the necessity for some permanent provision for the relief of really necessitous and worthy cases. After all that the proposed College can do, there will be wide scope for the patrons of the Fund in affording temporary relief in many cases of distress, where a permanent provision may not be required; or in other urgent cases, when some delay must occur in providing for the sufferers permanent homes in the College.

To conclude: no provisions that may be made for the relief of unavoidable distress should for a moment lessen our attention to all the means required to maintain independence. Strict calculation, provident habits, life-assurance, and all other prudential means, must be employed to avert the evil day; but as it may come and will come for many, after all their best exertions to avoid it, we sum up the whole purport of our remarks by heartily wishing success to the Medical Benevolent College, and success to the Medical Benevolent Fund! Let them never be mentioned as rivals: rather let "*hand-in-hand*," or *unum alterius eget*, be their common motto.

T. HERBERT BARKER, M.D.

Bedford, December 8th, 1852.

THE MEDICAL REFORM BILL:—HOW ARE WE TO PREVENT ILLEGAL PRACTICE?

TO THE EDITOR.

SIR,—I perceive that the Medical Reform Committee of the Association are still desirous of receiving suggestions relative to the amended Medical Bill. I think it effective in most points, particularly in the clauses referring to the registration of legal practitioners; nevertheless, it appears not to determine who shall be the prosecutors of *illegal practitioners, such as prescribing druggists and others*, who practise medicine very extensively, because their qualified neighbours do not like to make it a personal business in prosecuting them.

Unless some clause can be introduced into the present Medical Bill (as suggested by a correspondent of another Journal), to empower Government *excise officers* to prosecute and obtain fines from those who practise medicine illegally, I fear the measure will not, in the end, be of much benefit to the qualified practitioner. I therefore wish to call attention to a letter in the *Lancet* of Dec. 4th, signed "A General Practitioner", which appears to suggest a very effectual remedy for prohibiting pharmaceutical chemists, druggists, and others, from illegally practising medicine; which consists in affording to excise officers the necessary inducement to inform against such persons.

I am, etc.,

A SURGEON AND APOTHECARY.

Dec. 14th, 1852.

PARLIAMENTARY REPRESENTATION OF THE MEDICAL PROFESSION.

LETTER FROM THE SECRETARY OF THE YORK SCHOOL OF MEDICINE TO THE EDITOR.

SIR,—At a meeting of the Lecturers of the York Medical School, the question of the representation of the University of London in

Parliament was discussed; and it was thought that such representation was highly desirable, inasmuch as the medical profession might thereby obtain a more direct voice in public affairs. It was the unanimous opinion of the lecturers, that inquiry should be made as to whether the franchise should be conferred on the teachers in Provincial Schools, irrespectively of their being graduates of the University; and that it would be well to ascertain the opinions and intentions of parties interested. Would you, therefore, by publishing this note, afford me the opportunity of calling the attention of teachers and professors in the Provincial Medical Schools, and of the Committee of Graduates, to this important subject?

I am, sir, your obedient servant,

JAMES ALLEN.

York, Dec. 20th, 1852.

NEWS AND TOPICS OF THE DAY.

YELLOW FEVER AT SOUTHAMPTON.

REPORT OF THE SELECT COMMITTEE OF THE SOUTHAMPTON MEDICAL SOCIETY.

THE close and constant intercourse of Southampton with tropical climates, through the medium of a rapid steam communication, for some time past, has invested the subject of Quarantine with a peculiar interest in this quarter—an interest which has been painfully increased by the sad mortality amongst our countrymen during the existing prevalence of yellow fever in the West Indies. The intensity of the excitement thence arising, suggested to the Southampton Medical Society that the appeal, so frequently made to them individually for an opinion on this important topic, would be best responded to by the report of a select committee appointed by the society. This suggestion was accordingly carried into effect, and your committee now beg to submit the result of their investigation.

The very nature of the subject precluded your committee from arriving at conclusions through a process strictly inductive; but they have endeavoured from the evidence within their reach, to derive such general propositions as appeared the best approximation to the truth. In a word, they had no wish to compromise the interests of science, by pretending that their report had exhausted or could exhaust, the subject; or, that all the evidence possible to be adduced was before them; but they desired to make such practical suggestions, preventive and remedial, as the experience of the disease seemed to warrant.

Your committee do not feel themselves called upon to enlarge on the history of the disease beyond the limits of the circumstances which affect its development and progress at our own port. They, therefore, propose to consider the subject under four heads:—

- I. The natural climate of the disease.
- II. Whether malignant yellow fever is a specific disease, or can be identified with the milder forms of endemic fever common to warm climates.
- III. How yellow fever is propagated.
- IV. What sanitary measures should be adopted.

I. THE NATURAL CLIMATE OF THE DISEASE. In examining the evidence on this point, your committee have not been content to draw a conclusion merely from the direct testimony of those who have witnessed the disease in warm climates. A careful inquiry has been made into the diseases of Northern regions, and it has been found that febrile affections have been, although very rarely, imported into those latitudes in an epidemic form, an instance of which was the introduction of measles into the Faroe Islands in the year 1846. In the Temperate Zone it is well known that some fevers are indigenous, and others have been introduced; but your committee, having reviewed the accounts of the rise and course of every well-authenticated epidemic of yellow fever, do not hesitate to pronounce, from the uniformity of observed instances, that yellow fever is essentially an inter-tropical disease.

II. WHETHER MALIGNANT YELLOW FEVER IS A SPECIFIC DISEASE, OR CAN BE IDENTIFIED WITH THE Milder FORMS OF ENDEMIC FEVER COMMON TO WARM CLIMATES. This is a point upon which the profession is much divided, and it would be equally unprofitable as inconvenient to the members of the society to introduce into this Report the arguments which have

been used on both sides, in support of their respective opinions. But, since your committee intend to answer the question as to the identity of the two diseases, in the affirmative, it is deemed right to refer to a portion of the evidence upon which their judgment is based. Among the writers on the earlier epidemics, the names of Frank, Rush, and Bancroft, may be cited, as maintaining the opinion that the endemic and the yellow fever are varieties of the same disease. The history of the epidemic at Antigua, in the year 1816, as given by Dr. Musgrave, affords, perhaps, the most complete proof on record of the changeable character of yellow fever, and of the facility with which, under favourable circumstances, one form of fever may be converted into another. Again, the account recorded by Dr. Bryson, of the endemic of Sierra Leone, in 1823, may be compared with the subsequent outbreak of fever, and the intense form which it acquired on board H. M. S. Bann; and of a still later date, the case of the *Eclair* presents many phenomena parallel to those which had been observed in the case of the Bann. Moreover, the doctrine of the identity of the milder remittent with the severe form, derives additional support from analogous circumstances, which are ascertained to exist in the course of other febrile diseases.

III. HOW YELLOW FEVER IS PROPAGATED. Taking it for granted, as an empirical law co-extensive with all human experience, that so-called miasma is a cause of endemic fever, and assuming that the milder fever may develop the malignant variety, it will be important to consider whether contagiousness is a necessary quality of the disease, and if not, under what circumstances it will exist. For a solution of this question, your committee again appeal to the testimony afforded by the Report of Sir William Burnett, in the case of the Bann, at the Island of Ascension, in 1823, as well as to the facts brought to light by Drs. McWilliam and King on the appearance of yellow fever at Boa Vista, in 1845. A careful examination of those facts must, it is thought, convince every unprejudiced person that, in those instances, contagiousness was found to be a property impressed upon the disease after the appearance of the malignant stage; but, at the same time, it may be safely admitted that, in numerous cases of yellow fever, no such property has been detected.

The next point is, whether all or any of the conditions necessary for the development of contagiousness have been ascertained. On this point the utmost uncertainty prevails, since the number of observations is limited, and the quantity and distribution of the natural agents of contagion can neither be measured nor examined: nevertheless, it has been held by diligent observers, that science is approaching to a knowledge of such conditions, and that already they are warranted in associating the phenomena of contagion in yellow fever with the presence of certain natural states, such as high temperature, moisture, an atmosphere impregnated with emanations from animal or vegetable decomposition, and a susceptibility on the part of the recipient. But, without attempting to explain the precise office which each condition holds in reference to the result, it may be stated, that the probabilities are strongly in favour of the existence of at least some such conditions, as necessary agents in the propagation of yellow fever.

The solitary fatal case which has recently taken place in Southampton, and which presented unusually favourable circumstances for the action of the contagious principles common to the exanthemata and other fevers of this climate, coupled with the fact that free communication has been allowed between the ships' companies of the *Plata* and *Medway*, and many of the unacclimatised inhabitants of this port, has forcibly impressed your committee with the opinion that it is highly probable either that the conditions necessary for the endemic diffusion of the yellow fever were altogether wanting, or that the full operation of those conditions was prevented by counteracting causes.

From what has been already stated on the subject of this inquiry, the measures which your committee feel called upon to recommend will be easily understood. They are of two kinds—the care of the sick, and the protection of the healthy.

I. THE CARE OF THE SICK. A separation of the sick from the healthy is the first step to be taken, and your committee venture to suggest that this principle should be efficiently carried out on the arrival of all ships with yellow fever on board entering this port. Your committee do not hesitate to draw a marked distinction between the regulations necessary to be observed in the case of yellow fever, and the Quarantine laws which are in force with respect to diseases, supposed to be contagious in all latitudes. They therefore feel justified in recommending, that all persons not affected with this disease, should be allowed to proceed at once from the pestilential atmosphere of the ship, to their respective places of destination; and that a

suitable building should be provided in a healthy situation for the immediate reception of patients labouring under yellow fever.

In offering this recommendation, your committee do not forget that individuals have become the recipients of yellow fever, after having visited infected ships, even in this climate, a fact suggestive of the necessity of observing great caution in the intercourse to be permitted between the shore and an infected ship.

II. THE PROTECTION OF THE HEALTHY. Your committee do not feel themselves in a position to interfere with the medical arrangements of ships belonging to any company. The medical staff of every company is fully competent to manage its own internal affairs; but they think it right to observe, that no ships can be considered fit for the traffic between our own and tropical climates, unless furnished with the means of annulling, as far as possible, the conditions which are supposed to favour the propagation of disease within the tropics.

There is, however, another and a most important point to be noticed, in reference to protective measures; and that is, the sanitary condition of the inhabitants of the town itself. Your committee cannot too strongly urge the absolute necessity of giving every encouragement and facility to the resident officer of health, in his endeavours to remove all the causes which are believed to render persons susceptible of infectious diseases. Your committee feel assured that he will not only direct his attention to the crowded dwellings of the poor, where danger might reasonably be suspected, but that he will extend his observations to the more subtle causes which produce disease in the homes of the rich.

Finally, your committee look with confidence to the result of the adoption of the regulations here recommended. It may be anticipated, that not only will all fear of yellow fever finding the means of extension in this climate be allayed, but that, by carrying out increased sanitary vigilance, an additional security will be given against the future dissemination of ordinary endemic diseases.

W. S. OKE, M.D., *President.*

HENRY DAYMAN.

CHARLES P. KEELE.

LEONARD A. LAWRENCE.

J. K. SAMPSON.

G. A. K. LAKE.

Southampton, December 30th, 1882.

[This document did not reach us till we were going to press, but from its importance and interest, we have withdrawn other matter to make way for it. We have received several letters upon the same subject, to which, along with the above report, we may afterwards direct attention.]

THE PARISIAN HOSPITAL OF FOUR NAMES. By a recent decision of the Municipal Council of Paris, the large new hospital lately built in Paris, is henceforth to be called L'hôpital Lariboisière, in grateful recognition of large funds bequeathed to it by a lady of that name. The French are as fond of altering the names of streets and public buildings, as of changing their form of government: and this hospital has within the past few years been successively designated the Hospital of Louis Philippe, the Hospital of the Republic, the Hospital of the North, and the Hospital of Lariboisière.

KING'S COLLEGE HOSPITAL. The building of the new hospital, after having been discontinued for a short time from want of funds, has been lately resumed. The unnecessary, and indeed we may say mischievous multiplication of petty hospitals for the treatment of special diseases, greatly injures the older charities, as schools of medicine, by withdrawing funds and cases; both are required—the former in abundance, and the latter in variety—for efficient clinical teaching.

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CONTENTS.

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- " 2. Deformities from Accidents, Inflammation, Rheumatism, and Scrofula.
- " 3. Contractures from Spasm, Paralysis, Burns, Diseased Fascia, Retention of Parts in One Position.
- " 4. Deformities from Rickets and Debility.
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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. II.

LONDON: FRIDAY EVENING, JANUARY 14, 1853.

NEW SERIES.

PSYCHOLOGY, AND THE CLAIMS WHICH IT HAS UPON OUR ATTENTION.

THERE are in this country about twenty thousand individuals labouring under various forms of mental disease, secluded and constantly subjected to the close and clinical observation, if not to the treatment of a special class of medical men. There is double this number mixed up with the general community, whose malady is compatible with a certain amount of liberty and usefulness, but who frequently require the aid of medicine, physical or moral; whose condition must influence the health and happiness of all those with whom they are brought into contact; whose presence complicates all social arrangements; and whose passions, peculiarities, and tendencies—in fact, the symptoms of whose disease are incessantly bringing them into violent collision with the laws and conventionalities by which other men are guided and governed. There is, besides, the inevitable occurrence of new cases in a ratio to the population—a suspected actual increase of this class of diseases, and a well ascertained modification in their character, curability, and mortality. There is a distinct literature of this branch of medicine. There are regular reports of the experience in the hospitals, where insanity exists chiefly in its chronic form. There are systematic treatises and monographs on the disease as it is met with in private practice. There are periodicals exclusively devoted to the consideration of psychology and congeneric subjects, in almost all the European languages. Upon these grounds alone, it has been conceived that this Journal would be incomplete, were it not to contain, from time to time, a yerscope of the progress of Psychological Science. But there are other and even more important reasons than these for devoting some space to condensed expositions of our knowledge and our ignorance, our acquisitions and our deficiencies, in this wide and widening field.

IN the *first* place, our pages are intended for that great body of the profession engaged in general practice, and into whose hands the care of almost all cases of nervous disease primarily falls—and falls at that critical period when restoration to health is most practicable, when therapeutical means are most potent, and when all is lost or won of human reason and lifelong usefulness, by a well advised or injudicious application of these means. In the *second* place, from various causes, this class of diseases is less generally and thoroughly understood than others to which flesh is heir, simply because they have been less studied. They were long looked upon with awe and superstition; and were accordingly shunned. They were found to be protracted in duration, and intractable to certain orthodox means, and were abandoned to the efforts of nature, and, what was worse, to the efforts of empiricism. The immediate transference of such cases to places of seclusion has divested them of much of that interest which they would otherwise have possessed, has cut short observation, and has lessened the sense of responsibility of the professional man. And the total absence of clinical instruction, after

confinement had been resorted to, has, until lately, debarred the majority of practitioners from access to, practical acquaintance with, or comprehensive views of diseases, which they only encounter to fear or to fly from. These disorders have consequently not been investigated, and have been consigned to the care of a distinguished, but limited section of the profession. While it is very obvious, from a consideration of the nature of the symptoms of aberration, and of the utility of seclusion as a means of cure, as well as a condition necessary for the application of almost all other means of cure, that this must, to a certain extent, continue to be the case; it appears to be eminently desirable, that the true principles upon which such affections are curable or mitigable should be generally known; that every advance towards a more perfect pathology should be announced; that the labours of the few should be accessible for the use of the many; and that the conditions of the nervous system should be as familiar, and as much under the control of every well-educated practitioner, as the conditions of the lungs or of the uterus. In the *third* place, it is exceedingly probable that the doubt and difficulty, if not the ignorance, which confessedly exist as to mental disease when occurring in general practice, are the results of the combined influence of erroneous views of spiritualism upon the one hand, and of solidism on the other. It has been a fashion to regard aberration of intellect and perversion of sentiment, as conditions of our spiritual nature, rather than as indications of bodily disturbance, as amenable chiefly, if not solely, to moral agencies, and as removed beyond the influence of remedial agents, and almost beyond the sphere of the physician. It has further been a fashion, especially of late, to regard all deviations from healthy mentalisation as arising from disease of the brain. There is truth in these errors. But the whole truth appears to be, that mental disturbance, depending, it cannot be questioned, upon some abnormal cerebral condition, should be regarded as a phenomenon symptomatic of various forms of disease—centric or dynamic, of the solids, or of the fluids, of quantity, or of quality, of immediate, or of remote relations. Insanity is perhaps as often a symptom of albuminuria, of tuberculosis, of anæmia, as of hyperæmia of the vesicular neurine, or of effusion between the membranes. Had the subject been dealt with as it is proposed here to deal with it, and had it been viewed in relation to established physiological and pathological laws, it is highly probable that greater success might have crowned the means of treatment adopted; and assuredly clearer notions would have prevailed as to the course to be pursued, and greater confidence have attended the prosecution of the inquiry. But the vast strides which have been made in bringing our knowledge of the moral nature of man to bear upon its own morbid condition; the great and progressive amelioration in the position of the confined lunatic, which was commenced half a century ago, and cannot again be arrested, afford an additional justification for regularly recording what sorrow or suffering has been deprived of its intensity, what new development has been given to the powers unshattered in the general wreck, or

what new privilege or enjoyment has been found compatible with moral impairment or degradation.

In harmony with these views, it will be our province occasionally to present accounts of all that has been done, or attempted, or proposed in this department; but especially of the observations, opinions, and suggestions, of men actually intrusted with the care of the insane in this and other countries: to place these in practical lights, and to address them to what we know, or conceive, and to what we have felt, to be the wants and wishes of our fellow labourers. If such an apology be deemed unnecessary for what is a desideratum, it has afforded an opportunity of indicating the scope and tendency of the mode in which that will be supplied.

We shall endeavour to display the opinions of the author, rather than our own; to produce all that is original, or place in a new light all that is valuable or interesting, without further commentary than translations or abstracts demand. Condensation is inevitable; but, wherever it is possible, the words of the author shall be employed. It is proposed that all psychological subjects and relations should be embraced; and although the succession in which these will be considered must, to a certain extent, be regulated by the character of the fruits of each publishing season, an effort will be made to impress a unity upon the series, by arranging and harmonising the topics under review, in accordance rather with their natural affinities, than with the order of time in which they may be presented for examination,—so that each article may be, to a certain extent, a consecutive disquisition, and not a mere index of references, or an unconnected group of quotations.

PLAN OF THE PERISCOPIC REVIEW.

LAST week, we described, in general terms, the method which we intend to adopt in the PERISCOPIC REVIEW; which, we stated, "will represent all languages and all departments of medical science". We have likewise in this and the preceding number made some separate observations upon two important divisions of the Periscopic Review,—viz., Microscopical Discovery, and Psychology;—and in an early number we propose in a special article to introduce to our readers the first of a series of occasional Botanical Summaries. In the mean time, however, it may be useful to state the classification of subjects by which we shall generally be guided. Like every similar plan which could be devised, it is purely arbitrary, and is in no way intended to imply, that the study and practice of medicine can, without disadvantage, be broken up into a variety of exclusive pursuits or specialities, as they are usually called. To many, the classification may appear redundant; and we at once admit that it would have been easy to have reduced by more than one-half the number of headings. Microscopical Discoveries might, for example, have been distributed under Anatomy, Pathology, etc.; and Practice of Medicine might have been made to include *Materia Medica*, most of the Diseases of Women and Children, and many Diseases of the Eye and Ear. It has, however, been judged better to adopt the subjoined classification, with all its obvious faults and redundancies, because it is the most convenient for the effective distribution of our staff, and because it enables us to provide for the systematic examination of new books and periodicals, by persons well acquainted with

the practice and the literature of their profession, and who are therefore able to excerpt and criticise the materials which are most likely to be useful to busy practitioners.

- I. PRACTICE OF MEDICINE AND PATHOLOGY.
- II. MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.
- III. SURGERY.
- IV. MIDWIFERY AND DISEASES OF WOMEN.
- V. DISEASES OF CHILDREN.
- VI. OPHTHALMOLOGY.
- VII. DISEASES OF THE EAR.
- VIII. PSYCHOLOGY IN ITS RELATIONS TO PRACTICE, PATHOLOGY, AND JURISPRUDENCE.
- IX. TOXICOLOGY.
- X. FORENSIC MEDICINE.
- XI. EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.
- XII. MICROSCOPICAL DISCOVERY.
- XIII. ANATOMY AND PHYSIOLOGY.
- XIV. BOTANY.
- XV. CHEMISTRY.

THE METROPOLITAN COUNTIES BRANCH.

THE establishment of Branch Societies, composed of members residing within certain defined districts, is one of the wisest and most signal improvements which has been introduced into the constitution of the Association in later years, by its founder, Sir Charles Hastings. The existence of a Branch Society in a district has many advantages; it gathers in new members; it binds neighbours together by a common tie; it affords opportunities, easily available, of meeting together for social and scientific purposes; and it places an admirable check upon irregular practice, and unprofessional conduct. In no part of the kingdom, (as has been long and generally felt), was the establishment of a Branch Society so much wanted, for all the purposes which we have enumerated, as in the Metropolitan Counties; and it is therefore, we feel certain, with extreme satisfaction that the proceedings of Tuesday will be perused by all who desire to see the Association extending its influence, and adding to its numbers. When we reflect upon the importance of the sphere of the operations of this new Branch, the list of those who have already enrolled themselves as members, and the catholic spirit breathed in the speeches of the Chairman and Dr. COWAN, and applauded by those present, we cannot help feeling that the date of the formation of the Metropolitan Counties Branch will be looked back to in after times, as a bright and memorable epoch in the history of the medical profession in these kingdoms. A report of the proceedings of the meeting will be found at p. 43 of this number.

EPIZOOTIC DISEASES.

THE Epidemiological Society of London, established some years ago for the investigation of epidemic diseases, has instituted an inquiry into the nature of the pleuro-pneumonia recently, and, we believe, still prevailing among cattle. Believing that members of the Association might greatly assist the Epidemiological Society by contributing information on this subject, and by inducing their neighbours, professional and non-professional, to do the same, we propose to print in our next number a communication from one of its honorary secretaries, referring to this subject. The inquiry is undoubtedly possessed of great interest and importance, and deserves to be zealously promoted, not only by the medical profession, but by the general public.

ORIGINAL COMMUNICATIONS.

CASES OF EMPYEMA OPENING THROUGH THE BRONCHI:

WITH OBSERVATIONS ON THE CHARACTER OF THE PLEURO-PNEUMONIA WHICH HAS RECENTLY PREVAILED.

By JAMES RISDON BENNETT, M.D., Physician to St. Thomas's Hospital, and to the City of London Hospital for Diseases of the Chest.

CASE I. EMPYEMA OPENING BY THE BRONCHI. RECOVERY. M. T. a gentleman, *æt.* 52, of large frame, active mind, feeble circulation, and who had for some years been the subject of frequent bronchitic attacks, was suddenly seized, after standing in a draught, with severe stabbing pain, running though from the angle of the scapula to the anterior of the chest. This was followed by feverishness, an aggravation, as he supposed, of his usual cough, difficulty of breathing, and muscular pains of the trunk and limbs.

May 13th. I saw him, with my colleague, Mr. Solly, a few days subsequently. He was then suffering still from pain of side, aggravated by motion; cough, attended by mucous expectoration more or less sanguineous and tough; a hot skin and frequent pulse, furred tongue, and much restlessness. Mercury had been given by the mouth, and had also been rubbed in, and counter-irritation efficiently employed. On examining the chest, I found some dullness on the left side posteriorly, with muco-crepitant rhonchus, and over the chest generally some mucous rhonchi. Percussion was painful, and his decubitus was dorsal, leaning to the right side. He was cupped to zviii , and a large poultice applied to the chest. The mercury had but slightly, if at all, affected the gums, but was irritating the bowels. He was ordered a saline mixture, and a little Dover's powder night and morning. The following day we found him relieved, but there was more marked dullness below the angle of the left scapula, with bronchial breathing, and more small crepitation in the immediate vicinity. He was again cupped to zvj , and the poultices continued. Although his pain was greatly relieved, and he breathed without much difficulty, he had much restlessness, and passed wretched nights—the cough being troublesome, and the expectoration more or less pneumonic, but never copious. The dullness on percussion now rapidly extended, and soon occupied the whole of the left side, spreading quickly over the anterior of the chest. The bronchial respiration and augmented vocal resonance were, however, confined to the region about the angle of the left scapula. The sputa soon lost all trace of sanguineous admixture—were extremely moderate in quantity, and of a simple catarrhal character. The dullness gradually disappeared from the anterior of the chest, but continued in the lateral region and posteriorly. Respiration became everywhere audible, but laterally and posteriorly was feeble and distant. There was not much difference in the vocal fremitus of the two sides. His general condition improved, to a certain point, when he ceased to make progress—he was put out of breath on going up and down stairs to the carriage to take his ride, and his pulse continued quick and irritable, his tongue somewhat furred in the centre, but his appetite was moderately good, and he had absolutely no cough. He was annoyed by frequent examinations of the chest, repeatedly saying, "I am sure it is all right there"; and, "I am satisfied that you have effectively cured the inflammation"—"there is nothing in the world the matter with my chest," and so on. But on close questioning he would admit, that, especially in certain positions, he had a measure of discomfort or uneasiness about the situation of the angle of the scapula, and deep-seated. Being a man of great acquirements in almost every department of knowledge, he evinced his anatomical and medical knowledge by accounting for this uneasiness, which he attributed to adhesion, the result of the inflammation, etc. Although neither Mr. Solly nor myself were at all satisfied with his condition, yet

after waiting some weeks in vain, with the hope of finding his circulation become more tranquil, and the tongue and appetite improve, we agreed that change of air would probably do more for him than aught else. He accordingly went down to the sea-side, and bore the journey well.

Two days after his arrival at the sea-side, whilst dressing, he was suddenly seized with a violent fit of coughing, and vomited an enormous quantity of pus, by which he was well nigh suffocated, and made very faint. When seen by a medical gentleman in the neighbourhood, he was bathed in a profuse perspiration, pale, with a scarcely perceptible pulse, cold extremities, and still coughing violently, and bringing up large quantities of pus. The amount evacuated could not be accurately estimated, as much was, at the moment of seizure, lost on the floor; but from two to three pints, at least, must have been discharged within a few hours of the seizure. Wine and ammonia rallied him, but the cough continued all that day and night to a most distressing degree, and was attended by copious expectoration. The succeeding morning I had a telegraphic message to go to him immediately. I found him tranquil—breathing calmly, though rather quick—his countenance expressive of exhaustion, but not much anxiety—the skin sweating, and the pulse rapid, soft, and tolerably steady. He was able to take nutriment, and enjoyed both the beef-tea and claret wine which were allowed him. The cough, however, was constant and distressing, from the exhaustion which it occasioned, but was clearly the result merely of the effort of nature to complete the evacuation of pus, of which he continued to expectorate a considerable quantity. At this time, I did not think it desirable to make a more accurate examination of the chest than was necessary to satisfy myself that respiration was still to be heard, though rather faint and distant, throughout the affected side. Over the angle of the scapula it was, however, more tubular than when he left town. The succeeding morning I returned to town, and visited him again the following day. I then found him gradually recovering from the exhaustion. The expectoration was less, though still considerable, and the cough troublesome, interfering sadly with his rest. He was now ordered thirty minims of liquor cinchonæ, with a few drops of ipecacuan wine, three times a day, and nourishment and wine as before. No local measures were employed.

It is not necessary to continue the details of the case farther, for the recovery was steady and uninterrupted by the least untoward circumstance. In three weeks he was able to be removed to a warmer locality, in the immediate neighbourhood. As the cough and expectoration steadily diminished, he gained strength; the dullness of the side gradually cleared off; the natural amount of vocal fremitus returned; and, except over the angle of the scapula, the respiration became healthy. At the spot in question, however, there continued for some time to be a degree of preternatural vocal resonance, and the breathing was somewhat bronchial. In August he left England for Italy, where he spent the winter and spring. During the whole of the journey home, and for some time before, he was equal to as much physical exertion as ever, and had neither cough nor dyspnoea, even on climbing mountains. I had an opportunity of hastily examining his chest a few weeks after his return, and could detect no trace of his severe disease.

CASE II. FEVER WITH PLEURO-PNEUMONIA. EMPYEMA OPENING BY THE BRONCHI. RECOVERY. Edward Maroney, a labourer, *æt.* 35, was admitted into St. Thomas's Hospital, under my care, on the 15th April, 1851.

He had been ill five days with symptoms of fever, attended by some cough, coming on when he was still under the influence of mercury, or, at least, had very recently been so, having been treated with mercury and salivated in the Charing Cross Hospital, for inflammation of the eye. The tongue was much coated, his cough rather troublesome, the expectoration mucous, and there was little or no dyspnoea. He was ordered a purgative, and the catarrhal mixture of the

Hospital, containing a little antimony. On the 18th, he became worse; and on the 19th, he was complaining of very great pain of the chest, with quick and oppressed breathing. He had no more cough, but the expectoration was tenacious, sanguineous, prune-juice-like in appearance, intermixed with yellowish-green opaque matter. The great pain and tenderness of which he complained were referred chiefly to the supra-mammary region of the left side, where there was considerable dullness on percussion, ægophonic resonance of voice, and bronchial respiration, intermixed with muco-crepitant rhonchus. The pulse was quick and feeble, and the tongue was dry, but there was not much heat of skin. He was ordered to be cupped to ʒvj , and to have 4 grs. of Dover's powder, with 1 gr. of calomel, every four hours, with a draught containing ʒij of liquor ammoniæ acetatis and 3 grs. of sesquicarbonate of ammonia, in camphor mixture.

April 20th. He was relieved of his pain, 4 oz. only of blood having been taken by the cupping. A blister was ordered to the side. To continue the beef-tea allowed from the first.

April 21st. He had but little pain; pulse 104, feeble but steady; tongue and skin dry; some delirium. Over the antero-superior region of the left lung the breathing was bronchial, mixed with some crepitation; over the lateral region of the same side, there were general muco-crepitant rhonchi; the right lung was tolerably free; the expectoration was somewhat less copious, but very tenacious, and of a dirty greenish colour; bowels open. The head was ordered to be shaved, and the blister to be repeated.

April 23rd. The pulse had fallen to 96, the tongue was less dry, and the cough apparently looser, but the expectoration maintained the same character. He took his nourishment well; but rambled a little.

April 25th. The tongue and lips were covered with sordes, but the tongue was moist at the edges; the breathing was less frequent, and there was less muco-crepitant rhonchus in the left side; the cough and expectoration were less—the latter of the same character. He was directed to have ʒij of wine daily, and 4 grs. of sesquicarbonate of ammonia, with a drachm of tincture of squills, in decoction of senega, every six hours.

April 26th. Pulse 100, steady; there was dullness over the whole anterior region of left side, but coarse crepitation was everywhere heard. Tongue dry; bowels open; he had a better night, and considered himself improved. He was ordered to have ʒiv of wine, and lemonade for drink, as he complained of thirst.

April 28th. Dullness was very complete; nothing was to be heard but a loud soufflé on breathing, and whiffing resonance of voice; pulse 96, feeble; the tongue still dry; his support was taken well, and his cough less. After this date, blistering with liquor vesicatorius was frequently repeated.

May 2nd. The pulse had fallen to 88, the tongue was cleaning and moister, but the expectoration was still more or less sanguineous, and he again complained of pleuritic pain and tenderness in the left lateral region. This subsequently extended to the back, and he had afterwards a bronchial soufflé below the angle of the left scapula, with muffled resonance of voice and dullness, but with more or less surrounding muco-crepitant rhonchus. Soon after this, the expectoration lost its pneumonic character, and became trifling in quantity, and the general symptoms improved, when, without any material change in his general symptoms, he all at once began to cough much more, and the expectoration suddenly became profuse in quantity and purulent in character. For many weeks he continued to expectorate a large quantity of purulent and muco-purulent matter. The physical signs of effusion and compression of the lung gradually vanished; but for a long time there were traces of the former mischief about the angle of the left scapula, the respiration maintaining a bronchial character. He was kept in the Hospital simply for the sake of watching the progress of cure to its completion; and on the 16th of August he was carefully examined by some of my colleagues as well as by myself. We were unable to detect any evidence whatever of the severe and protracted disease

of which he had been the subject. The lung appeared, so far as could be ascertained by examination during life, to have completely recovered, nor was there any visible contraction of the chest.

CASE III. PLEURO-PNEUMO AND PNEUMOTHORAX. FATAL FROM CIRCUMSCRIBED EMPYEMA WITH GANGRENE OF LUNG. Edward Connor, æt. 32, came to London, from Ireland, a year ago. When a child, he had fever; and, eighteen months ago, an inflammatory attack of the character of pleurisy, for which he was blistered and confined to bed. With these exceptions, he had had good health. He stated that he had not been very well off, but that he never had indulged in spirits or beer. Eight days before admission, after exposure through a very cold and wet day, he was seized with pain of left side, and cough, attended by anorexia and thirst. To these symptoms succeeded dyspnoea, and some expectoration, for the last two or three days.

His decubitus, on admission, was dorsal, with the head raised; countenance somewhat flushed—not expressive of anxiety; skin not very hot or dry; pulse 90, soft. There was pain on motion or on coughing, which he referred to the sternum; the tongue was furred; the bowels open; respiration 32 per minute, performed without any apparent difficulty, nor did he complain of dyspnoea. The expectoration was copious; mixed in character, some frothy, some tenacious, and of the colour of prune-juice, and expectorated with tolerable facility. The chest, ample and well-formed, sounded well on percussion anteriorly. The respiratory murmur was everywhere heard, but mixed with more or less mucous and sonorous rhonchi, especially on the left side. The heart's action was natural. Posteriorly there was fair resonance on percussion throughout the right side, and the respiratory murmur was heard everywhere, mixed with some large mucous crepitation. Below the level of the spine of the scapula of the left side, there was some dullness, increasing towards the base of the lung, where, and in the inferior lateral region, there was complete dullness, and where percussion gave pain. Over the seat of dullness, there was a fine muco-crepitant rhonchus, and towards the spine the respiration had a slightly blowing character, but there was neither soufflé nor bronchophony. He was ordered low diet, with beef tea. \mathcal{R} Pulv. Doveri gr. viij; calomel. gr. ij; \mathcal{M} . Fiat pulv. horâ somni sumendus. He was directed to take an aperient draught in the morning, two tablespoonfuls of the catarrhal mixture every four hours, and five grains of Dover's powder with calomel every night; and to have a blister applied between the shoulders.

Feb. 26th. Being obliged from the blister to lie on the side, he preferred the right, pressure on the affected side giving him pain and inducing cough. He felt some nausea from the medicine. The expectoration was more copious, and more catarrhal in character, still, however, mixed with viscid reddish brown. Physical examination of the chest indicated that the inflammation had not extended; there were less of the bronchial rhonchi; and the patient expressed himself as more comfortable about the chest. Respirations 25; pulse 86, soft.

Feb. 28th. The blister was repeated.

March 1st. He breathed better; the dullness was less; respirations 22; pulse 88; tongue clean; he expectorated with ease.

March 3rd. Decubitus dorsal; there was tenderness on percussion over the left lateral region inferiorly; and over a spot of three fingers' breadth there was marked and circumscribed dullness on percussion, and the breathing was distant and somewhat blowing; the expectoration was less.

March 4th. Respirations 20; pulse 84.

March 6th. Cough troublesome; there was some increase of dullness over the false ribs of left side, and here as well as over the spot of circumscribed dullness, there was fine crepitation heard; around this, respiration was healthy. Pulse 88; respiration 22.

March 8th. He was improving in all respects; the expectoration had been for some days colourless.

March 11th. Expectoration was less copious, but very

offensive, and again coloured. He had pain, tenderness, and sense of constriction over the upper part of the chest; there was dullness on percussion beneath the clavicle, and in the left axilla. In these situations, and in the left lateral region generally, was more or less fine crepitation. Notwithstanding these symptoms, the pulse was 78; the appetite improved, and tongue clean; but the cough troublesome. He was ordered to have liquor vesicatorius applied to the side; to take the mixture every six hours; to have a pill composed of Dover's powder, extract of hyoscyamus, and squill pill, every night; and to have fish.

March 15th. Respiration was fairly natural in the dorsal and lateral regions inferiorly, but about the clavicle and in the axilla it was attended with muco-crepitant rhonchi, and augmented vocal fremitus. Pulse 80.

March 20th. There was some hæmoptysis; expectoration was muco-purulent. Pulse 96; skin hot; tongue rather red at the tip. He was directed to omit the former medicines, and to take, every six hours, an ounce of infusion of roses with sulphate of magnesia, and ten minims of tincture of digitalis; and a pill of Dover's powder and extract of hyoscyamus every night.

March 23rd. There was much febrile disturbance. He still expectorated some blood in clots. In the lower lateral region of the left side there was considerable dullness, associated with coarse mucous rhonchi, sometimes amounting to gurgling. Similar phenomena were manifested under the left clavicle. The expectoration was purulent and offensive. Respirations 36; pulse 80; bowels rather loose.

March 27th. There could be no doubt that in the left inferior lateral region there was considerable effusion, but limited to that region, and communicating with the lung; for there was now manifest bulging, with great dullness, and at one spot amphoric resonance and gurgling, the latter phenomena varying much from time to time. The expectoration was fetid and gangrenous in odour, and much more copious.

April 1st. In the localities last mentioned, *i. e.*, the left lower lateral region, and the infra-clavicular region of the same side, the phenomena maintained the same character, but in other parts of the same side much more respiration could be heard. From this date to the 24th, the auscultatory phenomena varied greatly from time to time, but clearly indicated the existence of cavities in the lungs, with pleuritic effusion, sometimes more and sometimes less, varying with the amount of expectoration; but the lower portion of the left side now presented a considerable swelling, and the liver was pushed down considerably below its proper level, the heart, however, maintaining its natural situation. Fluctuation in this swelling could be distinctly felt, and it was, therefore, determined to puncture it. This was done by Mr. Solly, with a lancet, between the seventh and eighth ribs, rather anterior to their middle, and a considerable quantity of thick, cheesy, stinking pus was evacuated. By this he was considerably relieved. His decubitus was at this time, and had been for some days, on the left side, avoiding pressure by resting on his elbow. On the 26th, his respiration was comparatively easy, his cough less, and he was free from pain, and the opening discharged freely. There was dullness on percussion from below the second rib anteriorly, but respiration was heard, though bronchial in character, and mixed with mucous gurgling; pulse 100, small.

May 1st. Respiration, more or less distinct, might be heard throughout the left side posteriorly and laterally.

May 8th. He appeared to be gaining strength; to the left, and a little below the left nipple, under the edge of the pectoral muscle, there was loud amphoric breathing, with metallic or amphoric resonance on percussion; with the exception of this locality, the respiration might be everywhere else heard, of tolerably fair character.

May 29th. He had lost ground considerably. Posteriorly, respiration was generally heard. Anteriorly below, and on a level with the edge of the pectoral muscle, there was amphoric resonance and pectoriloquy. More towards the sternum, there were mucous rhonchi and some dullness; there was general flattening of the left side. The prominence, where the puncture had been made, had entirely disap-

peared, and the opening had closed; cough and expectoration had increased; breathing was tranquil.

June 5th. The side reopened spontaneously, and again discharged, but the expectoration was more profuse; the pulse was small and rapid, and powers failing; the matter discharged from the side was much less offensive than that expectorated from the mouth.

June 7th. He became suddenly worse; collapse was extreme; respiration very hurried; he was delirious; the expectoration of stinking pus was profuse. In the evening he died.

June 8th. POST-MORTEM EXAMINATION, at half-past eleven A.M., obtained with difficulty, and chest only examined. The heart was found to be somewhat displaced towards the left side, the right lung being somewhat expanded, and the left diminished. The anterior surface of the left ventricle of the heart presented two or three patches of adhesions, not of very old date. The pericardium contained a very small quantity of clear serum, and the heart itself was healthy. The right pleura was healthy, and the corresponding lung voluminous, crepitant throughout, and somewhat emphysematous. The bronchial tubes, though not apparently congested, contained a considerable quantity of tenacious muco-purulent fluid. The left pleura was almost universally adherent, by tough but not very old adhesions. The only portion not so occupied, was a space of about nine square inches, situated between the seventh and eighth ribs, just external to the cartilages. The parietes of the cavity which existed at this part, were of a greenish colour, soft, and shreddy. The cavity contained a small quantity of dirty fetid pus, and communicated by two or three ragged openings, capable of admitting a finger between the sixth and seventh ribs, with a second cavity formed between the integuments and the ribs. The upper surface of the seventh rib was denuded and carious. Between the seventh and eighth ribs there was a small opening communicating with the exterior, which had been made by the trocar during life, and this cavity communicated also with the lung by a small ulcerated opening. The anterior half of the upper lobe of the left lung, and the anterior corner of the lower lobe, presented numerous large anfractuons intercommunicating cavities, the lowest one being apparently formed by both lobes. These cavities contained a quantity of dirty, stinking pus, with here and there shreds of gangrenous tissue. Their parietes were irregular and reticulated, though to a certain degree smooth and polished, owing to the formation of a lining membrane, and they were evidently in process of cure. The walls of these cavities which were lowest in position, were somewhat congested, and less perfectly furnished with a lining membrane than the others. In other parts of the base of the lung there were also several small cavities filled with flocculent, gangrenous matter, the sides of which were also flocculent and gangrenous. The whole series of cavities evidently communicated with one another, and with the cavity in the pleura. There were some patches of solid lung-structure, situated chiefly in the vicinity of the cavities, but the remainder, the great bulk of the lung, was crepitant.

CASE IV. PLEURITIS. EMPYEMA OPENING INTO THE BRONCHI. RECOVERY. A tradesman, æt. 56, of healthy constitution, and very temperate, regular habits, seven weeks previously to being seen by me, was suddenly seized with severe pain of the left side and of the left hypochondrium, attended by some cough and fever. He was seen early by Mr. E. Pye Smith, by whom he was bled, cupped, and blistered, and placed under the influence of mercury. The side became rapidly and perfectly dull on percussion, with absence of respiratory murmur. There was a little mucous crepitation to be heard posteriorly at one time, and slight mucous expectoration existed for a few days; but there never was much cough, nor any sanguineous tinging of the expectoration. The pain and febrile action subsided satisfactorily; but, despite counter-irritation, mercury and other remedies, the side remained dull on percussion, and there was no return of respiratory murmur.

When seen by me on 24th Nov., the pulse was soft and under 80, the skin of natural temperature and moisture, the countenance not expressive of any anxiety; he had no cough, was free from pain; could lie on either side, but preferred lying on the back; the tongue was rather coated and furred in the centre, but moist; the appetite moderately good. On examination, I found the left side of the chest rounder and apparently larger than the right, the intercostal spaces obliterated, and there was very little motion of the ribs. No vocal fremitus could be felt. The whole side was perfectly dull on percussion, except over the apex of the lung, and even there the resonance was much less than on the opposite side. No respiratory murmur could be heard, except beneath the clavicle and in the corresponding supra-spinous region, where it was harsh and somewhat tubular in character. I could not detect any mucous rhonchus, or crepitation, or friction sound, nor was there any increased vocal resonance anywhere, nor any bronchial respiration except at the root of the lung. The heart appeared to be in its natural situation, and change of position did not give rise to any material change in the auscultatory phenomena. The breathing was calm, not much increased in frequency, and the exertion attendant on the examination did not induce any dyspnoea. If, however, he walked about his room he was conscious of being short-breathed. There was not, and had not been, anything like hectic; but his nights had sometimes been restless, and he was frequently very uncomfortable, and did not sleep well.

I gave it as my opinion that the case was one of empyema, and not of consolidated lung; and from the entire absence of any urgent symptoms, either local or general, I advised that we should wait and watch the case for a while longer before making any proposal to puncture the chest; and that he should take a pill night and morning, containing two grains of blue pill and four of Dover's powder, and a draught three times a-day, containing hydriodate of potash, tincture of squills, and spirit of nitrous ether, in decoction of sarsaparilla. A large blister was ordered to be applied to the side, and a more stimulating nourishing diet allowed.

Dec. 1st. I again saw him, and found that three days previously he had had a sudden but not severe fit of coughing, and had expectorated a small quantity of dark-coloured extremely foetid pus. This was followed by more copious expectoration, less foetid, but distinctly purulent, amounting to 8 or 10 oz. in the twenty-four hours. The general symptoms were much the same as when I first saw him, but the tongue was cleaner; he had not been so restless, and had lost the ill-defined sense of discomfort or *malaise*. But the state of the chest had materially changed. The round appearance was gone, the intercostal sulci were distinct and well-marked; still, however, the side was dull on percussion throughout, although there was a considerable improvement in the antero-superior region. In the whole of this region, and through a considerable space posteriorly, faint and distant respiratory sounds could now be detected during deep inspiration, and here and there occasional mucous rhonchi were heard. There was, however, no vocal fremitus, or vocal resonance, nor any blowing respiration.

Dec. 10th. He has continued to improve in all respects, and everything leads to the conclusion that a speedy and complete cure will be effected.

Another case of pleuro-pneumonia, ending in empyema, was in the same ward, under my care, at the same time with Connor. The subject was a young man who had had previous attacks of an inflammatory character, and who was admitted into one of the surgical wards, as it was supposed that he had received an injury to the side. This, however, was not the case; and he was soon perceived to be the subject of acute pneumonia, and came under my care. The pneumonia was extensive and severe; it was situated in the right lung, and was attended by great orthopnoea, cough, and pain. As the pneumonic symptoms subsided, his chest became distended by fluid, and the signs of empyema were well pronounced. The accumulation increasing, he was urgently advised to submit to paracentesis. This he refused to do,

and left the hospital, with the right pleura enormously distended. He then fell under the care of Dr. Aldis, suffering from all the effects of compression of the lung from pleuritic effusion. He was supposed by Dr. Aldis to be dying; but not long after again made his appearance, greatly improved, and able to walk a considerable distance. From the intermediate history and the examination that was again made of the chest, Dr. Aldis had no doubt that the pleuritic effusion had been evacuated through the bronchi.

REMARKS. The cases which have been detailed very well illustrate, I think, the general character of the inflammatory disease which has prevailed to a considerable extent within the last eighteen months or more. The particular termination of these cases, by discharge of the purulent accumulation through the bronchi, is probably the least frequent, and I have merely selected such cases from their offering additional points of interest. I might have selected from my records of both private and public practice, other cases presenting the same general characters, in so far as regards the type of inflammatory action, and the course they ran.

The attention of most observers must have been more or less arrested by the modifications which our treatment of local inflammation, and especially of pneumonia, has for some years been undergoing, especially in reference to the employment of bleeding. In this important remedy the faith of many has been utterly shaken; nor has it fared better with antimony and mercury, in which many have been wont to place the most unlimited confidence. The dicta of Louis, in reference to the inefficacy of bleeding, except in the very earliest period of pneumonia, have not indeed been received in this country with unquestioning consent: but neither has the non-correspondence of his experience with that of British practitioners been satisfactorily explained. It cannot, I think, be doubted that, apart from varieties in what is called the epidemic constitution, there are important differences in the same disease, in so far as regards the constitutional symptoms by which it is manifested, dependent, perhaps, on climate, national constitutions, habits, modes of life, etc., as well as differences dependent on varieties of individual constitutions. All this, it may be said, is known and admitted; but is it sufficiently considered in practice? Is it sufficiently borne in mind, in estimating the statements and experience of observers, situated in very different circumstances from our own? I am satisfied that much of the contrariety existing between French and British practitioners in reference to some of the more ordinary diseases, and the more common points of practice, is explicable by such considerations and by such alone. Thus, when going round the wards of the *Hôtel Dieu* last summer, with M. Louis, I observed several cases of erysipelas, and asked whether he found it necessary to employ stimuli to any extent in their treatment. I was struck by his answer, that he did not find it necessary to employ any treatment beyond rest and the most simple dietetic rules; for that in his experience idiopathic erysipelas was a very trifling disease, and never fatal, unless associated with some visceral disease or cachectic habit. Now this certainly is not the experience of our British hospitals; at all events, not of the London hospitals. Nor is it the experience of private practitioners in this country. It is true that the majority of cases of idiopathic erysipelas do well, and that the disease manifests a strong natural tendency to cure, after running a specific course. But with us it is by no means a trifling ailment—it is essentially of an adynamic type, and requires a tonic treatment; more decided and vigorous, it may be, in some cases than in others. But whilst it is manifestly necessary to exercise much caution ere we adopt or reject the results of the experience of other observers, whether of our own or any other country, scarcely less caution is requisite either in following or discarding our own so-called experience. It appears to me that we are by no means warranted in inferring that, because bleeding and antimony are not found to answer so well in the treat-

ment of pneumonia as we had been taught to believe, or as we formerly found them to do, therefore our former experience, or that of our predecessors, was fallacious. These remedies will, I believe, be found fully to warrant the confidence that was placed in them, when they are judiciously employed in the treatment of the same type of disease. We must, however, be sure that the same phenomena are present which former observers have pointed out as the indications for blood-letting. We are not justified in questioning the correctness of their therapeutic precepts, unless we have applied them and found them wanting, not merely in what we believe to be the same disease, pathologically speaking, but in the same disease attended by those phenomena which they depicted in no obscure or doubtful manner. Most unnecessary and unmerited discredit is thrown on our science, and especially on our art, therapeutics, by thus questioning or discarding the results of former experience, merely because they are not available for our present necessities. The arch enemy, the spirit of quackery, is ever ready to turn to good account, for his own purposes, such error. And still greater is the advantage given him, when from over-weening confidence in established remedies, or inability to discover "the signs of the times" in reference to disease, there are found those who obstinately persist in the attempt to make disease accord with their treatment, rather than change their treatment with the disease. Doubtless, much of what is called experience, is fallacious, and we ought not, from unworthy fears of bringing discredit on our art, to shrink from abandoning error when once proved to be error. There has been no little craft displayed by the globulists in the selection of those acute diseases which they have made their stalking horse; and nothing is more easy than the attempt to turn to the discredit of legitimate medicine, the difference of treatment pursued in diseases called by the same name.

True sthenic pneumonia of the croupous variety, *i. e.*, inflammation attacking the air cells, and characterised by the effusion of plastic matter, by which these are obliterated, and which leads to solidification of the lung, when on being cut into, presents the characteristic granular surface, arising from the filling of the cells with solid lymph, has become a comparatively rare disease of late. The ordinary received descriptions of this disease are, however, true to nature; and there would not, perhaps, on close examination, be found to be much difference of opinion among experienced judicious practitioners, as to the treatment of such disease. For my own part, in proportion as I found a given case of such disease to correspond in its constitutional phenomena with those which the writers of the time of Cullen, and even much subsequently, described as indicating the necessity for blood-letting, I should with them consider it as the "*remedium magnum*", and employ it with as much confidence as they did. The pleuritis which accompanies this form of pneumonia is, for the most part, attended simply by the effusion of plastic matter, adhering to the two sides of the serous membrane, and unassociated with much fluid. And the pleuritis itself is quite a subsidiary and secondary disease, the mere result of the extension of the inflammation from its contiguous seat in the lung itself. The pleuro-pneumonia thus constituted, partakes of the same general character as the simple pneumonia.

In all these, as well as in other important respects, the inflammatory disease which has of late prevailed, and of which I have detailed several examples, differs considerably. It differs both in the character of the attendant constitutional symptoms, of the structural changes, and the treatment demanded. It is not, however, what has been generally understood as typhoid pneumonia. Certainly it is not always, nor generally, associated with either typhus or typhoid fever. It is, for the most part, unaccompanied either with any specific form of eruption, or evidence of contagion. In many instances the pleuritis has been the earliest of the two affections, in the order of occurrence, and in most, the more prominent affection. In some cases the disease has begun with catarrhal symptoms, subsequently passing into pneumonia or broncho-pneumonia, concurrent with the su-

pervention of pleurisy. The pain has been frequently great, and a very prominent symptom; and effusion has taken place rapidly and to a great extent, assuming, I think, very early a purulent character. Cough has not been either a troublesome or prominent symptom. The sputum at some period, sometimes earlier and sometimes later, has almost always indicated that the substance of the lung and the air-cells were involved in the inflammatory action. It has not indeed presented the ordinary characters of the brick-dust or rusty sputum of the sthenic pneumonia, expectorated in small masses of extreme viscosity; but it has always been more or less tenacious and glairy, sometimes streaked with blood, and at other times presenting the appearance of prune juice, or of a dirty greenish-yellow colour, and copious in quantity. It has varied also in the same case from day to day—at one time being free from sanguineous impregnation, having the appearance of simple viscid bronchial secretion, and the next day, perhaps, being more of a bistre colour. The dyspnoea has not usually been urgent, nor the respiration at all laboured, but for the most part of increased frequency. In most cases the skin and tongue have been moist, the former clammy, and the latter loaded with a dirty creamy fur—sometimes, however, dry and brown. The pulse, generally rapid, has usually been soft, sometimes very feeble—the urine, sometimes high coloured and scanty, in other cases has been copious and of a pale straw colour. In short, the constitutional symptoms have not been those indicative of excited action of the vascular system: so far from it, that, judging by the skin and pulse alone, it might frequently be inferred that little or no fever was present. I have seen in some instances, even where the greater portion of one lung was manifestly involved in the inflammatory action, but little if any appreciable excitement of pulse or difficulty of respiration.

The physical signs have shown that the inflammatory action has spread rapidly over a large extent of surface, although generally confined to one side. It is also deserving of special attention, that the upper lobes are much more frequently implicated than is observed in the ordinary sthenic pneumonia. The amount of solidification of the lung that ultimately results, is not, however, always correspondingly great, or, at all events, is not very complete; nor is it so permanent; that is, the lung sooner returns to a condition in which it is more or less permeable to air. It has appeared to me to be checked in a measure by the pleuritic effusion as this becomes copious; the ordinary result of copious pleuritic effusions ensuing—compression rather than enlargement and solidification from effusion of solid matter in the substance of the lung. Where the amount of pleural effusion has been less, and the pneumonitis has pursued its own course, uninfluenced by external pressure, suppurative infiltration of the lung has often supervened, without much complete preceding solidification. This state of lung, as was manifest in the case of Maroney, shows a tendency to gangrenous destruction: and one of the chief points of interest in the *post-mortem* history of Maroney's case, is the small amount of solidification that was found, notwithstanding the extent of lung involved. It was only in the immediate vicinity of the gangrenous cavities that the lung was impervious to air and non-crepitant. Indeed, it seemed pretty clear that the case proved fatal, not so much from the extent of lung originally involved in the inflammatory action, as from its character and the consequent gangrene. The suppurative tendency is still more marked in the pleural cavity. This tendency to suppuration, breaking down, and gangrene of the tissues, probably accounts for the particular termination of the cases detailed; at least, in two of them. In the case of the gentleman first detailed, I believe, the principal accumulation of pus was interlobar, and that, as the acute stage subsided, the effusion in the general cavity of the pleura was, for the most part, absorbed; whilst a considerable collection still remained pent up between the lobes of the lung and its root; so that, when, at length, the matter obtained exit, the outlet was very direct, opening immediately, or nearly so, into the larger bronchial trunks. Thus,

the discharge was sudden, rapid, effectual, and uninterrupted till the whole was expectorated. The sides of the cavity would thus be brought more readily into apposition, and its obliteration effected. The steady, rapid progress towards cure of this case, after the discharge of the matter, independently of the physical indications, shows, I think, how little true solidification of lung there had been.

The absence of the signs of pneumothorax (except in the case of Connor, where the indications of a circumscribed pneumothorax were well marked) is a point of great interest in all the cases detailed. This circumstance may perhaps excite doubts in the minds of some, whether there were really any communication with the bronchi. But I know not in what other way we are to explain the sudden removal of the pleuritic effusion, and the circumstances attending that removal. In the first case detailed, there cannot be the least doubt that a very large accumulation of fluid obtained sudden exit by the bronchi, so as for a time to place the life of the patient in extreme jeopardy. In the last case, the sudden discharge of a small quantity of foetid, gangrenous matter, succeeded by more copious purulent expectoration, was immediately followed by marked changes in the physical signs, which indicated the rapid disappearance of an accumulation of fluid in the pleura. Whether, in this and the other cases, the absence of all signs of the presence of air in the pleural cavity, is to be ascribed to the existence of extensive adhesions, or to any peculiarities of the communication with the bronchi, I am unable to say.

Such are the more important features of the thoracic inflammation, to which I venture to call the attention of the profession; and they are sufficient, I think, to show that it differs, in many most material respects, from the ordinary form of either pneumonia or pleuritis. Upon what does this difference depend? Not, I think, merely on peculiarities of individual constitutions. I have seen the disease in various constitutions, and in persons moving in very different social spheres. It has no necessary connexion with any form of continued fever. Is it connected with erysipelas? I am disposed to think that it is: not that it is generally associated with the external manifestation of erysipelas. The pneumonia that is associated with fever, erysipelas, and cachectic states of system generally, it is well known, is usually of the asthenic type; but I am disposed to regard the pleuro-pneumonia now under discussion as itself a form of erysipelatous disease, and for these, among other reasons: 1st. In its pathological features, it closely resembles erysipelatous inflammation; 2nd. It has prevailed contemporaneously with external erysipelas; 3rd. An erysipelatous form of cyanosis has been very common, and, in many cases, has been an attendant on the thoracic inflammation; sore throat having been frequently complained of in the beginning, and, as this has subsided, bronchial symptoms have occurred, to which the pneumonia and pleuritis have succeeded. I feel, however, bound to admit that it differs in some material respects from the ordinary forms under which erysipelatous inflammation of internal organs has hitherto been known to us.

In respect of the treatment of this disease, it is manifest that it must differ materially from that of the ordinary forms either of pneumonia or pleuritis. General bleeding is rarely if ever admissible: I have never employed it. Local depletion, to a limited extent, especially in the early stages, is sometimes decidedly useful, especially from the relief it affords to the pain and the congested state of the parts implicated. Counter-irritation may be more early employed than is desirable in the more asthenic forms. Blisters, indeed, I have found of the most marked benefit, and have been in the habit of repeating them frequently. Calomel and antimony, if used at all, must be very cautiously and sparingly employed. Dover's powder, in doses of five grains, with a grain of calomel, three or four times a day, has appeared to me very useful. But I have not given the calomel with the view of affecting the system, so as to induce any of the symptoms of mercurialisation. Ammonia has proved the best expectorant; and this I have given usually with the acetate of ammonia, sometimes with the

camphor mixture, and at other times with serpentary or senega. In almost all cases, I have allowed the patients beef-tea, and very frequently found a certain portion of wine to be necessary. But, under any plan of treatment, the affection is attended by great danger, and, in its worst forms, very fatal. So rapid has been the progress in many cases, so great the prostration, even with the most cautious treatment, that I have, in more than one case been led to doubt whether the patient would not have had a better prospect by entire abstinence from all antiphlogistic treatment, so called, and the use of stimuli alone *ab initio*. Ample and efficient blisters, with wine, beef-tea, and ammonia, are, I believe, the remedies on which most reliance should be placed in the most aggravated and most characteristic examples of the disease. But such remedies must be used cautiously. Many cases will do well with little or no treatment, even though, as ascertained by the physical signs, there be a considerable amount of inflammation; a simple diet, not too antiphlogistic, rest, and an open state of the bowels, with some counter-irritation, being all that are requisite; anything beyond this, like the homœopathic globules, serving only to amuse the patient, and gain for physic a degree of credit which is not its due.

Since writing the preceding observations, the substance of which was read before the Medical Society of London on the 16th Oct., I have been not a little gratified by finding how much they coincide with those made by my honoured preceptor, Dr. Alison, in the November number of the *Edinburgh Monthly Journal*. I cannot but feel additional confidence in the accuracy of my own observations, when thus confirmed, and I have the less hesitation in pressing on the attention of the profession the views here set forth. But, how long the present type of pneumonia may continue to prevail cannot be predicted, and we must not therefore repeat the errors on which we have ventured to comment, but recall the words of our own Hippocrates. "Hoc saltem pro comperto habeo ex multiplici accuratissimarum observationum fide, prædictas morborum species, præsertim febres continuas, ita toto celo differre, ut, qua methodo currente anno ægrotos liberaveris, eadem ipsa anno jam vertente forsitan e medio tolles; quodque, ubi semel in genuinam medendi rationem, quam hæc vel illa febris species sibi vendicat, auspicio inciderim, ad eundem scopum collimans (favente, ut fit, Optimo Numine), metam quasi semper attingam, respectu ad temperamentum, ætatem, et reliqua ejusmodi usquequaque habito; donec, extincta illa specie novoque gliscente malo, anceps rursus hæreo qua mihi via insistendum ut ægris subveniam; ac proinde, nisi ingenti adhibita cautela intentisque omnibus animi nervis, vix ac ne vix quidem possum efficere ne unus aut alter eorum qui se primi meæ curæ commiserint, vita periclitetur; donec, investigato jugiter tandemque perspecto morbi genio, ad eundem perdomandum recto pede et intrepidus denuo procedam." (Sydenham, *Observat. Medic.*, sect. 1, cap. II, p. 29. Sydenham Society's Edition.)

15 Finsbury Square, 18th Dec. 1852.

MECHANICAL SUPPORT IN PROLAPSUS ANI.

By JAMES DEANE, Esq., M.R.C.S.Eng.

It is singular that we hear so little of mechanical support in cases of prolapsus ani. Authors will puzzle us with minute and unpractical distinctions about the first element in different cases of hæmorrhoids, and will then forget that, whether it be their cause or not, the prolapsus, so generally accompanying them, will always aggravate them, and even form fresh piles, however carefully an excision may have been effected. Their treatment, also, has been well discussed; but have we been as attentive to their prevention? Have any means been devised for supporting the perineum during the expulsion of the fæces? What else can remedy

the relaxed state of the levatores ani? and, if constantly supported during the evacuation of the rectum, what more reasonable than to suppose that the hæmorrhoids will yield to some mild treatment? or, if requiring removal, that their re-formation will be prevented?

Such was the train of reasoning that occurred to me in the after-treatment of the following case.

CASE. A. B., aged 25, had suffered from prolapsus for sixteen years. During that time, the bowel had descended invariably with each act of defæcation. On examination, I found external piles, large and numerous, and a loose fold of integument completely encircling the anus, and projecting about three-eighths of an inch. I found also internal piles, two in number, about half the size of a filbert, and a general abnormal rugosity of the mucous membrane, the nidus of future hæmorrhoids in the present state of parts. She suffered great pain at stool, and the fæces were generally more or less marked with blood. Her general health was very delicate: she had a pale, exsanguined appearance. I removed the external piles by incision, and the loose fold of (skin?) projecting from and encircling the anus. This was, no doubt, originally mucous membrane, which had been protruded, and had taken the form of skin from atmospheric exposure. The wound soon healed, but the prolapsus was as bad as ever, and, if not remedied (the parts being protruded and strangulated for a time daily), would soon have brought on fresh piles, and my patient would soon have receded into her former state.

What was to be done? Here the records of surgery give us no information. I adopted the following plan, with the utmost possible success. My patient has now used it for upwards of two years, and has not during that time had the bowel down, except when accidentally requiring an evacuation when from home. This occasional exception, so certain when the board was not used, distinctly proves that the non-prolapsus, at other times, was due to the contrivance, as truly as the non-descent of the bowel is due to a truss. It is probable that the analogy may go further, and that the *absolute constancy* of this support during defæcation will *cure* prolapsus, just as a truss cures hernia, when used for years without the permission of one descent of the bowel. I may also add, that, since the use of the board, I have heard no more in this case of piles, either internal or external.

The plan may be described thus:—Cover a chamber utensil with a strong flat board, taking a circular form, and projecting one inch; let into the edge of the wood three or four pieces of wood, to keep it fixed on the chamber-pot; make an opening on the surface of the board, a little behind its centre, just large enough for the anus to act; and surround this opening with an elevated ridge, to support the entire perineum and sides of the anus during evacuation. The anal foramen which I have used, has been oval, its long diameter being antero-posterior, and four inches in length, and its transverse diameter being two inches and a half. It has been abrupt, not bevelled; the sharpness of the edge being removed. The ridge has been half an inch high, and has extended all round the anal foramen, and has been less than half an inch from it. The great object is to keep it within the ischia. Some of my patients have felt more secure and more comfortable *with*, and some *without* this ridge. For females, I have had a large anterior urinary fissure, half an inch wide towards the middle of the board, and opening into the foramen, and gradually enlarging forwards to the size of three inches in front. With males, I have recommended another utensil in front.

As "there is nothing new under the sun", some such apparatus may possibly have been already used without my knowledge; and I have no doubt that, if the attention of the profession be directed to the subject of this paper, some better plan may be discovered than that which I have suggested.

Chatteris, Cambridgeshire, Dec. 10th, 1852.

AMPUTATION OF THE ARM IMMEDIATELY BELOW THE SHOULDER JOINT, FOLLOWED BY RECOVERY, IN A CHILD AGED FIFTEEN MONTHS.

By ROBERT EDWARDS JONES, M.R.C.S.

On the sixth of September, in consequence of the absence of Mr. Mason, of Sudbury, I was hastily summoned to visit Eliza Harrington, aged 15 months, the child of poor parents, residing at Wickham St. Paul's, Essex, who had been knocked down by a waggon, the wheel of which had passed over her left arm. On examination, I found a fracture of the humerus at its lower third, the bone protruding denuded of its integuments, and the soft parts lacerated nearly to the shoulder joint: the little patient was much exhausted from loss of blood. I administered small quantities of brandy and water, which had the effect of producing reaction; and feeling there was no time to be lost, I at once amputated just below the shoulder-joint, being just able to save sufficient integument to form a good stump. I was ably assisted by Mr. Mason, jun., and very little blood was lost during the operation, and but one artery required a ligature. The child had severe convulsions the following day, which were relieved by small doses of tincture of opii; after which it progressed most favourably, and at the end of a month had perfectly recovered.

I am induced to send this case for publication, because I believe that it is rare for a child of such a tender age to recover from so severe a proceeding.

Long Melford, Suffolk, Nov. 1852.

FATAL DISEASES OF THE STOMACH.

By JOHN CHARLES HALL, M.D., Fellow of the Royal College of Physicians of Edinburgh, etc.

THE most important truths may be derived from a faithful record of those cases in which, notwithstanding all our efforts, the disease we are called upon to treat proves fatal. However pleasing and flattering to our vanity it may be, to publish those cases only in which we have been successful,—fatal cases, at least, as much as those which have had a favourable termination, convey important lessons.

CASE 1. On November 1st, 1852, I was requested to see, in consultation with my friend, Mr. Henry Julian Hunter, surgeon, Mr. F——, of Sheffield, aged 46, a brass-turner. From Mr. Hunter I learnt that he became his patient on the 20th of May, 1852, with symptoms of dyspepsia, under which he had then laboured for some time. He prescribed mild laxatives, with infusion of calumba, and prussic acid, and, on the 25th of May, the nitrate of bismuth and rhubarb. Under this plan of treatment, and a mild diet, the patient became much better. Mr. Hunter did not see him again until the 27th of August, when he called upon him, having, meantime, been under the care of Dr. ———, who had ordered him to be rubbed with the linimentum hydrargyri, etc. He had also been to Dr. M——, a physician, residing some distance from Sheffield, who prescribed calomel and the compound powder of antimony, and a simple saline mixture. He had now the same symptoms as when last attended by Mr. Hunter, and the same plan of treatment was again adopted.

Sept. 19th. He was much worse; had obstinate constipation; almost constant vomiting; and severe pain in the region of the stomach. Small doses of castor oil, and clysters of warm water, were given. An ointment of tartarised antimony was applied over the region of the stomach, which gave some little relief. He continued much the same until Oct. 7th, when all the symptoms were aggravated; the pain and sickness were constant, and the food rejected almost as soon as taken. Sometimes, however, it remained some hours, and was then vomited. The bowels were kept open with clysters; leeches, and a plaster of belladonna, were applied to the epigastrium.

Oct. 8th to 10th. First, prussic acid and water, then creasote and water, were prescribed; but the pain still continued, and even a little milk was vomited a few minutes after it was swallowed.

Oct. 10th. Mr. Hunter tried the nitrate of silver with opium, with some little advantage; but the symptoms again returned with increased severity, and so continued to the day when we met in consultation.

Nov. 1st. The first thing that struck me was the shrunk appearance of Mr. F—. I had not seen him for nearly two years, when attending another member of his family. He was then very fat, and appeared to be in good health. This wasted appearance at once impressed my mind unfavourably; for I have found, in the cases of this kind I have seen, that emaciation is a very ugly circumstance, and affords strong presumption that the long-continued pain and sickness are caused by organic disease of the stomach.

He told us, that for more than a year he had felt a constant uneasiness over his stomach, and that now and then during that period he had had severe pain; that on these occasions he was sick; after which the stomach did not feel so full, and he was better, often for days together. This appeared to have been the case, from Mr. Hunter's prescribing for him, on the 25th of May, to the end of August, when Mr. F— again consulted him. He had for many years past partaken freely of spirits and ale, but more ale than anything else.

When we entered the room, he was in violent pain, having just thrown up some milk, which was shown to us. He said that the pain was constant, that he was sick every two or three hours, and could get no rest. His face had a yellowish green aspect, and looked more like *wax* than *flesh*. The pulse was 80; the tongue clean and moist; the urine natural. The organs within the chest appeared healthy. The liver was evidently much enlarged. The abdomen was generally flat, and had the appearance of being drawn inwards; *pressure over the stomach gave no pain*; and the most careful examination did not enable either Mr. Hunter or myself to detect any hardness of or tumour near the pylorus.

Mr. Hunter had noted the case as one of disease of the pylorus, an opinion of the correctness of which there could be no doubt.

It was agreed in consultation to give a teaspoonful of water, with one drop of prussic acid (*Scheele's*), every two or three hours; and to confine the diet to a teaspoonful of milk, thickened with arrow-root. The bowels, which had been confined for a day or two, were relieved with a clyster, and the strength of the patient was ordered to be supported with injections of strong beef-tea. A blister was applied over the stomach.

Nov. 7th and 8th. He appeared better; was only sick twice in twenty-four hours; but at times had been in great agony.

Nov. 10th. He had been again very sick, and complained of *almost constant* pain. The countenance had a pinched and anxious appearance, and the peculiar yellowish-green hue, so characteristic of organic disease of the viscera, was more marked. We were shown some dark, grumous, offensive fluid, which he had vomited, evidently containing a considerable portion of blood.

The pulse was quick, and very feeble. Everything was now ejected, even a little cold water. In a case I had seen some time ago, in Nottinghamshire, with Mr. Nelson, chloroform had, for several weeks, given the greatest relief; the vomiting appearing to be checked by it, and the pain to be relieved, although only for a time; the patient, a female, in the end, dying from cancer of the stomach. At my suggestion, therefore, three drops of chloroform were given in a little water; but the patient disliked the smell, and refused to take it.

He was ordered to take nothing but a little ice, and to let it melt in his mouth. Beef-tea injections, etc., to sustain life; morphia, opiate injections, a plaster of belladonna, and opium, etc., were suggested, in order to give what temporary relief from suffering we could, but, I fear, with

little success; the pain and sickness continued, and he died from exhaustion on the 16th of November.

Post-mortem examination, 36 hours after death. The body was much emaciated; the organs within the chest were healthy. The omentum was not thicker than a piece of paper. The liver was much enlarged from hypertrophy of the white substance (*nutmeg* liver); the gall-bladder contained a small quantity of bile; the pancreas, spleen, and kidneys, were healthy; as was also the alimentary canal below the stomach. The stomach* was enlarged, and behind the lesser curvature there was a mass of scirrhus glands. On opening the stomach, below the cardiac orifice, we observed a *large and very bright vermillion patch* on the mucous membrane, several inches in extent, and shaded into a grey colour, as it passed towards the pylorus. Below the sphincter of the pylorus, was a large cancerous ulcer. To borrow the words of a gentleman present at the examination, as highly characteristic, the edges had a "punched appearance". The ulcer had destroyed all the coats of the stomach, the contents of which were only retained by the adjacent peritoneum, which had evidently become united during the progress of the disease; and even this was so softened, that it gave way in removing the stomach from the body. The pylorus was surrounded by and involved in a mass of disease of the same nature, by which the natural outlet was reduced to a very small size. The mucous membrane, *softened throughout*, could easily be separated. The stomach was empty.

REMARKS. It will, perhaps, be better to direct the few observations I have to make on this very interesting case, 1stly, to the symptoms present during life; 2ndly, to the post-mortem appearances; 3rdly, to the treatment of similar cases.

1. SYMPTOMS DURING LIFE. This case well illustrates the fact, first, I believe, pointed out by M. Andral, in his work on Clinical Medicine, that, in the early stages of disease of the pylorus, causing this opening to be narrowed, there is generally copious vomiting every eight or ten days, or even more frequently, by which the sufferings of the patient are much relieved; the distended stomach disgorging its contents. The late Dr. Hope† has remarked, that when the contraction has proceeded from carcinomatous tumours, "*the vomiting ceases when the ulceration of the tumour leaves the orifice free*"; but the symptom "*recurs in proportion as the tumour is regenerated*"; still, it occasionally happens, that similar dilatation of the stomach takes place when the pyloric orifice is enlarged—an anomaly which arises from the thickened walls of the viscus having lost their tonic contractile power, whence accumulations arise as in an inert bag.‡ M. Andral,§ Dr. Seymour,|| Dr. Watson,¶ and others, have directed attention to the peculiarity of the symptoms characteristic of cancer of the stomach; but sometimes there is not one symptom by which it can be detected by the most experienced and skilful practitioner. Some patients have much pain—others have none at all; one patient vomits continually—another patient, from the commencement to the termination

* The body was examined by Mr. Hunter, in my presence; the stomach was removed to the Sheffield Medical Institution, and examined by Messrs. Allanson and Atkin (lecturers on anatomy), Mr. Parker, and Dr. Elam. The preparation (with remarks on the case) was shown by me to the members of the Sheffield Medical Society, Dec. 2nd, 1852.

† Morbid Anatomy, p. 214.

‡ Those cases in which the food is vomited, when the pylorus remains open, are very interesting. Dr. Watson has shewn that the "pylorus" is a sphincter muscle, the natural and habitual state of which is contraction: it yields, in health, to the pressure of the digested aliment which is driven forwards by the muscular fibres, which compress and surround the pyloric end of the stomach. Of course, when the natural outlet is closed, the food will be thrown up again; but even when open, from the ulcer involving the pylorus, the propelling force cannot be exercised. Should the pylorus be closed, the disposition to hypertrophy in the muscular coat is conservative but in very thin and delicate people (more particularly, according to our experience, in females), the muscles are never sufficiently strong to conquer the impediment; the consequence is, that meal after meal is retained; the distended coats become thinner and thinner: so long as, by vomiting every now and then, the organ can relieve itself, the patient lives, or rather lingers, through a miserable existence, until the power to reject the contents of the stomach ceases, and death takes place.

§ Clinique Médicale.

|| Medico-Chirurgical Transactions.

¶ Practice of Physic, vol. II, p. 414.

of the disease, has little or no vomiting. These are all points of great practical importance, and direct us, in some degree, to the *situation* and nature of the disease. It has long ago been pointed out, that when the ulcer is situated, as in the case of Mr. F—, near the pylorus, the pain is much greater than when it is placed in the middle of the stomach; and we can readily conceive why an ulcer placed at or near either opening of the stomach, should give more pain than when attacking the intermediate parts, in either curvature.

When the ulcer is situated at the entrance to the stomach, the disease has symptoms very similar to those of stricture of the œsophagus; but the food, generally, gradually passes in the right direction, and then for a time the sufferings of the patient are over. This I have observed in a case in St. George's Hospital, under the care of Dr. Seymour.

Mr. Kiernan examined the body of a gentleman after death, in whom the pain had been unusually severe, and found, on a careful dissection, that the *scirrhous mass* had surrounded the trunk of the gastric branch of the par vagum, which in fact ran directly into it.

The emaciation has already been alluded to: not but that we have seen patients more reduced than this man; still, as his wife said, he was a mere shell when compared with what he had been two years before. Although not always a symptom of malignant disease of the stomach, wasting of the body has been observed in every patient dying of this disease that I have seen. Napoleon Bonaparte is said to have been very fat when he died; his omentum remarkably so. The fat is said to have been "upwards of an inch thick on his sternum, and one inch and a half upon his abdomen."

It will have been remarked, that, a few days before death, the pain, sickness, and vomiting, were urgent, even when the stomach was kept without food, and the thirst mitigated by permitting a bit of ice to dissolve slowly in the mouth. The vomiting on the 10th also began to resemble coffee-grounds, and was very offensive, affording almost certain evidence of organic disease of the stomach. From this time, the powers of life, too, rapidly declined. This was also the case in another patient under the care of Mr. S. Parker, a few months ago, whom I saw two or three days before he died, and whose stomach was found diseased, on examination after death, from the cardia to the pylorus. Here, as in the case of Mr. F—, the matter ejected resembled coffee or chocolate grounds, or lees of wine; and the patient rapidly sank after this symptom was present. The dark matter was evidently blood extravasated from the disorganized surfaces, and changed by exposure for a sufficient time to the action of the gastric juice. So far as we know, this kind of vomit generally ushers in a rapidly fatal termination. It is also interesting, as teaching that a mechanical obstacle is not the only cause of vomiting in cancer; for we see that, independently of any mechanical obstruction, and where no food of any kind has been taken, there may be repeated and copious vomiting, from the morbid irritability of the stomach in the advanced stages of the disease, and more particularly when the surface of the organ is denuded by ulceration.

Cruveilhier relates a case the symptoms of which, during life, were somewhat similar to Mr. F—'s; that of Madame A—, aged 42 years. The symptoms were, perpetual vomiting of mucus and food for three months; then hæmatemesis came on, and the lady died in three weeks. All treatment was ineffective, even to palliate. On examination after death, *encephaloid vegetations* were found in the stomach, chiefly about the pyloric half. One obstructed the pylorus.

2. POST-MORTEM APPEARANCES. Cancer was not observed in any other organ of the body; and I believe, notwithstanding the fact that cancer is a constitutional affection, or, at any rate, if local and solitary at first, is apt to disseminate itself, that, when it attacks the stomach, it is accompanied less frequently than some other modes of carcinomatous disease by cancer in other parts of the body.

The peculiar bright redness observed at the cardiac portion of the stomach was a feature of much interest, not

mentioned by any author I have met with, in connexion with a fatal disease of the pylorus, such as was present in this man. The researches of Dr. Yelloly, M. Billard, and Morgagni, are very interesting. The first-named physician conceived that these patches are not to be regarded as unequivocal marks of disease of the stomach, inasmuch as they "occur in every variety of degree and character, under every circumstance of previous indisposition, and in situations where the most healthy aspect of the organ may be expected": an opinion fully confirmed by Dr. John Abercrombie.

Cruveilhier describes the anatomical characters of the simple ulcer of the stomach to be spontaneous loss of substance; ordinarily circular, with well-defined edges; the bottom of it greyish and dense; of variable dimensions; almost always in the lesser curvature or posterior wall of the stomach; sometimes as a zone in the pyloric orifice. He remarks, also, that the simple ulcer is almost ever solitary.

The simple ulcer differs from the cancerous ulcer in the character of its base, and the absence of circumscribed hypertrophy, which always attends the latter.

The symptoms are described by this eminent writer to be emaciation, constipation, nausea, vomiting, hæmatemesis. The cases he gives, as illustrative of this disease, are such as have died from perforation without preliminary adhesion and consequent peritonitis. This adhesion is mentioned by Cruveilhier as one of the ordinary attendants on ulceration.

The distinction between simple ulcer and cancerous ulcer of the stomach is still further illustrated by the curability of the former. Two cases are quoted by Cruveilhier, of death from perforation, as a sequel of simple ulcer; the opening being found at the border of a cicatrix of an old ulcer, the relic of a previous disease. The progress of one of these cases extended over a period of more than twenty years.* There is no case illustrative of the vermilion injection of the mucous membrane observed in the stomach of Mr. F—.

3. TREATMENT OF SIMILAR CASES. The treatment of the advanced stages of a disease, which may be fatal by gradual exhaustion after long-continued suffering, by fatal hæmorrhage from the ulcer, or by perforating the stomach and permitting the contents to escape into the cavity of the peritoneum, giving rise to extensive peritonitis, can at the best only be palliative. Prussic acid, opium by the mouth, or anodyne enemata, and nutritive injections, when food cannot be retained, may afford some little comfort; but of one thing we are certain, *that the less we put into the stomach, in the way of medicine or food, under these painful circumstances, the better.*

But can anything be done in the first stages of these diseases of the stomach? We have already pointed out the important diagnostic mark of Cruveilhier, that *simple ulcers* of the stomach may be distinguished from *malignant*, by the former admitting of cure; and our treatment must be directed in the hope that the disease is not malignant; and even when we have every reason for supposing that chronic inflammation has ended in ulceration, we must not altogether live without hope. The possibility of the cicatrization of ulcers, once doubted, is now fully ascertained. The process certainly takes place with difficulty, having many obstacles to contend with; but there are now few pathological anatomists who have not met with instances in which some intestinal ulcers were in full activity, while others were healing, and a third set completely cicatrized.†

In a case in which we had reason for suspecting ulceration of the stomach, the treatment we should reply upon, in the first instance, would be, leeches, counter-irritation, prussic acid, and, in some patients, small doses of nitrate of silver. The treatment will of course demand great perseverance and patience; but we know that, if the patient have not the scrofulous diathesis, he may recover from a condition apparently the most desperate. Of course, each case

* Cruveilhier, *Léçaison* xx.

† Vide Dr. Hope's *Morbid Anatomy*, §g. 167 to 170.

will require modifications of treatment, which must be left to the tact of the medical attendant to regulate; but, in reference to the disease itself, I would remark, that the smallest possible quantity of food, and of the least irritating nature, is absolutely to be insisted on: wine, spirits, ale, should be avoided, and even the mildest kind of food, such as milk, arrow-root, etc., must not be given in sufficient quantity to distend the organ. As the emaciation, during the progress of the disease, often becomes very great, some food must be given to support life. The difficulty in the treatment consists in steering between the two extremes; but, so far as my experience teaches, the danger is *greater* of giving *too much* and too stimulating food, than *too little*. If we have a choice as to the kind of food, it is for a diet consisting, as proposed by the late Dr. Barlow, wholly of fresh-made curds; and even of this a small quantity only is to be taken at a time. Aperients always do harm, and are therefore, if possible, to be avoided. The bowels can be kept open by clysters of warm water, and the powers of life may also be sustained by injections of beef-tea, by which the necessity for food taken by the mouth is lessened, and the diseased stomach longer permitted to enjoy that perfect rest, which is so very important.

Sheffield, Jan. 1st, 1853.

CASE OF INTERNAL UTERINE HÆMORRHAGE.

By GEORGE KING, Esq., Surgeon.

IN the *Provincial Medical and Surgical Journal* for 31st March, 1852, I published a case of internal uterine hæmorrhage. The subjoined is another case of the same class, which recently occurred in my practice.

CASE. On Sunday, Sep. 5, 1852, I was sent for to see Mrs. T., a patient whom I had attended three times before in her confinements, and who had always had a quick and natural labour. She was now, as she supposed, in her last month with her fourth child. Not expecting for a month or five weeks, she had taken lodgings for a week or two on a hill about a mile from the city, for the benefit of the children's health, as well as her own. On the morning of the day when I was called in, she was preparing to go to church with her husband and family, when a wasp stung one of the servants. This trifling incident caused great commotion in the house, and so upset Mrs. T. that she did not go to church, but lay down on the bed. The account the woman of the house gave me was—that, soon after the husband and family were gone to church, Mrs. T. complained to her of a slight pain in the back, with a little discharge, and she felt altogether very unwell; and soon after she had a very copious motion, which she (the old woman) thought *smelt very deathly*. Here the old woman's olfactory organ was at fault. She had fainted twice in about an hour. They both became alarmed; and at half-past twelve o'clock the husband was called out of church. Immediately on his return to the house, a servant was sent off for me.

It was about two o'clock when I saw her. I found her then on the bed. She appeared much depressed, and complained of tingling pains in the back, and she thought that labour would very soon come on. On examination *per vaginam*, there seemed to have been no discharge, and I found nothing more than the usual premonitory symptoms of approaching labour. In the parturient passage the mucous secretion was very abundant, and the parts most amply lubricated. The os uteri was thin, and sufficiently dilated for me to introduce my finger with ease. Having fully satisfied myself that there was no external hæmorrhage, or any other alarming symptom, I did not interfere. I was with her about two hours. During that time there were no labour-pains, but she still continued to complain of great sinking, and fainted once, and was also sick; still this did

not improve her condition, (sickness often excites labour-pains). As she seemed much exhausted, I gave her a table-spoonful of brandy twice, but she kept yawning, and did not rally. The pains were alight, and less frequent, and not so strong as when she was first taken. Yawning and fainting occurring during labour, are unmistakable symptoms of mischief going on: they must always be looked upon with suspicion, and must create in the mind of an observant obstetric practitioner some degree of alarm, and will require his most prompt and active assistance. As there was no advancement at half-past four o'clock, I then gave a dose of ergot, but it did not increase the pains much. On making another examination, I found the os uteri a little more dilated, and a pouch of the membrane presenting, about the size of a filbert; this I ruptured, but only a very little liquor amnii escaped. I then discovered that it was a natural presentation, and was satisfied that if the pains followed I had nothing to apprehend. Shortly after the membrane was ruptured, the pains became stronger and quicker, and in about two hours a dead child was born, without any unpleasant symptoms succeeding. Before the placenta was expelled, and in a few minutes after the child, a large clot came away with a very slight pain. Although it was not very large, this fully explained the fainting and the other unpleasant symptoms which had been observed during the day. The clot had no doubt been accumulating ever since the first fainting-fit in the morning; and would have gone on until checked by fatal syncope or labour. The vessels had no doubt ceased to bleed the moment the membranes were ruptured, and the formation of the clot was stopped by the expulsive action and contraction of the uterus. That took place in the afternoon, without producing the slightest appearance of anything like internal or external hæmorrhage. It was very evident, from the appearance of the child, that it had not been dead long, and it was very clear that the mother had not gone her full time. She had herself expected to go three weeks or a month longer. I examined the placenta immediately after it was expelled, and there was a rent in its membranous covering, at the root of the umbilical cord; and on the surface of the placenta itself there was a large thick coagulum extending over it, an inch and half in circumference, which was very easily removed. This coagulum was no doubt nature's plug, which had put a stop to the hæmorrhage, and all the other unpleasant symptoms.

I need not here enter on the pathology of the utero-placental circulation, nor on the intricate subject of uterine susceptibility; but we all know, and those of us who have had much midwifery practice must have noticed that, at the placental end of the cord, the umbilical vessels are very large, particularly the umbilical veins. From this point they ramify, and are distributed over the whole membranous covering of the placenta, till lost in the substance itself; and from this point, also, springs, and is conveyed, the nourishment to the fœtus in utero. Thus, a rupture, or hæmorrhage, or any disorganisation taking place at this important and connecting link and vital union between the mother and the fœtus in utero, must be attended with very serious, if not fatal consequences, both to the mother and child; and would be calculated to produce the symptoms and all the great constitutional derangement, of which my patient complained, and from which she was suffering before the child was born, when I was first called in; and is another strong proof of the powerful influence and the great effect of passion and mental impression on the mother's system, and on the fœtus in utero. There is not here the slightest doubt that the agitation and commotion of the mother's mind, caused by the sting of the wasp, must have produced a shock to the whole system, the effect of which was so powerful, as to produce the copious evacuation from the bowels, and consequent great exhaustion; and no doubt it was a sudden and violent movement of the fœtus that tore the membranous lining of the placenta, and lacerated the umbilical vein; and here was the cause of the internal hæmorrhage which caused so much uneasiness during the day, and would soon have caused the death of the

mother, as well as of the child, if labour had not been quickly brought on. The bleeding, I expect, ceased as soon as the expulsive action of the uterus was set up. The child did not appear to have been dead long; and had the labour been a rapid one, I have no doubt but it would have been born alive. The mother recovered very well. The milk, as is usual in such cases, gave her some little trouble.

As there are but few cases of *internal* uterine hæmorrhage published, this, perhaps, may be interesting to the readers of the *ASSOCIATION JOURNAL*. What I wish particularly to direct their attention to is, the simple cause that produced it, and the slight hæmorrhage that gave rise to such great and alarming constitutional derangement in the mother, and to the death of the child. Here was only one clot, and but very little discharge afterwards. Query—Could any other plan of treatment have saved the child?

Beth, December, 1852.

BIBLIOGRAPHICAL NOTICES.

WHAT TO OBSERVE AT THE BEDSIDE, AND AFTER DEATH, IN MEDICAL CASES. Published under the authority of the London Medical Society of Observation. 12mo., pp. 136. London: 1853.

THIS work points out with minute and elaborate detail the method to be pursued in making clinical examinations regarding patients during life, and in examining bodies after death. The value of such a guide will be felt by all who have to attempt the diagnosis of puzzling cases; as it will enable them to explore every symptom and every part of the body, according to a plan which prevents any possible source of information from being neglected: but if the busy practitioner attempt to adopt it as his *usual* text-book of diagnosis, he will often, we doubt not, bewilder his memory and his judgment amid the unimportant features of his ordinary as well as of his extraordinary cases. The time of even moderately well employed practitioners is too precious, to enable them to subject many cases to the searching scrutiny proposed by the Medical Society of Observation; nevertheless, the little volume before us will be found a useful aid in the diagnosis and accurate reporting of cases, even by those who have not leisure to follow the elaborate system of inquiry which it recommends and explains.

The circumstances in which the book is published are thus unfolded in the preface:—

"Soon after the Medical Society of Observation had been formed, it was felt by the members, that the labour of analyzing and comparing clinical observations would be greatly lightened, and the precision of the observations themselves increased, if the records of these were in every instance arranged on an uniform plan. The society in consequence adopted, with some modifications, a form of arrangement of symptoms and after-death appearances, which had been framed by Dr. Walshe. The publication of this form seeming desirable, it was referred to a committee, who expanded and altered various parts of it, and finally threw it into its present shape. The supervision of the whole was intrusted to Dr. Ballard, who has bestowed upon his task great labour and attention.

"The society believes that this scheme or method of arranging the clinical and anatomical phenomena of disease, will prove useful both to those who desire to learn systematically with what amount of detail, and in what order, those phenomena should be looked for, and also to those who wish to record with accuracy the results of their experience. It will probably be admitted, too, that errors in diagnosis are more frequently traceable to forgetfulness in searching for all possible evidences of disease, than to misinterpretation of those actually discovered: the physician proceeding to the investigation of an obscure case may, then, in a book of the present kind, occasionally find a useful remembrancer."

AN INTRODUCTION TO CLINICAL MEDICINE: Six Lectures on the Method of Examining Patients; Percussion; the Use of the Microscope; and the Diagnosis of Skin Diseases. By JOHN HUGHES BENNETT, M.D., F.R.S.E., Professor of the Institutes of Medicine, and of Clinical Medicine in the University of Edinburgh. Second edition, with numerous woodcuts, 12mo., pp. 134. Edinburgh: 1853.

THIS is an excellent manual for the student; and, indeed, there are few practitioners who may not derive advantage from its perusal, not only from the clear and condensed information which it imparts, but also from the useful counsels which it gives as to the manner of making and recording observations at the bedside and in the dead-room. A chapter on the application of chemistry to diagnosis would be a useful addition, and we hope to see it supplied by Dr. Bennett at no very distant period.

MANUAL OF HUMAN ANATOMY: Descriptive, Practical, and General. By ROBERT KNOX, M.D., F.R.S.E. Illustrated by 250 highly finished wood-engravings, from drawings by Dr. Westmacott. 12mo., pp. 672. London: 1853.

As might be expected, this manual, proceeding, as it does, from an accomplished veteran in the art of teaching anatomy, is eminently luminous and graphic. We fear, however, that many old students of the author will be somewhat disappointed in turning to the *sphenoid bone*, the *humerus*, the *femur*, or other remembered theme of "Old Surgeon's Hall", to find that scarcely a trace can be discovered in any part of the volume, of the racy parables by which the oral lectures of the author were wont to be enlivened; and by the happy introduction of which he was able to command the attention of even the idle and the indolent.

PERISCOPIC REVIEW.

PSYCHOLOGY IN ITS RELATIONS TO PATHOLOGY, THERAPEUTICS, AND JURISPRUDENCE.

OPIUM IN MENTAL DISEASE.

In the *Psychological Journal* for October 1852, there is an analysis of the views of Dr. ENGELKEN, of Obermeuland, on the employment of opium in mental disease, and some allied conditions. He considers the drug to have a twofold action—one local, on the nerves of the stomach, the other remote, on the nervous centres, by absorption into the blood. He adduces the example of the oriental opium-eaters, in justification of its administration and long-continued use in large doses. He has exhibited three grains with benefit once or twice a day, for periods of three or four years. The appetite has improved—the entire frame has been benefited—and there has been decisive amelioration of the mental malady. He has observed that small or half-grain doses are followed by increased rapidity of the circulation, and of the quantity of the secretions. If the dose be raised to a grain, or a grain and a half, the actions of the brain are increased, and there is diminished susceptibility of external impressions. Thoughts are developed more rapidly, and with greater clearness; the association of ideas is more varied; and the imagination is more active. Doses from three to ten, or more grains, produce the well-known phenomena of stupor. He regards the medicine as contra-indicated in insanity depending upon inflammatory or congestive conditions. He recognizes its suitability in those forms of hypochondriasis which most closely approach to melancholia; but does not appear to be acquainted with its utility in general insanity, and in the latter stages of mania, in doses of one or two grains, gradually increased to four or six grains, combined with calomel and digitalis, as recommended by Dr. Seymour. Dr. E. confirms the opinions prevalent in Britain, of the benefit to be derived from opium in deli-

rium tremens and puerperal mania; and adds chorea to the list of nervous diseases, in which he has tried it with decided success.

HOMICIDAL MANIA.

In the same periodical, there are presented descriptions of three forms of homicidal mania, as inferences from an analysis of the case of Jobard, who destroyed a female, a stranger to him, in the public theatre at Lyons, *apparently* for the purpose of avoiding the crime of suicide by committing that of murder, the investigation of which would secure him time for repentance, but *probably* while acting under a morbid impulse.

1. *Moral Homicidal Mania*, arising from a morbid state of the feelings, passions, and propensities, which the powers of the understanding, reason, judgment, cannot control nor counteract. Acts of impulsive homicide come within this category.

2. *Intellectual Homicidal Mania*, arising from some disease of the imagination, some delusion or hallucination, or misapplication or perversion (which often happens in religious monomania) of the reasoning faculties. This variety of the disease is always primarily dependent on some lesion of the understanding.

3. *Moral and Intellectual Homicidal Mania*, arising from some morbid state of the feelings, passions, and propensities, affecting and impairing the controlling influence of the intellectual faculties.

The existence of the first variety has been a matter of dispute. It is admitted by psychologists; it is repudiated by jurists. Is the tendency to kill a vice or a disease? Is the impulse irresistible and involuntary, or the result of such affection of the will as to render the actor irresponsible? Tests or grounds of distinction between a diseased and a vicious inclination have been anxiously sought for. The most recent attempts have been by Michéa and Guislain. Michéa (*Ann. Médico-Psychologiques*, July, 1852), conceives that in individuals labouring under dyspepsia, disorders of menstruation or of the muscular system, under the disturbance of the puerperal condition, under hereditary predisposition, in spermatorrhœa, and especially in spontaneous anesthesia of the skin, we are entitled to recognize and treat eccentric, or extravagant, or revolting desires and tendencies, as symptoms of disease, and not as acts involving culpability, or exposing to punishment. Guislain (*Leçons Orales sur les Phrénopathies*, i, 255), suggests that a correct estimate of the depravity or the disease, of the responsibility or the irresponsibility of the individual, may be formed from the following circumstances:—the cause of the disease, the existence of hereditary tendencies, the education, degree of intelligence, manners, conduct, or ruling passion of the patient, pregnancy, the co-existence of any disease, but especially of nervous affections, as hysteria, catalepsy, epilepsy, and somnambulism, the circumstances preceding and accompanying the act, the physiognomy, the tendency to periodicity in pathological conditions, the momentary suspension of sensibility, and the motive or absence of motive.

INSTANTANEOUS INSANITY.

Intimately connected with the subject of homicidal mania, are some observations on instantaneous insanity, contained in an article by Dr. BOULEAU DE CASTELNAU, in the *Annales d'Hygiène*. All the instances of sudden and uncontrollable impulse adduced, are illustrations of homicidal mania. The development of these states is described as being preceded by no reasoning, by no process of thought naturally tending to suggest such an action, nor by reasoning in opposition to the laws of reason; as occurring where no predisposition to insanity existed; as being dreaded and opposed by the individual, and published by him, that precautions might be taken to render innocuous the destructive impulse which he could not resist. Marc, one of the highest medical authorities on this subject, Talma, the celebrated tragedian, and Professor Lichtenberg, are quoted, as having experienced this blind appetite to destroy the life of others. A large number of the cases attributed to this momentary insanity occur during some uterine disturbance; or immediately subsequent to deep congestive sleep. Georget's aphorism—that a horrible act, a murder, or an arson, committed *without cause, without motives of interest*, by an individual whose actions have been previously correct, must be the result of insanity, is lauded; but the author's own conclusions are:—1. Instantaneous alterations of the mental faculties occur, inducing instantaneous insanity. 2. The first manifestations of this sudden change may be what is styled a crime. 3. Persons committing such an act should be placed in an asylum specially set apart for such cases. 4. They should remain there until

examined and certified by a special jury. Guislain gives an instance where a murderous propensity was developed in a child four years old, who attacked another aged six months.

FEUCHTERSLEBEN'S DIETETICS OF THE SOUL.

Dr. FEUCHTERSLEBEN is well known in this country, from his *Principles of Medical Psychology*, published by the Sydenham Society. The object of his recent work, on the *Dietetics of the Soul*, is to develop and elaborate the truth, that the mind has great power in preventing and curing as well as in causing its own diseases. The tone is more ethical than medical; it is transcendental in style rather than in subject; and, although the whole course of the speculation is somewhat foreign to our indigenous modes of thinking, many valuable and suggestive views will be met with upon that ill defined and difficult branch of therapeutics, the moral treatment of the insane. It is not asserted that many of these opinions have been more ably and more clearly discussed by Barlow, in treating of man's power over himself to prevent or control insanity; or by Dr. Holland, in his chapters on the effects of mental attention on bodily organs; but it is incumbent upon us to allude to these authors as congenic with Feuchtersleben, and as having opened up in this country the same deep vein of thought.

The principal object of the "Dietetics of the Soul" is declared to be to communicate whatever may be learned of the mental act of faith as a curative process. If confidence in our medical attendant has contributed to our cure—are we less cured, it is asked, than if iron or bark had effected our recovery? Are we deceived when we find that confidence renders us as much service as the physician himself? Shall we be forbidden to attain the knowledge of acting for ourselves, or to direct the art of self-deception to any useful end? The author dwells upon the influence of impulses in particular states of mental obscurity—of the operation of the will when independent, or when acted upon by the consciousness of others in resisting external impressions, quoting an assertion of Goethe that he had warded off the contagion of putrid fever by a simple volition; of the protective and tonic power of the conscientious fulfilment of duties, and of self-activity as the condition of self-preservation. Men seldom die upon a journey or during their honeymoon. In introducing the theory, that disgust at illness, and a reliance upon the beautiful and loveable, and a conformation of mind which derives pleasure from every event, are intrinsically conducive to the preservation of serenity and sanity, the diagnostic powers of Dr. Heine of Berlin are mentioned, as enabling him to distinguish the various diseases of the skin by their odour alone; and as likewise possibly enabling him to discover moral peculiarities (p. 25). In discussing the effects of the imagination, Kant is represented as regarding dreaming as an exercise during sleep, intended by Nature to maintain the organic machine in a state of vital activity. We are called upon to admit that what can cure may likewise prevent—so that the influence which renders a disease fatal, may also be the means of inducing it. If we are ill, because we believe ourselves to be ill, the author suggests that there seems no reason why we should not be able to keep ourselves in health, by the firm conviction that we are healthy: that by esteeming our brother to be good, he is so: that confidence in the half virtuous man renders him wholly virtuous; that by the encouragement of a pupil in the assumption that he possesses certain faculties, they will be developed in him: that, in fact, to imagine, hope, or believe firmly, is tantamount to accomplishment.

In a chapter on character, ill-humour, and distraction, the former is defined to be a highly cultivated will; deliberation is defined to be a disease of the mind, which can only lead to unhealthy action; distraction, described as a means of dissipating painful, disturbing powerful, and rousing from torpid trains of thought, is condemned, and concentration—the fixation of the will upon our actions—recommended as the most potent curative resource. If a man conceives that he is devoid of the force necessary to direct himself, let him place himself in some position where he must act. Notwithstanding this proposition, the influence of external impressions is fully admitted; for in a few pages it is stated that "in a cheerful, orderly apartment, a man's feelings become cheerful: they partake of that which surrounds them". The agency of mental serenity, and the equable development of the faculties, in imparting vigour, and in carrying the mind clear and energetic beyond the usual period of decrepitude and decay, is illustrated by such examples as Isocrates, who shone as an orator in his ninety-fourth, and Fleury as a statesman in his ninetieth year. While it is admitted that in the present age mental power has been more attended to than that mental culture which

secures health and longevity, and that the premature and excessive exercise of the intelligence may have affected the bodily health, the proposition is advanced, that if intelligent, clear-minded individuals be watched, it will be found that they complain of mental and physical indisposition less than persons who consider sensual enjoyments to constitute the real happiness of this world. A strong appeal is, notwithstanding, made in favour of the beneficial influence of the active mental impulses; of the power which certain passions, or exaggerations of our tendencies, have in overcoming other passions. We can never neutralise any affection by reflection alone: we can scarcely moderate it; but one affection will drive out another. Love and pride, annoyance and friendship, mirth and anger, are examples. Plato called passions "fevers of the soul"; because, like febrile affections, they are crises which often cure the most deep-seated evils by a purifying and refining process. Yet, according to Feuchtersleben, strong passions rather belong to weakness. Misfortune, which subdues the innermost seat of our strength, the mind, exerts our passions in a powerful manner. Two principles are laid down as to our affections—that happiness is not the reward of love, but love itself; and that we are not happy because we control our passions, but that we control them because we are happy. In a disquisition on oscillation, or that constant alternation of tension and relaxation, sleep and waking, joy and sorrow, which make up the sum of moral being, we are told that we must learn to know and govern ourselves: we must cultivate our moral and intellectual faculties, and then only shall we know what is meant by the term health, by the integrity of man: that in this attempt every one can do what he *should* do: that it is not only necessary to listen to the warning voice of suffering amidst the intoxication of joy, but even to endeavour to draw it forth from the innermost recesses of our being: that pleasure presupposes suffering, and that suffering is the spur of human activity, and necessary for the formation of character.

Hypochondriasis, in its most formidable and monstrous form, is characterised as the offspring of selfishness, indolence, and pedantry, and as acknowledging the mawkish spirit of modern literature as its nurse. But this giant evil may be annihilated by disease. Make the hypochondriac ill, that he may know what illness really is, and you cure him. The grand panacea for all mental infirmity and disease is the study of nature—the worship of truth. At present we are nothing, because we are false, and therefore diseased. Let us turn our clouded sight from the narrow sphere of miserable tortured self to the boundless theatre of suffering or rejoicing humanity, and forget personal miseries in sympathy with our fellow men.

Appended to the main treatise is a *psychological diary*, intended to serve as a series of formulae, and as a model of what each mind should prescribe for itself. In it are to be found the following aphorisms, which owe something to their epigrammatic form, and something also to their truthfulness.

An excessively tender conscience, overrating its own importance, may induce hypochondriasis, unless counterbalanced by great activity. Our minds are so constituted, that a change of objects brings nearly as much relief as actual repose. The fearful germ of insanity slumbers in every man's mind: watch and strive with all cheerful activity that it awake not from its slumber. The gloomy, romantic dreamer should be trained to walk with head erect, to look others straight in the face, to speak in a loud, distinct tone of voice. I can affirm, says Dr. F., from personal experience, that such habits exercise a great influence both on mind and body. We should treat ourselves as Reil did his patients; the incurable lost life, but never hope. Composition, even when we have no idea of appearing in print, is an excellent dietetic tonic. The best and quickest mode of banishing a painful impression is to give it expression in words. Life may be considered and regulated in two ways. We may either consider ourselves as a central point, and endeavour to maintain life against the influence of external agents, seeking to increase our powers by the development of character; or we may abandon ourselves freely to the world, and endeavour to assimilate ourselves to external things, considering and making ourselves a portion of the universal whole.

GUISLAIN'S LECTURES ON MENTAL PATHOLOGY.

[*Leçons Orales sur les Phrénopathies*: 1852.]

GUISLAIN is not only the most eminent of the psychologists of Belgium: he called the school into existence, and still represents its strength and peculiarities in his own person. An accomplished physician, with a taste for metaphysics, and of large and active benevolence, he combines some of the most

important qualities for the situation he holds. In his own country he is known as the ardent advocate for the erection of asylums to meet the necessities of the population, and for information in the general management of the insane; in England, as the author of several excellent treatises on Mental Diseases. His latest success has been the establishment of clinical teaching in connexion with the institution under his charge. His first course of lectures is now published, and constitutes an approximation to a systematic treatise on the subject of which they treat. We have heard a physician say, that the first time he entered an asylum in this country was to be installed as its future superintendent. Dr. Guislain modestly says that his *debut* was distinguished by his comprehending nothing of what he saw. His mission was to remedy and remove this public misfortune and absurdity.

His first volume, containing seventeen lectures, is devoted to the phenomenology of mental disease. He is first engaged with the physiognomy: insists much on the colorisation of the skin of lunatics, interpreting pallor of the face and lips as indicative of concentrated passions, instead of attributing such a hue to an anæmic condition of the system, as has been general in this country. He formulises the interrogatories to be used during the examination of a patient: recommending a series of questions commencing with "*Why*" as a test of intelligence: another commencing with "*How*," to exhibit the amount of reason or judgment: a third, containing "*When*" and "*Where*" as an appeal to memory: and a fourth intended to estimate the powers of calculation, by such expressions as "*How much*?"

In addition to all other evidence as to the real, but perhaps unrevealed and undiscoverable condition of the insane, the frequent examination of their correspondence and composition is insisted upon.

Alienation is defined to be a morbid, apyretic, and chronic derangement of the mental faculties, which deprives man of the power of thinking and acting freely, in relation to his happiness, preservation, and responsibility. The difficulty of excluding from such a definition cases of eccentricity, of fanaticism, of crime, of mere intellectual feebleness, is admitted; and special exemptions, founded chiefly upon the history of the individual, are recorded in favour of disturbers of the public peace, religious martyrs, the profligate, and the visionary.

Objecting to the terminology now in use, a revolution is proposed: and under pretext of euphony and capacity for adaptation, the radical *phren* is substituted for *psyché*, and accordingly Phrenalgia is the successor of Melancholia, Hyperphrenia of Mania. As Dr. Guislain recognises a hundred forms of insanity, and as many monomanias, as there are elementary forms of alienation, and as there are elements in the human character, a vast augmentation of our vocabulary would ensue, did not he practically adhere to the more antiquated and catholic nomenclature and arrangement. The primitive orders are—1, Melancholia, or predominance of the depressing emotions. Under this head are found remarks on the creeping sensation, experienced by melancholics under the scalp, and along the extremities: on the cyanosis, met with during despondency, which is, in this place, attributed to disorders of the organs of circulation: on the rapid emaciation invariably observed: on the occurrence of instances of the disease, where there exists no disturbance of the intellectual powers: on the modifications impressed upon the disease by association with an erotic, nostalgic, misanthropic, or hypochondriac tendency: on the proof afforded that hypochondriasis is a genuine disease of our moral being, by its frequent transformation or mergence into other species of alienation: on the frequent association of hypochondriasis with nervous diseases of the heart, with affections of the pericardium, gout, and spermatorrhœa: on the greater frequency of recovery towards the first or second year than at other times: on the announcement afforded of the transition of melancholia into incurable chronicity, by the relaxation of the muscles of the face, change of expression, and inattention to neatness and cleanliness. 2, Ecstasy, Phrenoplexy, suspension of all intellectual acts, with general muscular rigidity. Insensibility to external, even painful impressions; statuesque attitudes persevered in for an incredible length of time; taciturnity; immobility—so that the patient does not even wink, and the peristaltic motion of the intestines is arrested; abolition of mentalisation, are the chief characteristics of this affection. It was conceived to be generally found in connexion with religious excitement or mysticism: Dr. G. is disposed to deny this. The disease is not frequent in Britain, but it certainly exists. 3, Mania, Hyperphrenia; exaltation of the moral feelings. The pathognomonic character is expressed thus; exaggeration, exaltation, agitation, aggressive passions. Tranquil Mania is, however, noticed, in which there

may exist merely a ruling passion, a slight incoherence of ideas, and hysterical or convulsive complications; and which has often led to the prison or the scaffold those who should have found shelter and reason in an asylum. This species is allied to the *Manie Raisonnante* of Pinel. The special forms most fully described are *Cleptomania*, or the tendency to steal, and its frequent connexion with pregnancy and the puerperal condition: *Dipsomania*, the tendency to inebriation, its appearance as a consequence of intemperance, as a symptom of simple mania, and its influence in the production of the General Paralysis of the insane: *Erotomania*, its frequent development contemporaneously with the suppression of the catamenia: but its distinction from nymphomania, in which there is local excitement or disease of the sexual organs. The connexion of the disease of lust and the disease of fanaticism is traced. *Choreomania* is arranged as a variety of the monomania of joy and dancing; its influence in the production of the convulsive epidemics, which have from time to time disgraced the religious world, and impeded the progress of Christianity, is adverted to, and the connexion of such conditions with concentration, or fixity of thought (monoideism), very briefly hinted. *Theomania* is remarked to be much less frequently met with in Belgium, as in this country, than religious melancholia. Of 100 melancholics, 58 presented religious aberrations; of 100 maniacs, not one had religion for an object. *Logodiarrhœa*, or logomonomania, must be well known to all who have visited or lived in asylums, by experience, if not by designation. Loquacity is now, we presume for the first time, elevated to the rank of a distinct mania. The wandering, climbing, obscene, sanguinary tendencies of the insane are regarded as examples of forms of Mania, rather than as subordinate and occasional symptoms. It is shrewdly observed that in melancholia the patient accuses himself—in mania he is a victim. The incontinence of urine; the exhalation of a fetid odour from the skin, doubted by Jacobi, and by English physicians attributed to inattention to cleanliness; and the suppression of the menstrual discharge, are enumerated as important premonitions of a paroxysm of mania. Dr. Guislain is led to regard some cases of periodical mania as transformations of the epileptical attack. He never saw a true attack of apoplexy occur during the course of mania; but the sudden deaths which he does report, somewhat weaken the force of this assertion. 4. *Folly*, *Paraphrenia*, anomalous affections of the will. The patient thus attacked is forced to some singular or repulsive act, or course of action, without knowing why or how, although there may exist no disturbance or incoherence of the ideas. As the sport of such impulses may be classed together lunatics who pick, mutilate, and destroy property, themselves, or others, or the remains of others; who do not speak for years, who do not eat or drink for months; who retain their fœces, or devour them; who burrow, shriek, or declaim. 5. *Delirium*, *Idiophrenia*; anomalies in the ideas, corresponding to illusions and hallucinations, where the aspect of the disease is determined by the nature and relations of the erroneous belief: where a man may be the victim of a plot, or the recipient of a divine revelation; reduced to the size of a monad, or expanded to that of a megatherium; transmuted into an emperor or a wolf. 6. *Dementia*, *Aphrenia*; obliteration or impairment of the moral and intellectual powers. The varieties of this modification will depend chiefly on the amount of enfeeblement. There are many patients who preserve the power and taste to execute painting, music, or mechanism. Dr. Guislain comprehends under this division congenital idiots, imbeciles, and cretins, as well as individuals who have passed from mania into fatuity: or who have become imbecile from fever, phrenitis, or epilepsy. He points out a false dementia, which occurs in the course of other mental diseases; but consists rather in the temporary oppression than the extinction of the faculties. It would appear that the proportion of the cases of dementia has greatly increased in Belgium: that in England there are found about 11 fatuous patients in 100; but at present, at Ghent, 32 in the same number. This augmentation is attributed to the severe privations of the working classes. Frequently these cases terminate in marasmus; but more generally imbeciles live for twenty or even fifty years, devoid of responsibilities or anxieties, and free from their inevitable consequence. They are unexpectedly found dead in bed; or they sink under scorbutus, diarrhœa, anasarca, paralysis of the pharynx, or stricture of the œsophagus. In alluding to the dementia, which accompanies the last stage of the general paralysis of the insane, that disease is affirmed to follow long excitement, dry intellectual labour, excess, intemperance, mercurial or syphilitic diseases, the use of opium or tobacco; and to be ushered in by abolition of articulation, complete deafness, and an attack differing from apoplexy only in the non-appearance of paralysis. Baillarger's

supposed discovery of the greater dilatation of one pupil than another, as a new symptom of the malady, is assigned its true value, by the remark that it exists in other forms of alienation. Such irregularity may be observed in healthy persons. Dr. G. gives in his adhesion to the observation of Calmiel, that paralytics of this kind generally die in the course of the second year: and settles the much disputed question as to the priority of the mental phenomena, to his own satisfaction, by suggesting that occasionally the moral and occasionally the muscular symptoms are initiatory. He compares the aspect and bearing of a paralytic to those of a drunkard—a comparison to be borne in mind where the moral condition of accused persons is agitated.

Dr. Guislain is of opinion that alienation may exist independently of all cerebral disease; but in accepting such a proposition, it must be observed that he appears to limit the expression to the solids within the cranium. His observations are founded, in all cases, on personal experience and examination. He conceives that the pia mater is ordinarily the seat of congestion in the insane. In 100 necroscopies, congestion of the encephalon was found 25 times. He compares this condition pathognomically to blushing from shame, or the injection of the neck and eyes during anger. Four times out of five, mania is not accompanied with true but with venous congestion. He directs attention to serous infiltration of the gray matter; and indicates slight anasarca of the eyelid as a sign of the existence of such a condition; a fact suggesting the explanation current in this country, that dropsy of the vesicular neurine, if it exists, is merely the extension of general dropsy. This condition, as well as its congener serous apoplexy, is frequently encountered in general paralysis. But softening of the gray, or of both substances, Dr. Guislain regards as the most frequent morbid appearance found in those who die of general paralysis. The alteration is found in one-sixth of them. In this condition the gray matter acquires an ashy, green, violet, yellow or brown shade, or is colourless: it breaks down on the slightest touch; it is transformed into a soft, semi-fluid pulp, which adheres to the blade of the scalpel. The lesion is generally of considerable extent, but may appear in the form of ulcers, from the size of a pea to that of a half-crown. The intimate phenomena are described theoretically as excitement by passion, or stimulation by alcoholic liquors; a permanent call and distribution of the circulating fluid into the capillaries; distension and engorgement of these vessels; stagnation of the fluids; and, as established by the microscope, serous transudation into the areolar tissue, accumulation of serous fluids in the tissue of the pia mater, penetration of these fluids into the gray matter, by the canals giving passage to the capillaries, disorganisation and distension of the primitive cells, and displacement of their nuclei. The distended vesicles are represented as ten times larger than in the normal state. *Ramollissement* is then, neither inflammation, nor puriform nor fatty degeneration, nor gangrene; but a *MACERATION* of the cerebral substance, with distension and rupture of the cells. Gluge is referred to as a supporter of this view. His observations were made on the brains of sane persons. This condition is the last of a series of changes, which may commence with the process of assimilation. Mental irritation may be to softening, what inflammation is to other changes. The hyperæmia which often exists in maniacs and melancholics does not necessarily lead to softening. It may exist without paralysis. Thickening of the arachnoid is supposed to be chiefly manifested by obtuseness and clouding of the intellect, immobility and rigidity of the features and limbs, and slowness in the formation of phrases. Induration, distinguished from firmness of the cerebral substance, is found chiefly in chronic and epileptic mania.

The inflammation of the mucous membrane of the intestinal canal, the displacement of the colon in melancholics; the frequency of ovarian disease in female lunatics; the frequency of phthisis in all classes of the insane; its probable connexion with the insufficient alimentation to which they from delusion subject themselves; the contemporaneity of phthisis and tubercular meningitis, are recorded. The connexion of pulmonary gangrene with the refusal to take food, has not been observed so frequently in this country, as it appears to have been in Belgium. Dr. Guislain conjectures that many cases of abstinence should be referred to diseased conditions of the eighth pair of nerves. He is disposed to attribute many of the affections of the lungs and heart in the insane, to their violence, their cries, their habits of restraining the respiration, etc.; and to regard them as consequences of the mental condition, or as occurring in its course.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

UNBLEACHED DISULPHATE OF QUININE.

Under the name of "Hospital Sulphate of Quinine", an unbleached sulphate or disulphate has been introduced into the drug market. It is prepared by Mr. Edward Herring, and is sold by Hulle, of Trinity-street, Southwark, London. In the advertisements, it is stated to be at least as pure, and 20 per cent. cheaper than the white salt.

The following is the account which the proprietor gives of the substance. He says:—"The crystalline form is the same, and is in every respect identical with the usual white article, with the exception of the one being bleached and the other unbleached. In refining the white, or bleached article of commerce, by the usual agency of animal charcoal, the sulphuric acid acts upon the lime of the charcoal, and great care is necessary to preclude the inadvertent contamination of sulphate of lime. The "hospital", or unbleached sulphate of quinine, is prepared without the aid of animal charcoal, rendering the presence of salts of charcoal impossible. The peculiar mode of preparing both the sulphates of quinine of this establishment is being patented, and therefore the process of manufacture will be made public."

We have examined a specimen of the unbleached, or "hospital" sulphate, which was forwarded to us by Mr. Hulle, and we can report in its favour. Save the merest trace of inorganic colouring matter, it contains no foreign substance. It differs in aspect from the pure colourless disulphate, its crystals being larger and denser. Not having made a quantitative examination, we cannot say whether the preparation be a sulphate or a disulphate; but we are satisfied that it consists only of quinine, sulphuric acid, water, and a trace of colouring matter, and that it is therefore as good for medicinal uses as the white and pure disulphate.

We are willing to admit that, as a general rule, it is wrong to sanction the use of medicines which are not absolutely pure, as by so doing, we are apt to afford temptation and facility for their adulteration. We think, nevertheless, that we ought to report favourably as to the value of the unbleached salt, because we have found that for medicinal purposes, it is entitled to be called pure; and because by its smaller price, we may enable many to benefit by its use, who could not afford to employ the white salt.

TINCTURE OF MASTIC AS A HÆMOSTATIC.

It is stated in a recent number of *Schmidt's Jahrbucher*, that Dr. FRANKL has found the tincture of mastic an excellent hæmostatic. He employs it in epistaxis, and in troublesome bleeding from leech bites. It is applied to the points whence the blood issues, by means of a camel's hair pencil. Terzer, a dentist of Vienna, is also reported to have used it successfully in hæmorrhage following the extraction of teeth.

MILK IN ABDOMINAL TYPHUS.

Through the French and Belgian journals, we learn that Dr. THIELMANN, of St. Petersburg, administers from two to four tumblerfuls of milk to his patients affected with abdominal typhus, in all stages of the disease—even when they are in a state of insensibility. He believes that this aliment is not only well borne, but is assimilated, and that it gives a power of resisting the disease. More than one patient, he says, who had been given over as hopeless, has been saved by the milk treatment: and he avers that the inconveniences which often follow the use of broth, and similar articles of diet—such as delirium, meteorismus and diarrhœa—never occur when milk is substituted for them.

HYPOSULPHITE OF SODA AND SILVER AS AN OCCASIONAL SUBSTITUTE FOR NITRATE OF SILVER.

Dr. J. DELIOUX, of Cherbourg, brings the hyposulphite of soda and silver under notice, as a therapeutic agent, in the *Bulletin Général de Thérapeutique* for October 15th and November 15th, 1852. He prepares it by pouring a solution of hyposulphite of soda on oxide of silver, recently precipitated by potassa, until it is completely dissolved. On evaporation, minute crystals of hyposulphite of soda and silver are left. The salt appears as a greyish-white crystalline powder, of sweetish taste, leaving a slightly styptic flavour: it is very soluble in water, but insoluble in alcohol. It becomes black on long exposure to light, but preserves its colour indefinitely when kept in bottles of coloured

glass, or covered with paper. The solution becomes black when exposed to diffused light, but much more slowly than that of the nitrate of silver. When pure, it does not discolour the epidermis nor linen. Its power of coagulating albumen, and hence its astringency, is small compared with that of the nitrate; and its local action is less irritating.

From various experiments, Dr. Delieux concludes: First, that for external use, the hyposulphite of soda and silver may be employed in larger doses than the nitrate of silver; and that in these doses it is much less irritant, and incapable of producing a true eschar: Secondly, that for internal use, if it is sufficiently diluted, there is no risk of injuring the mucous membrane of the stomach. Moreover, as its solution does not coagulate albumen, nor form a precipitate of chloride of silver, it will be readily absorbed by the veins of the stomach.

Dr. Delieux has had an opportunity of administering the salt in only one case of epilepsy. Here it was unsuccessful as far as the epilepsy was concerned; but it produced no blackening of the skin, nor any physiological disturbance beyond excessive hunger. But the author very justly points out that no inference can be drawn from a single case. He gradually increased the daily dose from 5 to 60 centigrammes ($\frac{1}{4}$ of a grain to 9 grains).

As an external application, Dr. Delieux uses the hyposulphite as a substitute for nitrate of silver, in cases where a local alternative is required which shall produce less irritation, and act chemically on the tissues less than the latter salt. It should be tried in obstinate ulcers, as an injection into purulent collections and into sinuses, in chronic fluxes of the external ear and of the nasal fossæ, and as a collyrium in diseases of the eye. Among the latter, Dr. Delieux can only cite from experience cases of acute conjunctivitis, which he has often found benefited, after the inflammatory stage has passed, by a dilute solution of this salt.

Dr. Delieux has employed the hyposulphite of soda and silver most frequently in acute and chronic urethritis; and here he has found it most efficacious, especially in chronic cases, and at the end of the acute stage. He does not set it forth as a specific, nor as pre-eminent among local remedies; but as one to which recourse may be had among others. He generally uses an injection of from 50 centigrammes to a gramme ($7\frac{1}{2}$ to 15 grains) of the salt in 100 grammes (about three ounces) of distilled water. It produces little or no pain, and does not act as an astringent.

ASSOCIATION INTELLIGENCE.

FIRST GENERAL MEETING OF THE METROPOLITAN COUNTIES BRANCH.

THE First General Meeting of the Metropolitan Counties Branch was held at the Hanover Square Rooms, on Tuesday, the 11th instant. Among the members present, were the following:—Henry Ancell, Esq., Norfolk Crescent; T. Snow Beck, M.D., Langham Place, London; John Bowling, Esq., Hammersmith; Isaac B. Brown, Esq., Connaught Square, Hyde Park; George Bury, Esq., Whetstone, Middlesex; Charles T. Carter, Esq., Hadley, Middlesex; Thomas Charles, Esq., London; Charles Cogswell, M.D., Bernard Street, Russell Square; White Cooper, Esq., 19, Berkeley Square; John Rose Cormack, M.D., Putney; R. P. Cotton, M.D., Clarges Street, Piccadilly; Charles Cowan, M.D., Reading; Abram Cox, M.D., Kingston-on-Thames; J. B. Daniell, M.D., Lower Grosvenor Street; John Davies, M.D., Hertford; Samuel Edwards, M.D., Upper George Street, Bryanstone Square; John Forbes, M.D., Old Burlington Street; John Grabham, M.D., Lonsdale Square, Islington; Samuel Griffith, M.D., Wellington Street, Southwark; Samuel Hare, Esq., Langham Place; A. Henry, M.D., Alfred Street, Bedford Square; J. D. Jones, M.D., Dalston; Henry Lee, Esq., Dover Street; Charles F. J. Lord, Esq., Hampstead; William Newnham, Esq., Farnham, Surrey; William O'Connor, M.D., George Street, Portman Square; R. H. Powell, M.D., Edward Street, Portman Square; John Probert, Esq., New Cavendish Street; Benjamin W. Richardson, Esq., Mortlake, Surrey; Joseph Ridge, M.D., Dorset Square; C. H. F. Routh, M.D., London; R. H. Semple, M.D., Torrington Square; Francis Sibson, M.D., Lower Brook Street; Arthur Stilwell, M.D., Hillingdon, Middlesex; George Stilwell, Esq., Epsom; Joseph Toynbee, Esq., Savile Row; Haynes Walton, Esq., Grosvenor Street; T. Ogier Ward, M.D., Kensington; George Webster, M.D., Dulwich; Joseph Williams, M.D., Tavistock.

tock Square. Several members, beyond the limits of the Branch, were present, including Dr. Spencer Thomson, of Haunton: and some members of the profession not belonging to the Association were likewise present.

Dr. JOSEPH RIDGE moved that Dr. Forbes take the chair. The motion having been seconded by Dr. Powell, was carried by acclamation.

The CHAIRMAN then rose, and thus addressed the meeting:—

Gentlemen, I presume you are all aware of the object of our meeting here to-day, it having been announced by the circulars issued by our temporary Secretary. As we shall go to some practical proceedings, which will show the nature of what we intend carrying on, I need not trouble you with many observations. I will only say, concerning myself, having been a member of the Provincial Association from its origin, and having attended the great majority of its meetings in different parts of England, that I can speak personally of the great pleasure, and the great advantage, I have derived from them. Setting aside the more scientific or professional advantages which one derives from hearing the papers and communications at such meetings, I think there is almost a greater benefit derived by medical men from meeting their brethren in different parts of the country. Everyone, I believe, is convinced, now-a-days, that the more one nation mixes with another, the more their various prejudices are worn off, and the more regard and affection spring up. I believe that is the case in all classes, and not less in our profession than any other; and I have no doubt whatever, that there never has been a meeting of the Provincial Association, or any great meeting of medical men, from which many have not derived decided personal advantages, from feeling that they got acquainted with persons with whom they were anxious to become acquainted, or that they renewed old friendships, and made new ones; in fact, that it was one of those happy holidays which combine utility with pleasure. I think, indeed, that medical men ought to countenance everything that will drag them perforce from their work. Now and then, some of us complain that we have not work enough; but, speaking generally, medical men have work enough, and the great majority have too much work. Conscientious men are, of course, unwilling to resign their work if they can help it; but it becomes a very important matter that there should be a great pressure from without—a great attraction which they cannot resist, and which they are able to tell their friends and patients they cannot resist. I have not the least doubt that the medical men in London, or in the country, in great practice, when they have been forced, or dragged, or have run away to attend the meetings of the Provincial Association in distant parts of England, have spent two or three days, perhaps, in a little tour, and have gone back refreshed, and renewed in strength like giants; and have been thereby enabled to do their work more happily, and to do more good to their patients, than they did before, when their heads were full of cobwebs, which really obscured what ought to be done. (Hear, hear, and a laugh.) There are a thousand other advantages which attend the institution of associations of this kind; and you are aware that, after the first establishment of the main Association, gentlemen found it so pleasant and agreeable, and so useful, that many wished to establish branches, and did so, in their own neighbourhoods. The consequence has been, that new branches have sprung up throughout every part of England. Those branches afford the great benefit to their members of meeting together, of discussing professional subjects, and of seeing their friends. Having the minor opportunities, as it were, nearer home, the members have still the greater advantage, of which they generally avail themselves, of attending the Association at its great meetings. I believe that so far from the branches being found sufficient to satisfy the mass of medical men, they have proved rather a kind of lure to attend the greater meetings. I, for one, think that since the institution of branches, the general meetings have been more numerous attended. I hardly know with whom the idea originated of having a branch near London. I believe it was with Dr. Ward,—whoever it was, it was not with me; I knew nothing about it; I was only asked by some of my friends to assist in organising the movement; but, I suppose one may safely say that the same reasons which have proved that the other local branches are useful, hold good with regard to this. I dare say we shall all agree, that a branch in the neighbourhood of London will have many advantages in various ways. I myself, for one, confess that I have been, the greater part of my professional life, a provincial physician, and perhaps I retain some of my provincial prejudices—and I should be sorry if anything were done by this meeting, or any subsequent meeting, which should destroy in any way the provincial character of the Association. I think if we establish a

Branch here in the neighbourhood of London, we should, I think, be very careful not to make it a mere London Society. I think that we have far too many Societies. We are anxious to attend this, and the other, but really we are bothered and confused by the multiplicity of Societies; therefore it appears to me, that it is not desirable to institute a new Society for London; but if it should be the opinion of the meeting, that it is desirable to form this Branch, and that it would be useful, I cannot help thinking that we should be careful not to make our meetings only in London. There are plenty of places all about London, where the annual meetings might take place; and speaking, at least in name, the London men, I think I might say for my brethren that the majority of them would feel the advantage of getting a day's fresh air in the country, rather than going to the Freemasons' Hall, or the Hanover Square Rooms, to add another murky day to a murky life. However, that will be for the decision of the members hereafter. I only mention my own individual opinion upon the subject. I will now call upon my friend Dr. Ward, to read a statement of what has taken place. I may just in outline say, after some friends consulting together, Dr. Ward sent notice to various gentlemen of a preliminary meeting—that preliminary meeting was held, and it was then decided to be expedient to form a Branch. A temporary Committee was nominated, in order to prepare for a general meeting, and to consider what things should be proposed and submitted to that meeting. The present meeting has now to consider whether it shall form the Branch; and, if so, what special rules and regulations shall be adopted for its governance.

Dr. WARD then detailed the steps which led to the preliminary meeting, and read the proceedings thereat. He stated that the movement had not originated with him individually, but had sprung out of a conversation between him and Dr. Cormack when they met at Oxford last year.

Dr. COWAN, in moving the first resolution, said:—

Mr. Chairman and Gentlemen, the Resolution which I have to propose, is "That a District Branch be established, comprising Middlesex and such parts of the adjoining counties as are not included in any other Branch, under the name of the 'Metropolitan Counties Branch.'" I need scarcely tell you, that I rise at the present moment with very great satisfaction, because I look upon this Meeting as one of the fruits of that agitation which has been going on now, within the limits of the Provincial Association, for a long time. I was myself guilty of a very bold step in doing what I did at the Oxford Meeting; I did it in no revolutionary spirit; it was with no desire to interfere in the slightest degree with an institution which had formerly existed, or with those principles upon which it was founded; but it was with the powerful conviction, that the objects with which we originally started could not be usefully carried out, unless an efficient instrumentality was put in active operation in London. I did it with no spirit of opposition to those who were taking an active part in the Association, but from the conscientious belief that I was doing them the best service in my power, by (if I may use the expression) compelling them to adopt a measure conducive to the object that I had in view. I did it upon that simple principle: I did it at the sacrifice of a good deal of personal feeling. I was quite aware of the difficulty we had to contend with; but, gentlemen, we persevered, and the motion was carried, by which the editorship and the publication of the Journal were removed from Worcester to London. I say, that the manner in which the Journal is now conducted justifies that movement. (Applause.) I would appeal to every member of the profession, and ask if the present publication is not an improvement over that which preceded it. I do not say that with any disparagement. I impute no fault to the Editors of the Journal: I maintain that the deficiency of our previous Journal mainly arose from the deficiency of its opportunities. (Hear, hear.) It was incapable of having an instrumentality at work, to enable it to be useful, and capable of meeting the wants of the profession; and, until we had it under different management and different auspices, it never could have been of use. It was no opposition—it was no disparagement of the gentlemen who laboured for us. We owe our grateful thanks to the members of the profession, more particularly to Sir Charles Hastings, who for so many years has conducted the Association with an energy, a success, and a self-sacrifice which do him the highest honour. My object was to enlarge the Association, and to give them the opportunity of doing that on a larger and more efficient scale, which they had been imperfectly but zealously carrying out up to that moment by a paper which was merely provincial. It was with the view of breaking down the lines of narrow subdivision, and of bringing medical

men in all parts of the kingdom into communication as one body, united by an unselfish principle; of having a vigorous and efficiently-conducted organ belonging to ourselves, by which that intercourse could be kept up, and by which the feelings of the profession could be acted upon by the profession itself. It was the object of the Association so to do; and it was that which it had been doing for the last twenty years. A vast deal of moral good has been accomplished by the working of the Provincial Association: a higher tone of moral feeling has been promoted amongst us, in consequence of those annual meetings and gatherings, and all those operations which have been accomplished by the Provincial Association. We country physicians do not desire to limit it; we do not wish to exclude ourselves from our metropolitan brethren. On the contrary, as soon as circumstances offered, we endeavoured to bring all under the influence of brotherly feeling, and to let them co-operate with us, for the purpose in which they have a common interest, namely, to bring the profession at large under those influences which will conduce to its moral and intellectual welfare. I believe nothing will be more consistent with that purpose than the establishment of efficient Branch Associations. Whatever elevated ideas we may entertain, there must be a *bond fide* something by which we are kept together—not a mere abstract feeling of what is right or what is desirable. It is precisely for this cause we desire to establish this Association, as the only machinery by which we can come personally into contact with the individual members of our profession. It is a necessary part of our instrumentality; without it we never could accomplish what we may determine to do; but with it we have an instrumentality more potent than anything else we could devise. It is true, that we are united to chartered bodies, and subject to a vast number of influences running through our ranks; but I believe that the greatest means of improvement is that of voluntary association on the part of medical men—the profession showing itself as one undivided unity, (scattered, it is true, over a vast distance as to space, and occupied in many different manners,) each member having the feeling, “I am a member of a united body; that body, I believe, has common moral purposes, common intellectual and scientific purposes; and the more I identify myself with that body, the more I partake of that spirit which is consistent with the welfare of the body at large, just in that proportion am I reaping that benefit I ought to desire to receive from it, and imparting that which as a profession we ought to seek equally amongst ourselves.” We shall never do better for the profession than by associating; and I do trust that all notions of *provincial* and *metropolitan* will be entirely excluded from our consideration at the present moment. Let us feel that every legitimate practitioner of medicine, every man whose moral character will bear examination, shall be welcomed as a member of our Institution; that we have nothing to exclude but that which is inconsistent with our highest and best interests as members of society, and of an honourable profession. I do myself feel strongly upon this subject; I am anxious that the profession should feel that there is a work which we have yet but imperfectly performed; that we are capable of doing more for ourselves than our chartered institutions can do for us; and let us take care that we do that which is consistent with our lasting and enduring welfare. It is only in proportion as we rise above the selfish element, and pass into principles which have for their purpose the general good, that we elevate ourselves in the moral atmosphere, and diffuse that moral atmosphere amongst those with whom we have the privilege of acting. I do trust that we shall extend our operations very much indeed beyond what we have yet contemplated. I hope that the funds of the Association, derived from the influx of new members (which is at present so actively going on), will give us the opportunity of doing vastly more than we have even intended to do. They will be a source of power within our hands; and, if directed to carry on the best interest of our profession, will be an incalculable boon to us all, by extending the circulation and maintaining the efficiency of the Journal. I hope that soon there will not be a member of the profession who will be excluded from those benefits. I believe that the Metropolitan Counties Branch will be the means of accomplishing that which the Association is capable of effecting in London more than anywhere else. From the fact of the numbers congregated in a limited space, there are opportunities of benefitting the profession at large in a higher degree than any other branch of the Association possesses; and we must feel that we have an arm in this branch of the Association,—not a metropolitan arm in the strict sense of the word, under the circumstances in which you practise, and in which you are placed here, but an arm which can accomplish more for the profession

as a body, than any other of our branches can hope to do. If our design is carried out heartily and unitedly, it will accomplish all we can reasonably wish. I feel sure that this Branch has been rightly founded, by embracing along with the metropolis places at convenient railway distances, such as the town in which I reside; and that the results will be consistent with the welfare of us all. I therefore most sincerely and cordially propose that the Metropolitan Counties Branch be proceeded with: and I wish it every prosperity.

Mr. HAYNES WALTON, of London, seconded the resolution.

Mr. STILWELL (of Epsom) said: Gentlemen, may I take the liberty of making a few remarks upon that which I consider hitherto to have been the weak point of the Association, namely, that a due care has not been bestowed upon the welfare of the general practitioner? My attention was forcibly directed to this subject in the late attempt to obtain an Act of Parliament to form the druggists into a profession. This attempt received support from influential members of the profession, and had it not been for Dr. Webster and a few other private individuals, a law would have passed, which, in my opinion, would have greatly injured the general practitioners throughout the country, and would have gradually, but most certainly, have introduced a lower grade of medical practitioners, though the contrary has been the aim of the profession for the last fifty years. When such an attempt at legislation as that to which I have alluded, was made, the profession was justified in expecting that its interest would have been cared for and watched over by their own organ;—instead of which, the Council and editors of the Journal took no part beyond admitting a few letters, coupled with some passing remarks of no effect. It is to be hoped that the Council and the present editor will not confine their doings to making known the sentiments of the *élite* of the profession alone, but that they will, for the future, take such responsible care of the welfare of the general practitioners as will give them confidence, and induce them to become and continue members of this Association.

The CHAIRMAN scarcely thought the remarks of the last speaker pertinent to the motion before the meeting, the object of the meeting being to decide whether there should be a Branch established or not.

Dr. DAVIES, of Hertford, observed that many of the practitioners of Hertfordshire would gladly join the Metropolitan Branch, and begged to suggest that it should extend to the limits of the Home Circuit.

Dr. WARD said, that it was for the meeting to define the limits of the Branch, and from the tenor of a reply received by him on the previous day (in answer to an application from the Provisional Committee), the Worcester Council stated that those limits might extend to any width, inasmuch as gentlemen were perfectly at liberty to belong to more than one Branch.

Mr. BOWLING (of Hammersmith) had no wish to interfere with any other Branch; but in Surrey and Kent there were many practitioners who belonged to no Branch, and therefore this Branch would be open to them as more convenient than the South Eastern.

Dr. POWELL observed, that from his experience in other societies, it struck him that a little difficulty would occur in convening meetings, unless the limits were clearly defined in such a manner as to prevent any clashing or imputation of neglect. He thought it was important that the meeting should to-day define what were to be the geographical limits of this Branch.

Dr. CORMACK thought it would be better to say “Metropolitan Counties”; which, after discussion, was agreed to.

Mr. BOWLING hoped the meeting would avoid anything which would be calculated to excite the jealousy of neighbouring Branches. It was held out at Oxford, that the Journal was to be diverted from the provinces, in order to make it a mere metropolitan journal; but that never was the intention of the Oxford majority.

Dr. DAVIES asked whether the limits of the other Branches were defined?

The CHAIRMAN believed not at all, except in a general way; the counties were so and so. He spoke, however, only from his general knowledge. At some future day, he foresaw that there would arise the great question which Dr. Cowan had shadowed forth. His (Dr. Cowan's) idea was, that what had hitherto been the Provincial Medical and Surgical Association, should ultimately become the Medical Association of England. (Hear, hear.) The adoption of such a proposition might probably lead to the greatest possible advantages. He believed that the Provincial Medical and Surgical Association had laboured under a great disadvantage, from being merely provincial. It was just possible, that at some future time it might be wise to consider, whether this Provincial Medical Association should no

be converted into an association for all England and Scotland.

Dr. STILWELL (of Hillingdon) knew that there was some jealousy existing with regard to the influence which a Metropolitan Branch might eventually exercise. Although the idea of an Association for all England and Scotland was undoubtedly a grand idea, yet at present the Association retained a provincial character, and he should be exceedingly sorry that that character should be lost.

The Rules, which had been prepared by the Provisional Committee, were then submitted to the meeting by Dr. Ward.

Some discussion ensued, as to the modification of some of the rules, in which Drs. WEBSTER of Dulwich, CORMACK of Putney, DAVIES of Hertford, Drs. DANIELL, GRIFFITH, POWELL, and O'CONNOR, of London, and Messrs. ANCELL of London, BOWLING, of Hammersmith, and CARTER of Hadley, took part; in the course of which,

Dr. CORMACK moved, and Dr. WEBSTER seconded, That the rules, as amended, be adopted as the rules of this Branch Association; and that a small Committee be appointed, to report to the first Annual Meeting upon any improvements which they may be able to suggest.

Dr. SIBSON moved, as an amendment, and Dr. O'CONNOR seconded, That the rules now agreed to, be adopted as the rules of this Branch; and that they be referred to the Council for revision.

The original motion being withdrawn, Dr. Sibson's amendment was carried.

Dr. WEBSTER moved, and Dr. SIBSON seconded the resolution, That Dr. FORBES be appointed President, which was carried with great applause.

After some discussion, it was determined that the President should continue in office until the second Annual Meeting.

Mr. BOWLING moved, and Dr. DANIELL seconded, that JOHN PROPERT, Esq., be the President elect.

Dr. COTTON moved, and Dr. WARD seconded, that JOSEPH TOYNBEE, Esq., be appointed Treasurer for the Branch.

Dr. CORMACK moved, and Dr. GRIFFITH seconded, that Dr. OGIER WARD be appointed Secretary.

Mr. TOYNBEE moved, and Dr. O'CONNOR seconded, that the following gentlemen form the ordinary Council of the Association,—to remain in office like the other office-bearers, until the second Annual Meeting:—

HENRY ANCELL, Esq., 3, Norfolk Crescent.

JOHN BOWLING, Esq., Hammersmith.

WM. BOWMAN, Esq., London.

C. T. CARTER, Esq., Hadley.

JOHN CONOLLY, M.D., Hanwell.

J. R. CORMACK, M.D., Putney.

CHAS. COWAN, M.D., Reading.

W. H. EVANS, Esq., St. Alban's.

GEO. GRANT, M.D., Richmond.

THOS. HEWLETT, Esq., Harrow.

CHARLES F. J. LORD, Esq.,

Hampstead.

R. H. SEMPLE, M.D., London.

FRANCIS SIBSON, M.D., London.

JAS. STILWELL, Esq., Uxbridge.

GEO. WEBSTER, M.D., Dulwich.

Dr. CORMACK moved, and Dr. DANIELL seconded, that the subscription of members be due annually on the first of January. It had been previously arranged that the annual subscription to the Branch should be 2s. 6d.

Mr. B. W. RICHARDSON moved, and Dr. WEBSTER seconded, that the thanks of this Meeting be given to Dr. FORBES, for his able conduct in presiding on this occasion.

The CHAIRMAN briefly responded.

The SECRETARY proceeded to enrol members and receive subscriptions.

EDITOR'S LETTER BOX.

CHOLERA IN THE BAHAMAS.

REMARKS BY DR. CHIPMAN, COMMUNICATED BY DR. COGSWELL TO THE EDITOR.

SIR,—The following extract from a letter I have just received from the Hon. Dr. Chipman, of Nassau, New Providence, Bahamas, appears to be worthy of publication. It relates to the cholera as prevailing epidemically in those delightful, and usually healthy islands. The letter is dated, Nassau, Dec. 7th, 1852.

Your obedient servant,

C. COGSWELL.

Bernard Street, Russell Square, London,
Jan. 11th, 1853.

"Within the past ten weeks, the cholera has been committing fearful ravages in this and the adjacent islands of the Bahamas. On Saturday, the 18th September, the disease made its appearance in a low swampy locality, in the eastern suburbs of Nassau, and almost simultaneously in the eastern district, about a quarter of a mile farther east, in the vicinity of a jungle of bush, formed in the rear of a long line of houses facing the upper harbour, where the fishery and wrecking vessels and boats, are kept at anchor, fronting the houses of their owners. In a day or two afterwards, the epidemic showed itself in an African settlement to the S.W. of Nassau, upwards of two miles distant from the jungle referred to at the E. of the town, and very quickly afterwards, it manifested itself everywhere, where filth and other localising causes invited it. In the two months commencing the 18th September, and ending the 19th November, ult., eight hundred people out of a population of about nine thousand died, the mortality being chiefly confined to the poorer classes. Ordinarily, those in comfortable circumstances escaped. There were only four medical practitioners in Nassau, to meet this terrible epidemic, and one of them had the garrison to attend, the P.M.O. being ill and obliged to leave for England. How we got through with the work, God only knows, but we were wonderfully preserved during a most arduous duty, which literally occupied us night and day. I am happy to say that the disease is rapidly declining, the deaths being now about six or seven per week, and from the decrease of the diarrhoea, we may cherish the hope that in a few days it may cease altogether. At several of the out islands, especially at Harbour island, and Abaco, the epidemic still rages, and is carrying off several daily."

[We would be glad to receive from Dr. Chipman any information bearing upon the question of the importation of the disease, and its propagation among the different islands through the medium of maritime intercourse. It would likewise be interesting to learn whether any peculiarity has been lately observed in the meteorological condition of the Bahamas.]

MR. HARRINSON'S CASE OF UTERINE HÆMORRHAGE.

LETTER FROM PROFESSOR MURPHY TO THE EDITOR.

SIR,—In the case described by Mr. HARRINSON, at p. 11 of the last number of the ASSOCIATION JOURNAL, he says:—"No writer, that I can find, has described one exactly corresponding, and some authors do not even name the possibility of such an occurrence." He then mentions, in evidence of the correctness of his statement, R. Lee, Copeman, Churchill, Ramsbotham, and Blundell, as authors who do not give an account of similar cases. He has, however, omitted me: I have fully described the occurrence to which Mr. Harrinson drew attention, at p. 325 of my Lectures on Midwifery, where I have likewise quoted two cases to the point from Hardy and M'Clintock.

I remain, etc.

EDWARD MURPHY, M.D.

12, Henrietta Street, Cavendish Square,
January 10, 1853.

HOMŒOPATHY IN THE EDINBURGH SCHOOL OF MEDICINE.

LETTER TO THE EDITOR.

SIR,—It is very important that you should fearlessly make known, from time to time, the bad state of certain medical schools, so that members of the Association may be able (to the extent of their influence) to prevent their young friends from resorting to them. For example, it seems to be forgotten that Dr. Henderson, a sort of a homœopath, still fills the chair of pathology in the University of Edinburgh, and that among the students medical heresies are thus widely promulgated.

Your obedient servant,

PATER.

January 12th, 1853.

[The condition of the Edinburgh University School of Medicine is not generally understood. It never was in a better state. Dr. Henderson cannot be got rid of; which is to be regretted: but he has little power of doing mischief, having nothing to do with clinical teaching. As regards the students, we believe that they are as a body uncorrupted; and in proof of this, we have been informed, that the rising talent of the profession, as represented by the Royal Medical Society, lately refused to place on their library shelves a presentation copy of a work by a homœopathist. Can any member of the Society corroborate this statement and furnish the particulars?]

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. III.

LONDON: FRIDAY EVENING, JANUARY 21, 1853.

NEW SERIES.

PRACTICAL APPLICATIONS OF A KNOWLEDGE OF MEDICAL HISTORY.

In a recent number (January 7th, p. 4) we promised to return to the subject of Medical History, and to urge its claims as a practically useful study. We write at this time in fulfilment of that promise.

In the first place, then, we would observe, that information on subjects pertaining to the records of medical science in days of yore, would greatly assist the student in forming an accurate judgment as to the worth of many of those remedial measures which modern teaching places at his command. For, although it must be granted that, in the progress of the healing art, extraordinary revolutions have taken place as regards the treatment of disease, it must also be admitted that numerous important points of practice still in full use have for their origins very ancient dates. Let us, in proof of this assertion, note down a few very ancient remedial measures; premising, however, that the subjoined list is written without any regard to arrangement, and that the various forms of treatment named include only those which flow from our remembrance as we write—therefore very far from all that might have been given; and that every remedy which is introduced was known and used previous to the sixth century of the present era.

The list will run as follows. Frictions; baths; fomentations; poultices; vesications. The abstraction of blood—by venesection, arteriotomy, cupping, or leeching. The arresting of hæmorrhages—by ligature of vessels,* torsion, application of pressure, cold, cauteries, or styptics. The use of enemata, vomits, purges, diuretics, tonics, narcotics, etc. The operations of tracheotomy, lithotomy, of opening abscesses, of removal of nasal polypus, and of extraction of teeth; the fixing of loose teeth by bands, the reduction of fractures, and the employment of the splint, the bandage, and the sling; the reduction of dislocations, and the use of the pulley for that purpose; the extraction of cataract, the removal of foreign bodies from wounds, the application of sutures to wounds, and of stimulating substances to indolent sores; the treatment of aneurism by ligature and by pressure; the laying open of fistulous sores; the insertion of issues; the administration of such valuable medicines as opium, henbane, hemlock, galbanum, gentian, sulphur, copper, mercury, lead, croton-oil, castor-oil, squills, colocynth, and alum; and, lastly, the employment of the most valuable rules regarding exercise, diet, and cleanliness.

But it may be asked—Did not the ancient administrators of the above-named means of cure often use them most injudiciously and absurdly? In all probability they did so on some occasions; and the probability is not less

that we, the prescribers of to-day (aye, the wisest of us), frequently employ the same remedies in a most absurd and injudicious manner. The ancient physicians used the remedies they possessed to the best of their abilities: modern physicians can do no more.

The ancients coupled superstition with their means of cure, cries some objector! So do the moderns, is our unhesitating response; and we only require to see ourselves from the distance of some fifty or a hundred years, to be made conscious of the fact. Superstition! why what, after all, is superstition? This, and nothing else,—man observing the accomplishment of a fact, and assigning a cause or causes for that accomplishment, which afterwards are proved to have had little, perhaps no connexion with the fact. Superstition can never cease whilst man is fallible. It is interesting, moreover, to observe how fully the history of medicine bears out this view of the subject. At the bottom of the wildest superstition of ancient physic, there was often buried a great truth; a truth, indeed, which formed in the first periods the invisible agency on which the superstition itself was nourished; which afterwards, in a further state of transition, presented itself to some gifted eye in a degree separate from, and higher than the superstition; and which eventually became manifest to the eye universal, untrammelled altogether, and in its pure and naked character.

Dr. Paris, in one part of his *Pharmacologia*, gives an admirable illustration of the truth we here enunciate, in the narration of the wonders effected in the curing of wounds, by the use of the sympathetic powder of Sir Kenelm Digby: "Whenever a wound had been inflicted, this powder was applied to the weapon that had inflicted it, which was, moreover, covered with ointment, and dressed two or three times a day. The wound itself, in the meantime, was directed to be brought together, and carefully bound up with clean linen rags, but, *above all, to be let alone* for seven days, at the end of which period the bandages were removed, when the wound was generally found perfectly united." In this instance, a natural cure was of course effected, and "the result," as Dr. Paris observes, "beyond all doubt, furnished the first hint which led surgeons to the improved practice of healing wounds by what is technically called *the first intention*."*

Again, the ancient prescribers not unfrequently used very useful modern remedies, only after a more primitive formula, and under a different name. Thus, the Editor of this Journal, in his essay on Creasote (Edin. 1836), has proved beyond dispute, that the preparations of wood-tar, that is, creasote in its original shape, have been used as medicinal substances from the earliest times; and that, too, for the very same purposes for which creasote is now prescribed. In like manner, also, iodine has long been employed for bronchocele, in the form of burnt sponge. So that, in short,

* The credit of introducing the use of the ligature for the arresting of hæmorrhage, has usually been given to Ambroise Paré, who was born early in the sixteenth century, and died in 1590. Joseph Warner, F.R.S., says that Paré believed himself inspired when he discovered the use of the ligature.—*Cases in Surgery*, 1764. The discovery, however, was made long previous to the time of Paré.—*Vide Celsus*, lib. v. cap. xxvi. sect. xxi. Aëtius also describes the use of the ligature for the cure of aneurism.

* Traces of this superstition still linger in some parts of England. The writer of the present article well remembers that having in his childhood injured his foot with the tine of a fork, he was recommended by a kind old dame to do nothing to the wound itself, but to be most particular in keeping the fork perfectly bright, for a week at least.

many modern medicines are "to the medical world" (we employ Dr. Cormack's words) "old friends unmasked."

The mention of these facts will, we think, satisfy the thoughtful reader of the truth of the remarks with which we commenced this article, since he will see that the Æsculapian disciple can in no way form a better estimate of the value of any special point of practice, than by tracing back the history of the practice, ascertaining who was its discoverer, the facts that led to the discovery, and the importance that has been attached to it by competent observers in succeeding times.

But, leaving the subject of remedies, we are not afraid to assert that in the ancient, unread, and voluminous writings of our medical fathers, many a precious observation and fact, on the nature and cause of diseases, lies hidden and neglected.

And here another thought breaks upon us, which we must reduce to syllable and sentence. It is scarcely necessary to say, that the world at this time is inundated with books. The stream of literature, which flowed on so quietly last century, is in this age a wild and overflowing sea. Book-making and gold-digging are the two rival manias of the age, and the profession of medicine is neither the least nor the last to show its attachment to the book-making mania. The tyro now, who for thrice nine months has gossiped at a hospital, and enriched himself with those medical Vedas, *A Grinder's Notes*, takes his diploma, and feels it at once a duty both to himself and the public, to write a book. This is bad enough certainly, but it is not the worst. The quill of the young writer tickles unpleasantly the noses of older men, who "straight dream" that, if their juniors attack the public even with bad powder, it will never do for them to rest contented with their old-fashioned bows and arrows; and so there rises forthwith another class of writers, who parade an experience which never interested them—who advance as a novelty anything which they, in their limited capacities, have not heard of before; and who write, in fine, merely because they think, that not "to do," is "to die". Thus the medical press is always in labour, and allegorical mice are constantly being eliminated, with the breeding rapidity of real mice in harvest time. Under these observations, however, "let galled jades" only "wincede". We know that at the present time, more than ever, numbers of earnest and truth-loving writers are at work; and to these, one and all, eminent and obscure, we offer our sincere tribute of love and respect. Nay, we have cause to admire the spirit of activity and enterprise which calls forth unprofitable works. Our sorrow is, that so much of the same spirit should be vilely squandered; and we would hold up with joy any plan that would turn this lost labour to better account. In the introduction of the study of Medical History into our system of education, such a plan offers itself. In this study, a field is opened, on which any number of minds may labour for an unlimited time, with usefulness and honour. The pangs of the mere copyist would there be legitimately quieted, in reproducing the ideas of other men, pure from corruptions of his own. The steady plodder would find employment suitable to his tastes, and worthy of his modest aspirations. Nor need the child of genius despise the prosecution of Medico-Historical investigations; for where is true genius more required than in solving the vast problems of history? And would it not be a high honour to be recognized by scholars as a medical Macaulay?

EXAMINATIONS REAL, NOT VERBAL.

GREAT improvements and great discoveries, when known, seem to be so simple and obvious, that the wonder to all is that they were never adopted or found out before. And there are few more simple and obvious improvements, and none perhaps of more vital importance, than the addition of *real to verbal* examinations, by the Examining Board of the University of London. A century hence, the mode in which students are now mostly educated for medical and surgical practice, will, we trust, hardly be credited. The plan hitherto has consisted in crowded lecture-rooms, while the attendance in dissecting-rooms, botanic gardens, chemical laboratories, and the wards of hospitals has been miserably scanty. Young men have assiduously worked at books in their own rooms and under grinders, and have let slip the most precious opportunities of learning their profession. They have plied themselves with the thoughts, opinions, and acts of other men, without gaining the power of thinking or of observing at all. Who does not look back with a sigh, or with a more bitter feeling, at a system which compelled him to go from lecture-room to lecture-room, to hear for the most part *words*, in order that he might pass an examination of *words*;—the one to fit him, and the other to convince the world that he was fitted, to practise, not a language, but a practical art and a science dealing with *things*? The whole system—teaching, grinding, and examining—was exactly calculated to make him believe that he had only to commit to memory a certain number of words, in order to cure disease: a most cruel treatment, nicely calculated to raise his hopes in order to disappoint them; to foster all his conceits at his acquirements, in order to shew the falseness of their foundation. He was sent away with prizes and medals and parchments, which proved, not that he had in any way mastered his art, but that he knew how to talk about it. Now the fault which lies at the very bottom of this system, and on which it rests, is the examination at the end. Improve that, and the other must correct itself. Examine the candidates in *things*, and not in *words*, and they must know the things and not merely the words representing them. Test anatomy by dissection, and the dissecting-rooms will be well attended. Test chemistry in the laboratory, and that will be the place of chemical study. Test surgery and medicine by the actual examination of patients, and the bedsides will be surrounded. This plan has been commenced by the University of London, and must sooner or later be followed by the other Examining Boards; and we feel convinced that the actual improvement in medical education will be rendered greater by this single alteration, than by any new curriculum, however comprehensive.

We will conclude with two instances of the working of the present system.

Two students competed for a botanical prize. One has since proved himself an original botanist of the highest accomplishments. At that time his knowledge of plants was marvellous. He could tell any species, name it, and give the natural order, even in Kew gardens, and his acquaintance with structural botany was great. The other knew something of the botany of his district, and little more, but very carefully got up by notes the lectures they were attending; and although not fit to hold a candle to the other, he ran him so hard in a written examination, as to be within a few figures of gaining the highest prize. He had sufficient self-knowledge to be glad that he did not.

In the second instance, the very worst house-surgeon inflicted on a public hospital, was the highest prize-man in his college, and was elected on the strength of his prizes. His abilities were excellent; but he had devoted with diligence all his powers to the acquisition of words from books, and broke down in an appointment which demanded a knowledge of things.

The system has been to blame, not the student; and we thank the University of London for having begun prominently to adopt a more scientific mode of examination, and for thus giving us the promise of a more capable set of junior practitioners.

ORIGINAL COMMUNICATIONS.

ON THE NATURE AND CAUSES OF THE PHYSIOLOGICAL PHENOMENA

COMPRISED IN THE TERM "MOUNTAIN SICKNESS"; MORE ESPECIALLY AS EXPERIENCED AMONG THE HIGHER ALPS.

By STANHOPE TEMPLEMAN SPEER, M.D.

It is, I believe, very generally admitted, that when an individual habitually residing at a moderate elevation above the level of the sea, attains in a short space of time a considerable altitude above such level, he will in all probability experience certain deviations from his ordinary condition of health, sufficiently marked to constitute, for the time being, a state of actual indisposition, if not of disorder.

Now, in examining the narratives of those who have been most qualified from personal experience to investigate the subject, we find much discrepancy existing; not merely in relation to the nature and intensity of the phenomena in question, but even as regards their very existence.

Having however experienced on several occasions, to a certain extent, the effects of a rarefied atmosphere, upon some of the loftiest Pennine Alps, I venture to offer a cursory view of the subject, in reply to the three following queries, which it naturally suggests.—1st. As to the actual occurrence and nature of the physiological phenomena alleged to be experienced at great heights? 2nd. Are these felt by all persons alike and at the same height? 3rd. What are the causes, and whence the explanation, of such phenomena?

A reply to the first of these inquiries, that which refers to the actual existence of an abnormal condition of the body at a great elevation, is to be sought for by reference to the somewhat scattered accounts here and there afforded by those, who, whether from curiosity or for scientific purposes, have scaled the loftiest summits of the great mountain chains of Asia, America, and Europe.

It need scarcely be said, that the information to be derived from those in whom somewhat more than curiosity constitutes the stimulus of enterprise, is by far the most valuable; not but that the courageous though unreflecting explorer of the Higher Alps may occasionally be heard to complain on his return, of having experienced certain disagreeable sensations to which he had hitherto been a stranger; the rapid subsidence of which however, on regaining the usual level, would render them (in his estimation) merely worthy of a passing remark.

Various circumstances combine to produce that diversity of opinion which is to be met with, relative to the phenomena in question. In the majority of instances, the ascent of a lofty mountain is undertaken as a pleasure excursion without any definite object; it may have been prompted by a love of *édelt*, or, what is more to be admired, by a thirst after the beauties of nature, and a wish, in spite of danger and peril, to approach as near as possible to her noblest works; and as a rule, with but few exceptions, the feelings elicited on such occasions are totally opposed to a

careful and impartial examination of facts, for sensations, which under every-day circumstances might be dwelt upon in detail, are now almost disregarded and absorbed in sentiments of a higher and less corporeal nature.

Another cause for the above-mentioned discrepancy relative to the subject in question, arises from the peculiar circumstances under which the ascent of a lofty mountain is usually made. The majority of those who undertake such an enterprise, are comparative strangers to mountain scenery and mountain exercise. They spend a day or two at the foot of these mighty masses, and forthwith proceed at once to attempt to scale the object of their ambition. Here everything is novelty of the highest order. The succession of wonder-striking scenes which they now behold, it may be for the first time, the rapidity with which marvel succeeds marvel, the bewildering sensation experienced, when first encountering those extraordinary objects of which no description can give an adequate idea, the glaciers, the feeling of dread occasioned by the ghastly aspect of their gaping crevices, the thrilling sensation momentarily produced by the dreaded sound of the falling avalanche, and last, not least, the all-absorbing sentiment of triumph, resulting from the safe and successful termination of an attempt, the accomplishment of which may have been, for some time previous, the object of thoughts by day and dreams by night; these circumstances, I repeat, are sufficient to burden and embarrass the mental perceptions of the tourist. His memory becomes crowded with a variety of souvenirs and facts, which ere long, by their very number and intensity, destroy one another. On his return to the ordinary dull routine of life, the thrilling events of the past stand out in still bolder relief to the monotony of the present: his imagination outruns his bewildered memory, and he pictures to himself and others, scenes and circumstances which he may conceive to be correct, but which not unfrequently, upon close inspection, bear the evident imprint of fancy preponderating over fact. Viewed in this light, it can be no matter of surprise, that he should either forget the corporeal annoyances he may have experienced, or that he should make light of them, and throw doubts on the veracity of others more keenly susceptible to physical impressions than himself, and more bent upon the calm appreciation of certain facts, than upon the enjoyment of the most exciting gratification. It is not unreasonable to suppose that, in the case of many Alpine ascents, the individual (unless completely prostrated), resembles the soldier on the field of battle, the pain of whose wound, if not sufficient to disable him, is unperceived until the engagement be at an end; so with the Alpine tourist, his physical sensations, unless strongly marked, being swallowed up in the interest of the moment, are thus not only disregarded during their actual existence, but from their rapid subsidence on returning to an ordinary level, are excluded from a prominent place in his after recollections.

In the records, however, of such travellers as Humboldt, Boussingault, d'Orbigny, Zumstein, Saussure, Pictet, and others, there are to be found many valuable and accurate references to the sensations experienced at great heights, more especially among the Andes and the Himalaya; for while the region of the higher Alps is that to which the present remarks have chief reference, the superior elevation of the two afore-mentioned chains would naturally lead us to suppose, that the attempt to scale their loftiest summits should have afforded marked examples of those functional modifications to which I have alluded.

The celebrated Humboldt ascended the peak of Teneriffe, without experiencing dyspnoea or any unpleasant sensation whatever. This was also the case with his travelling companion. When among the Andes he determined to attempt the ascent of Chimborazo, one of the loftiest of the whole chain: he had previously resided, for a certain length of time, on the table-land of Quito; from thence he proceeded with Bompland and Montufar to the plain of Tapia, and having slept at Calpi at an elevation of 9,471 feet above the sea level, they began to surmount the inferior terraces of

which the mountain is composed; at a height of 13,155 French feet, they saw snow that had lately fallen, and at length attained a height of 16,724 feet without material inconvenience. The Indians, however, who accompanied Humboldt, had, with one exception, turned back at a height of 15,201 feet, alleging that they suffered far more than their employer. The following is Humboldt's description of the sensations which he at this moment perceived: he says, "after attaining an altitude of 16,724 feet above the level of the sea, we continued to ascend for another hour, during which we all became by degrees much distressed: a constant desire to vomit, together with vertigo, were the most prominent symptoms, and proved far more trying than the difficulty of breathing which we likewise suffered from. An inhabitant of San Juan who had accompanied us, although robust, was still more affected. In all, the blood started from the lips and gums, while the conjunctiva, covering the eye-ball, was in each of us distended with blood. On the Antisana, Montufar likewise experienced a certain amount of hæmorrhage from the gums. All these phenomena however differ essentially, according to the age and previous habits of the individual, to the thinness of his skin, to the amount of muscular exercise to which he has been accustomed, etc. They however serve to afford, each one, a sort of measure of the rarefaction of the air, and of the altitude attained. In the Andes, they manifest themselves when the barometer stands at from 0 min. 379, to 0 min. 428. We continued to ascend for three hours and a half beyond the limits of perpetual congelation, and, in spite of the rarity of the atmosphere, we had not found it necessary to take any repose." The greatest height which Humboldt at length reached was 17,634 feet.

In traversing that portion of the Andes which separates Arica de la Paz from upper Peru, M. d'Orbigny first perceived the effects of diminished atmospheric pressure; this was at a height of 13,500 feet, upon the summit of Cachun. On the Col de Tacora, which is still more lofty, though within the limits of perpetual snow, he suffered from a violent and constant headache, together with considerable distress in breathing, and the whole party were unable to proceed upwards of thirty yards without halting. M. d'Orbigny thus speaks of his sensations upon this occasion. "I felt in an extreme degree the rarefaction of the atmosphere, in the shape of violent pain about the temples, together with those peculiar sensations at the præcordia, which characterise sea-sickness. I breathed likewise with difficulty; on making the slightest movement, I experienced violent palpitation, and a general uneasiness and depression, to overcome which all attempts were unavailing. Towards evening a smart fit of epistaxis produced temporary relief; I nevertheless passed a miserable night, inasmuch as I suffered, in addition, from exposure to a sharp biting cold, without shelter." During the few days which he of necessity spent at this elevation, the same symptoms continued with unmitigated severity.

The guides who accompanied D'Orbigny, informed him that they had lately conducted a Spaniard across the chain by the same pass, that he was so susceptible to the rarefaction of the atmosphere, as to have suffered on the first day of their journey from most alarming symptoms, and that being unable to continue his journey, or even to return, had died on the second day, without any alleviation of his sufferings. They also related several other instances in which the travellers with whom they had crossed the Andes, had suffered most severely from what they designated as the "*soroche*". This term, given by these men to what may be denominated mountain sickness, is derived from the fact of their attributing the effects which are in reality produced by the rarefaction of the atmosphere, to the emanations arising from mines of antimony, which they believe to exist in the neighbourhood: the Spanish term for antimony being *soroche*.*

The traveller Jacquemont, speaking of the ascent of a portion of the Himalaya range, says, that at an elevation

of 7,845 French feet above the sea level, he perceived nothing unpleasant; but that after ascending for two hours above the limits of perpetual congelation, it was found extremely difficult to traverse the soft snow, at a height where "the rarefaction of the air rendered the respiration difficult and hurried, and necessitated a halt at about every thirty paces." Jacquemont here refers to the case of an English physician, who in the same locality suffered severely, and lost several of his suite from similar causes; Jacquemont himself, having spent some time at various heights on the range of the Himalaya, appears to have at length become thoroughly habituated to the effects of a rarefied atmosphere.*

Two English writers likewise, Moocroft and Fraser, agree as to the physiological phenomena observed on the Himalaya. The former, in ascending the Niti Ghati, suffered from a feeling of fulness in the head and giddiness, and fearing an apoplectic stroke, lay down; this produced a temporary alleviation of the symptoms, but all attempts to proceed were fruitless, inasmuch as they immediately recurred with increased severity. In descending, he suffered but little; but on encamping for the night and retiring to rest, he had a return of the attack, together with much oppression of the chest, relieved only by taking deep inspirations.†

In *Fraser's Journal* we find a confirmation of the preceding account. At a height of 11,300 feet upon the Col de Bamsourou in the same range, the writer felt a trembling of the knees, with nausea and vomiting. His retinæ likewise suffered, some in one way, some in another; one complained of severe pain in the head, another of oppression of the chest, a third of gastric derangement. Many of them were overcome with sleep, and could scarce be kept awake for a moment.

To revert to the writings of M. d'Orbigny, it appears that in the vicinity of Cocha Bamba, at a height of nearly 15,000 feet, he experienced great difficulty of breathing. At La Paz, 11,151 feet above the sea, he felt suffocated in his room at night; at the slightest ascent, he was forced to stop every ten paces from the occurrence of palpitation and dyspnoea. He could neither converse with rapidity, nor indulge in the natural dances of the country, without being obliged almost immediately to desist, and this from similar causes. These sensations lasted during his entire residence at La Paz.

La Condamine and his fellow-traveller Bouguer have also furnished some details relative to the sensations which they experienced among the Andes; and although, as was previously stated, their appreciation of them differs somewhat from the previous accounts of Humboldt and d'Orbigny. Bouguer and La Condamine ascended the Pinchincha, one of the loftiest of the Peruvian Andes, in company with a Spaniard. The latter was seized during the ascent with a strong syncope tendency, which rendered it necessary to remove him to a neighbouring cave or grotto, where he passed the night. La Condamine, however, does not appear to have suffered much, for, at an elevation of 14,750 feet, he and his companion constructed a tent, where they remained for three weeks, during which time he experienced no difficulty of breathing, but merely a slight bleeding from the gums, attributed by Bouguer to a scorbutic condition of the blood, the result of cold.

The latter traveller, speaking of the sensations experienced on this occasion by his attendants and himself, says: "At first we found ourselves much annoyed by the rarefaction of the air, those among us whose lungs were rather delicate, felt the difference proportionally greater, and were even liable to slight attacks of hæmorrhage. As regards myself, I cannot affirm that the inconvenience became greater, when (at a subsequent period) we attained an increased elevation. This probably arose from the fact of having become inured to the locality and its atmosphere. Some of our party, however, when in the act of ascending, were seized with sudden syncope, together with nausea and

* D'Orbigny, *Travels in South America*, vol. ii; and Lepileur, *Phénomènes Physiologiques*, etc.

* Jacquemont, *Correspondence*, vol. i, p. 266-273.

† *Asiatic Researches*, vol. xii.

vomiting. I conceive, however, that these symptoms were rather the result of lassitude, in proof of which I may remark that they were not felt if the ascent were made on horseback; nor on attaining the summit, where nevertheless the air must have been still more rarefied. I do not however deny that this rarefaction materially augmented the sense of fatigue and exhaustion, inasmuch as the respiration became much embarrassed upon making the slightest exertion.

In his attempt to reach the summit of Chimborazo, M. Bousisingault experienced the effects of the rarefaction of the atmosphere to such a degree, as to be under the necessity of halting after every three or four paces.

Additional references might here be made; but it is sufficiently evident, from the above extracts, that those travellers who have ascended the higher peaks and passes of the Andes and the Himalaya mountains, have with few exceptions experienced sensations to which they were strangers when at an ordinary level; and that these have varied in character and degree in different individuals, according to circumstances; thus explaining any apparent discrepancy in the various accounts given, as to the intensity of such phenomena and to the exact height at which they occur. It is clear moreover from these narratives, that absolute accuracy on such points was not regarded as a *sine quâ non*; a minute attention to their own individual sensations forming certainly no part of the objects which such intrepid explorers as Humboldt, Bousisingault, etc., had in view.

It is, therefore, chiefly among the higher Alps that the phenomena, attendant upon a considerable elevation above the level of the sea, have been perceived and described with accuracy; and by none more fully than by De Saussure, in his celebrated *Voyages dans les Alpes*.

Before attempting to scale the loftiest of European mountains, De Saussure in 1778 ascended the Buet, in company with Professor Pictet. This mountain is the highest of a chain which runs parallel to that of the Mont Blanc, and is about 10,000 feet above the level of the sea. In his account of the expedition, he mentions the fact of having experienced a great degree of muscular debility and exhaustion, rapidly subsiding, however, upon abstaining from the exertion attendant upon a steep and perilous ascent; he likewise mentions a strong tendency to sleep, as another prominent symptom. His fellow-traveller Pictet appears to have suffered considerably, even at a height of 7,100 feet, from a general feeling of indisposition which he does not very clearly describe, together with a certain amount of nausea. The guides who accompanied them were obliged to halt for breath every few hundred paces, while De Saussure himself, who suffered less than the remainder of the party, was yet forced to rest repeatedly, on attaining the snowy cupola which forms the crest of the Buet. The elevation attained on this occasion was upwards of 10,000 English feet above the level of the sea.

As, at present, the object in view is to ascertain what are in truth the physiological phenomena observable at great altitudes, and by what physical sensations they are revealed, I trust the accusation of egotism may not be laid to my charge, if I compare the accounts given above, with my own personal experience, when ascending this mountain at the latter end of the autumn of 1845, a period so unfavourable to the attempt, that the Genevese journals declared the mountain to be no longer accessible. In company with three guides, we ascended the chain of which the Buet forms the culminating point, to a height of 7,000 feet, encamping for the night at about the level of perpetual congelation. Apart from a shortness and shallowness of the respiration, I perceived no unpleasant sensations, save those resulting from the cold. Early in the morning, upon resuming the ascent, my companion, a German lawyer, complained of much muscular debility in the lower limbs, as if they were about to give way from under him, but without the peculiar sense of fatigue which at an ordinary level usually accompanies this condition. I ere long was sensible of the same; and on reaching a height of 9,000 feet, we experienced

that uneasiness at the epigastrium which is so common at sea, together with such a shortness of breath as to render it necessary frequently to halt, and turn our faces away from the slope of snow we were ascending. I moreover noticed in my companion an unusually livid colour of the countenance, resembling the early stage of cyanosis, which subsided upon taking a few minutes' repose. On reaching the summit, none of our party, while abstaining from movement, found much to complain of; except that, in my own case; I felt a sensation which can be most appropriately compared to that perceived in a swing, when having attained its utmost stretch it prepares to return on itself, or to what is felt at the bow of a steam-vessel when elevated on a lofty wave which immediately recedes from under it.

Having read the account of De Saussure's ascent, previous to my own, I casually alluded to the sensations of which he speaks, in presence of the mountaineers who accompanied us, but I soon perceived that their bluntness of perception, together with their habit of living at various heights, precluded any attempt at obtaining information upon the subject. I resolved therefore to trust to my own feelings, and to those of my fellow-traveller, and these it will be seen tallied more or less with those described by De Saussure.

It has been however, upon the hoary monarch of the Alps, that the phenomena attendant upon a great elevation, have been most markedly felt and described; and while the above indefatigable explorer was one of the earliest of those who could boast of having scaled his summit, succeeding accounts have only served to ratify the truth and accuracy of his statements, a short outline of which may at present not be amiss. In describing the encampment of himself and party on the grand Plateau, at a height of 11,484 feet, he says: "At this time my guides, (men of strong constitutions, to whom seven or eight hours of previous exertion had been as nothing), could barely remove a few shovels full of snow, before they found it impossible to continue their task. One of them who had returned from a short distance, in order to collect some water which he had noticed in a crevice, was taken suddenly ill and passed the night in considerable suffering; I myself, though accustomed to the mountain air, and enjoying better health than when in the plain, felt exhausted to the utmost, simply from arranging and examining my meteorological instruments; we all of us, moreover, suffered from a constant but indescribable uneasiness, anxiety and thirst, while some of the guides were attacked during the night with nausea and vomiting.

"At the Petits Mulets, a height of 13,500 feet, the above symptoms became aggravated; and from thence to the summit, we found it impossible to take more than twelve or fifteen paces, without halting, while the greatest amount of nausea was felt about eight or ten seconds after doing so. The only relief I could obtain, was by turning my face to the north wind, which was blowing strongly, and swallowing large draughts of air. When arranging my instruments on the summit, and observing their indications, I found it necessary to rest frequently in order to gain breath. If I remained perfectly tranquil, I felt a tendency to sickness and indisposition; but if I attempted to direct attention to any particular object or to stoop for any purpose, so as to compress the thorax, I was forced to rest and gasp for some minutes. Similar sensations were experienced by my guides; they had no appetite, and cared nothing for wine or brandy, having discovered that such fluids served but to increase their uneasiness; cold water alone appeared palatable and productive of relief."

During the ascent of this mountain by Auldjo, an account of which was published in the year 1828, it appears that the first effects of a rarefied atmosphere were perceived at an elevation little short of 12,000 feet. The chief symptoms experienced by the narrator were considerable constriction of the chest, with difficulty of breathing, a frequent pulse, with a sensation of fulness in the head, and thirst. As the party continued to ascend, the individuals composing it almost all suffered from exhaustion and difficulty of

breathing, with violent headache and palpitation of the heart. At a height of 13,506 feet, Auldjo himself was attacked by a sudden and irresistible inclination to sleep, and felt himself completely overcome, cast down and disconcerted; while, on approaching the summit, which was only attained with the utmost difficulty by himself and guides, he was incapable of taking more than fifteen steps at a time. On reaching the highest point, he immediately fell asleep, and upon waking, the headache and pains of the limbs were found to have ceased, but he still suffered from thirst, difficulty of breathing, and rapidity of the circulation, while the sight and odour of food sufficed at once to produce nausea.

On the 19th of June, 1819, Dr. Reussœler and Mr. Howard attained the summit of the Mont Blanc. One of the guides was unable to proceed beyond the Grand Plateau; from this to the summit, the strongest of the party were unable to take more than fifteen steps in advance without halting. Howard himself was so severely indisposed, as to render it doubtful whether he would ever reach the summit.

In the month of August, 1825, Captain Sherwell, and Dr. Clark, likewise ascended the Mont Blanc. The former, on leaving the Grands Mulets, suffered much from thirst, cardialgia, and nausea; at a height of 9,600 feet, he was almost overcome by somnolence, and barely able to advance above a dozen steps without stopping. At the summit, the travellers felt much indisposed; Dr. Clark in particular was much oppressed in breathing, even while at rest, and experienced a sensation within the chest analogous to that which precedes an attack of hæmoptysis, to which when young he had been liable.

The following observations were made at different heights upon the Mont Blanc, by Dr. Martin Barry; they refer exclusively, as will be seen, to the physiological phenomena in question.

At a height of 11,001 feet he noticed a dry rugose condition of the integuments, lividity of certain parts of the body, tension of the surface, intense thirst, and gradual failure of the appetite.

At 13,640 feet, the symptoms were the same, with total loss of appetite, but without much fatigue.

At 13,713 feet, fatigue was perceived, with difficulty of breathing, relieved by halting and taking deep inspirations.

At 14,372 feet, there was tendency to syncope, increased dyspnoea, great prostration and indifference.

It is somewhat singular, that on one occasion during the ascent of this mountain, a dog, belonging to one of the guides, likewise suffered severely; he stopped continually, then fell down and slept immediately. At a height of 12,000 feet he vomited frequently, but nevertheless attained the summit, in company with his master.

M. Zumstein, in attempting to reach the highest peak of the Monte Rosa, appears to have suffered from the rarefaction of the atmosphere sooner than usual. At a height of 4,128 feet, he experienced so great a degree of anxiety and oppression, as to be unable to sleep during the night; after attaining an elevation of 10,800 feet, he and his companions were forced to halt repeatedly, and one of them fainted for some minutes. In ascending the pyramidal cone which constitutes one of the summits of the Monte Rosa, a chamois hunter of the party lost all consciousness.

Additional quotations might here be adduced, tending to confirm the statements of those observers, to whom allusion has already been made; I prefer, however, passing over these for the sake of brevity, and referring to the very accurate and detailed account which a French physician, Dr. Le Pileur, has given, relative to the phenomena of the mountain sickness, as noticed by himself, his companions, and guides, during successive attempts to reach the summit of the Mont Blanc. Speaking of his own sensations on attaining an elevation of 12,000 feet, he says: "I now experienced, after a few minutes exertion, a certain amount of fatigue, with dull contusive pains in the lower extremities. On counting my steps, I found that I could still take about a hundred without halting, the last twenty being performed

with much difficulty; after resting, the pain in the limbs ceased, and on resuming the ascent, the first few paces were comparatively easy. At a height of 13,350 feet, I perceived a slight degree of perspiration, lasting for a few minutes only. Prior to reaching the last rocks, situated near the summit, I became conscious of a most singular but indescribable uneasiness while in motion. There was no headache, no palpitation of the heart, nor any discomfort about the precordial region, but a general sense of great exhaustion and *malaise*, and I seemed in fact to have barely sufficient strength to execute the necessary movements of locomotion for a given period, after which I felt that any attempt to proceed would be fruitless. I could moreover advance but in one posture, namely, with the head inclined forwards, and the chin nearly touching the sternum. Each individual member of the party appeared to adopt this attitude, and I remarked that the act of halting and taking breath was similarly performed. A tendency to somnolence was also noticed; and what tended materially to increase the general sense of discomfort, was the dry, parched condition of the mouth. At a height of 13,580 feet, we were assailed by a violent north-west wind, which added to our suffering, more especially in my own case, inasmuch as a feeling of impending suffocation, with giddiness and nausea, was the result. This lasted for upwards of a quarter of an hour, during which it was necessary to exert all the moral courage I possessed, to continue the requisite exertion; I advanced indeed mechanically, without reflection; none spoke, and but one thought appeared to pervade the minds of the whole party, that of still accomplishing a few more paces in an upward direction."

The narrator proceeds to describe the sensations experienced by himself, his companions, and their guides after attaining the summit. These, as might be supposed from the absence of exertion, were less marked than during the ascent, and consisted for the most part in a tendency to somnolence, loss of appetite, thirst, slight nausea, and in one instance vomiting; he notices also the whiteness of the tongue, as occurring in every one of the party, together with a considerable acceleration of the pulse.

Upon a previous occasion, M. Le Pileur had been baffled in his endeavours to reach the summit of the mountain. At a height of 9,300 feet, one of the principal guides was suddenly seized with the "mountain sickness" and obliged to descend immediately. His countenance was bloodless, but covered with moisture, and he could but just take a few steps in advance; he recovered however upon descending about 600 feet.

At the Grand Plateau, another of the guides, Ambroise Coutet, was seized with nausea and a tendency to immediate syncope upon assuming the upright position.

A third guide, Simon, was similarly affected while M. Le Pileur was in the act of feeling his pulse, and had but just time to extend himself upon the snow, to avoid complete syncope.

In the year 1845, after residing three years in a perfectly level country, and with consequently no opportunity of becoming inured to mountain exercise, I spent some months in Switzerland; and on visiting the valley of Chamouni, proceeded at once with the assistance of two guides to attain the highest point on the Mont Blanc, capable of being reached without entailing the necessity of spending a night on the mountain. Beyond the ordinary fatigue and excitement, unavoidable upon such occasions, I felt nothing unusual until we had arrived at a height of 9,000 feet; here a sense of fullness in the head, and throbbing of the carotids, with palpitation of the heart, became evident. I had but little relish for food, and felt considerable thirst. At a height of 10,000 feet, I experienced a constriction of the chest, together with increased rapidity of the respiration, and this independent of the influence of severe exertion, inasmuch as the necessity for extreme caution, among the frightful labyrinth of crevices in parts of the glacier of Bossons, rendered the actual amount of exertion very trifling. For some time I had perceived the

taste of blood in the mouth, and this I found to be owing to a slight oozing from the gums. These peculiarities were, it is true, elicited at a comparatively early period of the ascent, which I attribute to the fact previously mentioned.

In the year 1846, when living among the Bernese Alps, I had still further opportunities of ascertaining the effect of great altitudes upon the body. In conversing at the hospice of the Grimsel, with some of the chamois hunters and attendants, who spend a large portion of the year at a height of 6,000 feet and upwards, I learned that habit had a great effect in doing away with those unpleasant effects which a rarefied atmosphere would produce upon an inhabitant of the plain. This I found to be actually the case during the ascent of one of the loftiest of the Bernese Alps, the Wetterhorn, or Peak of Tempests*. In scaling this hitherto untrodden summit, I was accompanied by three men, one an inhabitant of the plains, (although accustomed to ascend the lower and more accessible mountains in the neighbourhood), the two others habitually living at an elevation of between 6,000 and 7,000 feet, and inured to daily exertion of a severe nature. In these two men I could at no time detect aught that was unusual, save a shortness of breath, and a necessity for frequent halting during the ascent of the terminal ice-bound peak. The inhabitant of the plains however, evinced symptoms of distress at a very early period, and complained of nausea, thirst, oppression of the chest, and throbbing in the head. In my own case, the departure from the ordinary condition of health was but trifling, owing to having become somewhat accustomed to the atmosphere of lofty regions, and familiar with the species of exertion required to reach them. Occasionally, at some of the steepest and most dangerous parts, a feeling as if all power had been suddenly abstracted from the lower limbs, together with that sensation before described as experienced at sea or in a swing, necessitated a halt, and this sufficed to banish all unpleasant feelings. I may also add, that the whole party experienced a complete distaste for food, almost indeed amounting to loathing, and a wish rather for fluids. These we found to be very palatable and refreshing, when taken in small quantities. On arriving at the summit, I again felt the same peculiar sensation, previously noticed when on the Buét, together with increased rapidity of the respiration. The chamois hunters appeared but little inconvenienced; I remarked, however, that their distaste for food was as great as my own, while the guide who had accompanied me from Interlachen evidently suffered considerably from the effects of the elevated position upon which we stood; he appeared overcome by sleep, complained of throbbing in the head, nausea, difficulty of breathing and great thirst, and was utterly incapable of appreciating the stupendous panorama spread out before our eyes.

During the descent, comparatively few complaints were made by any one of the party, although the effects of the exposure to the reflection of an unclouded sun from the pure unsullied snow were very severe, and lasted for several days, producing vesication of the face, and in the chamois hunters an attack of ophthalmia; they having omitted to wear blue glasses during the ascent.

From these observations I conceive that, as a tolerably satisfactory answer to the first question proposed, it may be stated that at great elevations there actually do occur certain modifications in the natural functions of the body, in no way to be accounted for, but by admitting the existence of influences to which at an ordinary level it is not exposed.

[To be continued.]

* A detailed account of this ascent was published in the *Athenæum* of Nov. 1st, 1846.

CASE OF FIBROUS TUMOUR OF THE UTERUS, IN CONJUNCTION WITH PREGNANCY;

LACERATION OF THE PERITONEUM, AND HÆMORRHAGE INTO THE ABDOMEN.

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(Read before the Royal Medical and Chirurgical Society, Jan. 14th, 1851.)

CASE. In October, 1840, I was requested to attend a tradesman's wife, æt. 40, in her third confinement. I learnt that she had recently moved into her present residence, and that she had greatly exerted herself in cleaning it; that all through her pregnancy she had been much oppressed with flatulency, and had had misgivings about the result, having felt differently from what she had done on previous occasions; that four days previously she had slipped down four stairs, from which she did not experience any inconvenience; and that on the same day she caught her foot against a chair, which caused pain in her left hip, which she had at times felt since. I first saw her at noon; the membranes had broken eight hours previously. The pains had been frequent and regular. The external parts were relaxed. The os uteri was so far back that it could scarcely be felt, and was open to the size of an eighteenpenny piece; the vertex was presenting. She was at this time very much troubled with flatulency, for which warm gruel, with a little ginger, was given with relief. The pains continued strong and regular; the os uteri gradually dilated; and the child was born at four o'clock in the afternoon. It was large, blue, and almost dead, but recovered. The placenta was thrown off naturally shortly afterwards; the uterus contracted firmly; there was no hæmorrhage. I left her to all appearance well, an hour after her confinement. Her pulse was seventy-two in a minute: the urine had passed freely; the bowels had been opened five times that morning, and five times the day before.

About five hours after her confinement, I was called to her in haste. She had been allowed to remain undisturbed for two hours, when she was taken with cold chills; and upon being put to bed, she was seized with sickness (the flatulency still continuing), and she was very faint. Upon visiting her, I found her quite pale; her countenance shrunk, and very anxious; her lips pallid; the skin cold and clammy; the tongue very pale. She was conscious, but so faint that she could scarcely whisper. The pulse was all but imperceptible at the wrist; there was a very slight draining from the uterus; the breathing was slow and natural; sickness was constant; the abdomen was much distended, particularly below the umbilicus, and evidently tympanitic. The uterus could not be felt by the hand applied to the hypogastric region, neither did kneading pressure make it more apparent, or produce uterine contraction. Fearing that there might be internal uterine hæmorrhage, and not being certain about the state of the uterus, I introduced my hand with great facility, and found it somewhat large, empty, and flaccid. Thinking that relaxation of this organ might have had something to do with the symptoms present, I kept my hand steadily where it was, and, by means of an assistant, had pressure made externally upon the uterus; brandy and laudanum being at the same time administered. Finding but little good from these means, I tried the effect of cold. Wet cloths were first applied, and then a plate immersed in cold water, to the lower part of the abdomen; neither of which produced much effect. Cold water was therefore poured from a height upon the abdomen. This produced a slight shock upon the system, more decided uterine contraction, and more pulse. The uterus, however, again relaxing, it was necessary again and again to resort to the cold affusion. After each application, there were decided uterine contractions, more pulse, and a less anxious state of countenance. After an hour's trial of this plan, the uterus had contracted sufficiently to allow of my withdrawing my hand. Two

drachms of laudanum and much brandy had been given ; and although the skin was icy cold, and the pulse, though steady, 120 in the minute, the patient seemed more calm, and disposed to sleep.

On the following morning, I found that for an hour or two there had been a decided rally, and she had dozed a little : but there was then no real improvement. The countenance was very much pinched ; the skin deadly cold and clammy ; sickness was constant ; there was much flatulency ; and the abdomen was tender—not much distended, but decidedly tympanitic. She cried out at times, apparently from spasm of the abdomen. The pulse was exceedingly feeble. Bottles of warm water were applied to the feet and armpits ; and two assafoetida injections had been given, which came away almost immediately, expelling very little motion, and some flatus.

In the afternoon, the collapse being if anything more complete, a turpentine injection was administered ; mustard plasters were applied to the abdomen ; and ammonia with aromatic confection were taken every half-hour for some hours ; brandy and beef-tea were also given. In the evening, the pulse was stronger ; the skin warmer, and less clammy ; the sickness still continued ; there had been no motion. No urine having passed, a catheter was introduced, and about an ounce withdrawn. An effervescing draught was ordered to be taken every four hours, and the turpentine injection to be repeated in the morning.

On the morning of the third day, the injection was repeated, but returned instantly ; the pulse declined, and the woman appeared sinking. To my surprise, however, in a few hours there was a decided rally. The countenance, although shrunk, was more animated ; the cheeks were flushed ; the surface was warmer ; she took notice of objects, which she had not done before, and was even cheerful. The abdomen was not more distended, but tender to the touch ; the spasmodic pains recurred at times ; vomiting was incessant upon taking anything ; she had had no motion. The tongue was very much furred and dry ; there was incessant thirst ; the pulse was stronger, rather sharp, regular, 110. The urine had passed freely two or three times. The turpentine injection and the effervescing mixture were continued ; a bran poultice was applied to the abdomen, and calomel and opium ordered to be taken every four hours, in the form of powder.

On the fourth day, it is stated that the powders had been regularly taken ; several turpentine injections had been given ; and salts and peppermint-water were taken every four hours alternately with the calomel and opium. The sickness was incessant ; she had had one slight motion ; the abdomen was distended, and decidedly more tender upon pressure, especially the hypogastric and left iliac regions, where there was much greater solidity than elsewhere, and than had ever been perceptible before. She was ordered to continue the calomel and opium, and the salts and peppermint.

On the fifth day, it is reported that there had been some variations, but no important change for the better. The medicines were continued at longer intervals on the sixth day, and the injection was repeated ; after which about a pint and a half of fluid, tinged with fecal matter, came away ; and during the night and following morning several motions and much flatus were passed. The abdomen diminished in size, and was much less tender ; the hardness in the left iliac region greatly subsided ; and the uterus could be felt in the hypogastric region, about the usual shape and size for the time after delivery. There was also much less sickness.

On the seventh day, the tongue was more moist, and the surface warmer—more, however, from hot bran constantly applied to the abdomen than from the development of animal heat. The pulse was still feeble, and varied from 110 to 120. She was inclined to take nourishment, and she had, therefore, beef-tea and porter, and took them with relish.

On the eighth day, there was evidently more weakness and more emaciation. There was slight increase of sick-

ness, and hiccup occurred. The teeth were covered with sordes, and there were frequent alvine discharges. Mercury with chalk, opium, aromatic confection, and ammonia were prescribed, and a starch injection, with laudanum, was administered, by which the bowels were quieted. Refreshing sleep was procured by the acetate of morphia, but the patient became more and more exhausted ; the sickness and hiccup recurred ; she gradually sank, and died in the morning.

Dissection, twenty-four hours after Death. The body was not so much emaciated generally as might have been inferred from the aspect of the face and chest. The abdomen was not much distended ; it had some hardness and preternatural solidity at its lower part ; the peritoneum lining the abdominal parietes was of a dark green colour ; the intestinal convolutions were of a dark brown colour, in many parts being smeared with blood. Fully three pints of dark venous blood, quite free from coagula, were removed from the abdominal cavity. The convolutions of the small intestines were united to each other and to the uterus, by recent and easily separable adhesions. Upon breaking through these, there was observed, attached to the fundus of the uterus, but having no

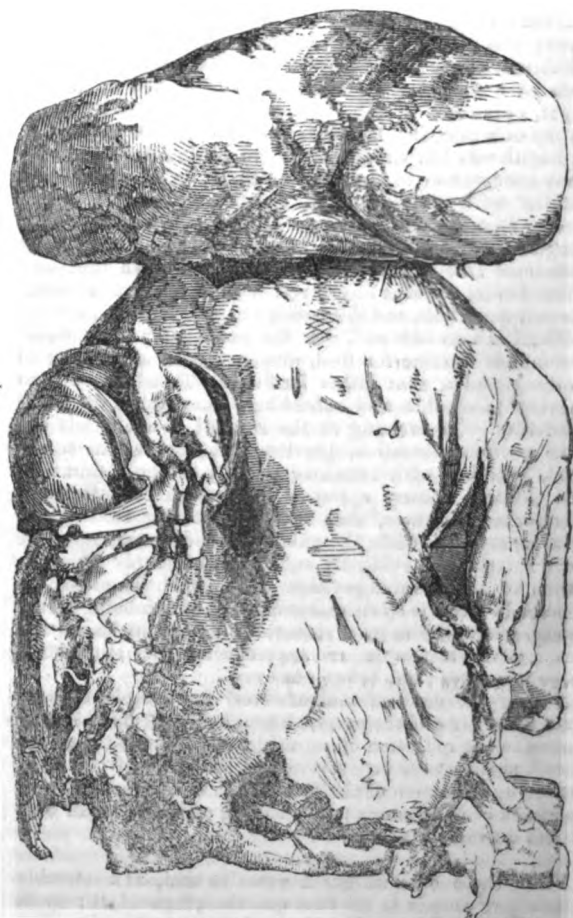


Fig. 1. represents the large fibrous tumour attached to the fundus of the uterus:—the dark parts of it are where blood was extravasated ; the part under the tumour shows the size, shape, and situation of the uterus in the peritoneum. The back view of the uterus only is given, in which the ovaries, round ligaments, etc., are incorporated, the having been coagulated and matted together by strong spirit, in the preparation was immersed with a view of preserving the exact shape of the tumour.

communication with its interior, a tumour of livid and in size and shape like a moderate sized placenta, the diameter of which was placed transversely. This tumour was covered with peritoneum, a prolongation of the membrane enveloping the uterus : this membrane, near the an-

reflection, was lacerated to the extent of nearly two inches, and from it the blood found in the abdomen appeared to have oozed. Upon making an incision along the upper part of the tumour, nearly down to its uterine attachment, it appeared to be composed of three lobes—a right, a middle, and a left, the middle lobe being separated from the others by a white ligamentous structure. The right and middle lobes were softened, and of a deep chocolate colour, and appeared to be principally composed of a congeries of vessels; the left was of a pale brown colour, and had a fibrous aspect. The uterus was not firmly contracted, but of the size usual in a person so recently confined; its mucous membrane was of a dark colour. The os uteri was elevated and granular. A drop of purulent looking fluid issued from one of the veins, upon cutting into it. There was a patch of lymph, about the size of a shilling, on the mucous membrane of the upper part of the vagina. The ovaries, Fallopian tubes, and, indeed, all the other abdominal and pelvic viscera were healthy. The head and chest were not examined.

The preparation was subsequently exhibited at the Pathological Society; and upon a further incision being made into the tumour by Dr. Quain, a cyst, about the size of a walnut, containing a clear colourless fluid, was found in the left lobe, and the base of the tumour was found of a deep red colour, from extravasation of blood.

Dr. Quain also made a microscopical examination of the tumour, and the following is the account he has been kind enough to give me:—

"I have examined the specimens of tumour which you gave me, and find them to consist—First: In some parts of a fibrous structure, altogether analogous to that of fibrous tumours, but apparently more vascular: at least I can observe much larger and more numerous blood-vessels. Secondly: In the immediate vicinity of the cyst which was divided, I find the structure less distinctly like fibrous tissue; it is mixed with a quantity of granular matter, and numerous blood-vessels can be seen.

"The inference which I am disposed to draw is, that the tumour had increased during pregnancy,—the vascularity suggests that idea; and that this increase was subsequently much exaggerated by hæmorrhage and the coagulation of fibrin which subsequently took place. The length of time during which the preparation has been kept in spirits, renders the examination difficult, and its results doubtful; however, I have compared them with those found in an ordinary fibrous tumour kept under nearly similar circumstances."

REMARKS. I have been induced to offer this case to the notice of the Society, under the belief that there is not one exactly similar to it on record. Tumours of the uterus are not of unfrequent occurrence: they sometimes grow to a very large size; one is recorded weighing *forty pounds*.* They are not very unfrequently met with in conjunction with pregnancy; in some cases interfering with parturition, from mechanical obstruction, in others occasioning severe uterine hæmorrhage, as in a case mentioned by Hildanus, in two cases occurring to Madame Boivin, and in others recorded by more recent writers; but not one, I believe, has been mentioned where hæmorrhage has taken place into the abdomen, from rupture of the peritoneal coat which attached the tumour to the uterus. It appears to me also to have other points of interest, to which I will next allude.

There are three circumstances worthy of note in respect of the tumour: its structure, its situation, and its growth.

Structure of the Tumour. This tumour comes under that denomination described by a modern author as "a tumour, whatever its size or induration, growing externally; and, by

projecting the peritoneal coat of the uterus, obtaining from it an external covering."[†] It was in parts decidedly of a fibrous nature; but in others it possessed somewhat the characters of an erectile tissue. It was of a chocolate colour, and was composed of a congeries of vessels, together with ligamentous bands, and was softening in the centre, as if a malignant character had been implanted upon that originally fibrous.[‡]

Situation. The situation of the tumour was that most usually met with; and that perhaps, generally speaking, where it was least likely to be dangerous: it was placed upon the fundus of the uterus, immediately underneath the peritoneal coat. It was not so likely, therefore, to lead to uterine hæmorrhage on the one hand, as it would in all probability have done if placed in or under the proper uterine tissue; or to mechanical obstruction on the other, as would most likely have happened had it been seated laterally. Had this woman not been pregnant, it is probable that the tumour would have remained for many years without producing much, if any, inconvenience.

Growth. I am of opinion that the tumour, at first of small size, grew with great rapidity, in consequence of the



Fig. 2, exhibits two small fibrous tumours in the fundus of the uterus—one entire, the other cut open, to show its structure. If the woman from whom this specimen was taken had been pregnant, I think it possible that these might have grown with great rapidity, and consequently might have attained the same size as the other tumour.

* Ashwell, on Diseases of Women, pt. II, p. 286.

"The usual distinction must be drawn between the tumours and the out-growths of the same structure. The uterus presents examples of both. The fibrous uterine polypi, more properly so called, are continuous outgrowths of and from the substance of the uterus; the mucous membrane and the muscular and fibrous tissues of the uterus, growing in a variety of proportions into its cavity and that of the vagina. The fibrous tumours, as distinguished from these, are discontinuous growths of similar tissue in or near, not of the substance of the uterus."—*Paget's Lectures*, Lect. v, pt. I.

† One great object that I had in bringing this case before the Society, was the hope that the malignant degeneration of fibrous tumours would have been discussed: although disappointed in that respect, I am glad to find the subject considered by Mr. Paget, in his valuable Lectures, delivered at the College of Surgeons subsequently to the reading of this paper, from which I quote the following observations, as bearing upon this point:—

"I can scarcely doubt that certain tumours, presenting in all apparent structure the same characters, may in different persons appear innocent or malignant; but respecting the grounds of these differences, I can, as yet, scarcely offer a suggestion."—*Lect. v*, pt. II.

"In corroboration of the above remarks, allusion is made to a case where Mr. Lawrence removed a large well-marked fibrous tumour, which had grown nine months after one of the same appearance had been removed from the same part. Before removal, this was judged by all who saw it to be malignant; but it presented a genuine fibrous structure, and could not, I think, be distinguished from an ordinary fibrous tumour."—*Lect. v*, pt. II.

Also "to another of Mr. Stanley's, where a tumour recurring after removal more than once, amputation was performed. The tumour was milk-white, soft, and brain-like, except where discoloured by effused blood; and in the exposed parts, was soft, pulpy, and grumous. One would certainly, judging by its general aspect, have called this a brain-like medullary cancer; and yet it had essentially the same microscopic characters as the tumours I first examined from the same patient, only the narrow, elongated caudate cells were very generally filled with minute shining molecules, as if from fatty degeneration connected with protrusion and partial sloughing of the mass."—*Ibid.*

"Whatever be the truth concerning the supposed transformation of an innocent into a malignant morbid structure, I think it cannot be doubted, that in the cases of some recurring growths, the successively later growths acquire more and more of the characters of thoroughly malignant disease."—*Ibid.*

* Lever, on Diseases of the Uterus, p. 111.

† The extent of growth appears unlimited, and among the fibrous tumours are the heaviest known. They have weighed fifty, sixty, and seventy pounds. Waller refers to one of seventy-four pounds; and to one described in an *American Journal* as having been estimated at one hundred pounds."—*Paget's Lectures*, Lect. v, pt. I.

large supply of blood to the uterus during pregnancy; and this view is, I think, confirmed by Dr. Quain's microscopic examination, and by the appearance of another preparation, which I also exhibited, and also by the way in which it was covered, and, as it were, *entangled* by the convolutions of the intestines.

Source of the Hæmorrhage. Upon this point there can, I think, be but little doubt; for upon elevating the uterus, with the tumour attached, a laceration, about *two inches* in extent, in the peritoneum, going from the posterior part of the uterus to the tumour, was at once apparent; and as there was no other laceration in that membrane, it seems all but certain that the bleeding had proceeded from it. This constitutes the great peculiarity in the case, as it is the only one with which I am acquainted where a fibrous tumour of the uterus has terminated fatally in that way.

Cause and Time of the Hæmorrhage. At the cause and time of the bleeding, there is some difficulty in arriving. It seems most reasonable to conclude that the rent was produced when the uterus was contracting violently, during the birth of the child: the tumour being entangled among the convolutions, could not follow the uterine movements so quickly as was necessary, and thus the peritoneum was put upon the stretch, and, upon the recurrence of pain, gave way. But, on the other hand, had that been the case, collapse would in all probability have occurred at the moment of birth, whereas no sign of anything being wrong was then apparent. The placenta was thrown off by the natural powers about the ordinary time, without any inconvenience; and it was not until the woman was put to bed three hours after the child was born, that the mischief showed itself.

Cause of the Collapse. This point is also involved in obscurity. If it arose from the rupture of the peritoneum, the cause most likely to have produced it, and if that took place at the time I have suggested, it would most probably have shown itself earlier; if it arose from the hæmorrhage, the symptoms to have been expected were simply those of syncope; and although these were the symptoms first manifested—namely, chilliness, paleness, sickness, and faintness, yet when I arrived they were decidedly those of collapse,—a shrunk and very *anxious countenance*; a clammy skin, so peculiar to this condition; a voice scarcely beyond a whisper; and a pulse all but imperceptible at the wrist. The only conclusion, therefore, at which I can arrive is, that her condition was partly owing to the extravasation of blood, and partly, also, to the rupture of the peritoneum. This possesses additional interest when contrasted with another case of extensive abdominal hæmorrhage, conjoined with rupture of the peritoneum, that came under my care, and which is already published.* The symptoms were in many respects the same in both; and in both there was nearly the same amount of blood extravasated; yet in one case death was produced in about *twelve hours*, and in the other the patient survived until the *tenth day*. In one, the patient was at once destroyed by the shock to his system; in the other, death appears to have ensued from atonic peritonitis. May not the difference in the treatment pursued in some measure explain this? The case so rapidly fatal was attended by spasm and pain of the abdomen, which naturally called for the application of *warmth*; whereas the other, occurring so soon after labour, and having some symptoms in common with internal uterine hæmorrhage, as naturally suggested the application of *cold*, by which it is probable that the hæmorrhage was in some degree arrested.

Another question arises here. Was the blood found in the abdomen all extravasated soon after the laceration? or did it continue to ooze up to the close of life? Upon the first supposition, the blood would most probably have been found coagulated, (its non-coagulation is extraordinary under any circumstances,) and might have been otherwise changed; upon the latter, it seems scarcely reasonable to suppose that the patient would have rallied at all.

Cause of the Peritonitis. The inflammation of the peritoneum, which partook of the enfeebled powers of the constitution, appears, like the collapse, to have had a two-fold origin, and to have been attributable partly to the rupture of the peritoneum, and partly to the presence of extravasated blood.

Induction of Premature Labour. Could this woman's condition have been known, there seems great likelihood that her life might have been preserved by the induction of premature labour; as, at an earlier period, in all probability the tumour would not have been so large as it was at the full period of gestation; it might not have been so entangled in the intestinal convolutions; and the pains for expelling the child might not have been so strong. Laceration, therefore, would have been less likely to have followed. But as, until the fatal event, there never was any sign which could lead to the supposition that such a tumour existed, the induction of premature labour could never have been contemplated in this case. As, however, it brings to light a fresh danger connected with these cases—namely, rupture of the peritoneum, from long-continued uterine action, it affords an *additional* reason for advocating premature delivery where the existence of a uterine tumour in conjunction with pregnancy is clearly ascertained.*

I cannot help alluding, in conclusion, to the serous cyst subsequently discovered in this tumour; and I do so chiefly to introduce the following observations from Mr. Paget's Lectures.

"We find examples of fibrous tumours thickly beset with small, well-defined, and lined cysts. This appears to be the nature of the hydatid testis described by Sir A. Cooper. A similar condition may be found, but is rare, in fibrous tumour of the uterus. In another set of cases, we find one large cyst existing alone, or far predominating over all the others in a fibrous tumour. This is most frequent in the tumours in the nerves and in the uterus. In the latter organ it has peculiar interest, because the cyst, if it attain a great size, may be mistaken, and treated for an ovarian cyst. Several such cases have happened. In the College Museum is a preparation, the history of which, sent by Sir E. Home, is that it is a portion of a uterus in which a very large encysted tumour had formed. The patient had been tapped twice, and the cyst emptied. The case was supposed to be ovarian dropsy during life. In another case, Mr. Caesar Hawkins, suspecting ovarian disease, drew fifteen pints of fluid from a great cyst in a fibrous tumour of the uterus. The patient died a long time afterwards. The specimen, which is in St. George's Hospital, shows an enormous fibrous tumour in the side wall of the uterus, having one vast cavity, and in its solid part many small cysts." (*Lect. v, part 1.*)

NOTES ON THE TREATMENT OF ERYTHEMA NODOSUM, URTICARIA, AND ERYSIPELAS.

By W. S. OKE, M.D., Physician to the Royal South Hants Infirmary.

1. **ERYTHEMA NODOSUM.** This is a disease of not unfrequent occurrence, and is met with in females from the age of puberty to about 25 years. It more commonly affects cottagers and servants, and is rare amongst the better classes of society.

The eruption is characterised by tumefactions of the skin, of an irregularly round or oval shape, and about the size of the long section of a damson. The spots are at first red, but soon become more or less livid, and assume the ap-

* From what took place at the discussion of my paper, I fear the above observation was misunderstood; some explanation may therefore be necessary. It was very far from my intention to advocate the induction of premature labour in all cases of fibrous tumour, or indeed in fibrous tumour as a rule at all; but only to suggest, that as certain reasons have been assigned for that operation, such as want of space for a full-sized fetus to pass, the blocking up of either the inlet or outlet of the pelvis by tumours, &c., so, should a fibrous tumour be discovered before parturition, and be observed to be growing rapidly, then the fear of the rupture of the peritoneum from strong uterine action would be an *additional* reason for resorting to this proceeding.

pearance of a bruise. They usually appear on the lateral and anterior surface of the legs, and are painful and tender, causing the space between the knee and ankle to swell. They never vesicate, nor do they terminate in suppuration.

This exanthem does not appear to run its course in any definite number of days, and generally lasts for some weeks, unless its progress be shortened by medical treatment.

This kind of erythema is accompanied by a considerable degree of febrile disturbance. The pulse is not much under 100 in the minute; the tongue is white; the urine is high coloured; and there is thirst, great lassitude, restlessness, and impatience.

The languid aspect of the patient would sometimes appear to indicate the use of tonics, even in the early stage of the disease; but these invariably aggravate the symptoms. The mode of treatment which I have always found successful, is calomel combined with antimony at bed-time, and saline aperients during the day, as in prescriptions 1 and 2.

- 1.—R. Hydrargyri chloridi gr. j.
Pulveris Jacobi gr. ij.
Confectionis rosæ q. s. Misce.

Fiat pilula omni nocte sumenda.

- 2.—R. Magnesie sulphatis 3vj.
Liquoris ammoniæ acetatis 3ij.
Spiritus myristicæ,
Syrupi simplicis, aa 3ss.
Aquæ destillatæ q. s. ad 3vj. Misce.

Capiat cochlearia larga duo ter quotidie.

This treatment, with a cooling diet and confinement to bed for a short time, will speedily relieve the patient and terminate the symptoms.

II. URTICARIA. The name given to this cutaneous eruption is remarkably happy, as it is in strict accordance with the appearance of the nettle-sting. It is evolved in circular whitish wheals, with a slightly red base, and is accompanied with tingling and prurience. In some parts it is distinct, and in others coalescent. Common urticaria is, in many instances, the almost immediate result of having eaten some crude, indigestible food, such as mushrooms or shell-fish, especially muscles, oysters, lobsters, prawns, and the like; and the cutaneous eruption will probably be preceded or accompanied by pain or inflation of the stomach. The rash in such a case is generally removed with its cause. The pill (1) and the draught (2), repeated twice or thrice at proper intervals, will usually suffice.

- 1.—R. Hydrargyri chloridi gr. iij—iv.
Pulveris rhei gr. viij.
Syrupi q. s.

Misce et divide in pilulas duas statim sumendas.

- 2.—R. Pulveris rhei 3j.
Magnesie sulphatis 3ij.
Tincturæ jalapæ,
Syrupi zingiberis, aa 3j.
Acidi prussici (Scheelii) gtt. j.
Aquæ cinnamomi 3ss.
—destillatæ 3vj. Misce.

Fiat dosis horis sex post pilulam sumenda.

There are examples of urticaria, which are far less evanescent, always within call, and which tease the patient from time to time, for months or years. Such cases depend more upon a chronic excitability of the gastric or intestinal mucous membrane, acted upon by indigestible food and acrid secretions. This kind is curable by such means as will gradually restore the digestive functions to a healthy state; and as this is effected, the urticarial rash will diminish and ultimately disappear. The remedies to be used will of course be indicated by existing circumstances; the formulæ 3 and 4 will often succeed; but the entire removal of the eruption will chiefly depend upon the strict observance of a light diet, the avoiding of all fermented drinks, sufficient clothing, and regular exercise.

- 3.—R. Pilulæ hydrargyri,
Extracti colocynthis compositi, aa gr. xxiv.
Extracti hyoscyami gr. vj.
Antimonii potassio-tartratis gr. j.

Misce bene et divide in pilulas xij. Capiat duas alternis noctibus.

- 4.—R. Sodæ bicarbonatis,
Magnesie carbonatis, aa 3j.
Vini ipecacuanhæ 3ss.
Tincturæ lupuli,
Syrupi aurantii, aa 3ijj.
Acidi prussici (Scheelii) gtt. vj.
Misturæ camphoræ ad q. s. 3vj. Misce.

Capiat fluidunciam omni mane et meridiæ.

A course of tepid or vapour baths will often conduce to the cure of protracted urticaria.

I have sometimes seen urticaria accompany severe erysipelas. The wheals assumed a deep purple hue. In such an association, it will, of course, fall under the treatment of the latter disease.

There is a singular species of urticaria occasionally met with, called *tuberosa*, which appears in much larger elevations; and when they occur in any part of the face, they occasion great disfigurement, especially if the lips or one of the *alæ nasi* should be bunched out. The tongue is sometimes the seat of one of these huge wheals, to the great alarm of the patient.

CASE. A married lady, æt. 30, whilst on a visit in the neighbourhood of Southampton, was suddenly attacked in the night with a sense of suffocation and difficulty of deglutition. She was greatly alarmed, and sent in haste for me. On examining the internal fauces, a large wheal of the urticaria *tuberosa*, situated upon the upper and back part of the tongue, was found to be the cause of her distress. An inquiry was then made, whether she had eaten anything which might have disagreed with the gastric function; when she acknowledged that she had made a hearty supper on oysters. This at once satisfactorily explained the nature of the case, and set the mind of the patient at rest. The symptoms were soon removed by a smart purge, and saline effervescing medicine.

The *urticaria febrilis* is very rarely seen. I cannot say that I have met with more than one distinct example of it. It came out principally on the fore-arms, and the wheals were surrounded by a florid areola. They were accompanied with smart pyrexia, and ran a course of about eight days, without being in any wise controlled by the influence of medicine.

III. ERYSIPELAS (incipient stage of). Erysipelas is an inflammatory outbreak of a distinct character; and it may be either idiopathic or traumatic—the result of morbid causes, or of external injury. The former most frequently attacks the face and legs; the latter may attack any part of the surface which might have been injured by accident or operation.

Erysipelatous inflammation is somewhat sudden in its attack, diffuse, and bounded by a well defined and abrupt margin. If momentary pressure be made upon it, the blood recedes from the capillary vessels; and, as soon as the pressure is removed, it is seen to flow into them again.

Erysipelas generally commences with simply an inflamed and congested state of the surface; but this often rapidly occasions serous infiltrations beneath the cuticle, raising it into bullæ of various sizes; or suppurative action in the areolar tissue, forming abscesses; or even gangrene of the part involved: and these are the results of one and the same disease.

The inflammation is also of a serpiginous character, leaving one part and extending to another. Thus, if it commence in the integuments of the nose, it will often leave that feature, pass over the palpebræ and cheek to the temple and ear, and thence to the scalp. In some severe cases, it will not stop there, but extend down the neck and over the greater part of the integuments of the thorax.

Erysipelas is commonly ushered in by severe rigor; but the amount of disease about to follow may not be in proportion to the degree of this symptom. I have known a shivering, threatening a serious attack, to be followed by a mere erysipelatous blush of the integuments of the leg, without the smallest vesication, or any suppuration.

Erysipelas does not always observe a definite course,

like some other febrile eruptions. It may terminate in eight or nine days, or it may last a month, an instance of which I have lately met with in a lady, *æt.* 50. It began in the face, on the 2nd of November; and after traversing the head, neck, and trunk, terminated fatally on the 12th of December. It was remarkable that the case, in its last stage, assumed the character of urticaria, which came out in large wheals, of a deep red colour.

This disease seems to be often derived from a morbid poison; and it may be sporadic or epidemic. Whether it be contagious, is a question of great importance. That it spreads in the wards of hospitals, and in crowded families, from the want of cleanliness or ventilation, or from deficient drainage, is a well-known fact; but under such circumstances, it is difficult to decide whether it be communicated from person to person, or generated from an impure atmosphere. The safest decision will be, that it may arise from both.

Erysipelas is sometimes very fatal in public institutions, especially in hospitals for the sick; indeed, it has sometimes proved so frequently fatal in these places, that the surgeons have been unwilling to perform even the slightest operations, during the existence of the disease, lest the patient should be subsequently destroyed by an erysipelatous attack—an event by no means uncommon.

Erysipelatous action has been treated by a variety of remedies—each surgeon or physician adopting his own peculiar mode of treatment; but, until lately, it does not appear that any method of cure has been entitled to much confidence. It is to Mr. Higginbottom that the public are indebted for the discovery of the external application of a strong solution of the nitrate of silver, as a remedy for this disease (*London Medical and Physical Journal*, vol. xlviii, p. 223); and it is certain that this medicine possesses a therapeutic power in arresting its progress. The Royal South Hants Infirmary, in common with other hospitals, has been occasionally invaded by erysipelas, with an average result; but since the nitrate of silver has been employed, the unfavourable terminations have been comparatively very few; and I am persuaded that, were this excellent remedy more frequently adopted, erysipelatous inflammation might be generally controlled.

A relative of mine, Mr. Robert O. Clark, of Farnham, who was Resident Surgeon in this establishment for two years, informs me that he never hesitated to apply the lotion (1) on the first appearance of the disease, and that it hardly ever failed in arresting its progress.

- 1.—*Rx.* Argenti nitratis \mathfrak{z} j.
Acidi nitrici *gtt.* vi.
Aque puræ \mathfrak{z} j. Misce.

This formula does not, I believe, contain so large a proportion of the nitrate of silver as that recommended by Mr. Higginbottom; but it is sufficiently strong to answer its purpose.

If the erysipelas be of the asthenic kind, as it usually is in hospitals, the system is to be supported by the mixture (2), with a generous diet, and the bowels must be regulated by a gentle aperient (3).

- 2.—*Rx.* Acidi nitrici diluti \mathfrak{z} j.
Syrupi zingiberis,
Tincture cardamomi compositi, *aa* \mathfrak{z} ss.
Aque destillatæ q. s. ad \mathfrak{z} vj. Misce.
Capiat quartam partem *ter* quotidie.
3.—*Rx.* Pulveris rhei *gr.* x.
Magnesiæ sulphatis \mathfrak{z} j.
Tincture cinnamomi comp. \mathfrak{z} j.
Aque puræ \mathfrak{z} ix. Misce.

Fiat haustus.

CASE I. Ellen Borsell, a domestic servant, *æt.* 19, having suffered severe headache for four months, was admitted into the Royal South Hants Infirmary under my care. The functions of the body were healthily performed, except that menstruation was deficient. Blisters were applied to the temples, which caused the face to swell, and brought out a crop of large pustules. Flour was applied to them, and they were subsiding, when an attack of erysipelas came on

with shivering: it began at the pustules, and spreading over the forehead and cheek. She was in great pain; the pulse rose to 130 in the minute, and the bowels were confined. The erysipelatous surface was painted over with the solution (1), and a purge was given. This was on the 31st of December, 1850. On the following day, the part so painted was deadened; but as the disease had spread to the other side of the face, the solution was applied there also; and she was ordered to take the mixture (2), strong beef-tea, and \mathfrak{z} ij of wine daily.

Jan. 2nd. The erysipelas was much faded; the pulse was 120; she had taken nourishment well, and was in less pain.

Jan. 3rd. She felt better; the erysipelas had spread but slightly; pulse 100. The parts were again painted over with the solution. The same diet and medicine were continued.

Jan. 6th. Since the last date, she had rapidly improved, and the erysipelas had left her.

CASE II. In the spring of 1850, one of the inmates of the County of Hants Female Penitentiary (where no instance of erysipelas had ever before occurred, although it had been established more than twenty years,) was attacked with erysipelatous inflammation of the right cheek, accompanied by headache, febrile disturbance, and a pulse of 120 in the minute. Fearing lest the disease might spread amongst the women of the house, I immediately brushed the inflammation over with the solution (1), giving her, at the same time, a gentle aperient and some saline medicine. On the following day, it was manifest that the solution had arrested the local progress of the disease, and moderated, also, the febrile symptoms, the swelling and redness having greatly subsided, and the pulse being reduced to 84. Wherever the inflammation showed any disposition to spread, the part was again brushed over with the solution, which never failed to stop its progress. In a few days she was convalescent; and no other case occurred in the house.

These cases are not added as anything new, but merely as facts in confirmation of the efficacy of this treatment.

Should the internal fauces become involved in the erysipelatous action, the solution should be applied to the throat also, as often as it may be deemed necessary.

In the incipient stage of vesicular erysipelas, I have seen the application of honey attended with the happiest effect, in at once arresting the spread of the disease, and subduing it altogether. My attention was first drawn to its therapeutic efficacy, by observing that an eruption of an erysipelatous character, spreading from the external angle of the left eye, rapidly disappeared after having been smeared with honey; and afterwards, having found it equally successful in similar conditions of the skin, I resolved to give it a fair trial for the local treatment of incipient erysipelas, on the first opportunity that presented itself, and this soon occurred.

In the month of October, 1851, the senior nurse of the Royal South Hants Infirmary, was attacked with vesicular erysipelas of the face; and, in a few days afterwards, four female patients in the ward adjoining her bed-room, were attacked in a similar manner. The symptoms certainly were of a mild character, though well marked. There was headache, whiteness of the tongue, febrile action, and, in some, there were small vesications upon the cheek. I immediately ordered the inflamed surface, in every case, to be well smeared with honey, morning and evening, and that no other remedy should be used. On the following day, I was surprised to find that in each patient the progress of the disease was effectually arrested, and that the inflammation had subsided in a remarkable manner. On continuing the honey as directed, the disease rapidly and completely subsided. I am fully aware that the external application of honey cannot be considered as a remedy for the cure of incipient erysipelas, even of a mild kind, upon so scanty a report of its efficacy; but I have deemed it my duty to state the fact, that others may make trial of it, and report its effect.

ERYSIPELAS PHLYCTENODES, Zoster, or "Shingles", is a species of erysipelas. It appears in groups or clusters of phlyctenæ, and commonly selects for its development the integuments of the thorax or abdomen. It is less frequently seen on the face and extremities. There is commonly some slight febricular disturbance of the system, and great soreness of the parts involved; and after the eruption has disappeared, it leaves a painful sensation beneath the skin for a considerable time.

There does not appear to be any settled treatment of this disease, either internal or external; and, therefore, it is generally left to take its course. I am not prepared to state from facts, that the solution of the nitrate of silver would at once obliterate this form of erysipelas; but, judging from its decided effect in the preceding form of the disease, there is every probability that it would be equally effectual in this.

Southampton, January, 1858.

CASE OF UTERINE HÆMORRHAGE, APPARENTLY SIMILAR TO THAT RECENTLY REPORTED BY MR. HARRINSON.

By WILLIAM EDWARD CROWFOOT, F.R.C.S.

THE perusal of Mr. Harrinson's case of uterine hæmorrhage induces me to publish the following case, which occurred in my practice a few years since, and which appears to be of a similar character. Two analogous instances are given in the *Practical Observations on Midwifery*, by Drs. McClintock and Hardy, p. 194.

CASE. In August, 1841, I was summoned, in the middle of the night, to a poor woman who was in labour, under the care of a midwife, at the distance of three miles from Beccles. She had been frequently pregnant, but in every instance, except the last, her children had been born dead, in consequence of hæmorrhage either previous to, or during her labours. On the last occasion, I attended her, and ruptured the membranes immediately upon my arrival, and the child was born alive. In consequence of her poverty, she engaged a midwife to attend her, who, when she had been three hours in labour, assured her that she was doing remarkably well. In spite of these assurances, the poor woman felt that all was not right; complained of extreme faintness; told her husband she was confident she should die, if not immediately delivered, and begged him to lose no time in coming for me. Her fears proved but too correct; for almost before he could leave the house, she expired. Upon my arrival, an hour after her death, I made an examination *per vaginam*, and found little or no external hæmorrhage, but the os uteri completely dilated, the vertex presenting, and the head firmly wedged in the bones of the pelvis. The midwife could in no way account for the disastrous result, and said that everything appeared to her to be going on naturally; that the patient had no loss, but only complained of a great feeling of faintness.

On the following day, I made a *post-mortem* examination of the body, which was that of a fine, well-formed female, of thirty-five years of age. Upon opening the abdomen, the viscera were found healthy, but pale and anæmic. The placenta, which had been attached to the posterior surface of the uterus, was separated throughout a large extent from its attachment; and coagulated blood, to the amount of six pounds, with a proportionate quantity of serum, was effused between it and the uterus. The head of the fœtus was so firmly wedged in the pelvis, that I had some difficulty in withdrawing it; and this circumstance accounts for the non-escape of the hæmorrhage externally. Had the membranes been ruptured at the commencement of labour, this poor woman's life might possibly have been saved.

Beccles, Suffolk. January 10th, 1863.

BIBLIOGRAPHICAL NOTICES.

THE CLIMATE OF ITALY, IN RELATION TO PULMONARY CONSUMPTION; WITH REMARKS ON THE INFLUENCE OF FOREIGN CLIMATES UPON INVALIDS. By T. H. BURGESS, M.D., etc. London: 1852.

AMONG the desiderata of the present day, as far as the treatment of pulmonary affections is concerned, it must be admitted that the choice of a suitable climate for patients is one of very great importance. While hospitals have been established for the treatment of phthisis and its cognate maladies, and while a more perfect knowledge of physical diagnosis is daily on the increase, it is surprising how little attention has been paid to the choice of a suitable sojourn for the consumptive invalid. How many, alas! have been sent to linger out their days on the inhospitable shores of a foreign land, without regard to its suitability, either economically or medicinally; a warm climate being in some cases only regarded, and a constant sea-breeze in others; no care, no thought, is bestowed on the capabilities each may present as a residence for the sick and dying; and while some weary from their very flatness, others partake so much of the mountainous in their character and external features, as to render walking exercise impossible. Too little importance has been attached to the natural air of the sick; and medical men have yet to be informed that Great Britain itself possesses spots to which pulmonary invalids may resort with benefit.

"The purpose," says Dr. Burgess, "of this volume is to show, that to send consumptive patients to Italy or to the South of France, for the benefit of their health, is a mistake; and that the climate of the United Kingdom, as yet very partially and imperfectly understood, will afford to the English consumptive patient as great if not greater chances of recovery than that of either of the former countries, provided a proper locality be selected. If," he observes, "we contemplate the climate theory through the appropriate medium of the natural history of creation, we shall find that the argument is also in our favour. We may seek in vain along the entire range of organized existence for an example of diseased animals being benefited by a change from a warm to a cold, or from a cold to a warm country. There appears nothing in the book of nature so violently inconsistent. The fishes, which inhabit the waters of the British Islands, will not thrive in the Arctic seas, nor those of the latter in the oceans of the tropics. The birds of the forests of America generally die in this country, unless reared like hothouse plants; and so with the wild animals which live and flourish in the jungles of Asia and the scorching deserts of Africa. Man, although endowed with the faculty of enduring such unnatural transitions in a remarkable degree, nevertheless becomes sensible of their injurious results. The child of the European, although born in India, must be sent home to the climate of his ancestors, or to one closely resembling it, in order to escape incurable disease or premature death. The accident of birth does not constitute the title to any given climate. The natural climate of man is that in which not only he himself was born, but likewise his blood relations for several generations. This is his natural climate, as well in health as in disease. * * * *Change of air in his own climate*, or removal to one nearly approaching to it, is the natural indication, and will accomplish whatever good climate can effect in consumption." (p. 21.)

"If there be on earth a spectacle of misery utterly deplorable," says Whiteside, "it is that of consumptive patients, in an advanced stage of that fatal disease, wandering through Italy in search of health. Unacquainted with the language, the people, and the habits of the country, they endure an accumulation of vexations, increase the suffering they had hoped to mitigate, and hasten the progress of a malady they fondly expected climate would retard or avert. There can scarcely be a question, that a residence at home, in a favourable situation, would be preferable to a cheerless residence in many parts of Florence, Rome, or Naples; and yet a patient may be sent abroad at such a period of the year as to render it impossible to procure a healthful abode with a sunny aspect and some of the comforts he would require. The churchyards of the towns in Italy frequented by English invalids, teach a melancholy lesson on this subject." (Whiteside's "*Italy*.")

Dr. Burgess justly observes, that a revolution must take

place in the system of every consumptive invalid who goes to Italy, before he can become acclimated : and how many, he asks, must sink under the probationary process, from fatigue and exhaustion ? (p. 23.)

Every person interested in this important subject should peruse Dr. Burgess's work with attention. It is a candid and impartial inquiry into the merits of the various foreign climates hitherto recommended, showing clearly the impolicy, not to say unkindness, of sending dying patients abroad in search of an *ignis fatuus*. How often is the visit to a foreign climate postponed, from the instinctive love of home and all its endearments and fond associations, until change of air, the only real reason for undertaking it, has ceased to afford the shadow of a prospect of benefit ? Surely it is not unworthy the talents and industry of our provincial physicians, to endeavour each in his locality and sphere of observation, to inquire how far particular places in Great Britain fulfil the requirements of the consumptive invalid. It is a work of too great magnitude for any one person to attempt, in the present state of meteorological science ; all that we can hope to do, is, to collect observations and make deductions for the benefit of a future writer on the climate of England.

We will now accompany Dr. Burgess in his remarks upon the climate and peculiarities of the various localities usually recommended to consumptive patients. These we shall abridge, referring to the work itself for more full details.

MALTA has long been a favourite resort for phthisical patients ; yet it stands prominently forward in the army reports as yielding a high mortality from consumption. The vicissitudes of temperature are exceedingly trying. Mr. Lawson observes, that the difference between the temperatures of the warmest and coldest months is very considerable, being at Malta equal to and at Corfu even greater than at London. I have seen, says Dr. Burgess, the thermometer at Malta stand at 32° during the whole day, with a fresh breeze from the north ; and even in the latter end of March, after a fall of hail, distinct traces of it were found in Valetta five hours after it fell. The climate presents much the same characters at Gibraltar and the Ionian Islands. In sixteen years, at Gibraltar, easterly winds prevail annually 184 days ; westerly, 177. Snow and ice are rare, but during the winter the cold is keenly felt by those who have been long resident there. Mr. Spencer Wells, who has resided for several years in the hospital at Malta, corroborates the preceding remarks on the mortality from consumption. During the year 1842, 813 patients were under treatment in the Royal Naval Hospital at Malta. Of these 813 patients, 51 died within the year, of whom 17, more than 30 per cent. died of phthisis alone. The sirocco makes no distinction ; its effects are felt in the sick chamber of the rich as well as in the barrack-room of the soldier. While it is necessary to breathe to carry on life, the baneful effects of this Syrian blast must be more or less felt by all who live within its influence.

MADEIRA, says Dr. Burgess, is now perhaps the most frequented of all the foreign depôts for consumptive invalids ; yet Mr. White, a recent writer upon the subject, reluctantly admits, that, although the climate is so very equable, it is not altogether free from those sudden changes of climate which constitute every where the exciting causes of pulmonary disease. Mr. White tells us, that the currents and eddies caused by the vicinity of the mountains render either a vane or aerometer of very little use ; and that, from the position of the island and nature of its surface, the sky cannot be so clear or the atmosphere so calm as in Italy. Dr. Mason, indeed, complained bitterly of the cloudy sky, the high winds, and variability of the climate of Madeira. This worthy man and enlightened philosopher ultimately fell a victim to pulmonary consumption, and occupied himself, during a residence of nearly two years, with meteorological investigations which were afterwards given to the world in a work entitled "A Treatise on the Climate and Meteorology of Madeira," by the late J. A. Mason, M.D. Edited by James Sheridan Knowles. London : 1850."

"With respect to the hygrometric condition of Madeira," says Dr. Mason, "we must enter into some detail, particularly as no one has confirmed Dr. Heineken's observations, which appear to have been greatly overlooked by the medical profession, who persist in regarding the climate of Madeira as *essentially dry* ; whereas, if any confidence can be placed in the data obtained by Dr. Heineken and myself, it must be admitted to be saturated with humidity during the greater part of the year ; in which respect its advantages are little superior to the climate of London, while, as regards the action of humidity on the organization, it is infinitely inferior."

Dr. Mason supports this statement by a series of tables, from which it appears that, at the temperature of 50°, which is near the mean temperature of London, the air, if saturated, is capable of holding 100 parts of moisture in solution ; while, at the temperature of 68°, which is rather above the mean temperature of Funchal in Madeira, it will contain 200 parts, or nearly double what it is able to hold in London.

Madeira has its *sirocco* as well as Italy. The *sirocco*, however, is essentially different in its character ; it is hot, moist, and relaxing, whereas the *leste* of Madeira is essentially hot, dry, and stimulating, so that it soon exhausts those in health by its exciting qualities. It will be observed, that Mr. White, in the tables appended to his work, leaves out altogether the *leste* from his calculations of the mean monthly range of the thermometer.

It appears from Dr. Mason's tables, that the dryness observed during the *leste* is 22° 5', while the mean annual dryness is at the most 3°. In fact, his observations, taken in London, on his return home, go to prove that London is drier than Madeira during the months of June and July, when his observations were made. We must refer to Dr. Mason's work for other proofs of the dampness and variability of the climate, and content ourselves with quoting a few of his observations.

"The very frequent and remarkable variations in a given series of years incontestably prove that Madeira is no more to be relied on than any other place for certainty of fine weather ; and that it has equally its annual vicissitudes of temperature." "It is a rare occurrence to see it clear and free from detached clouds even for two or three hours together." "Within twenty-four hours after the *leste* has ceased, there is a copious fall of rain. Thus, we find, that the whole atmosphere, from being intensely dry, becomes surcharged with humidity."

Drs. Heineken and Gourlay both agree that no disease is more common among the natives of Madeira than pulmonary consumption, and Dr. Mason confirms the fact.

"From my own experience," he says, "I should be inclined to corroborate Dr. Gourlay's opinion, that consumption and scrofula are frequent in Madeira. From what has been stated by writers respecting the salubrity of Madeira, a person might be led to imagine that disease was scarcely known there ; but I am afraid, that, were the subject thoroughly investigated as it ought to be, few places would be found where the system is more liable to general disorder ; while, at the same time, I suspect that the average duration of life would turn out to be inferior to that of our own country." (Mason, *op. cit.*, p. 108.)

"The strangers' burial ground," says Mr. White, "has a melancholy appearance, and one lingers not unwillingly among its rich and fragrant flowers, while reading with sadness the simple tale of many who, in the bloom and joy of youth, having sought these shores for a relief to their sufferings through the influence of its balmy climate, and far removed from the endearing ties of friends and home, have only found that relief in the grave." (White, "*Madeira, its Climate and Scenery*," p. 29.)

If from Mr. White's tables we select the month of April, 1850, we find that the mean maximum of the thermometer in the day time was 73°, while the mean minimum at night was 60°. During the same month in Bath, the mean maximum was 56°, and the mean minimum 42° ; the mean for the whole ten years being 55.7 and 41.3. And the inquiry naturally arises, in what respect, except in that of its heat, does a climate excel whose mean monthly range of thirteen degrees is contrasted with a native climate of a mean range of fourteen degrees ? On the contrary, it appears to us that it possesses a disadvantage ; for every one who has been in a warm climate testifies to the extreme suffering produced

at night even by the loss of a few degrees of heat; while in this country a mean monthly variation in April of between 56° and 42° could produce no serious amount of mischief to one of its inhabitants. A loss of temperature in Madeira from 70° to 58° would, in a susceptible individual, produce greater distress and irritation than a fall in this country from 50° to 32°, even though it touched the freezing point; because in the warmer climate the skin is the more active agent, and in the colder, the kidneys. In the former, the functions of the cutaneous surface would be checked; whereas, in the latter, the ordinary temperature would not have risen sufficiently to call it into action.

It is thus that we ought to regard the temperature of a climate warmer than our own, in reference to its influence upon the health of the English invalid. Its suitability is not to be measured by the rise in its thermometer, but rather by the difference between the maximum and minimum degrees of heat in a given period of time. Where is the advantage of seeking abroad for a climate, whose variation of temperature during a month like April is only one degree less than that of a valley within three hours' distance of the metropolis of Great Britain?

"A low degree of temperature," says Dr. Burgess, "with a limited range, will give more permanent ease to persons having diseased lungs, than a climate of even the most genial warmth if subject to rapid and extensive alterations. No climate is perfect, not even the much-lauded Madeira—the *ultima Thule* of hectic invalids. Then, why expect that any foreign climate will work something like miraculous results by curing phthisis?" (p. 40.)

SOUTH OF FRANCE. "I am utterly at a loss," says Dr. Burgess, "to conceive how either Aix or Montpellier ever obtained a name for salubrity, as I really know of no place more unfavourable for patients suffering from organic disease of the lungs, than these far-famed and much-frequented dépôts of consumption. No atmosphere, however pure, if occasionally keen and piercing, can prove beneficial for pulmonary consumption; and this is the true character of the air of Montpellier. Provence is the land of dust, from the nature of the soil. Moreover, from the earliest period of its history, the South of France has been famous for its *mistral*, a violent and impetuous wind from the north-west. Leaving the dusty roads out of the question, the rapid and extensive variations of temperature, met with in Provence, are more than sufficient to make that part of the continent shunned by consumptive invalids. There is actually no part of France in which phthisis is so prevalent as in Montpellier and Marseilles; in the latter more especially, where the ravages of this disease are very great." (p. 43-47.)

NICE. The character of the climate of Nice is determined by the manner in which the town is almost surrounded and protected on every side, excepting the south, by that part of the Maritime Alps called Amènes. On the south, it is open to the Mediterranean and its capricious winds. The climate very closely resembles that of Provence; its modification depending upon the circumstance that it is screened from the north wind by the surrounding heights. Hence the cause of its luxuriant vegetation, which in some parts quite equals that of the tropics. The mountainous semicircle is unfortunately interrupted in some parts, which admits the winds most unfavourable for consumptive invalids. These winds sweep down the valleys with great impetuosity, so that vegetation as well as invalids soon show marked signs of their injurious effects.

As Bath may be said greatly to resemble Nice in its sheltered situation, we shall give the mean annual duration of its most frequent winds, contrasting them with the same winds at Nice.

NICE.	BATH.
125 South	35
80 East	37
52 North	15
50 West	67
30 South east	30
337	184

In Bath, the most frequent wind is the balmy south-west, which blows, on an average of ten years, on 101 days per annum.

Amongst the occasional winds that visit Nice, is the north-west, or *mistral*, which even the mountains cannot shut out. This wind is considered the most violent and impetuous of all the winds prevalent in the Nicene valley. Its duration is uncertain; it may continue from three to nine days at a time, or it may disappear in twenty-four hours. In winter, it blows as frequently as the north-east, the west, and the north, the prevailing winds of the season. In autumn, it blows more frequently than the two other autumnal winds, the north and east. Its great prevalence during the winter and autumn exercises a most injurious effect upon the climate, and shows the folly of consumptive invalids seeking at Nice the advantages of a mild temperature and calm atmosphere during those seasons.

"But one of the greatest vices characterizing the climate of Nice, if not the greatest, is the remarkable difference of temperature noticed between day and night, in the sun and in the shade. The land winds prevail during the night, the maritime during the day; the former cold and dry, the latter soft and humid. As soon as the sun rises in the horizon, the humidity commences to show itself in the atmosphere; whilst, on the contrary, when the diurnal winds cease and the sun sets, the above hygrometric condition of the air disappears." (p. 52.)

Mons. Roubaudi estimates the mean annual fall of rain at twenty-six inches; the greatest fall in his observation being forty-five. The annual mean for Bath is thirty-one; the greatest amount during the ten years ending 1851, occurring in 1848, when it reached forty-three; the lowest in 1844, when it was twenty-five.

"There is another circumstance connected with the change of wind which augments the evil. A violent struggle frequently occurs between the maritime and continental winds; the result is a violent atmospheric commotion, the effects of which are felt in every part of the valley. During the existence of this phenomenon, the temperature becomes as much disturbed as the elements themselves; capricious as the winds which are struggling for pre-eminence, it indicates, within a short space of time, heat and cold, with all the intermediate changes. The transition is frequently accompanied by a perfect hurricane, during which violent thunder storms take place, and the valleys are swept by impetuous gusts of wind." (p. 53.)

In reference to this part of our subject, it is worthy of mention, that in the ten years ending with 1851, only twenty-five gales of wind occurred in Bath, and that the whole of the year 1849 elapsed without any; the mean annual number of days in which the wind reached 3 in the scale being 2.3, and that the maximum number was 5 during the years 1843 and 1847.

"A third form of the transition state at Nice, still more injurious to invalids, is, as M. Carrière remarks, worthy of notice. During the alternations from cold to heat and from heat to cold, morning and evening, the humidity suspended in the air and precipitated to the earth produces the following effects: the dew which falls in the evening is often extremely chilly, so much so as to penetrate the clothing in the same manner as occurs in part of the Italian coast. The hoar frost, which covers the earth in the early part of winter, continues after sunrise, producing a hazy state of the atmosphere, and impregnating the soil with moisture. The mornings and evenings are often treacherous, even when the climate seems in its most favourable condition. Nor is its climate so dry as it is described; the land winds which prevail during the night are no doubt dry, but then the maritime winds of the day are humid. M. Carrière cannot understand why the English prefer Nice to other parts of the continent of a milder and more favoured climate, unless it be from the circumstance of the English disease (pulmonary consumption) being generally of a scrofulous nature. Nevertheless, he adds, the mortality annually amongst the English at Nice is sufficiently discouraging to deter other hectic invalids from going there." (pp. 53-4.)

M. Valeri says: "There are certain maladies against which the climate of Nice, far from being efficacious, as imagined, is mortal. Thus, every year's experience tends to prove that it hastens the end of persons attacked with pulmonary consumption." Dr. Meryon, who resided and practised at Nice, thus writes: "You know how treacherous the climate is, alluring you out of doors with a brilliant sun, and then attacking you with a cold, piercing wind,

that neither cloth nor flannel can keep out. Had I leisure, I could collect facts to prove that there are more natives (not strangers, but inhabitants born in the place) who die of consumption in Nice, than in any town in England of the same amount of population. The bills of mortality give one-seventh of the deaths from phthisis." Dr. Burgess concludes his chapter with the remark: "But enough has been shown, I think, respecting that climate, to demonstrate that one more favourable for consumptive patients might easily be found within the British Isles."

It will be seen from the few meteorological facts in relation to Bath which we have quoted, how far superior its situation is to that of Nice; that it is freer from sudden changes of temperature, more equable in its climate; that both possess an equable amount of rain, or nearly so; that in the one the moisture is accompanied with heat, and in the other with a coolness highly grateful to the feelings without being cold; for, as Dr. Burgess observes, a patient with an ulcer in his lung does not want an atmospheric poultice of heat and moisture to promote suppuration, for it is not heat but an *equability of temperature*, even if it is of a low range, that is needed by the class of invalids referred to; and wherever an approximation to that quality can be found, there should the consumptive reside.

We must leave Dr. Burgess's interesting and highly favourable remarks upon the climate of SWITZERLAND to the readers of his work, and proceed with him in his review of the climates of Italy; endeavouring to show that even in that sunny land there are but few if any places, which can be confidently recommended as a winter residence for the consumptive invalid.

MILAN, he says, though not generally recommended, is much frequented by this class of patients, on their way to the south. From lying upon a plain, it is but indifferently sheltered from the various winds. The south has to cross the Apennines; the west and south-west are modified in their character by the line of the Alps; and the upper valleys of this range admit freely the north and north-east winds into the plain in which Milan is situated. On the side towards the Adriatic, from the north to the south-east, the coast is altogether exposed, which enables the various winds to sweep the plain without interruption. The thermal changes thus produced are explained by M. Carrière in the following manner: "The sea, and the open country corresponding with it in the southern region of the Peninsula, admit of the free passage of the temperate and humid winds, which during their transit sink in point of temperature, but gain in that of humidity." Thus, the west winds cool the air in place of softening it, and condense the vapour. They cause a fall of rain without rendering the atmosphere mild. The north winds, colder, more rapid, and more frequent, are those which establish fine weather. The south winds do not possess the same temperature or the same hygrometric conditions, which are their characteristic conditions along the Mediterranean coast. The climate is decidedly cold; the mean number of days on which snow fell during a period of sixty-eight years was nearly eighteen. The maximum was twenty-one between 1820 and 1830. The rain falls abundantly; the mean is, however, but 62; the maximum, 81.

It is only necessary to walk through the streets of Milan, to see the morbid effects upon the countenances of the people produced by the hygrometric condition of the atmosphere, and the sudden transitions from humidity to dryness and cold. It is hence very evident, that consumptive persons can derive no benefit from the climate, but that they may sustain a great amount of mischief.

CENTRAL LOMBARDY. The entire plain of Lombardy, says M. Carrière, is irrigated so profusely, that, with the exception of Holland, it has not in this respect an analogue in Europe. A number of rivers and lakes, a network of canals, and finally the artificial marshes produced for the cultivation of rice, occupy the whole territory. When the waters retreat, the saturated soil and mud become *foci* of miasma, which would be in a still higher degree dangerous but for the care bestowed upon the cultivation of the soil.

Dr. Burgess is clearly of opinion that a locality equally injurious to patients suffering from consumption could not be found in any part of the United Kingdom or central Europe.

Dr. Webster thus describes the climate of Pavia in a letter to Dr. Burgess:

"For many weeks during winter, the fogs are so dense, that the sun is scarcely visible. For months real sunshine was unknown. Mantua is not better as regards climate, nor is Verona an exception."

VENICE. Dr. Burgess speaks more favourably of this city than of any other in Italy, for its mildness and equability of temperature. He devotes an exceedingly interesting chapter to its examination, quoting largely from the observations of previous inquirers. So far, he observes, as consumption is concerned, the alleged sanative effects of its climate are purely imaginary, as shown by the prevalence of phthisis amongst the inhabitants.

GENOA. Of this city Dr. Burgess speaks unfavourably; for he justly says that, when Cevasco, prepossessed in favour both of the city and its climate, admits that pneumonia, hæmoptysis, catarrh, and consumption, are amongst the most frequent diseases, it becomes pretty evident that Genoa cannot prove a very favourable halting-place for phthisical patients, at whatever stage their complaints may have arrived.

FLORENCE. In no part of England could a climate be found more unfavourable for consumptive invalids than that of Florence, a town built in a deep ravine, almost surrounded by the Apennines, and intersected by a squalid river. During winter, intense cold sometimes prevails in Florence, more so than in England. The surrounding hills are frequently covered with snow, and a sharp, cutting wind from the Apennines often blows like the blasts of Siberia.

PISA. Dr. Burgess devotes an entire chapter to this city, which he describes as the great central depot for foreign consumptive invalids throughout Italy. It is impossible to analyze his description without doing him injustice. He says, "you cannot walk through its streets, without mourning over the traditionary delusion which has enticed so many natives of England to seek a renewed lease of life in a foreign country, to find only an Italian grave." M. Carrière, who, as Dr. Burgess well observes, rarely advances anything against the Italian climate in relation to phthisis, that he can possibly avoid, admits the climate of Pisa to be by no means so favourable for consumptive invalids as rumour and tradition would lead foreigners to suppose.

ROME. We would strongly advise a perusal of Dr. Burgess's remarks upon the climate of the Eternal City to every person who contemplates a sojourn in it during the winter. He says: "I could hardly recommend those who suffer from affections of the chest, to pass a winter in Rome, as I fear they would too often suffer from the inconveniences of a cold latitude, without being able to meet with suitable preservatives against cold and damp." "I believe," says he, "that the climate of Rome is not adapted for pulmonary consumption in any form whatever;" and we firmly believe that no one, after reading Dr. Burgess's remarks upon its coldness, damp, and malaria, can possibly differ from him in his unfavourable opinion.

NAPLES. Dr. Burgess concludes his work with the following observations:

"The climate of Naples is the most dangerous throughout Italy to persons suffering from diseases of the respiratory organs. From the preceding summary of the characters manifested by the Italian climates, it will be seen, that, however useful they may be in other complaints, one more likely to act beneficially in pulmonary consumption might easily be found within the United Kingdom."

In concluding our remarks upon Dr. Burgess's valuable work, we would urge upon our fellow-members the importance of the study of medical topography. It forms, indeed, one of the prominent objects for which the Association was founded; and yet, how little has been done during its twenty-one years' career. Those only who have had the

courage to pursue the topography of a district can tell the difficulties which environ the task. The absence of correct observations extended over a period of years, the difficulty of access to both private and official sources of information, and the unremitting attention required, render it almost too great a task for one individual; but why not associate together the members of our various branches in the different investigations required in each locality, so that by a division of labour a work might be compiled on the climate of England, which, while it would be honourable to British medicine, would at the same time confer honour upon the Association? There is not one branch of physical science upon which we as a nation are so ignorant as upon the climate, meteorology, and natural history of our own country; and we think that great good would result from the formation, at the next annual meeting, of a topographical committee, whose duty it should be to compile a series of forms suitable to each portion of the inquiry, which might be circulated with advantage; so that each associate might contribute something to the general stock.

A few words more upon the climate of our own country, and we have done. There are many spots, more particularly in the West of England and South of Ireland, which possess great advantages as residences for pulmonic invalids, but whose merits rest on hearsay rather than on scientific testimony. Dr. Burgess largely quotes scientific data in reference to the foreign climates discussed, and rebuts much of their vaunted celebrity. He is of opinion that many places in the British Isles might be found equally suitable; and we agree with him; but their advantages must bear the test of diligent inquiry and patient investigation, before we can hope to remove the long-established error, that nothing but a removal to Italy, Malta, or Madeira, can avail for the cure of the aristocratic sufferer from pulmonary consumption.

We trust that the wide circulation of Dr. Burgess's volume may tend to dissipate the prevailing mischievous delusions as to foreign climates.

ANIMAL ELECTRICITY; being an Abstract of the Discoveries of EMIL DU BOIS REYMOND, Member of the Academy of Sciences at Berlin, etc. Edited by H. BENGE JONES, M.D. Cantab., F.R.S., etc., Physician to St. George's Hospital. Small 8vo., pp. 214. London: 1852.

To the cultivator of science, and to the physician engaged in active practice, this abstract of the *Untersuchungen über thierische Elektrizität* of Dr. Du Bois-Reymond will be most acceptable; but especially to the latter, as presenting to him, in a condensed form, a lucid sketch of the progress of this branch of physiology from the time of its founder, Galvani, to the present day, and a succinct account, not of the labours merely, but also of the errors and misconceptions, of those who are now gratefully recognized as masters in the brilliant path of electrical philosophy.

The introductory chapter runs rapidly and pleasantly over the course of discovery from the 20th of September, 1786, when Galvani made his eventful observation upon the muscular contraction of animals, to the period of Oersted's grand discovery in 1820, to which most, if not all, of the varied and marvellous economical applications of electricity may be directly traced; a discovery which has furnished us with one of the many striking proofs we possess, of the advantageous results springing from the sedulous cultivation of pure science to the physical well-being of man, and putting to open shame the utilitarian, who with his limited vision would recognize Science so far only as she can immediately minister to his wants and gratifications, sneering at theory, and prosing about practice; forgetful, or rather ignorant, all the while, that a single observation of the student of nature has often—as in this instance of Oersted's remark on the deflection of the needle by a galvanic current—been the foundation and starting-point of a series of discoveries and applications which have exercised an irresistible and marvellous influence on the world's progress.

The galvanometers ordinarily made use of not being sufficiently delicate for the author's purpose, he constructed two of different degrees of sensitiveness, but both exceeding, in this particular, those previously employed by electricians. For his description of these instruments we must refer the reader to the

work itself, instancing only the length of the wire used in constructing the more delicate of the two: it is of copper, measuring 5,584 yards, or 3.17 English miles long, about .0055 inch in diameter, and forming 24,160 coils around the frame. Such an instrument as this necessarily requires the greatest care in guarding it, when in use, from extrinsic influences, ample directions for which are given. The next step is the mode of using the galvanometer to detect electric currents in the organs of animals: this is carefully described. Platinum plates, perfectly clean and homogeneous, are made to communicate with each end of the galvanometer, and plunged into cylindrical vessels of glass or porcelain filled with a saturated solution of common salt; the circuit being completed by connecting the vessels with a syphon-tube, also filled with the saline solution, and closed at either end with bladder. But it is only in the rougher experiments that the animal structures can be dipped directly into the solution, because it would so act on these structures as to seriously vitiate the observations. To meet this difficulty, Dr. Du Bois-Reymond has modified his apparatus by employing cushions of blotting-paper, so as to prevent the possibility of this injurious action, in a manner which is thus described:

"These cushions are made of many layers of fine blotting-paper, swelled with the saturated solution of salt; they rest against the edge of the vessel containing the solution, not only on the edge of the glass, but inside, upon little blocks of wood fixed to the side of the glass. These paper cushions may be called the *conducting cushions*. When these cushions are used, the circuit, instead of being closed by means of the connecting tube, is closed by means of a *connecting cushion*, which is also wet with the saturated solution. To bring the animal part into the electric circuit, the connecting cushion must be removed. Still the animal part must not be laid directly on the conducting cushion, lest such a corroding action should take place as would cause contraction of the muscles, and most rapidly destroy the vital properties of the nerves. To avoid this immediate contact, Du Bois-Reymond places a guard of pig's bladder, perfectly moistened with white of egg, on that part of the conducting cushion on which the animal part is to be laid. Thus on the cushion the guard is laid, and on the guard the animal part."

This is sufficient to show both the care of the experimenter in preventing sources of error, as well as the patient and dexterous manipulation requisite in pursuing observations demanding such great delicacy.

With this apparatus, and the galvanometer already noticed, the author has industriously investigated the phenomena attendant on the contraction of the prepared limbs of the frog, proving the frog-current and the various cognate phenomena to be dependent on one general law governing the muscular current of all animals, so far as these have been experimented on; and the elimination of this one simple general law from a series of observations of the most careful and guarded kind, is the most valuable of all the results which Du Bois-Reymond has attained. It is difficult, without the help of the plates and diagrams of the text, to describe these striking experiments; but we must make the endeavour. Let, then, the circuit, including of course the galvanometer, be complete, excepting the space between the two cushions of blotting-paper; now if a muscle, such as the *adductor magnus*, be placed so that one of its tendinous extremities shall be in contact with each cushion, no current is produced, and no deflection, or the very slightest, is observable; but bend one end of the muscle up, so that whilst the *tendinous extremity* presses against one cushion, the *red flesh* is in contact with the other, a considerable deflection ensues, showing the existence of a current in the muscle from the tendinous extremity to the place of contact of the fleshy part of the muscle on the other cushion. Now if a transverse artificial section of the muscle be made, and this section rest against one cushion, whilst the natural longitudinal section is in contact with the other, powerful action is at once excited, and the needle remains fixed at the checks of the galvanometer, the current in the muscle invariably being from the transverse to the longitudinal section; "hence it may be concluded that *every point in the natural or artificial longitudinal section of a muscle is positive in relation to the transverse section, whether natural or artificial*." It appears that differences exist between the points of the transverse section, those points lying near the centre of the section being negative in respect to those at the exterior; the current, however, being far weaker than that obtained between the transverse and the longitudinal section, which latter, like the transverse section, is not homogeneous at all its points.

The chapter succeeding the descriptions of these expe-

riments, and the announcement of this important law, is sadly out of place in an abstract; it would have been quite sufficient if the Editor had assigned the palm of discovery to his author, without dragging in the particulars of the disputes with Matteucci, a defect observable in other parts of the book. The next point of importance treated of is the influence of contraction on the muscular current, which the author is convinced is sensibly diminished during a powerful and lasting act of contraction. Various subjects in connexion with the muscular current are then brought under the reader's notice, and the treatise closes with an examination of the much vexed question of the identity of the nervous power with electricity. In this investigation, Dr. Du Bois-Reymond has been equally happy as in the previous researches; showing, not only from experiments on the ischiatic nerve of a frog and of a rabbit, that a current exists in the nerves, but that it is evidenced in the same direction as in the muscles, the length and thickness of the nerves increasing the electro-motive force, just in the same way as they act with the muscles. Enough has been said to show the value of these researches, and to induce such of our readers as may be interested in this subject to peruse this abstract of the present state of knowledge on a very obscure and difficult subject, for which, in this compendious and portable form, we have to thank Dr. Bence Jones.

THE MODERN PRACTICE OF PHYSIC: exhibiting the Symptoms, Causes, Prognostics, Morbid Appearances, and Treatment of the Diseases of all Climates. By ROBERT THOMAS, M.D. Eleventh edition: thoroughly revised, corrected, and, to a considerable extent, re-written, by (the late) ALGERNON FRAMPTON, M.D. Cantab., Physician to the London Hospital. Two volumes, pp. 755 & 564. London: 1853.

No digest of practical medicine ever enjoyed a greater popularity than the work of Dr. THOMAS—a circumstance which may be in a great measure attributed to its excellent plan and abundance of useful formulæ for prescriptions. The young practitioner finds the value of good formulæ, and he naturally prefers a work which, along with general precepts, enters into details regarding the proper doses and most convenient combinations of medicines: and as every one, in starting in practice, must have at least one text-book of medicine, it is not difficult to account for the rapid sale of so many editions of the work now before us. The merits of the treatise, however, are not limited to those at which we have hinted; for we find it as comprehensive, as clear, and as satisfactory a book of instruction for students and practitioners as any work of a similar description with which we are acquainted.

At the period of Dr. FRAMPTON'S death, in December 1851, the first volume of this edition was printed off, or in the hands of the printer; and a considerable portion of the second volume was ready for the press. The subjects which Dr. FRAMPTON had not finally prepared, were entrusted to several accomplished friends of the deceased, who have ably and faithfully carried out his plan.

PHYSICIAN'S, SURGEON'S, AND GENERAL PRACTITIONER'S VISITING LIST, DIARY, ALMANACK, and Book of Engagements for 1853. London: 1853.

We have used Mr. SMITH'S Visiting List every day for the last three years; and we can cordially recommend it as by far the best thing of the kind which has yet been contrived. In its present improved form, we really have no fault to find with it. The various sizes render it equally suitable to large and small practices.

PERISCOPIC REVIEW.

MIDWIFERY AND DISEASES OF WOMEN.

ALBUMINURIA IN PREGNANT FEMALES: ITS SYMPTOMS, CAUSES, RESULTS, AND TREATMENT.

THE occurrence of albuminuria during pregnancy has in late years engaged much attention, both in this country and on the continent. We therefore propose to give a digest of some of the principal essays which have recently appeared on the subject. The titles of the works from which we have gleaned our information are subjoined according to the chronological order of their publication.

1. LEVER, John C. W., M.D. Cases of Puerperal Convulsions, with Remarks. *Guy's Hospital Reports*, 2nd series, vol. 1, p. 405.

2. DEVILLIERS and REGNAULT, MM. Recherches sur les Hydrophisies chez les Femmes Enceintes. *Archives Génér. de Médecine*, 1848.

3. CORMACK, John Rose, M.D. Dependence of Puerperal Convulsions on Toxæmia; Explanation of the more common occurrence of Renal Convulsions in Primiparæ. *London Journal of Medicine*, June, 1849.

4. BLot, M. Hippolyte. De l'Albuminurie coïncidant avec l'Eclampsie. *L'Union Médicale*, Oct. 10, 1850.

5. LITZMANN, Professor (of Kiel). On Bright's Disease,* and Convulsions before, during, and after Labour. *Deutsche Klinik*, May, June, and July, 1852.

6. SIMPSON, Professor J. Y. Albuminuria in Puerperal and Infantile Convulsions, etc. *Monthly Journal of Medical Science*, October, 1852.

7. COSTILHES, Dr. Case of Convulsions occurring seven hours after Delivery. *Gazette Médicale*, October 9, 1852.

Albuminuria in pregnant and parturient women has generally been noticed in reference to convulsions, for the most part occurring in primiparæ. The investigations of Dr. Blot and Professor Litzmann were made with a view to determine its frequency during pregnancy.

Dr. Blot found it present in 41 cases out of 205, primiparæ being chiefly affected.

Dr. Litzmann has examined the urine of 131 females: 79 during pregnancy, 80 during labour, and 80 after delivery. He found albumen present in 37, and absent in 95. Of the 95, whose urine contained no albumen, 53 were primiparæ, and 42 multiparæ. Of the 37 who had albuminuria, 26 were primiparæ, and 11 multiparæ; two were pregnant with twins. Of the 37, the urine of 16 was found to be albuminous during pregnancy: in 10 of these the albumen continued some days after labour: in 4 it disappeared before confinement. In 4 women in whom albuminuria was found after labour, it had probably existed during pregnancy, although the urine had not been examined.

Dr. Litzmann points out that albumen may be present in the urine from vesical catarrh. This can sometimes, but not always, be referred to pressure on the neck of the bladder during labour. It is distinguished from renal albuminuria by the absence of fibrinous casts of the uriniferous tubes, which he found in most of the cases in which the albuminuria had reached a high degree, towards the end of pregnancy.

Symptoms. Nothing certain is known as to the time when the renal affection commences. It usually begins insidiously, and increases slowly: its commencement is, perhaps, rarely denoted by any remarkable symptoms. The only constant sign by which renal disorder during pregnancy is denoted, is the state of the urine. Dr. Litzmann has not observed albumen before the eighth month; but Devilliers and Regnault found it in the sixth. The quantity of albumen is usually very conspicuous, and increases as the time of delivery approaches. In proportion to the intensity and duration of the morbid process in the kidneys, are found casts of the uriniferous tubes in greater or less quantity, the epithelium lining them being sometimes normal, sometimes in a state of fatty degeneration. In the milder cases, the tube-casts are often found just at delivery, or soon after. Careful examination will probably in all cases detect a not inconsiderable diminution of the quantity of urine. Pain in the loins is not diagnostic; but Dr. Litzmann has found tenderness on pressure over the kidneys in nearly all cases—this being absent in pregnant females whose kidneys are unaffected. Dropsy, in many cases, is entirely absent; but more frequently it is considerable. It is favoured by an impoverished state of the blood, and by local impediment to the circulation. The true succession and influence of these causes cannot always be determined. Oedema usually commences in the last four months of pregnancy, mostly in the lower limbs, ascending gradually to the knees, or even higher. Sometimes it is limited to these parts; but oftener extends to the abdomen, and more rarely, as in a case recorded by Dr. Litzmann, to the *labia majora*. A most unequivocal sign of renal disease is oedema of the upper part of the body, the hands, arms, and face; but Dr. Litzmann has several times seen this

* The term "Bright's disease" is very frequently used by continental writers in a wider sense than by the English. They appear to ascribe to it all conditions of the kidney in which albumen is found in the urine, from simple congestion up to advanced structural disease.

when there has been no albumen in the urine, although there have sometimes been even headache and transient disturbance of vision. The oedema in these parts generally appears towards the end of pregnancy: sometimes only after the patient has been some time in bed, disappearing when she arises. In the lower limbs the skin is usually pale and cool, and the finger leaves a depression; in the face the skin is generally warmer than usual, the cheeks red, the eyelids injected, and the skin elastic. The oedema sometimes appears and disappears irregularly; sometimes it increases up to delivery, and then disappears without leaving any trace of renal disease; and that even when the albumen in the urine has gone on increasing.

Mechanical Origin of Albuminuria during Pregnancy. In his paper, of which we have given the title, Dr. Cormack ascribes the frequency of albuminuria (and of convulsions) in primiparae to the greater tenseness and rigidity of the abdominal parietes; the gravid uterus being therefore more apt, by its inward pressure, to produce renal congestion. The tight girdling of the abdomen, often practised by those who become pregnant out of wedlock, probably acts powerfully in producing the same effect; and may, as Dr. Cormack suggests, explain to some extent, why unmarried primiparae are more liable than married primiparae to puerperal convulsions. When convulsions occur in subsequent pregnancies, Dr. Cormack would, believing them to be chiefly toxæmic, ascribe them either to imperfect distension of the abdominal wall, from incomplete gestation on former occasions, to excessive muscular development, to renal disease, or to excessive volume of the uterine tumour, including plural pregnancies. He says that "the gravid uterus, or other tumour, pressing on the renal veins, or in any way seriously impeding the return of blood from the kidneys, must induce more or less inability on their part to perform their emunctory office."

Dr. Litzmann adopts a similar explanation of the occurrence of albuminuria in pregnancy. "In favour of the mechanical explanation of the occurrence of albuminuria in pregnant women, may be adduced its predominance in primiparae—a fact recognised by all observers. The tight and unyielding abdominal wall most naturally causes the uterus to press more powerfully on the structures behind and above it." Two of his patients who had albuminous urine, were pregnant with twins: in others there was a large quantity of liquor amnii, or a large child, or both. In one case, there were periodical spasmodic contractions of the abdominal muscles, especially the recti, pressing the uterus against the spine; in four cases the pelvis was narrow.

Dr. Murphy, in his *Lectures on the Principles and Practice of Midwifery*, objects to Dr. Cormack's explanation—"First, that the pressure exercised by the gravid uterus is of too gradual a nature to cause any great amount of congestion, and the circulation has sufficient time to find new channels for itself, and relieve the emulgent veins. Secondly, the period of the attack would be more frequently at the last month of gestation, or the commencement of labour, than we know it to be." (pp. 379-80.) With deference to so high an authority in matters obstetrical as Dr. Murphy, we do not feel convinced by his arguments. In the first place, the number of cases in which albuminuria has been detected during pregnancy, proves that there must be some impediment to the renal circulation; and we must probably take into consideration not only the unyielding abdominal walls, but also the hindrance to the compensatory circulation through the mammary and epigastric veins, produced by tight stays and other articles of female apparel. Secondly, we find Dr. Murphy himself stating (p. 368)—and this is in accordance with general experience—that the most frequent period of puerperal convulsions is "on the approach, or during the progress, of labour."

Relation of Albuminuria during Pregnancy to Renal Disease. In his paper already quoted, Dr. Cormack, after referring to the frequent abrupt occurrence of convulsions and death in the course of Bright's disease, writes as follows:—"It is quite plain that a pregnant woman, labouring under Bright's disease, even in an early stage, must in this way run a tenfold risk of convulsions. If she have an ovarian tumour, or any other mechanical predisposing cause to renal congestion, besides the gravid uterus, her risk will also be great. In her, too, delivery will hardly bring exemption from the danger of toxæmia from renal non-elimination. Dr. Simpson said, in 1843, that he had been accustomed to teach in his lectures that 'patients attacked with puerperal convulsions had almost always albuminous urine, and hence probably granular renal disease.' This remark of Dr. Simpson's, with deference to so high an authority, I must dissent from. Under proper management, the majority of those

affected with puerperal convulsions quickly and perfectly recover, and in future pregnancies are very rarely affected. Undoubtedly women who have structural disease of the kidneys, are pre-eminently liable to renal congestion, and consequent toxæmia; but then oedema, albuminuria, and convulsions, are not, in the puerperal woman, pathognomonic of any organic disease of the kidney, though in the *fatal* cases we may expect them to be often present. In three fatal cases of puerperal convulsions, Dr. Simpson found, on dissection, a great amount of renal disorganisation. Albumen was looked for in the urine during life, but was not found."

In the *Monthly Journal of Medical Science*, for October 1852, Dr. Simpson expresses a greatly modified, and we think more correct opinion, on the subject. He says:—"Usually, the state of albuminuria which leads to puerperal convulsions is a transitory morbid condition, from which the patient recovers within the course of a few days after delivery; and the affection does not depend on, or result in, any actual change of structure in the kidney."

Professor Litzmann, in the *Deutsche Klinik* for July 17th, says: "The anatomical changes which are found in the kidneys of those pregnant females who have died with Bright's disease, denote, for the most part, only the earlier stages. Even Devilliers and Regnault have not felt themselves justified in assuming the existence of albuminous nephritis in all cases. They generally found the kidneys enlarged in volume; the capsule was rarely adherent. In two cases only was there an undoubted granular appearance in the organ. In three cases, inconsiderable enlargement of the organ was accompanied by slight hypertrophy and paleness of the cortical layer. In two other cases, the cortical substance was highly coloured, while the pyramidal portion was in some parts injected, in others pale. In one case, the deep red of the hypertrophied left kidney contrasted strongly with the paleness of the right; and in another, the hyperæmia and swelling were limited to the cortical substance. Cazeaux and Rayer have observed generally the second, sometimes the third, and in one case the fourth form of the albuminous nephritis of the latter author. In all the cases examined by Frerichs, he found fibrinous casts in the urinary passages and in the urine. In one of the cases described by me, the changes in the kidneys had proceeded unusually far; and this might have been inferred from the severity of the symptoms during life, and the presence of tube-casts in the urine."

Dr. Litzmann believes that there is no case in which renal disease, continuing after delivery, has been proved to have commenced during pregnancy; although women have died of chronic disease of the kidneys some time after labour. It is, perhaps, probable that in certain rare cases the renal affection during pregnancy becomes so intense and extensive, that the impeded circulation is not restored after delivery; on the other hand, there is no doubt that women who have once suffered from renal congestion when pregnant, are liable to its return when again in a similar condition. It by no means follows that the disease should amount to uræmia, for this is not always present even in primiparae.

There is, we think, ample evidence to prove that albuminuria during pregnancy is far from being an indication of *permanent structural renal disease*: but if disease of the kidney already exist, the danger to the patient will be much increased, while delivery will not cause the albumen to disappear from the urine. Dr. Murphy inclines to the belief that "the albuminous state of the urine, taken in connexion with the oedematous condition of the surface, would indicate the existence of renal disease in many instances." Temporary congestion is no doubt disease, in the strict sense of the term; but if Dr. Murphy means permanent structural disease, we think that the statistics of Blot and Litzmann, as to the frequency of albuminuria during pregnancy, as well as the common fact of recovery from it, militate against his opinion.

Prognosis. The prognosis in cases of albuminuria during pregnancy, is, according to Dr. Litzmann, more favourable than when the affection occurs under other circumstances. The danger principally arises from poisoning of the blood with urea: but not unfrequently the renal affection runs its course without any threatening symptoms, so that it might be overlooked, unless the urine were examined chemically and microscopically. The albumen commonly disappears after delivery: often within forty-eight hours. During labour, the secretion of urine commonly increases, as does also the number of fibrinous tube-casts; after delivery, these increase for a time, but soon disappear, even while albumen is still present. The oedema disappears, as the quantity of urine increases.

Relation of Albuminuria to Puerperal Convulsions. The frequent occurrence of albuminuria in connexion with puerperal convulsions, has been fully demonstrated by the observations of Drs. Simpson, Lever, and others. MM. Devilliers and Regnault declare that "chez toutes les femmes éclamptiques, on trouve de l'albumine dans les urines. Cette règle ne nous a pas encore paru souffrir d'exceptions". Reasoning on these and similar statements, Dr. Cormack says: "If it be a fact, then, that albuminous urine and anasarca—the characteristic signs of congestive kidney—be so common in puerperal convulsions, as to be regarded, by the first and most recent authorities, as their constant concomitants, it may, I think, be very safely inferred that the renal congestion is the cause of the convulsions; or, to be more explicative and precise, that the convulsions are direct toxicological effects on the nervous centres, produced by poisonous substances which the unembarrassed kidney could throw off with the urine, but which the congested kidney cannot excrete." And he refers the greater frequency of convulsions in primiparæ to their greater liability to congestion of the kidney, from the mechanical causes already described.

Dr. Litzmann writes as follows: "The principal danger in Bright's disease occurring in pregnant females, arises from the uræmia, which is usually indicated by convulsions. Of the causal connexion between Bright's disease in pregnancy, and convulsions, no one, who will observe it, can remain in doubt; although I by no means deny that exceptional cases of eclampsia may arise from other causes. Lever has observed a case depending on inflammation of the meninges. The first authors who pointed out the occurrence of albuminuria in puerperal convulsions, as Lever, etc., recognised the analogy of the convulsions to the cerebral disturbances occurring in common cases of Bright's disease; and expressed their conviction that they were dependent on the noxious influence of blood poisoned with urea. But they, as well as Devilliers and Regnault, failed in discovering urea in the blood of convulsive patients.* Frerichs, from his observations on patients and experiments on animals, has asserted that the symptoms of uræmic intoxication in Bright's disease do not depend on the existence of urea, as such, in the blood, but on its transformation within the vessels into carbonate of ammonia, under the influence of a peculiar ferment. My observations on the convulsions of pregnant females entirely agree with this theory. In one of my cases, the presence of ammonia in the blood was not ascertained by conclusive evidence; but in three other cases there could be no doubt of its presence, as carefully repeated experiments always gave the same result. On the other hand, when there were no symptoms of uræmic intoxication, though albuminuria existed, the blood appeared free from this poisonous admixture. I have not found urea either in the blood, nor in the serum resulting from scarification of the oedematous parts. In only one case could I detect ammonia in the expired air. In one case just after delivery, the sweat on the forehead had an alkaline reaction".

Although puerperal convulsions are often connected with renal congestion, it by no means followed that they are an inevitable result. Devilliers and Regnault observed eleven cases of convulsions in twenty pregnant females who had albuminuria; Blot found them present in only seven cases out of forty-one. Dr. Litzmann found seven cases with uræmic symptoms, five of whom had convulsions, in thirteen cases described by him.

Other effects of Toxæmia from Renal Congestion during Pregnancy. Dr. Litzmann observes that certain other phenomena, principally connected with the nervous system, which have been usually considered as premonitory of convulsions, may be themselves the only effects of toxæmia; and that this probably occurs when the quantity of urea in the blood is but small. Headache is generally present when there is œdema of the face; and is then probably most frequently the result of simple congestion. The most marked symptoms of uræmia are disturbances of the senses, especially of vision. The patients complain of muscæ volitantes, or see objects coloured yellow or red; more frequently they see dark figures, or only see the half of objects; sometimes there seems to be a dark veil over objects; or the patients may be quite amaurotic. These symptoms are sometimes only momentary: in other cases, when they are more intense, they continue for hours, and days. In the amaurosis, the pupils are little or not at all dilated; but they obey sluggishly, or are unaffected by, the stimulus of light. Amaurosis usually appears before or during labour; but sometimes subsequently. Coma or convulsions are apt to follow it. It is probable that most of the cases of amblyopia and amaurosis,

which occur at the end of pregnancy, disappear after labour, and return in subsequent pregnancies, are to be referred to this head.

Noises in the ears, which authors have named among the forerunners of eclampsia, have never been observed by Dr. Litzmann.

Nausea, a sense of choking, and vomiting, are among the most constant symptoms. The vomiting is not always an indication of uræmia, but is sympathetic with renal irritation, or perhaps more frequently with congestion of the brain. Its connexion with uræmia must be decided by chemical examination of the vomited matters.

When uræmia is developed for the first time during labour, there is often a dulness of the intellect, a certain wildness or melancholy of the patient, and remarkable restlessness and impatience during the labour pains: there frequently are rigors, returning with each pain, (Hamilton, Mc Clintock and Hardy); the pulse is more frequently slow than accelerated.

Eclampsia rarely occurs without any premonitory symptoms: and when it does, it probably arises from a sudden impregnation of the blood with a large quantity of urea.

Dr. Costilhes (*Gazette Médicale*, October 9, 1852,) points out that long continued albuminuria, by impoverishing the blood, may give rise to hæmorrhage from the uterus or other parts of the body.

Treatment. Dr. Cormack writes as follows. "The prophylaxis of renal puerperal convulsions must evidently embrace an avoidance of too long continuance in the supine position; an easy corset, giving free play to the lungs, and not pressing back the womb; moderate exercise; regularity and sufficiency of the alvine evacuations; and a good state of the skin. Mental excitement must also be avoided, as it might, even with a moderately poisoned state of the blood, be the immediate cause of convulsions." In the treatment, he gives the following as the leading indications.

1. Remove pressure from the renal vessels, by interdicting the supine posture, and by unloading the bowels; and, when safe, by emptying the uterus.

2. Relieve congestion of kidneys by purging, by cupping in the loins, or by general bleeding.

3. Venesection, if apoplexy be threatened.

4. Calmatives to soothe the excited nervous system.

The first two of these measures have more especial reference to the condition of the kidneys; the last two to the cerebral symptoms.

Dr. Litzmann observes, that the renal congestion cannot be relieved before delivery: but that it may be mitigated, and more unfavourable symptoms averted, by timely measures, especially the removal of all causes which may assist in impeding the circulation through the abdominal vessels. It is thus important to obviate the constipation so common in pregnant women: and in one case, Dr. Litzmann has not only seen all the symptoms recede, but the albumen in the urine diminish. If the renal disease have set in suddenly, and is accompanied with much pain and tenderness, local bleeding is indicated. It is doubtful whether benefit would be derived from diuretics or astringents before labour: but on this point he has had no personal experience.

With regard to the blood-poisoning, when symptoms of an impoverished state of blood occur, a strengthening diet, with iron, cinchona, etc., are indicated.

In the unmistakable symptoms of cerebral congestion, which almost always accompany uræmia, local depletion and cold applications, timely applied, usually give quick relief, and the secretion of the dry skin may be rendered active by bathing with warm vinegar. Frerichs, acting on his theory of the conversion of urea into carbonate of ammonia within the blood, gives acids, especially the benzoic; and Litzmann has given the benzoic and citric acids, he believes sometimes with favourable results.

If convulsions occur, general bleeding is indicated in strong plethoric individuals. But if the renal disease have lasted some time, and hydræmia is present, this treatment is likely to injure; local depletion must then be employed and repeated as may be required. Large doses of acids must be given, cold wet cloths applied to the forehead, and the extremities bathed with warm vinegar. It is often useful to empty the intestinal canal: but Dr. Litzmann cautions his readers against being led to give large doses of drastics and mercurials; and he acknowledges himself not blameless in this respect, with regard to a case related by him. If all these remedies fail, labour must be induced: and after birth, the state of the kidneys must be carefully watched. Mild diuretics are now likely to be useful, but if albumen continue to be present in the urine, the case is to be regarded as one of chronic Bright's disease.

* In Guy's Hospital Reports, 1849, vol. vi, chap. 12, Dr. Lever appears to have found urea in the blood of an eclamptic female.

MR. I. B. BROWN'S OPERATION FOR THE REMEDY OF RUPTURED PERINEUM.

The principle on which Mr. Brown's operation is founded, and the success which appears to have attended it, entitle it to be well received by obstetric surgeons. We quote the following account from the published proceedings of a recent meeting of the Medical Society of London:—

"The patient should be placed in the position for lithotomy; the knees well bent back upon the abdomen by an assistant to each leg; the parts around should be carefully cleansed of hair, by shaving; then each assistant should hold the sides of the vagina and perineum, so as to insure sufficient tension for the operator to make a clean incision with a scalpel down into the vagina, about three-quarters of an inch on each side, removing carefully and thoroughly the mucous membrane. Both sides being done, there will still remain a space covered with mucous membrane between those two sides, embracing the edges of the rectum where the sphincter is lost; this must also be carefully denuded,—very carefully, because, if there remain the slightest portion of mucous membrane around, or even near to the rectum, then most certainly there will be a recto-vaginal fistula after the restoration of the perineum. Some operators, especially on the Continent, have removed the mucous membrane by the scissors, but Mr. Brown stated that that is a long and insecure method, and that the knife will be found quicker and better. As soon as this stage of the operation is completed, the sphincter should be divided; then the legs should be relaxed, and the thighs brought more in apposition, so as to allow the sides of the vagina to be grasped with the forefinger and thumb of the left hand, while with the right the sutures are passed deeply through each side, as deep as the denuded surfaces of the vagina; the first backwards, as near the rectum as possible without piercing it; the second and third in the same way: the length of the incision should correspond with the scar of the ruptured surfaces; the sutures are double, so as to allow the quill, or, more properly, the piece of elastic bougie, to pass through each suture on both sides. Mr. Brown prefers twine to silk for the sutures, because it is less irritating, and produces, therefore, less suppuration. The forefinger of the right hand should then be passed into the vagina, and the forefinger of the left hand into the rectum, so as to ascertain that there is no opening. After securing the three sutures firmly to the bougies, it is advisable to bring the edges of the incised surfaces together by three or four interrupted sutures; and if this be carefully done, union of the skin will quickly take place, and materially facilitate the adhesion of the deeper surfaces. It has been asserted by many accoucheurs of the highest eminence, that, if the operation be performed immediately after the accident, no good will result, as the lochia will flow in between the surfaces, and thus prevent adhesion and union. This was the opinion entertained by Trogher, who states, in the seventh volume of the *Vienna Journal*, for 1851, among other conclusions drawn from sixteen cases, 'that a favourable issue could only be expected where there was a very moderate flow of lochia': also, 'that it was impossible to protect the margins of the wound from the injurious influence of the lochia'. Mr. Brown believed that these objections are removed by dividing the sphincter; if this is not done, the inner edges of the wound will be gradually drawn apart by the action of that muscle, and the lochia will penetrate; whereas, after division, those edges are perfectly passive, and are steadily kept together by the sutures. Mr. Brown stated, that, for the convenience of discussion, and in order to make his paper more intelligible, he affirmed four distinct propositions, which he hoped to demonstrate by the cases which followed:—Firstly, that the oldest and worst forms of ruptured perineum can be cured by the operation he had already described. Secondly, that the worst forms can be cured by operating immediately after the lesion. Thirdly, that the new perineum is not torn by, or prejudicial to, subsequent parturition. Fourthly, that those forms of rupture where the sphincter is not torn through, should be cured, to prevent prolapsus uteri, etc."



In the discussion which followed the reading of Mr. Brown's paper, several interesting remarks were made by different speakers. Dr. Murphy "was decidedly opposed to—he was almost induced to say, he protested against—the performance of an operation in recent cases as soon as possible after the occurrence of the rupture. It was vitally important for some time after delivery to avoid the accession of inflammation in the

tissues adjacent to the uterus; and if inflammation were set up in the vagina, there was great reason to dread its extension. Besides, it was well known that the laceration of the perineum, which, a few hours after delivery, might appear of formidable extent, would frequently contract, in two or three days, to one of insignificant size, so that an operation practised prematurely, might have been altogether unnecessary. For these reasons, he considered that in all cases of perineal rupture, in which an operation was resolved upon, it would be infinitely better to defer the operation than to practise it immediately after parturition."

Mr. Coulson thought "the chief merit of Mr. Brown's operation consisted, as in most operations, in the perfect adherence to its details. There were four principal features in Mr. Brown's operation to which he would more especially advert. The first, which had been hardly noticed sufficiently in justice to himself by the author, was the large extent of mucous membrane that was pared from the edges of the wound. He (Mr. Coulson) considered this a very important step, because two thick vascular edges were thus gained, which could be accurately and evenly brought into contact with each other. The second was, the lateral division of the skin and sphincter on each side,—a proceeding preferable, in his opinion, to subcutaneous section, and which contributed greatly to the success of the operation, by preventing all traction on the edges of the wound, and affording great relaxation to the skin and cellular tissue. The third point was, the guarding against the possibility of the urine dribbling on the wound; and the fourth, the tranquillity in which the bowels were maintained for some days after the operation, by the liberal administration of opium. Each of these measures was, he conceived, necessary to the success of the proceeding; and if they were put in practice, and the operation properly performed, he had no doubt that the result would be almost invariably satisfactory."

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

LYKION OF THE ANCIENTS, AND THE MODERN USE OF THE SAME DRUG.

PROFESSOR SIMPSON, of Edinburgh, has collected from various sources some curious and interesting information on this subject, which he has published in the *Monthly Journal of Medical Science* for January 1853. Dr. Simpson describes four ancient Greek vases which have evidently been used by the apothecaries for containing Lykion. He remarks, that "the great rarity of such archaeological remains may serve as some apology for the present notice of some specimens of ancient Greek medical vessels or vases. Besides, the vases which I wish to describe are interesting in other points of view. They are all of them intended to contain one and the same drug, as shewn by the inscriptions on their exterior: this drug was derived by the ancient Greeks chiefly from Hindostan—one of the many points of evidence of the former freedom and frequency of the traffic between the south of Europe and India; and at the present day the same drug is still employed extensively and successfully by the native practitioners of the East, for the very purposes for which it was in former times used by the medical practitioners of Greece. The drug to which I allude, is the Indian LYCIUM, or LYKION, the ATKION INAIKON of Dioscorides. In modern collections and writings, I know of four ancient vases or drug-bottles, intended to contain this valued eye-medicine. If our museums, however, were properly searched, perhaps various other Greek vases for the same or for similar medicines would be detected." Dr. Simpson gives drawings of the four vases, and he learnedly describes their shape and the inscriptions which they bear. Passing over that portion of the essay, we come to the following account of the modern use of the drug in India, and of its recent experimental employment in Edinburgh.

"The Lykion, or Lycium, is still used extensively by the native medical practitioners of India, under the Hindoo name of *Rusot* or *Ruswat*. In a learned article on the nature of the *Aukios* of Dioscorides, contained in the *Transactions of the Linnean Society*, vol. xvii, p. 82, Professor Royle has shown, that the Indian Lycium or Rusot is an inspissated extract, prepared from the wood or roots of several species of Berberis, as the *Berberis lycium*, *aristata*, etc., growing on the mountains and plains of Upper India, and principally procured from Nuggur-kote, near Lahore.* 'On inquiring, says Dr. Royle,

* The other variety of Lycium, described by Dioscorides as procured in Asia Minor (*Lycia*, Cappadocia, etc.), is now generally supposed to be an extract from the *Rhamnus infectoria*, or other species of *Rhamnus*.—See Professor Royle, in *Linnean Transactions*, vol. xvii, p. 87; Dr. Adams, in his admirable edition of *Paulus Aegineta*, vol. iii, p. 234.

'in the shops of the druggists in the bazaars of India, I everywhere learned that both the wood (*dar huld*) and the extract *Rusot* were imported from the hills into the plains, and that large quantities continued to be brought from Nuggur-kote as well as other places.' And he adds, 'the *Rusot* is at the present day procurable in every bazaar in India, and used by the native practitioners, who are fond of applying it both in incipient and chronic inflammation of the eye; and in the latter state both simply and in combination with opium and alum. It is sometimes prescribed by European practitioners; and I have heard that it was found very efficacious by Mr. McDowell in the ophthalmia of soldiers who had returned from the expedition to Egypt. I have myself occasionally prescribed it; and the native mode of application makes it particularly eligible in cases succeeding acute inflammation, where the eye remains much swollen. The extract is by native practitioners, in such cases, rubbed to a proper consistence with a little water, sometimes with the addition of opium and alum, and applied in a thick layer over the swollen eyelids; the addition of a little oil I have found preferable, as preventing the too rapid desiccation. Patients generally express themselves as experiencing considerable relief from the application.'

"My friend, Dr. Wise, the author of that learned work, *Commentaries on the Hindoo System of Medicine*, some time ago brought to Scotland with him a small quantity of the Indian Lykion. I have seen one or two cases of recent conjunctival ophthalmia treated by the application of this Lykion, with speedy relief and cure. Dr. Wise has been so good as to furnish me with the following interesting note regarding his own extended experience with it.

"The use (says Dr. Wise) of the mixture of Lykion or *Rusut* is very generally known over Hindostan, where diseases of the eye are common, and probably over Asia and Africa, if we are to believe that this was the black application employed with such success to the diseased eyes of our soldiers in Egypt. It is likewise probable that Dioscorides obtained it nearly two thousand years ago from the East, where the plant is indigenous, and introduced it into Europe. Having found great personal benefit from the application of the mixture of Lykion to my eyes when inflamed, I employed it extensively when superintendent of the Eye Infirmary, Calcutta; and so convinced was I of its efficacy, that I brought a supply with me to Europe with the intention of bringing it to the notice of the profession. I found you investigating the subject; and at your suggestion, Dr. Walker was so kind as to try the medicine, and I am sure will inform you of the results he saw derived from its use. The Indian mixture consists of equal weights of lykion and burnt alum, with half the weight of opium. These ingredients are mixed with lemon juice, and reduced to the consistence of cream, and applied round the eye-lids and over the eye-brow of the inflamed eyes. This mixture is washed off, and again applied twice in twenty-four hours; and it was only when accompanied with fever, that aperients and other parts of the antiphlogistic regimen were required. In less urgent cases the mixture was only applied at night, and produced no inconvenience, unless when it dried, and the lids felt stiff, when it was softened by applying a little moisture. I found the Lykion mixture most useful in all cases of inflammation of the external tunics of the eye. When both eyes were inflamed, it was interesting to mark the advantage this simple remedy had when applied to one eye, while the usual remedies of leeches, blisters, etc., were applied to the other eye. Another most important application of the Lykion is when the ophthalmia is accompanied with severe pain. On such occasions, after applying the mixture, a piece of live charcoal (*gool*) produced the most soothing effect when approached near the eye. With this intention, the charcoal was placed upon an earthen cup, and held on a wooden stand by the patient, and he approached or withdrew it from the eye according to his own feeling. The great relief in this case was in part from the anodyne effect of the opium.'

"Mr. Walker has kindly given me the following note of his experience with the Lykion at the Edinburgh Eye Dispensary:—

"I have used (he writes me) the Indian Lykion in a considerable number of cases of eye disease. The affections in which I found it most useful were those of the conjunctiva, such as the simple, catarrhal, and pustular forms of inflammation. In them its action was well marked and beneficial, the disease generally subsiding in a day or two; sooner perhaps than it would have done under the ordinary treatment. I have had no opportunity of trying it in purulent ophthalmia; but I believe that in it also it would prove of service. Cases of slight rheumatic and catarrho-rheumatic inflammation have been benefited, but not cured, by it alone. In some affections of the eye-lids, as

ophthalmia tarsi and chronic ophthalmia, it did good; but such cases often get well with very little treatment. I applied it to the eyelids in the form of a paste, with opium and burnt alum, as recommended by Dr. Wise. This was repeated two or three times a-day. The patients generally complained of a burning and smarting of the lids after its application, similar to what is produced by a mustard blister."

We would suggest the necessity of making a comparative trial of a paste of opium and alum made *without* and *with* the Lykion, before any opinion be given as to the value of the latter. We strongly suspect that results equally favourable would be obtained from the paste *without* the Lykion: at all events, we can aver that one of the very best applications in chronic ophthalmia, especially in scrofulous subjects, is a paste or ointment composed of opium, alum, and the nitrous oxide of mercury ointment of the Pharmacopœia, the relative quantity of each ingredient depending upon the specialities of the case. We have not used this application without the mercurial, but very probably that ingredient may in many cases be dispensed with.

RENNET IN DIABETES MELLITUS.

Dr. J. GRAY, of Glasgow, has contributed an interesting paper on this subject to the January number of the *Monthly Journal of Medical Science*. As the value of the remedy can only be fairly estimated by taking into consideration all the circumstances connected with the cases in which it was used, we have not abridged Dr. Gray's article.

"CASE I. John Dryburgh, a married man, 44 years of age, one of the foremen employed at St. Rollox Chemical Works, temperate and regular in his habits, had always enjoyed good health until August 1850, when he observed that his calls to make water were more frequent, and the quantity voided much greater, than usual. The increased discharge was accompanied by great thirst. These symptoms gradually increased, until they became so aggravated that, he says, "had it not been for shame, I could have remained constantly by the well, drinking and making water by turns." His appetite was upon the whole good, every article of diet agreeing with him, except cheese. He was habitually costive, and troubled with uneasy sensations about the epigastric region. He had also experienced numbness in the upper extremities, from the elbows to the tips of the fingers; and in the lower extremities, from the knees to the toes; and he likewise had occasionally a sensation of heat rushing along the arm and forearm to the fingers, continuing about fifteen minutes, and then leaving him feeble, and unable to do anything for some time afterwards. He had lost upwards of three stones in weight; and was very weak, low-spirited, and unable for his usual employment. He had tried various remedies, all of which proved ineffectual in giving him the slightest relief.

"On the 7th of July, the countenance was expressive of great anxiety: he was much emaciated: the pulse was 66, full and regular; the respiration slow; the mouth dry, in consequence of which he was unable to articulate distinctly; the tongue coated with a thick yellowish fur; the appetite good; and the thirst excessive, so that he drank upwards of three gallons of liquids in the course of twenty-four hours. The urine was very abundant, of a bright straw colour, sweet to the taste, loaded with sugar, as indicated both by the sulphate of copper and the caustic potash tests, and in density 1045.

"He was ordered a table-spoonful of creasote mixture, to be taken when the thirst was urgent; and ten grains of the alkaline phosphate of soda, three times a-day, in a glass of water. His diet was made to consist of beef, fish, tea without sugar, eggs, bran-bread, butter-milk, and water. Under this course of treatment, and attending to the state of the skin and bowels,—alternating the creasote with tincture of nuxvomica and tincture of colocynth, he continued for three weeks, with little improvement in the general symptoms; during which period the density of the urine varied from 1045 to 1037.

"On July 30th, he was directed to take a tea-spoonful of rennet in a glassful of water after each meal, and to continue the alkaline phosphate of soda.

"On August 3d, the thirst was not quite so urgent, and he thought he did not pass so much water. He complained of distressing pain in the fore-arms and legs. He did not discontinue the animal diet. The urine was paler in colour, and of density 1027.

"On August 7th, he continued gradually improving, the density of the urine having descended to 1025. As the bowels were confined, he was directed to take ten drops of tincture of colocynth every four hours, until the bowels should be acted on."

"On August 13th, he felt easier about the pit of the stomach; the pains in the arms and legs were not so troublesome; the urine was acid to litmus paper; it contained no albumen, but a superabundance of sulphates, chlorides, and uric acid.

"On August 21st, he felt decidedly better; the thirst had greatly abated; the bowels were regular; the tongue clean; and he slept well. The quantity of food and drink now used in twenty-four hours was 3 lbs. of meat, $\frac{1}{2}$ lb. brown bread, seven cups of tea without sugar, eight ounces of water, and half as much butter-milk. The density of the urine was 1024; and there were only slight traces of sugar. The alkaline phosphate of soda was discontinued; and a few drops of muriatic acid were given along with the rennet.

"He had a smart attack of diarrhoea on the 24th. On the 25th, he gave up taking the rennet. The tongue was slightly coated with a yellowish fur, and the stools were black coloured. He slept well. The quantity of urine passed in twenty-four hours was sixty-four ounces, and its density 1022.5.

"I could not detect the slightest trace of sugar by the caustic potash test. The uric acid was present in lozenge-shaped crystals. Lactic acid was found by Pelouze's test; that is, on boiling the urine with caustic potash, it became turbid, and when allowed to stand a deposit fell to the bottom of the test tube, which, when placed on a slip of glass, partially evaporated, and, examined under the microscope, presented numerous crystals, some of them much resembling a sheaf of corn, and others arborescent. This deposit dissolved on the addition of a solution of prussiate of potash.

"On August 29th, the tongue was clean and moist. He had no longer any thirst, and took no more of fluid than he used to do while in perfect health. He was always ready for food, and was using more farinaceous food. He did not feel any uneasiness from being restricted to the diet prescribed. He had gained six pounds in weight. No rennet had been taken for three days. The density of the urine was 1024. The rennet was resumed.

"On September 2nd, he felt daily stronger, had no thirst, and fewer calls to pass urine; slept well; felt no longer pains in the stomach, fore-arms, and legs; was able to work, and did so with pleasure; and had added three additional pounds to his weight. The urine was 1022, and presented slight traces of sugar.

"On September 8th, he still continued to improve, and gained flesh daily. The density of the urine was 1022; it contained lactic and uric acids; but, when boiled for some time with caustic potash, did not change colour.

"On September 13th, he said his health appeared to himself as good as previously to his illness.

"On November 8th, he felt quite well; had gained about two stones in weight. Since commencing the rennet, the urine had a density of 1018, and no sugar could be discovered in it by any test. He was taking the ordinary mixed diet, and continued the rennet.

"December 24th. This patient continues to enjoy good health.

"CASE II. William Clark, aged 29, ship-carpenter, married, of regular habits, had enjoyed good health until within the last three months, about which time he complained much of thirst, frequent calls to pass urine, general debility, and loss of flesh. These symptoms increased so much towards the close of autumn, as to render him unable for his employment.

"When I was first consulted by him on the 11th of October last, I found the urine to contain a large quantity of sugar, and its density to be 1044. He complained much of pain in the legs and forearms. The tongue was furred; and his articulation indistinct. He had lost a stone and a half in weight. The pulse was 78. There had been no cough.

"He was ordered ten grains of the alkaline phosphate of soda three times a day, in water, and to live as much as possible on an animal diet.

"13th. Density of the urine, 1040. A teaspoonful of rennet to be taken after each meal.

"16th. He felt a little easier, and the thirst was not quite so urgent. The density of the urine was 1034. He was directed to continue the rennet and phosphate of soda.

"21st. He was more cheerful, and returned to work. The specific gravity of the urine was 1035. The phosphate of soda was omitted.

"25th. Within the previous twenty-four hours, he passed 252 ounces of urine, and used 196 ounces of liquids, half a quartern loaf, about two pounds of meat, three eggs, and a boiled cabbage. He perspired occasionally, and was frequently troubled with heartburn. The urine was 1030 in density. He had gained two pounds in weight.

"30th. He felt stronger in the arms and chest, and the pains in the legs were entirely gone; but there still remained

a slight cedematous swelling of the ankle. Urine 1034 in density.

"November 5th. For the last twenty-four hours, he had passed 108 ounces of urine. The thirst was now not nearly so troublesome; the swelling at the ankle was gone; he felt stronger for his work; the tongue was clean; the pulse 76; the appetite good; the urine 1030 in density. He was now directed to discontinue the use of wheaten bread altogether, and, as a substitute, to have bread made with six eggs and four ounces of butter, kneaded into a loaf with common bran, and baked in a slow oven.

"10th. Within the last twelve hours, he had only had three calls to pass urine. He had added four pounds to his weight since he was last weighed. He felt much stronger. The density of the urine was 1030; the sugar was greatly diminished, as shown by the tests; but there was a considerable quantity of lactic acid.

"December 24th. Soon after the last report, I directed him to use chlorine inhalation. I was led to make use of this remedy by the following circumstance. Conversing one day with John Dryburgh, he happened to remark, that, when he had occasion to go into the chlorine-room during his illness when his thirst was urgent, a free flow of saliva took place, which immediately afforded him relief. Under the impression that the chlorine might both act on the sugar circulating in the blood, and also in some way on the nervous system, I was induced to try it in Clark's case.

"For ten days or a fortnight before using it, this man passed urine varying in density from 1030 to 1040. In a fortnight after first using it, the density fell to 1020, and every trace of sugar disappeared. During the last four weeks, the quantity has never exceeded fifty-six ounces in twenty-four hours, and the density has been pretty steady between 1018 and 1020; nor have I ever been able to observe any sugar in it. Every symptom of the disease has now left him; he has regained his former weight; and he feels strong, and as able for his work as ever he was. His diet, however, has not yet been changed; but I have no doubt, judging from John Dryburgh's case, that, by and by, he may with safety return to his usual way of living.

"CASE III. I have now (December 24) a third case under my care who has been ill for eight months. He had been treated in the usual way by several medical men, but without success. At first he made seventeen pounds of urine of the density 1037. Now the quantity is four pounds, and the density 1028. He has used both rennet and chlorine. Before commencing the treatment, his sight was much impaired; but it is now quite restored, and he has almost regained his original weight.

"The issue of this case will be reported afterwards.

"REMARKS. I was led to administer rennet, from knowing the effect which it has upon a solution of sugar. I reasoned thus: If out of the body it converts a solution of sugar into lactic acid, it may have a similar effect upon a solution of sugar within the body; and bearing in mind that lactic acid is found in the juice of flesh, and, according to Liebig, is a supporter of the respiratory process, I considered that, if sugar formed in the body of a diabetic patient could be converted by the rennet into lactic acid, it would be burned in the lungs; and that if a larger quantity were formed than could be consumed in this way, that portion would be excreted by the kidneys. In this I have not been mistaken; for lactic acid was more than once detected in the urine of the first two patients.

"It is necessary that the rennet be recently prepared, and a tea-spoonful capable of coagulating a pint of milk in five minutes; as it not unfrequently happens that, by being kept for some time, it becomes decomposed. Its quality should therefore on all occasions be tested with milk before being used as a medicine."

EXTERNAL USE OF COD-LIVER OIL.

In the *Canada Medical Journal* for May 1852, Dr. A. H. DAVID recommends the use of cod-liver oil, as a local application in various cutaneous diseases. In ringworm of the scalp, he has used it in more than twenty cases, some of which, of an obstinate character, were cured in four or five days. He also applied it in a case of psoriasis inveterata, which had lasted three years. The patient was discharged, cured, in seven weeks.

Dr. ARNOLDI has also used it with good effect in cases of extensive burns, and in frost-bites.

In some cases, it has produced burning heat and intense pain in the parts to which it has been applied; and in one case of acne rosacea, Dr. DAVID was obliged, on this account, to discontinue its use on the fourth day.

ASSOCIATION INTELLIGENCE.

NOTICE TO MEMBERS:—PAYMENT OF SUBSCRIPTIONS.

MEMBERS who have not yet paid their Subscriptions for the current year, or who are in arrears, are requested to forward the amount due, either to the Treasurer (Sir CHARLES HASTINGS), or to the Secretary of the Association, at Worcester.

Gentlemen, joining the Association, are required to observe the 24th rule, which states, that "each member is to pay one guinea annually; and that the subscription commences on the 1st of January in each year, and must be paid in advance."

JAMES P. SHEPPARD, Secretary.

NOTICES BY THE EDITOR.

A LIST OF THE MEMBERS of the Association is preparing for publication. It will include all the new members up to date. Gentlemen who have new members to propose, ought, therefore, to do so without delay.

MEMBERS and others are requested to send books, manuscripts, and letters for the EDITOR, to his residence, Essex House, Putney, London; or to the office of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London.

Dr. CORMACK will attend at the office, to receive members, every WEDNESDAY, from four to a quarter past five, p.m., when not unavoidably prevented by other duties.

THE COMMERCIAL BUSINESS of the JOURNAL is transacted by the publisher, every lawful day, at the office, between the hours of nine A.M., and seven P.M.; and, to prevent delays or mistakes, it is particularly requested that all advertisements and letters connected with the alteration of addresses, or with the commercial department, be addressed to the publisher, Mr. THOMAS JOHN HONEYMAN, and not to the editor.

EDITOR'S LETTER BOX.

EPIZOOTIC DISEASES.

LETTER FROM THE SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY TO THE EDITOR.*

38, Berners Street, Jan. 8th, 1853.

SIR,—I beg to forward to you the Epizootic queries, emanating from the Epizootic Committee of the Epidemiological Society.

The President and Council of the Society, as well as the members of the Committee, would feel much gratified if any notice of the same should appear in your Journal.

I have the honour to be, sir, your obedient servant,
J. H. TUCKER, Hon. Sec.

1. Has the disease, termed *Pleuro-pneumonia*, existed either among your own cattle, or among any which are under your immediate observation?
2. Has it prevailed in your neighbourhood, and, if so, how near to your own premises?
3. Did the disease *first* appear among the "old stock" of the farm, or among the animals which had been recently purchased?
4. Has it attacked any other variety of animals besides oxen?
5. What is the usual health of the animals kept on the farm, their average age and condition?
6. What number of cattle are kept by you, and how many have been attacked by the disease?
7. Were the breeding or the fattening stock *first* affected?
8. Can its appearance in your locality be traced to any special or direct cause, such as the introduction of diseased animals?
9. To what do you attribute its outbreak in your own herd?
10. Have the cows, either in calf or in milk, been more susceptible to the disease than the oxen?
11. Have you any proofs of calves being affected at birth, or very shortly afterwards?
12. What was the state of the weather at the time of the outbreak; and were the animals, when attacked, exposed to, or protected from, its influence?
13. Is it your opinion that the malady is contagious; and, if so, what proofs have you?

14. How long a time has usually elapsed between exposure to infection and the appearance of the disease?

15. Were the losses quickly replaced by new purchases?

16. Did such newly purchased animals have free communication or not with those that had been previously living with the diseased; and, if so, for what period of time?

17. Have these new animals been equally the subjects of disease?

18. Is the malady on the increase or otherwise?

19. What are the symptoms marking the commencement of the attack, and are they easily recognized or not?

20. What are the symptoms which accompany the progress of the disease, and particularly those that indicate the greatest danger?

21. Have any animals recovered in whom diarrhoea has shown itself in an advanced stage of the malady?

22. What number of the cattle have died, and what proportion has been killed, or otherwise disposed of?

23. What are the usual *post mortem* appearances? is effusion of serous fluid into the chest usually present?

24. In how many cases were both lungs diseased? in how many was the right lung alone affected? and in how many the left alone?

25. In what state or condition has the disease left those animals that have recovered from mild or severe attacks?

26. Has it seemed to have any effect in producing abortion?

27. Do you know of any instances in which an animal has become a second time attacked with a mitigated form or otherwise of the disease?

28. What are the causes which you have found to be the chief obstacles to the eradication of the malady?

29. How long is it since the first case occurred in your herd, and how long since the last case?

30. Has the disease steadily progressed, or have there been repeated outbreaks after intervals of freedom from disease?

31. Has prevention been attempted by change of diet, situation, or management; by medical treatment, or any other means?

32. What results have followed the adoption of the preventives employed?

33. Is the general character of the district in which you reside flat or hilly, dry or damp, wooded or open?

34. Are the pasture grounds free from stagnant waters and bogs, and is land drainage generally adopted?

35. Is irrigation of the pasture grounds carried out to any extent?

36. Are the cattle sheds well drained and ventilated?

37. Is the system of "box feeding" adopted either upon accumulating manure, or upon boarded floors placed over pits for the reception of the dung and urine?

38. Did any blight, mildew, or similar affection manifest itself amongst your corn, or other crops, previous to or about the time that your cattle became diseased?

39. Have any epidemic diseases prevailed among the people in your locality, either shortly before, or during the appearance of the malady in question?

40. Does any other epizootic affection besides the one which forms the special subject of this inquiry exist among domesticated animals in your district? and if so, state,—

I. What animals are affected.

II. The leading characters of the disease.

III. The per centage of death it produces.

P.S. The following gentlemen compose the Epizootic Committee of the Epidemiological Society:—

CHAIRMAN, Professor J. B. Simonds, Royal Veterinary College.
HON. SECRETARY, *pro tem*, E. N. Gabriel, Esq., Rolls Buildings, Fetter Lane. MEMBERS: B. G. Babington, M.D., F.R.S.; M. Martin de Bartolome, M.D.; B. Cartledge, Esq., V.S.; Robert Ceely, Esq., M.R.C.S.Eng.; T. B. Davis, Esq., F.R.C.S.; Thomas Foster, Esq., M.R.C.S.; Robert Garner, Esq., F.L.S., M.R.C.S.; W. T. Karkeek, Esq., V.S.; W. Litt, Esq., V.S.; J. F. Marson, Esq., M.R.C.S.; T. W. Mayer, Esq., V.S.; W. Robinson, Esq., V.S.; F. Sibson, M.D., F.R.S.; John Snow, M.D.; W. C. Spooner, Esq., V.S.; S. Mayer Turner, Esq., M.R.C.S.; T. Wells, Esq., V.S.; J. Wilkinson, Esq., V.S.

HOMŒOPATHY IN EDINBURGH.

LETTER FROM WILLIAM OGLE, Esq., TO THE EDITOR.

St. Catharine's Hall, Cambridge, Jan. 23, 1853.

SIR,—As a member of the Royal Medical Society of Edinburgh, and of the Association, I have pleasure in transmitting the

* Vid: p. 28 of last number.

statement which appeared in the Journal of the 14th inst., that "the Royal Medical Society lately refused to place on their library shelves a presentation copy of a work by a homœopathist". I may add, in reference to the University of Edinburgh, at which I was a student from Nov. 1850 to Nov. 1852, that the heresy of homœopathy is fully exposed by more than one professor in his annual course of lectures. I have notes of two lectures by Professor Christison on the subject.

Once more, Professor Henderson is watched; and (as I have understood, for I did not attend his course) no one has yet been able to detect a homœopathic tendency in his teaching. If your correspondent, "Pater", is in fear of any of his friends, let him not, without some better cause than the one assigned, dissuade them from resorting to the Medical School of Edinburgh. A more certain antidote, and more pleasant, surely will be to urge them to attention to the sound teaching of the professors; and to join without delay the young aspirants to fame in their weekly meetings at the Hall of the Royal Medical Society.

Your obedient servant, WILLIAM OGLE.

MONTHLY REPORTS OF THE BENEVOLENT FUND.

LETTER FROM DR. GRIGOR TO THE EDITOR.

SIR,—I was greatly interested by the editorial article on the Benevolent Fund, which you describe as an "integral part of the Association"; but as a new member, I am inclined to beg for more information. Would it not be useful to report monthly the operations of the Benevolent Fund Committee? I would also suggest, that the subscriptions and donations should be occasionally advertised in your columns, so that we might be able to show the list when a favourable opportunity occurred for obtaining subscriptions to a cause, which the public as well as the profession ought to support. I am, sir, your obedient servant,

JOHN GRIGOR, M.D.

Nairn, N.B., 15 Jan. 1858.

[Suggestions very similar to those contained in Dr. Grigor's note have reached the Committee from different quarters, and they are anxious to cooperate with us in carrying them out.]

NEWS AND TOPICS OF THE DAY.

ACCIDENTAL POISONING BY FLEMING'S TINCTURE OF ACONITE, AT THE CONVENT OF THE GOOD SHEPHERD, NEAR BRISTOL: CORONER'S INQUEST.

On Saturday, the 16th inst., Mr. B. Fry, the coroner for the northern division of the county of Somerset, concluded, at the White Hart Inn, Brislington, near Bristol, an investigation touching the death of Emma Forty, an inmate of the Roman Catholic Convent of the Good Shepherd, situated at Arno's Vale. Deceased, it appears, had had administered to her, by mistake, by the sister-attendant, Miss Sophia Ryder, a poisonous dose of aconite, instead of the medicine prescribed for her, and which resulted in her death in about five hours.

This being a reformatory institution, the inmates, on entering, have a fresh name given them, so that, if possible, their real names may not be known to each other. The penitents will therefore be found distinguished in the sequel as Celeste Wilton, otherwise Veronica, etc., the former being the real, the latter the assumed name.

CELESTE WILTON, otherwise Veronica, deposed that the deceased, Emma Forty, otherwise Melanie, came into the infirmary on Monday morning last, at a quarter past 7 o'clock, complaining of sickness, and stating that she had vomited a great deal. Witness administered some salt and water, to bring off the bile, from which she conceived the deceased to be suffering. When asked where her pain was, deceased did not speak, but put her hand to the lower part of the chest. She was alive but motionless when witness left her.

MARY HUTCHINSON, otherwise Aloysius, took up the dinner of the deceased, when she found her dead.

MARY POWER, otherwise Sister Mary of Stanislaus, stated that the deceased was taken ill in the chapel on Monday morning, and was conducted by her to the infirmary. At 9 o'clock witness went to the infirmary accidentally; the deceased appeared ill, but witness thought she would get better by and by. It would not have been her duty to send for a medical man. She left that for the Superioress.

SOPHIA RYDER, the sister-assistant who administered the poison, having been sworn, deposed that the deceased was under medical treatment for tape-worms. Dr. O'Brien ordered for her a solution of pomegranate one drachm, and one grain of quinine, to be taken fasting. She said:—I had made a solution of the pomegranate and put it into a bottle. I am in the habit of dispensing the prescriptions of Dr. O'Brien. We have a large medicine cupboard in a room which is called the *economat*. Any of the sisters might go into the room, but no one would have permission to administer medicine except myself and a sister appointed to assist me. None of the penitents have access to that room. On Monday last, at the usual time, shortly before 7 in the morning, I was to have given to Melanie (the deceased) a dose of the medicine ordered for her by Dr. O'Brien. I went into the *economat* for the purpose of preparing the medicine. I took a bottle off the shelf; I poured a drachm of it, which is about one teaspoonful, into a cup. I put also into it one grain of quinine, and poured water, about a wineglassful, into it. I took the cup into the class-room, and administered it to the deceased. The deceased left the room and went down into the chapel. Five minutes after she asked my permission to leave the chapel to get some water, and left with me. I gave her a cup, and she drank about half a pint. She returned alone to the chapel. About a quarter-past 8, I next saw her in the infirmary. She appeared in pain, and was very sick. Veronica, who was holding her, said, "Mother, I think she is very bilious," and I said, "What shall we give her?" Veronica replied that a little salt and water would do her good. I left the infirmary, and returned about 9 o'clock. She was still sick, and appeared to be in great pain, throwing herself about. I did not feel it necessary to send for a medical man. I went again to the deceased about 10 o'clock. She was then quiet, and lying down. I asked Alphonsine how she was. She said "she has gone to sleep, mother. I think she will be better soon." She did not then appear in pain.

The large bottles in the medicine-cupboard were labelled by the druggist, but the bottle from which I administered this medicine was not labelled. I had given one dose on the Saturday to the deceased from a saucepan on the fire, in which I had made it on the Friday night previous. I poured the remainder of the decoction into a bottle in the cupboard, which was locked up. On Monday morning, when I was about to administer the medicine to the deceased, I took a bottle from the shelf, supposing it to be the bottle in which I had put the decoction of pomegranates. Neither of the bottles was labelled. I took the one from the shelf in which I had been in the habit of placing the dispensing medicines. I did not discover my mistake till many hours after.

I had in my possession a bottle containing aconite and morphine, which I had mixed on the Friday previous as an external application for toothache. I had applied the embrocation with linen to the face of Veronica. She complained that it gave her so much pain she would not have it on again. I knew when I made this mixture that aconite was poisonous. I forgot to label the bottle. The deceased did not say to me I had by mistake given her poison instead of medicine.

The SUPERIORESS deposed to having seen the deceased on Monday last. She was vomiting or retching. She did not consider it necessary to send for a medical man. The sister-assistant afterwards came and said, "a dreadful thought has flashed across my mind, that I have taken the wrong bottle." When Dr. O'Brien arrived, the sister-assistant seemed in a distressed state, and brought the bottle to Dr. O'Brien, and said, "I think I have given the embrocation by mistake." Dr. O'Brien, after tasting the contents of the bottle, confirmed that opinion.

DR. O'BRIEN stated that he had been called in, and satisfied himself that a portion of the contents of a bottle, containing a tincture called "Fleming's Tincture of Aconite," had been administered. He attended the deceased on the 6th inst. for tape-worm, and had ordered her a drachm of the bark of the root of pomegranate and a grain of quinine in water every morning fasting. He diligently inquired into the symptoms that followed upon the administration of the aconite, and they exactly corresponded with those that are known to follow a large dose of that drug, a drop or two being the ordinary internal dose; even that was sometimes followed by specific effects. The deceased died from the aconite.

The inquiry was then adjourned to the following Saturday in order that a *postmortem* examination might be made, which the jury deemed to be absolutely necessary.

DAVID GRANT M'PHERSON, surgeon, stated that he had been called in as the nearest medical man on Monday the 10th. Before the new-Superioress came, he was the medical attendant

at the convent. Asked the Superioress to what cause she attributed the death? She replied that she did not know, but two or three of the family had died sudden deaths. Asked her if the deceased had struggled much before death, and was told she had thrown herself about a good deal, saying she felt the worm in her stomach. Had known several patients who had tape-worm complain of great pain. When he attended the penitents they often complained of pain; he could find no cause for it, and therefore did not make much account of it. He told the Superioress that deceased seemed to have died from an irritant poison, such as copper. Miss Ryder showed him a few drops of a dark-coloured fluid, saying that was the remains of the medicine she had administered. He was surprised at seeing it so dark, and tasted it, and the whole of the afternoon and evening his tongue and lips were tingling from the effects of the medicine, and he was made quite ill. To the best of his knowledge, none of the inmates expressed to him their opinion that the deceased had been poisoned. When he was medical attendant, he always dispensed medicines of a dangerous character himself.

Dr. O'BRIEN deposed that he had assisted in making a *post mortem* examination of the body. The brain was healthy, so were the lungs and heart. The stomach contained a little fluid, and its membrane presented diffused marks of congestion over the large curvature. The *duodenum* presented appearances of very active inflammation of its lining membrane, which was softened and in patches dissolved. Some spots were so dark, that if life had endured sufficiently long they would have ended in mortification, the inflammation was so great. In the small intestine he found a very large tape-worm, dead. The *sphincter ani*—a very unusual occurrence—was relaxed. He never dispensed medicine at the convent, he only wrote prescriptions, even if the drugs were dangerous. He never ordered internally any dangerous medicine in that house. Messrs. Ferris and Score supplied the drugs to the convent. The bottle sent by Messrs. Ferris and Score containing aconite had not the word "poison" written or printed on it, and only the words "Fleming's Tincture of Aconite." He went to inquire the reason why the word "poison" was not put on a medicine so dangerous as that; and they replied that they understood the medicines would be dispensed by a medical man. I had a conversation with Miss Ryder, and she said it would have been a great assistance if that word had been upon it. When I found it necessary to prescribe the tincture of aconite for neuralgia I entered such prescription in a book, and wrote "for external use"; and, in addition, I made Miss Ryder, as I thought, perfectly acquainted with the power of the drug, and the manner and quantity in which it was to be used.

Dr. AUGUSTIN PRICHARD, one of the surgeons of the Bristol Infirmary, and lecturer on anatomy at the Bristol Medical School, who had assisted at the *post mortem* examination, corroborated the evidence given by Dr. O'Brien as to the appearance of the body. He had no doubt that death was produced by an irritant poison, first acting upon the stomach and intestines, and then on the nervous system. A teaspoonful of the tincture of aconite in a glass of water would be sufficient to produce the appearances described, and to cause death. He was not aware of any chemical tests by which tincture of aconite could be ascertained in such a mixture as was contained in the stomach. He examined the surface of the stomach, to see if there were any traces of metallic poison, and found none.

SOPHIA RYDER was recalled, and said that the deceased was treated kindly in the establishment. There was not a penitent in the house but loved her,—she was such a sweet child. Deceased had never been corrected for any misconduct, and, as far as witness knew, had never expressed a wish to leave the establishment. As far as she knew, deceased came to the establishment of her own free will.

The CORONER could not conclude this examination without giving the witness a caution never again to place herself in such a painful position. He implored her never again to administer dangerous medicines of which she had no knowledge.

The SUPERIORESS having been called, the CORONER said that she ought not to permit any one in her establishment to administer medicines of so dangerous a character. It was necessary that they should have a medical man to administer all medicines. Here was a poor young woman deprived of life through carelessness. He did not wish to wound her feelings, but it was his duty to caution her, and he hoped that this might act as a warning on all future occasions, to her and others.

The jury returned the following verdict:—"That the death of Emma Forty was occasioned by the administration of aconite, a poisonous drug, given to her by Miss Ryder in mistake for

medicines prescribed for her. The jury wish also to express their opinion that much blame is attributable to the authorities of the convent, for allowing a practice which prevails of permitting persons to dispense medicines who, from the want of the necessary education, are ignorant of their nature. The jury further express a hope that in future such practices will be discontinued."—The jury also concurred in the cautions and censures of the coroner.

Mr. GILLON, a medical gentleman connected with the establishment, undertook that the present practice should be discontinued in this convent.

[We have abridged from the *Times*, of Monday last, this melancholy case, because it is one well calculated to call attention to the great risks which are constantly being run, not only in convents and schools but by the public at large, from two very easily remediable causes:—viz., the dispensing of poisonous drugs by ignorant persons, and the unnecessary strength of many of our tinctures and other medicinal preparations. A less potent tincture of aconite ought for safety and convenience to be substituted for those now in use.]

A SURGEON COMMITTED FOR MANSLAUGHTER. A very painful sensation has been created in Bedford, by the committal, under the following circumstances, of Mr. Robert Hicks, the highly respected surgeon of Toddington. It appeared, that as Mr. Hicks was passing the house of a Mr. Ward, he was called in, and requested by Mrs. Ward to examine her son's leg, which she suspected had been severely injured by a fall. After examining the leg, Mr. Hicks said that the small bone was broken, and applied to it a diachylon plaster, bandaging the limbs—the mother having told him he could not set it that night. The child, who was four years old, was brought to him the following morning, when he substituted pasteboard for the plaster. The child getting worse the next day, Mr. Hicks, jun., attended, and expressed a fear that a gathering was taking place under the knee; whereupon he and his father consulted, and applied a bread poultice to the whole limb. That evening Mr. Benson, surgeon, was sent for, but he could do nothing for deceased, who died that night. Mr. Benson, before the coroner's jury, stated, that he performed the autopsy, and found no fracture of the leg, but that under the knee joint, some matter, which filtrated through the muscles of the leg, had escaped. In his opinion, death resulted from congestion of the brain, produced by the pressure of the bandage. Mr. Hicks' treatment was injudicious. Mr. Thompson, surgeon, corroborated Mr. Benson. It further appeared, that Mr. Hicks gave a certificate of death, stating that deceased died from an inflammation of the bowels and knee-joint. The jury returned a verdict of "Manslaughter" against Mr. Robert Hicks, who was accordingly committed to jail, under the coroner's warrant.

[The above probably contains many inaccuracies; but there can be no mistake as to the absurdity and injustice of the verdict.]

A CORONER BROUGHT TO HIS SENSES. At the sessions of Longford, for December, 1852, Dr. Nicolls obtained a decree against one of the coroners of said county for 2*l.* 2*s.*, a *post mortem* fee, which sum the grand jury had disallowed, the barrister, Thomas O'Hagan, Esq., Q.C., holding that the 30th section of the coroner's act made it obligatory on the grand jury to present such sum as would reimburse the coroner.

"Well done, Dr. Nicolls!" exclaims the *Dublin Med. Press*, "if every one acted in this way, we should have less to complain of."

REDUCING THE SALARIES OF POOR LAW MEDICAL OFFICERS. A parliamentary paper has just been printed respecting the Tewkesbury Union. The board of guardians carried resolutions to reduce the salaries of the medical officers, on account of the "cheapness of provisions." The officers appealed to the Poor Law Board, and the reasons were required from the guardians that induced them to pass the resolutions. They urged that the value of agricultural produce had been diminished at least 30 per cent., that the rates had decreased, and that food was cheap. The Poor Law Board replied, that they had "never recognized the principle that the price of the articles and of the produce referred to are to be the criterion by which the amount of salaries ought to be estimated and regulated, or that such salaries should be liable to vary as the price of food fluctuates." The Poor Law Board thought that no sufficient reason had been assigned for the reduction, declaring that the fixed salaries of the medical officers remunerated them only for their ordinary duties, and the board did not see that sufficient grounds had been adduced for diminishing the salaries of the officers referred to in the resolutions of the guardians.

PATHOLOGICAL SOCIETY OF LONDON. At the Annual Meeting of the Society, recently held, it appeared that thirty-five new members had joined the Society, while ten names had been removed from the list on account of death or resignation. The following gentlemen were elected officers for 1853. **PRESIDENTS:** B. G. Babington, M.D., F.R.S. **VICE-PRESIDENTS:** P. M. Latham, M.D.; James Copland, M.D., F.R.S.; Thomas B. Peacock, M.D.; H. Bence Jones, M.D., F.R.S.; Caesar Hawkins, Esq.; John Avery, Esq.; William Fergusson, Esq., F.R.S.; Edward Stanley, Esq., F.R.S. **TREASURER:** Alexander Shaw, Esq. **COUNCIL:** John Hall Davis, M.D.; C. J. B. Williams, M.D., F.R.S.; Edward Bentley, M.D.; W. Jenner, M.D.; Henry Fuller, M.D.; W. Brinton, M.D.; Charles John Hare, M.D.; C. Handfield Jones, M.D.; Joseph Ridge, M.D.; T. Ogier Ward, M.D.; Mitchell Henry, Esq.; Edwin Canton, Esq.; James Dixon, Esq.; John Gay, Esq.; W. Coulson, Esq.; Barnard Holt, Esq.; Charles Brooke, Esq., F.R.S.; William Adams, Esq.; Robert Woollaston, Esq.; Carsten Holthouse, Esq. **HONORARY SECRETARIES:** Richard Quain, M.D.; George Pollock, Esq.

MEDICAL BENEVOLENT COLLEGE. The building operations are now going on in the neighbourhood of Epsom. On the 1st of December last, the Council formally took possession of the land on which the College is to be built. The site is about a mile to the south-east of the town of Epsom, on an elevated position, and commanding a beautiful view of the surrounding country. The soil is dry, with a substratum of chalk, but there will be no difficulty in procuring a plentiful supply of good water. The placing the first stake in the ground by J. W. Freshfield, Esq., M.P., was followed by a prayer by the Rev. George Pocock, one of the Council. The College is intended, first, to furnish an Asylum for 100 legally qualified medical men, or their widows, who have at least 15l. a-year each; secondly, to furnish a superior education to the sons of medical men, at 25l. a-year each, or about one-half the usual cost. Many orphans will be entered as Foundation Scholars, and educated and maintained entirely at the expense of the Society. The first outlay is estimated at 20,000l., and the yearly expenses at 2,000l.: 12,000l. has been subscribed.

After taking possession of the land, the party proceeded to the Spread Eagle Inn, where about eighty, including the leading tradesmen in Epsom, sat down to a splendid dinner.

J. W. Freshfield, Esq., was in the chair, and John Probert, Esq., 6, New Cavendish Street (the founder of the Institution), vice-chairman. Amongst the company were the Rev. G. Pocock, Dr. John Conolly, Dr. Sieveking, Dr. Gibson, Dr. Goodfellow, Dr. Tukey, Dr. Price, Dr. Power, Dr. Sempile, and H. Pownall, N. Clifton, G. T. Dale, W. Self, John Lewis, R. D. Edgcombe, John Chippendale, S. Roots, G. Pilcher, T. Hunt, W. Carr, C. F. J. Lord, W. C. Meates, Robert Dunn, John Ince, George Curtiss, J. F. France, P. Martin, W. Hart, W. T. Iliff, John Harris, E. Clifton, T. J. Ryder, G. W. Driver, H. T. Davies, F. Crew, T. J. Clarke, Esqrs.

The festival concluded at about ten o'clock, and the majority of the company returned to town by a special train, highly delighted by the proceedings of the day.

NUMBER OF MEDICAL STUDENTS INCREASING. Commercial prosperity, cheap food, and emigration to the gold-fields of California, have lately, both in France and England, enabled an unusual proportion of parents to give a liberal education to their children. The consequence has been a great influx of recruits into the professions, and particularly into the too crowded ranks of medicine, which, however, does not at once suffer by this unneeded accession, as many who were struggling for existence as medical practitioners have abandoned the weary contest and followed the multitude to the diggings, thereby in the mean time slightly relieving those left behind from the evils of undue competition. It is not easy to ascertain the number of students at the different schools in London; but as far as we can learn, it is greater now than for some years past. At Edinburgh, pupils are also more abundant. The *Edinburgh Monthly Journal* of December says:—"It is once more our pleasing duty to record an increase in the number of medical students attending classes in the Edinburgh University. The numbers of the matriculated on first December, 1852, were 497, being an excess of 73 over 1851." We are afraid that the statement conveyed in the sentence which follows the above is not correct, and that the exodus to the diggings, in place of diverting students from metropolitan or other schools, is at this moment powerfully contributing to fill their benches. "We may add," says our contemporary, "that for some years past, the increase has been progressive, and that too in spite of the allurements of the 'diggings'—which are said to have diverted no small number of students from the benches of the metropolitan schools." We sincerely regret that we cannot congratulate our brother prac-

tioners upon any such hope of relief, as is here indicated. It is in Paris, however, that the present influx into the medical profession is most remarkable, as will appear by glancing at the subjoined statement of the number of inscriptions at the Faculty of Medicine during the last twelve years:—

YEARS.	INSCRIPTIONS.	YEARS.	INSCRIPTIONS.
1840	879	1847	859
1841	749	1848	784
1842	791	1849	880
1843	746	1850	1,223
1844	800	1851	1,300
1845	851	1852	1,437
1846	903		

The extraordinary increase during the later years, especially during 1852, may not perhaps entirely depend upon real abundance of capital, but partly upon the artificial means adopted during recent political changes to create an easy system of credit, and a free circulation of money among the speculative classes. However the facts may be explained, they deserve to be recorded, and considered with the light of future years.

MEDICAL STATISTICS OF FRANCE. The *Gazette des Hôpitaux* states that in France there are 11,217 physicians, 7,221 *officiers de santé*, and 5,175 *pharmaciens*. These numbers give one medical attendant for every 1,940, and one *pharmacien* for every 6,914 of the population. What is singular is, that the richer departments have fewer doctors than the poorer; thus in those of the north there is one practitioner for every 2,490 persons, while in the south there is one for every 1,619. It is still more singular, that there are nearly 600 towns or communes, with populations varying from 2,000 to 8,000 souls, which have neither medical practitioner nor *pharmacien*.

The commission appointed to examine into the state of the lodgings occupied by the poorer classes in Paris has just published a report. The investigations of the commission have embraced three categories of habitations; the lodges of porters, private houses and lodgings, and furnished lodgings. Among the first category, there are many which are really infectious holes. Their insalubrity arises from various causes: from the dampness of the walls, and from want of space, air, and light. The commission has been able to remedy many of them by enlarging the lodge and opening windows; but in many cases all improvement has been found impossible, and the commission has required from the owners that no one should be allowed to sleep in them. In the second category—private houses and lodgings—the commission found the same causes of insalubrity, and ordered similar measures for rendering them more healthy. As to the external causes which still more increased the insalubrity of different houses, such as piles of rubbish, stagnation of water in courts and alleys, want of proper drainage, exhalations from cesspools and waterclosets, and the bad state of the staircases and passages, the commission has found no difficulty in removing them, as an application to the owners has been almost always promptly attended to. The furnished lodging-houses have excited the particular attention of the commission. The commission caused the most urgent measures to be adopted, such as ordering the number of beds in each room to be diminished, and prescribing the observance of more cleanliness. The number of private houses visited by the commission amounted to 100, of which 42 have been pronounced to be in a healthy state, and 58 have had improvements made to render them so.

The quarters St. Jacques, Jardin des Plantes, and St. Marcel contain many narrow streets, into which the rays of the sun never enter, and which, being built on a steep, receive the infiltration from the ground above them. These quarters remain just as they were in the middle ages; and their unfavourable situation, which is rendered more unhealthy by the careless habits of the inhabitants, is such that only the most general measures can be adopted. It is to remedy this state of things that the city has decided on opening the new street called the rue des Ecoles, which will tend to admit more air into this part.

BATHS AND WASH-HOUSES FOR THE POOR OF PARIS. The following paragraph appeared in the *Moniteur* of the 17th December:—"The Emperor has just decided upon establishing, in three of the poorest districts of Paris, three model institutions for public baths and wash-houses. The expenses of these establishments are to be defrayed from the private purse of his Imperial Majesty." *L'Union Médicale*, in quoting the above, remarks that mere sanitary advice does very little good; and that hygienic measures can only be brought into operation by being imposed upon the people by example and by law. Our contemporary adds—"Conseiller est bien, agir vaut mieux encore, et l'Empereur agit."

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION. From the *Athenæum* of Jan. 15th:—"A meeting of the London Members of the Provincial Medical and Surgical Association was held last Tuesday, at the Hanover Square Rooms, for the purpose of constituting a Metropolitan Counties Branch. This Association—which was first formed with a view to bringing together provincial medical practitioners, and in some measure counteracting the exclusive London interest of the great medical corporations—has succeeded in a remarkable manner, and presents a powerful organization for carrying out measures of interest to the medical profession. Its success has tempted it to storm the capital itself. Already it supports a Medical Journal, published in London; and from the hearty co-operation which it experiences on the part of a large body of London medical men, we should think this Association bids fair to become the representative of the medical profession throughout the British Empire. Such a union has been greatly wanted, and would promote those legislative measures which are so much needed to place the medical profession in this country in a position suitable to the demands and requirements of the age."

MEDICAL BENEVOLENT COLLEGE. We have great pleasure in announcing, that the Lord Bishop of Oxford has kindly fixed the 8th of May next for advocating the claims of this national undertaking, in St. Peter's Chapel, Vere Street; the Rev. EDWARD SCOBELL, the incumbent, having granted the use of his pulpit for that occasion. In addition to the land recently purchased by the Council at Epsom, a piece adjoining has handsomely been presented to the College by JAMES GADESSEN, Esq., of Ewell Castle; as well as a donation to the funds of £25.

ST. GEORGE'S HOSPITAL. Mr. CESAR HAWKINS, the President of the Royal College of Surgeons, has just presented to the Pathological Museum of this hospital a collection of nearly 600 preparations, illustrative of some of the rarest forms of disease that come under the notice of the surgeon. The collection is increased in value by the addition of a descriptive catalogue.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were members of the Association.]

- AGAR, Staff Assistant-Surgeon Rowland, at Tangalle, Ceylon, on 28th October, after a long illness from fever.
 DRANE, Assistant-Surgeon Henry, of the Bombay Army, at Bombay, on November 8th.
 *FOSTER, Thomas Wood, Esq., M.R.C.S.Eng., Surgeon to Wortley Union, at Ecclesfield, Yorkshire, on 18th Dec. 1852, in consequence of a fall from his horse.
 GRAY, Surgeon Peter, at Bombay, on November 10th.
 LESLIE, Patrick, M.D., of 27, Wilton Place, Belgrave Square, London, at Folkestone, on 31st Dec. 1852, aged 62. Dr. Leslie was 18 years in the medical department of the H.E.I.C. Service, Bombay.
 *MARTIN, William, Esq., House Surgeon to the County Hospital at Winchester, lately.

APPOINTMENTS.

[*An asterisk is prefixed to the names of members of the Association.]

- *BAIRD, A. W., M.D. (late of Ipswich), was elected, on the 4th inst., one of the Physicians of the Dover Hospital and Dispensary.
 *BARRETT, John, Esq., F.R.C.S., elected Surgeon to the Western Dispensary, Bath.
 FOOTE, R. F., M.D., appointed Resident Physician to the Norfolk County Lunatic Asylum.
 WADHAM, —, M.D., elected, on 23rd December, Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, at Brompton.
 *WAKE, Robert, M.D., of Southwold, Suffolk, one of the Council of the Provincial Medical and Surgical Association, has received by Royal Letters Patent, the appointment of High Steward of the Borough, Town, Manor, and Lordship of Southwold. Dr. Wake has exercised magisterial functions as a J. P. for many years. He has lately retired from practice, after having been actively engaged for thirty years in the exercise of his profession.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of members of the Association.]

- *ANGELL, Henry. TUBERCULOSIS, the Constitutional Origin of Consumption and Scrofula. 8vo., pp. 770. London: 1852.
 BENNETT, John Hughes, M.D., F.R.S.E., Professor of the Institutes of Medicine, and of Clinical Medicine in the Uni-

versity of Edinburgh. INTRODUCTION TO CLINICAL MEDICINE. Second edition; with numerous wood-cuts. 12mo., pp. 134. Edinburgh: 1853.

BETHLEM HOSPITAL. Observations of the Governors upon the Report of the Commissioners in Lunacy to the Secretary of State; with Appendices. Ordered by the General Committee to be printed, November, 1852. 8vo., pp. 124. London: 1852.

*BIRD, James, M.D., F.R.C.S.Eng. WHAT TO OBSERVE IN MEDICINE. 8vo., pp. 26. London: 1852.

*BURGESS, T. H., M.D. CLIMATE OF ITALY, and Influence of Foreign Climates upon Invalids. 8vo. pp. 206. London: 1852.

CARTER, Robert Brudenell. PATHOLOGY AND TREATMENT OF HYSTERIA. 8vo., pp. 161. London: 1853.

COCKLE, John, M.D. POISON OF THE COBRA DI CAPELLO. 8vo., pp. 32. London: 1852.

COOKE, Wm., M.D. MEDICAL AND MORAL LIFE; or, Mind and the Emotions, considered in Relation to Health, Disease, and Religion. 8vo., pp. 304. London: 1852.

CRISP, Edwards, M.D. On Perforating Ulcer of the Stomach from Non-malignant Disease. Reprinted from the London Medical Examiner. London: 1852.

CRISP, Edwards, M.D. Appendix to the Treatise on the Structure, Diseases, and Injuries of the Blood-Vessels; with Statistical Deductions. Being the Essay to which the Jacksonian Prize for 1844 was awarded by the Royal College of Surgeons of England. London: 1851.

EGAN, John C., M.D., M.B.I.A., SYPHILITIC DISEASES. 8vo., pp. 346. London: 1853.

ELLIS, Andrew, Fellow and late President of the Royal College of Surgeons in Ireland. Lecture on the Working of the "Medical Charities Act". 8vo., pp. 34. Dublin: 1853.

KNOX, Robert, M.D., F.R.S.E., etc. MANUAL OF HUMAN ANATOMY, Descriptive, Practical, and General. 250 wood engravings. 12mo., pp. 672. London: 1843.

LARDNER, Dionysius, D.C.L. Hand-Book of NATURAL PHILOSOPHY AND ASTRONOMY. Second Course. Heat, Common Electricity, Magnetism, Voltaic Electricity. 200 Illustrations. 12mo., pp. 456. London: 1852.

McCORMACK, Henry, M.D. MORAL SANATORY ECONOMY. 8vo., pp. 149. London: 1853.

*NUNNLEY, Thomas, F.R.C.S.Eng. INTRODUCTORY LECTURE, delivered at the Leeds School of Medicine, Oct. 4, 1852. 8vo., pp. 27. London: 1852.

SMITH, Edward, M.D., Lecturer on Anatomy at the Charing Cross Hospital. INTRODUCTORY LECTURE, Oct. 1, 1852. 8vo., pp. 23. London: 1852.

SMITH'S VISITING LIST for 1853.

STATHAM, S. F., F.R.C.S.Eng., Assistant-Surgeon to University College Hospital, London. Practical Sketch of LOW INFLAMMATIONS. 8vo., pp. 31. London: 1852.

THOMAS, Robert, M.D. MODERN PRACTICE OF MEDICINE. Eleventh edition, revised by A. FRAMPTON, M.D. Two volumes. 8vo., pp. 755 & 564. London: 1853.

TODD, Robert Bentley, M.D., F.R.S. RESOURCES OF KING'S COLLEGE FOR MEDICAL EDUCATION: Lecture delivered Oct. 1, 1852. 8vo., pp. 53. London: 1852.

WHEAT TO OBSERVE at the Bed-side and after Death in Medical Cases. Published under the authority of the LONDON MEDICAL SOCIETY OF OBSERVATION. 12mo., pp. 140. London: 1853.

*WILLIAMS, Joseph, M.D. LUNATICS BENEFITED AND PROTECTED; with an Inquiry into Public and Private Asylums. 8vo., pp. 48. London: 1852.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. IV.

LONDON: FRIDAY EVENING, JANUARY 28, 1853.

NEW SERIES.

ARE THE MEDICAL CHAIRS IN THE SCOTTISH UNIVERSITIES TO BE RESERVED FOR MEMBERS OF THE ESTABLISHED CHURCH OF SCOTLAND?

A MAJORITY of the clergy of the Established Church of Scotland have not only boldly answered this question in the affirmative, in Presbyteries, Synods, and General Assemblies, but have been for some time past, and are at the present moment, strenuously endeavouring to obtain for their communion this extraordinary monopoly; a monopoly which, if allowed to be created, would dangerously cripple the Scottish Universities, and ultimately destroy them as medical schools.

Fortunately, but few of the lay adherents of the Established Church of Scotland have become infected with the intolerance which has reappeared among their clergy; and we rejoice to find the tolerant lay party of that communion headed by some of the most eminent members of the medical profession, and—what is more important as regards the issue of the struggle—represented in the upper House of Parliament, and in the Cabinet Council of Her Majesty, by a Scottish nobleman, generally recognized as one of the most rising and most honest statesmen of the day. As might be expected, the liberal and patriotic speech of his Grace the Duke of Argyll, recently delivered in the House of Lords, upon the Religious Tests in the Scottish Universities, has excited alarm among the narrow-minded clerical faction to which we have referred. A notable manifestation of this dismay lies before us in the form of a pamphlet, by "The Rev. Adam Duncan Tait, minister of Kirkliston." It is entitled a "*Letter to his Grace the Duke of Argyll on the proposed abolition or modification of the Tests affecting the Chairs in the Universities of Scotland.*"* The production is a prosy and rapid sermon upon a misapplied text printed upon the title-page, viz.: "Remove not the ancient landmark which thy fathers have set." (Prov. xxii, 28.)

Mr. Tait's letter has no claims upon our attention, except the circumstance that it speaks the sentiments of that majority of the Scottish established clergy, who wish to resuscitate an old and obsolete enactment, passed by the Scottish parliament in troublous times, when the respective partisans of Presbytery and Prelacy were ranged against each other in fierce and unrelenting antagonism. Long ere the recent disruption in the Church of Scotland, time had smoothed down these unhappy animosities; and the secular chairs had been *de facto*, though not *de jure*, thrown open to men of learning and of genius, even though adherents of that very episcopacy against which the Test barrier was first erected. At the moment when we write, a majority of the secular chairs in the University of Edinburgh are filled by episcopalians, and other dissenters from the established church; and, as

the Lord Advocate (James Moncrieff)* stated in the House of Commons, upon the 27th of April last:—

"The truth is, that the Scottish Universities are happily for ourselves *absolutely studded with episcopalians*—to the great scandal of the law, no doubt, but to the great benefit and gratification of the country. If," (he continues) "the Crown were now to purge out heretical professors, our (Scottish) Universities would be deprived of their brightest ornaments. Sir David Brewster would be dethroned from his principality of St. Andrews; Forbes and Kelland would be lost to science and Edinburgh; Ayton to literature; such men as Simpson and Miller to the Medical School; in short, not to detain the House with details, out of about eighty professors in the Scottish Universities, twenty-four, or more than a fourth, are admitted contrary to law. In Edinburgh, the Test is almost in desuetude; in Glasgow and the other Universities it is taken as a form. I know not which is to be the more lamented—that a law should stand on the Statute-book and be perpetually contemned, or that the Test should be taken by honourable men, a pledge binding them to submission to a church they disown, a vow on paper which is powerless on their consciences."

In addition to the eminent professors above named by the Lord Advocate, (and whom the reverend pamphleteer and his friends would exclude from the Scottish Universities), are at least two members of our ASSOCIATION,—men who are bright ornaments of their University, and champions of the departments of science which they represent. We mean Mr. Syme, professor of Clinical Surgery, and Dr. Balfour, professor of Botany in the University of Edinburgh. Both of these gentlemen are, we believe, episcopalians.

Upon a future occasion, we intend to glance at the history of the Scottish Universities, and to point out the position which they occupy in relation to the Established Church. In the mean time, we would draw particular attention to the fact, that the Test was originally devised by the friends of the "Covenant" who gained the ascendancy at the close of the seventeenth century, when prelacy was abolished as an "unsupportable grievance to the nation." In 1690, an act was passed by the Scottish parliament, which provided that none should be admitted as professors "who shall not subscribe the Confession of Faith, swear and subscribe the Oath of Allegiance, and submit to the government of the Church now settled by law." The act thus obtained in these excited times, was intended to exclude *episcopalians* from the University chairs; but the modern intolerants wish, it cannot be concealed, to resuscitate this obsolete enactment, less for the purpose of excluding *Prelatists*, than *sturdy Presbyterians*,—men, who hold and preach the very same doctrines which they hold and preach, who adhere to the same form of Church government, and who actually have, as their theological standard, the same Calvinistic Confession of Faith,—men, who claim to be considered as

* Bro., pp. 56. Paton and Ritchie, Edinburgh, 1853.

* Mr. Moncrieff, the present Lord Advocate, is a Member of the Free Church, and is generally returned as a "lay elder" to its supreme court, or "General Assembly"; which sits annually in Edinburgh, and is composed of clerical and lay representatives from the different Presbyteries.

the true representatives of the Covenanters,—men, who in fine (rightly or wrongly, we say not), in 1842 relinquished their state pay from conscientious scruples, and, as they conceived, “to preserve the ancient landmark which their forefathers had set”; and who, thereby, *without any change of creed*, became unable to “submit to the government of the Church now settled by law”. The new zeal which has sprung up among the Scottish established clergy, in favour of securing “godly” teachers by rigidly applying this Test to all secular professors, is either miserable cant, or it is a lamentable illustration of the proverbial truth, that the slightest points of difference, the fiercer and more intolerant is the tone by which ecclesiastical controversies are characterised.

The revived application, the modification, or the repeal of the Scottish University Test, are questions far too important and too extensive to admit of summary discussion. They have important bearings upon the interests of religion, science, and of general education in the northern division of the empire; but it is chiefly as involving the future destinies of the medical schools of Scotland that we have thought it necessary to call attention to them. It is our earnest hope that every one who loves his profession, and wishes to see the onward progress of medical science, will, within his own sphere, make known and denounce to the utmost of his ability the monstrous and mischievous monopoly which ecclesiastical bigotry, oblivious of the spirit and requirements of the age, is now seeking to create in Scotland.

ABUSE OF HOSPITALS AND DISPENSARIES, A MONSTER EVIL OF THE DAY.

Among the many evils which impede the progress of the medical man struggling with the world, there is none, which to a greater extent renders difficult even moderate success in practice, than the enormous increase of charitable medical institutions, and the indiscriminate manner in which advice and medicines are there supplied to all comers. Far be it from us to deny the great value and importance of Hospitals and Dispensaries, both to the profession and to the public, when proper rules are observed as to the class of patients admitted: but the truth must be spoken, and attention called to some prominent evils which arise from the present prevalence of indiscriminate medical charity.

That the labourer is worthy of his hire, is recognised by the public as a truth which offers but one exception, that exception being the Honorary Medical Officer of a public charity: he is called upon to devote his time and his talents to the patients placed under his care, and to be rewarded by a merely formal vote of thanks at an annual meeting, while the donation of a ten or twenty pound note, from the richest man in the county, is ostentatiously advertised, that the rustics may admire his munificent liberality. The toil-worn doctor who gives his gratuitous services, is supposed only to do his duty: but the wealthy donor, who suffers no inconvenience, is paraded as the poor man's friend.

Again, let us look at the remuneration offered to House Surgeons and Apothecaries at many of the metropolitan and provincial hospitals, and ask ourselves whether these hard-working servants of the public are not miserably underpaid.

We maintain that while hospitals and dispensaries, where

the number of patients is not too numerous, have been the means of doing good to the deserving poor, indiscriminate admission to the crowded out-patients' room has been productive of a vast amount of evil to the profession, and of little benefit to the majority of the applicants, on whom often only a minute or a fraction of a minute can be bestowed.

1st. The *out-patient system* diminishes the earnings of the physicians, surgeons, and general practitioners, practising within the sphere of the operations of a hospital. The yeomen of the neighbouring villages are in the habit of resorting to the nearest county hospital for medicines and advice: thus the rural practitioner loses his patient, and the hospital physician or surgeon is deprived of his legitimate consultation fee. In the metropolis, similar evils are equally rife. Gentlemen's servants, clerks, and well-to-do tradespeople with their wives and children absolutely encumber the waiting-rooms of the London hospitals: and it is chiefly in the Union Infirmaries that the really destitute sick are ministered to. Our larger hospitals and dispensaries are degenerating more and more every day into institutions for furnishing gratuitous medical advice and medicines to the servants and dependents of subscribers; while the minor establishments for special diseases are used principally (and often most unblushingly) as mere pretexts for advertising.

2nd. It tends to reduce the extra allowances of the poor-law medical officers. Boards of Guardians, in their advertisements, make a great flourish of trumpets with regard to these allowances; yet in many districts all extra cases that can be removed are at once transmitted to the neighbouring hospital; thus in a large Union, a subscription of two or three pounds saves fifty, the parish surgeon is deprived of his proper cases, and the hospital surgeon for his skill and attention receives nothing.

3rd. It tends to diminish the public estimation and proper money value of professional advice. This is self-evident.

4th. It injures the prospects of the rising men who practise in the neighbourhood. Of this we could furnish many painful illustrations. The young surgeon fresh from the schools seeks a large town, in which he has connexions, and in which he thinks that by industry and attention he may work out a practice; but he finds an opposition there which he little expected, in the county hospital, where a shabby exterior is all the recommendation required to obtain advice and medicine gratuitously; thither resort all the petty tradesmen and servants; while the Dorcas society provides their wives with gratuitous accoucheurs; and this opposition arises from the abuse of institutions, which, without the gratuitous assistance of his professional brethren, could not exist at all.

All honour to the men who gratuitously serve an ungrateful public! but we would ask them to pause in their work, to inquire whether they are not, by supporting the present system in its manifold abuses, injuring the profession as a body. It is the out-patient system against which we chiefly rebel; the indiscriminate admissions we would abolish, refusing assistance (except in cases of accident), to all not in needy circumstances. We would commence by driving forth, with indignation, from the waiting-rooms, the overpaid and pampered menials of the pseudo-charitable subscribers.

We have hitherto only glanced at some of the more patent evils of the present system as they affect our profession; but in a social point of view, the present mis-

chievous constitution of our hospitals and dispensaries has a still more momentous bearing : it *destroys or prevents the formation of provident habits among the poorer classes*. The man who knows that a charity is open to him whenever he wants a dose of medicine, is not likely to save money ; with him, sufficient for the day is the evil thereof ; and thus when his family are laid aside by sickness, the dispensary doctor is struck with the poverty of the den or garret, which, had not indiscriminate charity existed, might have been a comfortable home.

It may be said, that these growing and long-continued evils admit of no immediate or adequate relief. We would suggest a remedy, by asking two plain questions.

Why should the medical officers of public charities work gratuitously ? Why do they not combine together to memorialize the various committees and boards of governors to stop the present wholesale distribution of medicines and advice to out-patients ; or to adopt the alternative, of paying their physicians and surgeons a suitable salary for their attendance, and adequately increasing their number, so that the advice given, instead of being, as it now too often is, only nominal or routine, may be founded on an efficient examination of the patient.

We feel certain that there is scarcely a body of gentlemen acting as a hospital or dispensary committee, who would not feel that they were imperatively called upon to confront and reform existing abuses, were they to be thoroughly convinced of their actual magnitude.

SHABBY TRICKS OF THE GUARDIANS OF THE LEDBURY UNION.

THE mean devices by which "guardians" of the poor strive to snub, crush, and despoil Union Medical Officers, are so well known, as to have become proverbial ; yet that is no reason why we should not occasionally call attention to the tactics of these parties. Abuses must be unceasingly exposed, so long as they remain unredressed.

Before us lies, in the *Medical Times* of the 22nd instant, an advertisement of the Guardians of the Ledbury Union, in which, after stating the salaries they propose to give to their medical officers, they state ;—"The guardians will provide all drugs and appliances, and a competent person to dispense the same ; they also purpose subscribing to the Hereford and Worcester Infirmaries. No extra fees will be allowed." In other words, the subscribers to these charitable institutions are to be burthened with the maintenance of all the paupers who may sustain severe surgical injuries, while the hospital staff gratuitously attend to them, in order that they may save the ratepayers the paltry fees sanctioned by the Poor Law Commissioners to be paid to Union medical officers. We unhesitatingly declare, that county hospitals are not intended for such purposes ; and that their surgeons are not appointed to minister to such cases. The system cannot be defended ; and we think that if a firm remonstrance from the Association, or its Council, were made to the committees of these infirmaries, lasting beneficial results might flow to the Poor Law Medical Staff of the whole kingdom.

The numerous letters which we receive, bearing more or less on this point, constrain us to publish that this is a matter which requires more than statements and appeals in these columns. It demands decided, organized, and persevering action.

THREATENED RE-IMPOSITION OF THE INCOME TAX.

THE threatened re-imposition upon medical practitioners of their present unjust share of the Income Tax, ought to rouse not only their indignation, but their energies. On the 10th of February, Parliament meets ; and before that day there is abundance of time for the medical profession in every town in the kingdom to prepare petitions to both Houses, similar to those which have already been adopted at Torquay, and which we print at p. 93, along with a prefatory letter from Dr. Nankivell. The labours of Mr. Hume's committee have clearly proved the practicability of a more equitable adjustment of the tax ; and as it must at no very distant period be either revised or abolished, we call upon our colleagues to be up and doing.

ORIGINAL COMMUNICATIONS.

ON INFLAMMATIONS OF THE SCLEROTICA.

By WHITE COOPER, Esq., F.R.C.S.Eng., Ophthalmic Surgeon to St. Mary's Hospital, etc.

INFLAMMATIONS of the Sclerotica having been particularly rife during the last autumnal and winter months, I propose to offer a few practical remarks upon them.

The reason of their frequency in autumn, may be the action of the damp and cold then prevailing, on systems still feeling the effects of the summer heat. During the hot months the perspiration is active, but is checked by the chilly nights of autumn. If the atmosphere be *dry*, cold, no matter how intense, will not set up rheumatic inflammation ; but a cold fog is, as every one knows, especially favourable to its development. The electrical condition of our nervous systems is much influenced by moisture, and when the air is loaded with moisture, the insensible perspiration cannot be carried off with the same freedom as when the air is dry ; thus effete particles are retained which ought to be removed. In some persons, there is a tendency in the fibrous structures to take on inflammatory action under such circumstances, and the sclerotic, as one of them, evinces this in the affection Scleritis : and when this membrane has once been the seat of inflammation, the morbid action has a tendency to recur again and again when the exciting cause is in operation.

The tough, fibrous sclerotic has little sensibility in its normal state ; but when the vessels composing its areolar tissue swell under inflammation, the membrane yields to the distension slowly, obstinately, and with grievous pain. To a superficial observer, the inflammation appears much less severe than in conjunctivitis ; for in place of the bright crimson of the latter, the eye has a generally diffused pink hue, caused by the minute capillaries of the white sclerotic being gorged with red blood. On close inspection, there will be seen a series of straight vessels running from the periphery of the globe towards the cornea, separately at first, but inosculating at acute angles as they approach it ; these are manifestly deeper than the more tortuous vessels, which may always be seen coursing over the surface.

Whenever the sclerotic is inflamed, there is deep-seated pain of an aching, throbbing character. The globe feels too large for the socket, and is tender to the touch ; the pain is not confined to the eye, but extends to the temple, which is bruised and sore ; in severe cases the whole side of the head, even to the occiput, together with the brow and cheek, participate in the suffering. This is aggravated at night, and it is supposed that in true rheumatic cases the periorbital lining the orbit participates in the inflammation. Be that as it may, the patient is generally awakened about two in the morning by a paroxysm of pain, which gradually increases up to a certain point, and then as gradually subsides ; and this is repeated night after night, till the sufferer,

though jaded and weary, dreads the approach of bed-time, and the morning finds him tossing, feverish, and unrefreshed.

When the great vascular communication which extends from tunic to tunic of the eye is considered, we may readily conceive that inflammatory action commencing in the sclerotic is speedily extended to the other membranes. Accordingly, within a few days after the pinkness of the sclerotic manifests the presence of inflammation, the conjunctiva will redden, and the iris will be slightly changed in colour; for instance, a blue iris will assume a slight greenish tinge without perceptible dulness, and about the same time the patient complains of some mistiness of vision;—the pupil too will be rather contracted, and will not act freely. These symptoms indicate that the iris and choroid participate in the morbid action. When the iris becomes involved, the characteristic zone around the cornea becomes strongly marked, being gradually shaded off into the general pink of the sclerotic, above which a pretty close network of inflamed conjunctival vessels can be seen.

At the first onset of scleritis the whole membrane is not suffused at once; a patch, generally near the cornea, first becomes injected, and from this the inflammation, if not checked, rapidly extends.

Being desirous of ascertaining the relative frequency of scleritis in different places, I have compared the reports of the Liverpool, the Bristol, and the Moorfields Eye Infirmarys; and taking the average of three years, 1846, 1847, and 1848 for each, I have found that the proportion of rheumatic cases was to the whole number of cases as follows:—

At Liverpool	1 in 128.29
Bristol	1 in 71.53
Moorfields	1 in 53.64

According to M. Cunier, the proportion of rheumatic cases in Belgium is about twenty-two per cent.—an enormous proportion, fully bearing out his statement that, in order of frequency, rheumatism stands next to scrofula as a disease of the poor in that country; and we cannot fail to remark, that the proportion is greater in London than in either Bristol or Liverpool.

Besides the simple form of scleritis which is excited by local influences, there is another which is really the development of rheumatic inflammation in the eye, and is independent of local causes. During the last spring, I was requested to see a patient of Dr. Sibson's in Victoria-ward, St. Mary's Hospital. On a bandage which covered her eyes being removed, I recognised acute rheumatic inflammation of the right eye; and on inquiring for what disorder she was admitted, was informed that she was then confined to bed by acute rheumatism of the joints, and that the inflammation of the eye had come on since her admission, being, in fact, metastasis to that organ. It is, however, more common to find the eye affected after the general attack has passed away. Mr. Middlemore thus describes the conditions which usually govern the invasion of rheumatic scleritis.

"Rheumatic scleritis," says he, "takes place most commonly independently of the present existence of any rheumatic affection, but not independently of the former existence of rheumatism; and in very many instances it would seem to be vicarious of rheumatic inflammation elsewhere, for, although rheumatism in some other part of the body may have been somewhat severe at the time of its occurrence, its severity has declined as the disease in the eye has progressed, and when fully established in that organ, it has wholly disappeared in its original site. I have known a severe attack of rheumatic scleritis supervene upon an acute rheumatic affection elsewhere, and continue in both situations with great severity; but this is very unusual, and presents a rare exception to the general rule upon this point. In other instances, rheumatic scleritis has distinctly alternated with rheumatism in some other part, the one texture resuming, or, to use a familiar phrase, taking up the action the other texture had declined."*

The following cases illustrate these positions.

CASE. On the 14th of last September, a member of Par-

liament, about 36 years of age, consulted me under the following circumstances. During the late Session of Parliament, he had suffered severely from the currents of hot and cold air, which play in a most eccentric manner on the members of the House of Commons, giving rise, in his case, to general rheumatism of the muscles of the body; so that, as he expressed it, "Whether sitting or lying, there was no posture in which he was not in pain." After trying a variety of treatment he went to Buxton, and had derived considerable benefit from the bathing there, when suddenly, and without apparent cause, his right eye became attacked with inflammation, which for a fortnight completely bade defiance to the active general measures, and local sedatives and astringents, with which he was treated. At this point I shall leave the case, referring to it again when speaking of the treatment of rheumatic inflammation.

CASE. On the 6th of the present month, Susan Jandrell, a spare woman, 78 years of age, applied to me at the North London Eye Infirmary. Her right eye presented a well-marked example of rheumatic scleritis. On asking how long she had had it, she replied, "Oh, sir, this is one of my old attacks: for the last seven years I have every autumn had an attack of rheumatism, and as soon as my limbs get well my eye always becomes bad." I might adduce many more examples, but these are sufficient for my purpose.

The symptoms in rheumatic inflammation differ in no great degree from those which have been described as characterising the simple form; the colour is perhaps more dull, more brickdust-like, and the redness more patchy than in ordinary scleritis, but according to my experience the rheumatic form is by far the most troublesome to deal with. In the first place, its obstinacy is great. The surgeon is sent for to a patient labouring under this disorder; his treatment is attended with the most pleasing improvement, and the eye gets nearly well. He congratulates himself on the speedy cure effected; when, on calling, he finds the room again darkened, and the eye bound up. "Oh," says the patient, "my eye is as bad as ever: I've had a dreadful night; I went to bed quite comfortable, but awoke about two, and have not had a wink of sleep since." The examination of the eye quite confirms the assertion of the patient, that the inflammation is as bad as ever, and the whole battle has to be fought over again; and this will sometimes happen twice or thrice, until the patient is utterly disheartened, and the medical attendant perhaps not less so.

There is another feature of rheumatic scleritis, which is very troublesome. After the inflammation has existed some days, a little ulcerated furrow, surrounded by a slight haze, is seen near the margin of the cornea. This is very apt to extend, until there is a troublesome superficial ulceration, attended with considerable haziness, involving, perhaps, half the surface of the cornea, and materially interfering with vision. I believe this is most frequently found in persons of feeble constitution, and whose systems are debilitated either by disease or by excesses. In such, weeks and even months will elapse before the eye perfectly recovers, as in the following case.

CASE. On the 11th of last May, I was sent for to a lady, seventy-one years of age, who had during the last seven years suffered from four attacks of rheumatic inflammation of the left eye, two of which had respectively lasted three months, and three months and a half. The outer half of the sclerotic was of a dull red, the eye felt bruised and sore, and there was pain of the brow. Six leeches were applied to the temple, frequent fomentations ordered, and after the secretions had been corrected, bark and soda with colchicum were prescribed. The eye gradually became better; and on the 20th, I took my leave.

On the 24th, I was again sent for, and found a slight return of the inflammation, but so trifling, that I again took my leave on the 26th, the eye being apparently well.

On the 31st, I was again summoned, and this time found a rather sharp return of the inflammation, with ~~business~~ and several small superficial ulcerations on the ~~cornea~~; but by the 10th of June, all had subsided, with the ~~eye~~.

* Middlemore, "Treatise on the Diseases of the Eye", vol. 1, p. 568.

tion of slight haze, which was gradually disappearing, in the cornea.

A month afterwards, the eye experienced a slight return of inflammation, and the abrasion of the cornea reappeared, nor did it yield readily to treatment. The weather was at this time oppressively hot; and being satisfied that change of air would be beneficial, I sent this lady to the Isle of Wight. Within a day or two after her arrival there, an improvement in the symptoms was apparent. It continued, and the eye gradually recovered; so that when I saw it at the expiration of five weeks, the faintest possible haze alone marked the seat of the troublesome ulceration of the cornea.

In connexion with this case, I may mention a little incident so characteristic of the late Duke of Wellington, that I will venture to relate it.

Soon after the second attack of inflammation had subsided, but whilst the eye was still uneasy and intolerant of light from the ulceration, my patient said to me one day on making my call, "Mr. Cooper, the Duke of Wellington and I are very old friends; and hearing that I was suffering from my eye, he called yesterday, bringing with him a bottle of eye-water, which he said he was quite sure would cure me if I would use it, for he had used it himself daily for twenty years, and entirely attributed the preservation and strength of his sight to it, but I said I would not apply it without your permission."

I smiled, and asked if her ladyship knew its composition?

"Oh, yes," said she, "the duke told me that it was equal parts of vinegar and rose-water; and the way he uses it is this:—he dips his finger in it every morning, and sweeps the moistened finger round the eye two or three times, not letting any of the eye-water get into the eye; and he is perfectly confident that if I will do the same, my eye will soon be well."

I told her ladyship that so far as I was concerned, she was at perfect liberty to use it in the way described; but I had great misgivings as to the favourable result so confidently predicted by my illustrious rival.

There is a peculiar condition of the eye occasionally seen in old persons who have been martyrs to chronic rheumatism, especially that form in which the joints of the fingers have been slowly disorganized, giving these extremities the appearance of birds' claws.

Without other pain than dull aching, a morbid action will be set up in one of their eyes, of which the appearances are as follows. The sclerotic gradually loses its natural appearance, and assumes a purplish dingy brown hue, most marked in the neighbourhood of the cornea; after the lapse of many months, it may be seen to bulge a little—not equally, but more on one side than the other. The iris becomes dull and rather discoloured; a few purplish vessels may be seen ramifying on the surface of the sclerotic, and the patient complains that the sight has become very imperfect. In such cases there has been chronic inflammation, giving rise to effusion, which effusion, causing absorption of the sclerotic, permits the dark hue of the choroidal pigment to be seen through the attenuated membrane—whence the colour. The same pressure, at a later period, produces the bulging projection. I believe that the choroid is always implicated in these cases, and that the local changes being in connexion with constitutional mischief, are very little amenable to treatment.

Authorities differ widely as to the line of treatment proper for scleritis; but perhaps too much attention has been paid to verbal distinctions, and too little to the broad principles which should guide us. We ought not to consider ourselves bound down to one line of treatment for scleritis, to another for conjunctivitis, to a third for iritis, or to yet a fourth for choroiditis. A practitioner who allows himself to be trammelled by mere names, places himself in a false position. We should first look to the affected organ, and carefully ascertain the extent to which the inflammation has proceeded. Having satisfied ourselves on this point, we should not less carefully examine into the general condition of the patient, obtaining all the collateral

information as to constitution and habits that can be acquired; and on the combined information obtained in this manner, we should direct our proceedings, irrespective of mere names. I have been led to these remarks by the different directions laid down in books as to the treatment of scleritis. One authority would treat it exclusively by attacking the morbid condition of the system; another would confine its treatment to local measures; then, again, some would bleed from the arm very copiously, whilst others condemn even the moderate use of leeches. The truth is, that every case ought to be made a study of itself, and should be treated according to its requirements. As a general rule, there can be no doubt that judicious depletion, by cupping or leeching, is beneficial. The vessels are thereby unloaded, and brought into a favourable condition for responding to the action of medicines; and I may remark, that the mastoid region is preferable to the temple for the abstraction of blood. The bruised and tender feeling of the temple, which is characteristic of scleritis, renders cupping on that spot a very painful proceeding, and leeches occasionally cause much irritation and erythematous swelling, when applied there; these objections do not apply to the mastoid region, and the relief is equally great when the blood is taken from thence.

As regards general treatment, much will, of course, depend on the condition in which the patient is found. The bowels should be well cleared in the first instance, but afterwards mere purging does little good. The point to be held in view, should be correction of the secretions, and regulation of the bowels, rather than active purgation: no less important is it to maintain an action of the skin, by doses of Dover's powder, or James's powder, where the surface is dry. A valuable medicine, after the tongue has become clean, is bark and soda, five grains of each of which, combined with two of powdered colchicum, or without the colchicum, may be given thrice a day with the happiest effect. The iodide of potassium, too, often exerts great influence over scleritis, especially after it has become chronic. From three to five grains thrice a day, in a light bitter infusion, as that of hop, will often remove the lingering inflammation with great rapidity.

Space will not admit of my dwelling upon the treatment, but I must, in conclusion, allude to a remedy which, at the suggestion of my colleague, Mr. Ure, has recently been employed by me. I mean benzoic acid; and I will briefly narrate the circumstances under which it was tried. It was in the case of the Member of Parliament already referred to. His condition, when I first saw him, on the 14th September, was as follows. The conjunctiva and sclerotic were intensely inflamed, the corneal zone being strongly marked. The iris, naturally blue, had a green tinge, but was not otherwise altered; the pupil was contracted, and sluggish; the globe excessively tender; he had much mistiness of vision, intolerance of light, and profuse discharge of scalding tears. There was great supraorbital pain, involving the whole side of the head, and greatly aggravated at night. This state of things had existed a fortnight, and he was very low, with cold skin, and feeble pulse.

The history of the case, and the symptoms, indicated rheumatic scleritis, which had gradually involved the iris and the choroid; and I thought it a favourable opportunity for trying benzoic acid. Six leeches were first applied to the mastoid, and he was then ordered to take half a drachm of powdered benzoic acid thrice a day. He began this on a Tuesday. On the Thursday there was a manifest improvement: he had passed a good night, and could face the light; whilst the local inflammation had materially decreased. The powders were stopped on the Friday, as he complained that they made him sick; the improvement, however, continued. The only other medicine ordered, was a little grey powder; and on the Monday following—the sixth day after fairly commencing this treatment—the patient left town with his eye almost entirely free from redness, and with merely some haze of vision, all which symptoms, I subsequently learnt, disappeared in the course of another week.

19, Berkeley Square, January 1853.

REQUIREMENTS IN METEOROLOGICAL TABLES.

By W. ADDISON, M.D., F.R.S.

THE quarterly returns of marriages, births, and deaths, contain mean readings of the thermometer, barometer, etc.; but, in order to estimate correctly the influence of weather upon sickness and mortality, it seems to be the extremes, which often occur within very short periods, that are required.

It is generally understood, that sudden alterations in the weather are prejudicial to health; nor can there be any doubt of this fact; yet such alterations are frequently obliterated by averages and means. The means of a month or a week may come out nearly alike to those of the preceding week, or of the corresponding month of the preceding year, and yet include very extensive thermometric changes, which are thus placed out of view. Every one, in his own person, is acutely sensible of a change of temperature from 50° to 24° , and *vice versa*. This may occur, and has occurred, without altering the averages of the month more than 1° or $1\frac{1}{2}^{\circ}$. In projecting a meteorological diagram, the mean curves are rounded off and depressed; whereas, what seems to be required are the extreme limits and the time.

I will give one or two examples of my meaning, from a manuscript meteorological journal now before me, embracing observations made four times a day.

It is at night, when going to bed, and in the morning, when we first encounter the outward air, that sudden changes in the weather are most acutely experienced. Let us take, then, 9 o'clock A.M. for our illustration.

On the 6th of January, 1835, at 9 in the morning, the thermometer out of doors stood at 34° F.; on the 7th, at 27° ; on the 8th, at 24° ; on the 9th, at 40° ; on the 11th, at 48° : the barometer falling, in the same interval of time, eight-tenths of an inch.

Turning to the bills of mortality for the metropolis, to find the effect, if any, of this sudden change, we find, in the week ending January 6th, the deaths from scarlet fever, 7; from measles, 15; and from hooping cough, 15; whereas, in the week ending the 23rd (when the influence of the vicissitudes of temperature between the 7th and 11th of the month might be expected to appear in the mortality table) we find the deaths from scarlet-fever, 14; from measles, 23; and from hooping-cough, 18. In the two former instances, the mortality was doubled. The inference is, that cases of sickness were both aggravated and largely increased.

Again, in April 1835, we meet with another remarkable example of a sudden depression and rise of temperature, and of the dew-point, as ascertained by Daniell's hygrometer. On the 14th of the month, the dew-point, at 9 A.M., was 50° ; on the 16th, at the same hour, it was 25° ; on the 17th, 28° ; and on the 18th, 42° . The thermometer, in the same period, ranged from 61° on the 14th to 28° in the night of the 16th—a range of 33° .

Turning again to the bills of mortality, we find, in the week ending the 28th April, an increase in the burials, as compared with the preceding week, of 332. The deaths from consumption were double: fever, scarlet-fever, measles, hooping-cough, and inflammation, being the other heads under which there was a large increase.

April we expect to be a month of genial, warm, moist, spring weather; but, as above shown, it is subject, for 24 or 48 hours, to a temperature and a dew-point appropriate only to the depth of winter. Sudden and temporary these changes may be, and are: and this is the point of the present communication. They are so sudden and temporary, that they disappear in the monthly means; and may even be lost sight of in the average of a week; but they are not so sudden or short-lived as not to have a powerful influence upon the origin and progress of epidemical distempers.

It is concluded, from the facts stated, not only that sudden atmospherical vicissitudes have a great influence upon the progress of sickness and the amount of the mortality,

but also that meteorological tables do not fulfil their proper function with reference to epidemic diseases, unless they show the full extent or the extreme points of all the most prominent or sudden atmospherical changes, and define or give a measure of the time they include.

Maldstone, Jan. 15th, 1835.

ON THE NATURE AND CAUSES OF THE PHYSIOLOGICAL PHENOMENA

COMPRISED IN THE TERM "MOUNTAIN SICKNESS"; MORE ESPECIALLY AS EXPERIENCED AMONG THE HIGHER ALPS.

By STANHOPE TEMPLEMAN SPEER, M.D.

(Concluded from p. 53 of last number.)

THE abnormal sensations constituting mountain sickness may thus be classed in a tabular form, according as they affect the different functions.

Of the nervous system.	{ Vertigo. Cephalalgia. Somnolence.
	{ Dyspnœa. Increased rapidity of the respiration. Sense of thoracic constriction.
Of the respiratory and circulatory systems.	{ Occasional oozing of blood from mucous surfaces. Syncope tendency. Cardiac palpitation. Throbbing of the vessels within the cranium. Increased rapidity of pulse.
	{ Anorexia. Nausea and vomiting.
Of the digestive functions.	{ Thirst. Constriction below the epigastrium. White tongue.
Of the locomotive functions.	{ Muscular pains. Paralysed sensation in the lower limbs.
Of the tegumentary system.	{ Harsh skin. Suppression of the cutaneous transpiration. Pallor of the surface. Cyanosed appearance of the countenance.

It must not be supposed that all these symptoms are to be met with in every individual, upon his attaining a considerable elevation; but in one instance or another, they have each and all been noticed in ascending the Mont Blanc. While, in the different accounts given by those who have reached its summit, we meet with many different opinions relative to the physiological phenomena there observed, some asserting that nothing unusual was felt, others, that this or that symptom was the most prominent and unpleasant, all such diversities of opinion as regards personal sensation are to be estimated at their real value, and not to be set down as indicative merely of the workings of imagination. No one doubts the influence of the sea upon those unaccustomed to it; but if a given number of such persons be taken promiscuously, there will be a great probability of receiving from them at least three or four different versions of its effect. One individual will complain of excessive nausea, without the relief afforded by vomiting; with another it will be exactly the reverse, fits of vomiting occurring, with perfect ease during the intervals; in a third, diarrhoea and abdominal uneasiness will be the prominent symptoms (of this I know several examples); a fourth will complain chiefly of severe headache, with or without gastric complication; a fifth may suffer from a combination of the above miseries; while a sixth, without obvious reason, will enjoy a complete immunity from them all. But further, these varieties in the effects produced by the motion of a vessel at sea are not only met with in different individuals, but they may occur in the same one, at different times, and under different circumstances, according to the state of health he may have previously enjoyed.

Upon the same principle may be explained the diversity of symptoms, and at the same time the occasional immunity from them, at a given elevation which may exist in differ-

ent individuals. Reference is to be made to their physical peculiarities and antecedents.

The causes which give rise to the phenomena of mountain sickness, next claim attention.

The earliest attempt to explain the occurrence of these symptoms, was made by De Saussure; he asserts that they are due, not to the difficulty of breathing in such an atmosphere, but to the relaxation of the vessels, which arises from a diminution in the compressing power of the air. After ascending the Mont Blanc, he says, "the respiration is inevitably accelerated in a rarefied atmosphere, by the necessity of supplying the lungs with the same quantity of air in a given time", and he adds, "this forced acceleration of the respiration is the cause of the fatigue and distress experienced at great elevations, for, as the respiration becomes quickened, the circulation becomes so likewise." He further says, "the muscular exertion, moreover, produces, in a rarefied atmosphere, an acceleration of the circulation and respiration, extremely annoying to certain temperaments."

In a paper published by M. Brachet, in which he endeavours to elucidate the causes which give rise to certain of the phenomena occurring upon lofty mountains, it is justly observed that, in America and Asia, the effects of a rarefied atmosphere are only first perceived at the limits of perpetual congelation, although these limits differ considerably in point of elevation according to the latitude of the locality. In the opinion of this author, the lassitude and dyspnoea are explicable upon the following theory. "During the act of locomotion, those muscles which are contracting remove the oxygen of the blood which traverses them more rapidly than those which are at rest; hence the necessity for an accelerated respiration, in order to supply the deficiency produced by such movement, more especially in a rarefied atmosphere, and the relief from the dyspnoea thus produced upon taking rest, when the blood, losing less of its oxygen in the muscles, requires less in the lungs."

"On the other hand, as the muscles can contract only under the influence of arterial blood, it follows that, when the blood which reaches them has become venous, they are struck with a certain degree of paralysis; and hence the difficulty, amounting at length almost to an impossibility of locomotion, when on lofty mountains the muscles which perform this function, and consume at the same time a considerable quantity of oxygen, receive at length blood containing but little oxygen, and all but venous in its character."

From the above theory it would appear, that the physiological phenomena in question are attributed solely to changes in the quality of the blood. Such a view, however, is somewhat too exclusive.

It is here worthy of remark that, after attaining a height of 13,000 feet and upwards, the necessity for a frequent halt will arise in one person from extreme dyspnoea, rather than from fatigue, while another will halt less from want of breath than from a loss of power in the lower extremities, and a conviction that a fall would be the result of an attempt to proceed further. Rarely indeed is the dyspnoea so urgent but that it would permit of a few more steps being taken, were it not that muscular power fails entirely.

To those who have known what it is to make protracted extension upon a fractured limb, to compress an artery during a tedious operation, or to engage in the exercise of fencing, this species of muscular incapability will be familiar. While, under the above circumstances, the respiration may be unembarrassed, the individual ere long will perceive in the contracted muscles a painful sense of fatigue, and the fingers would soon refuse to do further service, were their strength not recruited by being allowed to relax somewhat. The same result takes place at a great altitude, only with greater rapidity; but it is possible (as will be seen) to become so accustomed to a rarefied atmosphere, as at length to feel no unpleasant effect therefrom: and were this muscular incapability the result of increased venosity

of the blood, from habitual deficiency of oxygen at such heights, it is doubtful whether it would be so easily and rapidly removed by habit, nor would such a condition be accompanied by actual pains in the limbs.

It is probable, therefore, that this painful species of fatigue depends upon sanguineous congestion, occurring in those muscles which are in the act of contraction: and the general character of the phenomena, which result from rarefaction of the atmosphere, appears to corroborate this view.

In proportion to the rapidity of the circulation, does the tendency to active congestion increase; now, at a great elevation, this increased rapidity does actually take place, as evinced by the greater frequency of the pulse, without any reduction of its strength; in such a case, the liability to congestion is sufficiently evident. Upon refraining, however, from exertion, or at least by diminishing the amount of effort, the proper equilibrium may be recovered and maintained, in persons of a tolerably robust constitution; but upon again moving, the contracted limbs become, *de novo*, the seat of congestion, and this increases in proportion to the acceleration of the circulation. It may here be remarked that, in a rarefied atmosphere, those whose muscles have been most exercised are less liable to these sensations.

That the pains felt in the back and loins under such circumstances are due to congestion, is, I conceive, rendered still more probable by their similarity to those which are felt at the commencement or cold stage of a febrile paroxysm,—a period when there in reality exists a congested condition of the internal organs.

The dyspnoea and semi-paralysed condition of the extremities thus produced, are usually associated with certain other phenomena, the *ensemble* of which alone deserves the appellation of "mountain sickness"; these are nausea, anorexia, a syncopal tendency, experienced especially when the trunk is not inclined forward, severe headache, oozing of the blood from the gums, as noticed by Humboldt, etc., etc.; and these symptoms may (like the dyspnoea and muscular debility) be attributed in a great degree to the same cause—irregularity of the circulation, with congestion of the cranial and abdominal viscera.

The usual result of ordinary muscular effort is to produce a stasis of blood in the capillaries, and a condition of active congestion in the brain, lungs, and muscles. Upon making a series of such efforts without intermission, as, for example, when indulging in violent gymnastic exercise for some minutes consecutively, in running hurriedly up a long flight of stairs, or a steep ascent, the same effect is produced to a still greater extent; and if such exercise be at all prolonged, the sight becomes dim and troubled, giddiness and vertigo supervene, with a painful sensation of lassitude and complete failure of the muscular powers. If, however, repose be taken before the effects of pulmonary and cerebral congestion have attained their maximum, there occurs a reflux of blood towards the heart, evinced by sudden paleness of the countenance, a sensation of faintness, troubled vision, and even complete syncope; unless the precaution of assuming the horizontal posture be immediately taken.

Such are the ordinary consequences of violent exertion, as occurring within the scope of general observation. They are evidently due not merely to the inordinate stimulation of the muscles by a surplus of arterial blood, in their earlier stage, or to the paralyzing effect of venous blood at a subsequent period, but likewise to the cerebral excitement produced by an increased afflux of that fluid towards the brain, its rapid subsidence from which leaves the sensory and motor powers in a state of comparative collapse.

Upon comparing these phenomena, evidently arising from temporary sanguineous congestion and its sequelæ, with those observed at great altitudes, the similarity becomes apparent, and in fact unmistakable; with this difference merely, that the rarefaction of the air, in accelerating the movements of respiration, even during repose, contributes to develop the ordinary results of exertion with greater rapidity than in the plain.

The next most prominent symptom, noticed as occurring

at great altitudes, is a condition of the stomach resembling in a great measure that which is familiar to all who have experienced the pitching motion of a steam-vessel in a short cross sea. It is this phenomenon to which the term "mountain sickness", in contradistinction to that of "sea sickness", is especially applicable, as constituting frequently the most prominent and distressing symptom during the ascent of a lofty mountain. It is true that it seldom attains such a degree of severity as that felt at sea; but it nevertheless produces, when well marked, the greatest prostration, and that sense of general depression which accompanies nervous headache with gastric derangement.

It is evident that the causes giving rise to this condition of the stomach cannot be classed under the same head as those to which the analogous phenomena of sea sickness are attributable. In the latter case, it is probable that the real cause lies in a disturbance of the brain, produced by the continued motion of the vessel, and affecting the sense of vision in a manner to which it had been previously unaccustomed. In sea sickness, therefore, the stomach would appear to be secondarily implicated as the result of a morbid impression transmitted to the brain; and that such is the actual explanation of this distressing affection, seems warranted by the peculiar nature of its premonitory symptoms, which are evidently of cerebral origin, and by the fact that the same phenomena in a modified form are experienced by some individuals, upon looking at an object perpetually moving before the eyes. I have, in my own person, while steadfastly gazing at one of the long moving panoramas so popular at present, perceived at length a dimness of vision, with the same trifling giddiness and even tendency to nausea, which usher in sea sickness. These ceased, however, upon closing the eyes; and the efficacy of this measure at sea, more especially if accomplished through the intervention of sleep, would afford further grounds for presuming that in sea sickness the unaccustomed impressions, received by the eye and transmitted to the brain, should, through the well known sympathy existing between these organs, secondarily affect the stomach.

But while the mountain sickness resembles, in a mild degree, that felt at sea, its explanation must be otherwise sought for; and while saying that the two conditions resemble each other, it is necessary to add that in some particulars they differ. The cerebral symptoms are less prominent in the mountain variety,—there is less nausea, and actual vomiting is not common, unless the stomach have been previously deranged; nor is there that extreme sense of prostration and wretchedness which characterizes severe sea sickness, and which renders the sufferer totally careless, for the time being, as to what may be the result.

In an ordinary state of health, there exists in the intestines a certain quantity of gas, intended to counteract the pressure of the external atmosphere upon the parietes of the abdomen. At a given height this pressure becomes diminished, the gas undergoes gradual dilatation, and, according to the theory of M. Maissiat, by its pressure upwards upon the stomach, produces those symptoms of gastric derangement previously mentioned.

To this theory of Maissiat it might, as M. Le Pileur remarks, be objected, that these gastric symptoms are not accompanied by colicky pains, nor any marked sensation of abdominal uneasiness, such as often occur in ordinary cases of gaseous distension. It should, however, be remembered that those cases of flatulence are the most distressing, in which unaccustomed gases, or those occurring naturally in small quantities, such as sulphuretted and carburetted hydrogen, are largely developed within the intestinal canal; pure nitrogen and hydrogen may exist to a considerable extent without producing much abdominal uneasiness, more especially if, as is usually the case, they are secreted gradually. In the present instance the distension is not the result of the abnormal increase of irritating gases, but arises rather from the suddenly augmented bulk of those innocuous gases, which even in a natural condition are tolerably abundant within the intestines.

It has been by some supposed, that this gastric derangement is attributable to a general condition of the system, analogous to that which precedes an ordinary febrile attack. Others, on the contrary, deny this; they argue that the occurrence of the symptoms at a certain height, without appreciable cause, and their disappearance upon regaining a lower level, prove their non-dependence upon aught of a febrile nature. They assert that, beyond the disordered condition of the stomach, there are no feverish symptoms, the whiteness of the tongue and the acceleration of the pulse excepted; that the latter, moreover, presents no irregularity, or other peculiarity, further than that which occurs after taking moderate exercise, and that the whiteness of the tongue is attributable to the small amount of food taken on such occasions. They who deny the analogy between the two conditions, also affirm that during these ascents, there is never experienced that *malaise, sui generis*, which precedes a febrile paroxysm; and they explain the occurrence of thirst, by the evaporation which takes place with great rapidity in the upper regions of the atmosphere.

It would, I think, appear from this, that those who have advocated the non-identity of the physiological states giving rise on the one hand to the mountain sickness, and on the other to the congestive stage of an ordinary febrile attack, must have shut their eyes to the real facts of the case; for the very attempt to explain away each symptom which is known to attend the incubation period of a fever of non-specific origin, is a proof of the force with which the idea must have suggested itself. The symptomatic analogy between these two conditions may be seen by placing their respective phenomena in juxtaposition. I chose ephemeral fever as being the type of an ordinary febrile paroxysm.

Prodromic Phenomena of Ephemeral Fever.

1. General feeling of languor and distaste for motion.
2. Muscular pains in the loins and lower extremities.
3. Nausea, anorexia.
4. Headache, throbbing of temples.
5. Thirst.
6. White tongue.
7. Dry, rough blanched skin.
8. Acceleration of pulse.
9. Ditto of respiration.
10. Diminished general secretion.

Phenomena of Mountain Sickness.

1. Prostration with loss of power.
2. Muscular pains in the lower extremities.
3. Disgust for food, nausea and vomiting.
4. Headache, throbbing of carotids; vertigo.
5. Thirst.
6. White tongue.
7. Cold dry state of the cutaneous surfaces.
8. Increased rapidity of pulse.
9. Ditto of respiration.
10. Diminished secretion.

The above shews clearly the close resemblance which exists between the early symptoms of an ordinary feverish attack, and those which characterize the mountain sickness; but this is still further demonstrated, when the conditions of the system which accompany each, are taken into account.

In the early stage of ephemeral fever, which, as the type of simple fever, is best suited to the comparison in question, the symptoms point to a deficiency of blood in the external parts of the body, and, as a consequence, its accumulation in the deeper seated organs.

With the predisposing cause of this condition of the circulation in the prodromic period of a fever, we have nothing to do: various theories have been suggested to account for it. What may be looked upon as tolerably certain is that (whatever be the cause) there exists, as the prominent feature in the phenomena of mountain sickness, a congested condition of the internal organs, with a deficient cutaneous circulation; or that, in other words, while the two affections agree as regards symptoms, they each present an analogous state of the circulation sufficient to account for such symptoms.

The idea here suggests itself, that were it desired to produce such a pathological condition in a healthy individual, there could scarcely be a more efficacious mode of doing so than by suddenly removing him from a temperature of between 70 and 80 degrees of Fahrenheit, to one in which

he would be surrounded by fields of snow and masses of ice; in fact, to the regions of perpetual winter; and this in reality occurs in the case of those who attempt to ascend the loftiest of the Alps. At a height of between 1,000 and 2,000 feet, the traveller possibly spends a few days, buried as it were in a deep valley, suffering from intense heat and constant copious transpiration: upon leaving the valley he ascends rapidly, and in a few hours enters upon a region of eternal ice and snow, the vital heat being rapidly abstracted by the frozen material under his feet, and the power of advancing with sufficient rapidity to sustain the equality of the circulation, becoming hourly less and less.

This leads to a consideration of the somewhat singular fact, that the mountain sickness commences only at the limit of perpetual congelation, whatever that limit may chance to be.

Albeit liable to exceptions, the rule holds good in the majority of instances; for it may be seen, by referring to the narratives quoted previously, that among the Andes and Himalaya, the phenomena of mountain sickness are first noticed at an infinitely greater height than among the Alps, where the snow level is considerably lower.

The following is the most probable explanation of this anomaly.

In all mountainous countries, the habitations of men are to be met with, up to within a short distance of the line of perpetual congelation. To reach this limit from the sea-level, often requires, especially in the Andes and Himalaya, some days; upon attaining it, a short time is usually allowed to elapse, previous to entering upon the ice-bound desolate regions which now present themselves, and in this manner, an opportunity is afforded for becoming habituated to the increasing rarefaction of the atmosphere; but as, upon leaving the domain of man, it is necessary to achieve the remainder of the ascent as quickly and with as few stoppages as possible, it is evident that the rapid elevation through 5,000 or 6,000 feet, from a point where already the effects of a rarefied atmosphere were slightly felt, must produce marked results. It must tend at once to develope rapidly those abnormal sensations which had previously remained in abeyance, owing to the more gradual atmospheric transitions experienced in ascending from the level of the plains, across the succession of table-lands and lower mountain ranges, which lie at the foot of the loftiest and steepest summits.

It is for this reason that some of the Alpine passes, the St. Bernard to wit, give rise, not unfrequently, to an amount of mountain sickness and indisposition, scarcely explicable upon the grounds of absolute elevation. In this case, a height of 7,473 feet is attained in one day; and the traveller, a few hours after leaving the valley of the Rhone, sleeps at a height of $1\frac{1}{2}$ mile above the level of his previous night's resting-place. The sudden change in the density of the atmosphere between the two points, is quite sufficient to produce the phenomena in question, more especially in the uninitiated.

That it is not so much the absolute as the relative elevation attained, which causes the mountain sickness to be felt at much lower points among the Alps than among the Andes, is evident from facts, which show the possibility of individuals living without discomfort at heights, where, if suddenly removed to them, they would have experienced the most distressing sensations.

On the Thibet side of the Himalaya mountains, are to be found villages of 13,000 feet above the sea level; and likewise upon the slopes of the Andes, at 11,000 feet; and M. Humboldt mentions the fact of having lived for some time at a height of 12,303 feet, on the Antisana, without suffering in any way from the rarity of the atmosphere, the effects of which he was not sensible, until he had attained an elevation of 16,800 feet upon Chimborazo.

In M. Agassiz's travels and excursions among the higher Alps (*Excursions et Sejours dans les Hautes Alps*), he describes the mode of life led by himself and his companions, at a height of 7,800 feet, during the space of several weeks. From being frequently in the habit of ascending the neigh-

bouring peaks, they were at length enabled to reach the summit of the Jungfrau, without being annoyed by the rarefaction of the air. And D'Orbigny, in speaking of the sufferings he endured among the Andes, tells us that persons born in these lofty regions feel no inconvenience, while those who, after leaving the plains, reside for any length of time among them, suffer, it is true at first, but recover their usual health ere long, of which he himself afforded a personal and convincing proof.

In the accounts which we possess of some of the most remarkable mountain ascents, comparatively little notice appears to have been taken of the condition of the pulse. Not a few have been contented with asserting that it was somewhat quicker than usual, or did not vary to any great degree. Of the value of such loose statements, little need be said.

To the indefatigable De Saussure, however, we are indebted for some interesting remarks upon this subject. After remaining for several hours on the summit of Mont Blanc, he made some observations upon the pulse. His guides, as well as himself, were entirely free from the exhilarating influence of spirituous liquors; they had for some time been in a state of rest, and suffered merely from prostration and nausea. The pulse of De Saussure himself was found to be 100; that of his servant 112; and that of Balmat, his chief guide, 98. At Chamounix, the following difference was noted:—

	Chamounix.	Summit of Mont Blanc.
Saussure	72	100
Servant	60	112
Balmat	49	98

The same observer, at the close of his sojourn upon the Col du Géant, upwards of 11,000 feet in height, examined the ratio between the pulse and the respiration in his own person. In the morning, when at rest, he found the respirations 17, and the pulse 79, per minute. The next day, at noon, the pulse beat 82 in the erect, 83 in the horizontal posture.

Among those who ascended the Mont Blanc in company with Dr. Clark, it is said that the average variation of the pulse was from 4 to 30 pulsations per minute, at a height of 7,299 feet; and that this variation appeared in no way to depend upon the natural muscular powers of the individual.

Dr. Parrot, the well-known Russian traveller, in his ascent of Mount Ararat, reports that his pulse, which in the plains was about 70 per minute, was, at a height of 4,752 feet, 80, and at a height of 11,739 feet, 110 per minute.

In attempting to scale the Monte Rosa, Zumstein, who was accompanied by seven hardy mountaineers, varying from 20 to 60 years of age, found that at a height of 13,662 feet, the mean average for the seven was 85 pulsations per minute. He has unfortunately, however, omitted to mention the average of the pulse in these men before leaving the plains.

In the account given (*Annales de Chimie et de Physique*, vol. lii.) of the celebrated balloon ascent of M. Gay Lussac, we find that in Paris his pulse beat 62 per minute; that of his companion, 79. At a height of 6,786 feet, the pulse of the former beat 80, that of the latter 111 per minute.

In the year 1823, a French traveller, named Roulin, made some observations relative to the variations of the pulse, upon some men who for several months had been living at a height of 7,929 feet, upon the table-land of Santa Fe de Bogota. They were all of sound constitution, and aged respectively, 27, 26, and 23 years. On leaving Santa Fe, their pulses beat, in the above order, 69, 71, and 67 per minute; but upon descending into the plains, the pulse of each, so far from progressively diminishing in frequency, merely varied in an irregular manner, being sometimes even more frequent than at Santa Fe. The result, however, of Roulin's experiments, shows that as the atmospheric pressure between St. Martin and Santa Fe diminishes in the proportion of about 9 to 7, the average acceleration of the pulse between the same localities is as 6 to 7.

It would appear from the experiments of M. Roulin, that while the pulse becomes considerably accelerated at a great elevation, a protracted residence in such a locality has not the effect of maintaining this condition; but that, on the contrary, it ere long regains its natural frequency.

The same observer made another series of experiments upon three individuals, aged respectively twenty-eight, seven, and thirteen years. The two former had inhabited the plateau of Santa Fe for eighteen months previously.

The points of observation chosen by M. Roulin were Guaduas, 3,069 feet, and Santa Fe, 7,929 feet above the sea level; and the periods chosen were, first, the moment of awaking, the individual being in the recumbent position; and, secondly, the interval between the moment of rising and the morning meal—this observation being made in the upright posture.

Between these two stations, the mean of atmospheric pressure was found to be 0.78, and the average of the pulse at each locality shews that there exists no regular definite proportion between the increase of atmospheric pressure and the diminished frequency of the pulse.

In a memoir published by M. Le Pileur, to which I am indebted for much information on the subject in question, there are some excellent observations relative to the frequency of the pulse at great altitudes. These experiments were made during the ascent of the Mont Blanc, and from their accuracy of detail are well worthy of note. The tables containing the results of these experiments are here introduced, as affording at a glimpse a summary of the information thus acquired.

The opposite table contains a series of observations made upon the frequency of the pulse, at different heights, by different travellers.

Experiments upon the Frequency of Pulse at different Altitudes.

Locality.	Name of Observer.	Number of Pulsations per Minute.			Remarks.
Chamounix, 3650 ft. above sea level.	Saussure	Saussure 72	Balmat 49	Tetu 60	Four hours after arriving.
Summit of Mont Blanc, 14,760 Ft. feet above ditto.	ditto	100	98	112	Four hours after reaching the summit.
Col du Géant, 10,578	ditto	79 83			In the morning In the afternoon; recumbent. Ditto, upright.
Grand Plateau, 11,730 feet	Hamel	82 128			
Rochers Rouges, 13,800 feet	Clissold	Clissold 100 to 150			While in the act of ascending.
Pierre de l'Echelle, 7,008 feet	Sherwell	Sherwell 108	Guides 84 to 104		After eating.
Monte Rosa, 9,939 feet	Parrot	Parrot 110			
Noversch, 4,752 feet	ditto	80			
In the Plain . .	ditto	70			
Monte Rosa, 12,662 feet	Zumstein	Zumstein 76	Molindi 108	4 Guides, average 84	
Balloon Ascent, 7,806 feet	Biot	Biot 111	Gay Lussac 80		
Paris	ditto	79	62		

The following observations on the frequency of the pulse at different periods of the day and under various circumstances, were made by MM. Le Pileur and Martin at Paris, previous to their expedition to the Mont Blanc, with a view to establish a standard of its comparative frequency between the level of that city and the summit of the mountain.

Experiments on the frequency of the Pulse at Paris, by M. Martin.

BEFORE NOON.

AFTER NOON.

1844	Concurrent Circumstances.	Time.	Pulse per Minute.	REMARKS.	1844	Concurrent Circumstances.	Time.	Pulse per Minute.	REMARKS.
June 7th		7-20	65	Right radial	June 6th	After rapid exercise in the erect posture.	10-44	70-50	Left radial
		31	61	artery			47	71	Ditto
		35	61	Right femoral			50	69	Ditto
	In the horizontal posture.		63				11-3	65	Ditto
		7-39	61	Right radial			6	63	Right radial
		41	59				8	60	Ditto
		43	58				11	60	Ditto
		46	62				14	59	Ditto
9th	Ditto, ditto.	7-34	65	Ditto			18	60	Ditto
		36	65		8th	After lying down for a quarter of an hour.	10-1	64	Ditto
		39	63	Left radial			3	63	Ditto
		43	72	Right radial			5	64	Ditto
		49	72				6	64	Ditto
		51	72				8	65	Left femoral
	In the erect posture.	7-49	74				10	62	Left radial
17th	In the horizontal posture.	7-38	59	Ditto			12	64	Right radial
		41	58	Ditto	16th	In the horizontal posture after smart exercise.	9-35	65	Ditto
		43	62	Left radial			39	64	Ditto
		50	59	Left crural			42	64	Ditto
		52	60	Ditto			44	61	Ditto
		53	61	Ditto			45	61	Ditto
		8-0	61	Right popliteal			47	61	Ditto
		2	62	Right crural			49	60	Left femoral
22nd	After carriage exercise.	9-35	71	Right radial			51	63	Ditto
			72				52	62	Ditto
			71				55	61	Ditto
July 9th	During the course of the morning.		63		19th	In the horizontal posture, a quarter of an hour after taking smart exercise.	11-15	60	Ditto
			64				19	65	Left radial
			62				21	64	Right radial
			60				23	64	Left crural
			63				25	64	Left radial
			61				27	65	
			62				29	65	
	Average before noon..		63-34			Average after noon ..			
						Daily average 62-04.			

Experiments on the frequency of the Pulse at Paris, by M. Le Pileur.

BEFORE NOON.

AFTER NOON.

1844	Concurrent Circumstances.	Time.	Pulse per Minute.	REMARKS.	1844	Concurrent Circumstances.	Time.	Pulse per Minute.	REMARKS.
July 3rd	Slept well, rose at 7-15, walked up and down the room, observation made while seated at 11-45; walked for 25 minutes, sat down for five minutes, appetite good.	8-0 11-45	66 64	The right radial was alone felt.	May 8th	Retired to rest at 3 in the morning, rose at 7. Average amount of occupation during the day, dined at 6, stimulants in moderation.	10.30 31	64 68 72	
5th	Retired the night previous at 12, slept well, rose at 7 A.M.; fasting.	11.50 51 52 54 12-0	64 72 68 68 67		25th	Breakfasted at 10-45 A.M., walked to the Institute of France; observation made while sitting.	1-25 26 27 28 29 30	72 66 68 66 68 66	
13th	Fasting, walked a hour and a half after rising.	12-0 2 8	69 69 60	Pulse feeble and depressible.	July 5th	Observation made after eating.	1-5 6 8 9 10 11	70 68 68 70 70 70	
14th	Rose at 6, after a good night, observation made while seated—but after walking about the apartment.	6-45 47 54 55 56 57	67 65 60 62 65 64	Pulse strong and full.	13th	Breakfasted at 1-45 P.M., observation made an hour after; sitting posture.	2-45 46 47 48 49	72 72 68 75 75	
Average before noon ..			65-85		Average after noon ..			69-40	
					Daily average 67-36.				

From the preceding table it appears, that the daily average frequency of the pulse at Paris of these two experimenters, was in the one case 62-04, and in the other 67-36. The following table shews the results obtained

between the level of the village of Servoz, 2,306 feet above the sea, and the summit of the Mont Blanc, 14,760 French feet in height.

Experiments on the frequency of the Pulse at different heights between Servoz and the summit of Mont Blanc.

M. MARTIN (aged thirty-eight).

DR. LEPILEUR (aged thirty-four).

SERVOZ ; 2406 French feet above the sea level.

Date.	Hour.	Concurrent Circumstances.	PULSE		Date.	Hour.	Concurrent Circumstances.	PULSE	
			Before Noon.	After Noon.				Before Noon.	After Noon.
July 27th	11-0	After a day's walking exercise.		69	July 22nd	5-0	From Sallenche to Chede in a char-à-banc, from thence on foot: slept well, rose half an hour before making an observation: fasting.	64 64 62 62 64	
		Mean					Mean	63-20	

CHAMOUNIX ; 3,650 feet above the sea level.

Date.	Hour.	Concurrent Circumstances.	Before Noon.	After Noon.	Date.	Hour.	Concurrent Circumstances.	Before Noon.	After Noon.
July 28th	11-20	Walked for three hours.		73 70 70	July 23rd	7-8	Arrived here on foot; slight catarrh—slept well; felt a weight in the head on rising: pulse feeble and compressible	60 59 58 56 56	
Aug. 27th	Noon.	After moderate exercise and ten minutes repose in the horizontal posture.	67 69 68 68 60		Aug. 27th	2-25	Breakfasted at 8 A.M.: slight nervous agitation; no exercise.		58 62 62 60
Daily average ..		..	60-00		Daily average ..		..	60-00	

PIEBRE POINTUE ; 6207 feet above the sea level.

Date.	Hour.	Concurrent Circumstances.	PULSE.		Date.	Hour.	Concurrent Circumstances.	PULSE.	
			Before Noon.	After Noon.				Before Noon.	After Noon.
					July 30th	10-22	Breakfasted at 7, in moderation ; ascended slowly up to this point ; perspired profusely ; slight dyspnoea : pulse full and regular	88 88 80 88 86 86	
					Aug. 7th	10-10	Conditions same as above.	78 78 78 80	

LES GRANDS MULETS ; 9252 feet above the sea level.

					July 30th	4-38	Sense of debility, with syncopal tendency, removed by taking a little bread and wine.		92 92 93
							Average	92-33	

LE PETIT PLATEAU.

					Aug. 7th	5-13	Constant ascent since 7 A.M. ; slight fatigue ; no particular indisposition.		106
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LE GRAND PLATEAU ; 11,733 feet above the sea level.

July 31st	4-15	Slept the night previous on the Grands Mulets, arrived here this morning ; felt much indisposed, physically and morally ; posture horizontal : pulse barely perceptible	82 80 78	July 31st	4-0	Very little indisposition ; appetite tolerable ; tendency to sleep ; pulse moderately strong	100 98 98 100
Aug. 28th	3-0	Left Chamounix at midnight, arrived here at 11 A.M. ; posture horizontal.	83	Aug. 28th	2-0	Slight fatigue after cleaning the tent of snow ; observation made in the upright position.	100 104 102 102
29th	6-40	Observations made previous to rising.	78 80 81 84 80 84	29th	6-55	Slept well ; pulse feeble but regular.	88 86 86
30th	9-0	Gentle ascent for two hours before breakfast. Several alterations of position during the observation.	68 65 65 69 75 79 75 71 66 69 68	30th	7-50	Little sleep, having suffered from sciatica.	90 88 86 84 88
				30th	1-10	Took some food ; fatigue felt ; no mountain sickness while tranquil ; pulse moderately strong, not very compressible. Sitting posture.	78 80 84 80 82
Sept. 1st	7-15	Observation made in the recumbent posture.	74 70 67 67 66 67 68 67				
		Daily average	73-74			Daily average	90-80

SUMMIT OF MONT BLANC, 14,760 feet above the sea level.

Aug. 20th	4-0	Reached the summit at 1-45 P.M. ; during the first hour experienced nausea and vomiting ; pulse feeble	81 83 84	Aug. 29th	3-0	Observation made in the sitting posture ; pulse strong.	94 88 88 86 85
		Average	82-66			Average	88-20

It would appear from these tables that, after attaining a certain elevation, the frequency of the pulse is invariably increased. The level, however, at which this acceleration commences, evidently varies in different individuals; while in some, there is reason to believe that the influence of diminished atmospheric pressure may, within certain limits, be counterbalanced by concomitant circumstances capable of reducing the frequency of the pulse even while under such influences.

The pulse of M. Le Pileur was much less frequent at Chamounix than at Paris, although in the former locality there was everything in the approaching expedition calculated to produce nervous excitement. At Chamounix, it beat 60 per minute, and at Paris 67·25, notwithstanding the superior elevation of the valley.

In the case of M. Martin, on the contrary, the average frequency of the pulse was greater at Chamounix than at Paris, being 62·04 in the latter, and 69·00 in the former locality.

These same observers, having likewise made experiments upon the pulse of three guides who accompanied them to the summit, found the following differences in point of frequency between the level of the Valley of Chamounix and the highest point of the mountain :—

	Average of the pulse at Chamounix.	Do. at the summit.
Mugnier, aged 36	63·12	94·40
Coutet, " 34	77·75	117·83
Simon, " 27	69·22	111·06

It is worthy of note, that in these men, born among the Alps, the acceleration of the pulse was greater than in the case of MM. Le Pileur and Martin, who were habitually residing on a comparatively trifling elevation above the sea level, and but little accustomed to mountain air and exercise.

A *resumé* of the foregoing remarks may, I conceive, lead to the establishment of a few propositions relative to the affection which I have here designated by the term "mountain sickness".

1st. That in mountainous districts, and upon attaining a certain elevation, a series of physiological phenomena manifest themselves, which differ widely from the standard of health, and exist as long only as the exciting causes are in activity; disappearing upon a return to the ordinary level of human habitation.

2nd. That the discrepancy existing among travellers relative to these phenomena, is to be accounted for by their variability both in nature and degree; this variability being itself dependent upon conditions, referable on the one hand to the individual, and on the other to the locality.

3rd. That, on the part of the individual, the following circumstances may modify the nature and intensity of the "mountain sickness": idiosyncrasy, previous condition of health, the habit of fatigue (especially that produced by ascents), and previous residence in a rarefied atmosphere.

4th. That, as regards the locality, the phenomena in question are most strongly marked where a considerable elevation above the previous residence of the individual is attained in a short space of time; as on the Pass of the St. Bernard, the Col of the Mont Moro, and the Col de St. Theodule, in the Alps.

5th. That the mountain sickness is characterised by the following symptoms, the entire category of which, however, is seldom, if ever, united in one individual: vertigo, headache, somnolence, dyspnoea, constriction of the chest, palpitation, syncopal tendency, occasional oozing of blood from mucous surfaces, increased rapidity of pulse, anorexia, nausea and vomiting, thirst, febrile tongue, muscular pains, sense of extreme debility in the lower limbs, with general prostration of strength.

6th. That these symptoms may be referred to a threefold source, viz., a gradually increasing congestion of the deeper portions of the circulatory apparatus, increased vascosity of the blood, and loss of equilibrium between the pressure of

the external air and that of the gases existing within the intestines.

7th. That these exciting causes of mountain sickness are themselves the result of a change from a given atmospheric pressure and temperature, for one in which both are greatly and suddenly diminished.

Cheltenham, Nov. 24th, 1852.

ON INTERNAL UTERINE HÆMORRHAGE.

By GEORGE KING, Esq., Surgeon.

It may be remembered that I have drawn the attention of the readers of the former series of the *Provincial Medical and Surgical Journal* to the subject of internal uterine hæmorrhage, which seems to have escaped the notice of practitioners, as well as teachers and writers on obstetric practice; at least I have, like many others, searched in vain for information on this important subject, and for the records of such cases.*

The case reported in the number of the *ASSOCIATION MEDICAL JOURNAL*, for January 7th, as a "*peculiar case of accidental uterine hæmorrhage*," by Isaac Harrison, Esq., of Reading, was, I consider, one of internal uterine hæmorrhage. Being, I believe, the first who has directed the attention to this peculiar kind of uterine hæmorrhage, it is natural that such a case as Mr. Harrison's should attract my notice, and that I should make some remarks on it.

In directing attention to an occurrence which I consider has often till too late been neglected, internal uterine hæmorrhage during the period of gestation, I wish it particularly to be understood, that I do not mean to say that there is no external appearance or sanguineous discharge from the vagina: there often is in such cases; but it is so slight, and frequently at such lengthened intervals, that it passes unnoticed by both patient and doctor. This state of things goes on, until the patient herself begins to feel its debilitating effects on her constitution; and the practitioner is unconscious of the mischief going on, until his suspicion is excited by the constitutional symptoms. There is a universal paleness, which is first discovered in the face; the pulse becomes quicker and weaker; the abdomen is discovered to be much distended; the patient becomes restless and faint; her friends are anxious; and the *accoucheur* begins to see the danger, and feels his responsibility. All this may take place at almost any period of gestation, and without there being any external discharge. The danger does not so much depend on the quantity of blood lost, as it does on the velocity with which it is lost. In these cases, we cannot, by any means that I know, judge for a certainty either as to the quantity or velocity. All we know is, that frightful external hæmorrhage may occur; floodings may last for days; and even gushes of blood may be poured out from the vagina, without exciting much alarm for the safety of the patient; yet with even the slightest internal hæmorrhage, this insidious dripping within the cavity of the uterus may continue some time, and produce the most serious constitutional derangement, demanding the most prompt and energetic treatment, without our having any visible sign, or the slightest indication or knowledge of the cause, or the point from which it is emitted. We have yet to learn why the powers of nature should give way and often sink from such apparently trifling sanguineous discharges, and linger and survive a much more profuse one; and also why the uterus, a muscular substance, an organ only designed for the purpose of generation and the perfection of the fœtus (though it may be very vascular during gestation), should become a sponge to sop up the vital fluid of the mother as well as of the child, so that the life of both frequently is destroyed. As practitioners, we have to do with the symptoms, conse-

* I regret to find on referring to the index of the last volume of the *Provincial Medical and Surgical Journal*, that the word "internal" is left out in reference to the cases and treatment published by me.

quences, and treatment; and this is a very painful position to be placed in, as our resources are very limited, and the remedial measures are very few; and all those medicines which are called specifics in stopping hæmorrhage, are as futile as incantations. There is no medicine in the *Materia Medica* that can have a styptic effect in these cases; but we must do something, and all that can be done must be done mechanically, by removing the contents of the womb, or by external applications, employed as I have stated in another paper on this subject. The only means to be depended on as a remedy in these desperate cases, is cold water, a small hand, and the blunt hook. I have given directions for the application of cold water over the abdomen in such cases. If we can make the surface of the body contract, the internal parts will by sympathy contract likewise. Three out of four patients are lost in uterine hæmorrhage, mainly for want of being delivered when there was a possibility of delivering them, and a chance of saving their lives. The difficulty in such cases is not in what we ought to do, but when we should do it. I am not a disciple of the mystical German school, nor do I believe in the hydropathic method of treating diseases; but I do believe that in internal uterine hæmorrhage, the wet sheet may be very beneficially applied.

I have been led to these remarks by reading the case of accidental uterine hæmorrhage by Mr. Harrison, as the case published by me at p. 38 of No. 11, New Series, which I sent previously to the date of Mr. Harrison's paper, is so similar.

Mr. Harrison asks, "Could a more accurate diagnosis have been arrived at? and if so, could the treatment have been materially modified?" This would imply that he wished to have the opinion of others, and that he sought information on the subject, as to the diagnosis.

With such symptoms, it was natural to suppose that there was some great mischief going on within the walls of the abdomen; and, in the patient's condition, the uterus would be suspected to be the seat of the disease or disorder, and the existing cause ought to be removed; but how and when was this to be done? Without having seen the case, it is very difficult to say what ought to have been the treatment; and it may be considered presumptuous to say, that anything that was done ought not to have been done, or that anything was left undone that ought to have been done, as there might have been some peculiar idiosyncrasy of constitution, or many special circumstances, that could be only judged of by those who were present. Still, a remark or two on the general treatment of such cases may be useful to those who may be so unfortunate as to meet with similar cases in their practice.

After the rupture of the membranes, a full dose of the secale cornutum might, I think, have excited the contracting power of the uterus, and, by its stimulating quality, have kept up the failing powers. The mode of delivery I do not consider to have been the most safe and proper. The blunt hook would have been a much safer instrument, and more applicable than the perforator or forceps. As there was no propelling action of the uterus, and the head presented, there would have been no difficulty in introducing it, and of getting a good hold. The child, I suppose, was dead, and it would not have been of much consequence to what part we had fixed it. The chin, occiput, and mouth, were to be easily got at, and there appears to have been no rigidity of the os uteri, resistance, or want of repose. There was only a lack of physical power: this the blunt hook would have safely and easily supplied. The operation of craniotomy can never, in my opinion, be justifiable, unless there be a hydrocephalic head presenting, or an unusual degree of ossification of the entire bones of the cranium, or a very great degree of deformity and contraction of the pelvic orifice, or a dying patient. I believe it would not be considered orthodox to let a woman die undelivered. The powers of action in this case did not seem to have been exhausted, as she survived some hours after the loss of some quarts of fluid blood. Its being fluid is, I consider,

a clear proof that that was not the cause of the previous symptoms; but that the clots resulted from the internal hæmorrhage going on before delivery was attempted. We thus possess two means or ways of restraining uterine hæmorrhage; firstly, by exciting the power of contraction; and, secondly, by promoting the formation of coagula. Mrs. G. must have sunk from the loss of the quarts of fluid blood. I never lost a patient from hæmorrhage after delivery, who survived it an hour.

Bath, January 14th, 1853.

SUDDEN DEATH FROM COLLAPSE IN A CASE OF RUPTURE OF THE BLADDER.

BY ALEXANDER HENRY PATERSON, M.D.

CASE. January 15th, 1853, M. Corr, æt. 45, a labourer, was, at half-past eleven, P.M., slightly intoxicated, and engaged in a quarrel with another man. On receiving a blow on the chest, he fell, but appeared not much hurt. He was separated from his antagonist, and walked a short distance. The two men then met, and renewed their dispute; and collaring each other, rolled down together, Corr falling on his back, and his antagonist upon him. As Corr was rising, his antagonist, who had regained his feet, ran towards him, and kicked him in the lower part of the abdomen. The blow was the more violent as the man had wooden clogs on. Corr fell back, and died immediately.

On making a *post mortem* examination, on the 17th, I found the brain healthy, though congested; the heart was free from disease, but much distended with black, feebly coagulated blood. The abdomen appeared healthy, and free from all injury. On scratching aside the peritoneum from the pelvis, my finger passed into the bladder, through a rent almost two inches in length. There was some bloody urine, perhaps an ounce, effused into the cellular tissue. The injury occurred on the left side of the body of the bladder. That organ and the urethra were healthy, and the peritoneum was uninjured. The body did not exhibit any internal marks of violence.

REMARKS. I have not met, either in Beck's or Taylor's Jurisprudence, with a similar case; and though I have seen several fatal instances of laceration of the bladder, death has not occurred for some hours or days.

It appears to me clear, that in this case death resulted from the shock to the sympathetic system; and that the rupture of the bladder had nothing to do with it. The darkness and fluidity of the blood, and the congested state of the brain, lungs, and especially of the heart, all confirm this view.

Altrincham, Cheshire, January 1853.

BIBLIOGRAPHICAL NOTICES.

A TREATISE ON TUBERCULOSIS, THE CONSTITUTIONAL ORIGIN OF CONSUMPTION AND SCAFULA. By HENRY ANCELL, late Surgeon to the Western General Dispensary, etc. pp. 778. London: 1852.

THE object of this very able and elaborate work is to draw attention to that state of the constitution which is characterised by the term *tuberculosis*, and on which Mr. ANCELL is satisfied that *scrofula* and *consumption*, in all their varied manifestations, depend.

"Tuberculosis is herein regarded, strictly, as a blood disease. I have endeavoured to collect all the most important facts relating to the physical and chemical properties of the blood, the aberrations observed in the phenomena of cell-growth and nutrition, the histology of tubercular deposits, and the special pathological anatomy of the tissues and organs, and have referred them to the primary affection as sequences, or results. Those maladies which are but local manifestations of the same

bid condition of the blood, as phthisis, hydrocephalus, hydrarthrus, and scrofulous caries, are thus exhibited according to their natural relations, but in a novel and more connected manner: and the whole subject is treated upon an original plan." (Preface, pp. 9-10.)

The work is divided into Eight Chapters.

Chapter I treats of the Tuberculous Predisposition. Under this head are noticed, in succession, the state of the blood, physically, microscopically, and chemically; the state of the fluids which supply the blood—lymph and chyle; the blastema; structural characteristics, as exhibited in the various tissues and organs of the body; functional characteristics, as shown in the digestive, respiratory, circulatory, secretory, excretory, and animal and nervous functions; and the concluding section of this chapter exhibits a general summary of the state of the constitution in the tuberculous predisposition. The facts show, that in tuberculosis there is a disturbance in the development, and an irregularity in the form of different parts of the body, particularly of those which have cell-growth for their basis: but the whole, or even the majority, of these peculiarities, are by no means always present; but few may be observed, and none can be said to be constant.

"From all that has preceded, the tuberculous predisposition is not a mere aptitude to be more easily affected by the causes of tuberculosis. Short of internal disease, it is an abnormal state of the constitution, both in its solid and fluid constituents, and in its vital power, of the same nature as tuberculosis. Where the predisposition ends, and where tuberculosis as a disease begins, it is most difficult, if not impossible, to determine. Nor does the predisposition necessarily pass into disease. Many have been deemed consumptive throughout life, from having exhibited this constitution in a well-marked form, and have nevertheless attained longevity, and died from some other malady. It by no means follows from this circumstance, that their blood was never tuberculous, and that they were never subjects of the predisposition: but it shews that, under favourable circumstances, the predisposition may never pass into actual disease, and that the blood has either been in a tuberculous state in a slight degree only, or, if more intensely affected during the period of growth and development, that it has recovered the standard of health at a later period of life. Even the conformation of the osseous skeleton, as of the bones of the chest, will improve if the constitution of the blood be improved; a circumstance which has been occasionally observed to happen without obvious cause. Again, tuberculosis may attack not only individuals of this particular habit, but even the robust, with a complete physical development, well formed chest, and great muscular power." (pp. 58-9).

In Chapter II, we find an exposition of the Signs and Symptoms of Tuberculosis. The subjects here discussed are *anæmia*, which is one of the earliest symptoms; atrophy, one of the most general structural changes; direct debility of the various organs and functions; diminution of the power of sustaining animal heat; and febricula. In his general summary at the end of the chapter, Mr. Ancell refers all these states to the morbid condition of the blood, which is deficient in vitality, with defect of red corpuscles and vitiated liquor sanguinis. He believes the phenomena of the predisposition to the disease, and its symptoms, to show—

"1. That from the earliest invasion, the sum of the vital forces is either below the standard of health, or it is relatively low as respects the structure and organisation of the individual.

"2. That this diminution in the sum of the vital force depends especially upon diminished vitality of the blood and of the cellular, gelatinous, and muscular tissues produced and nourished from an imperfect blastema derived from the diseased blood.

"3. That, as tuberculosis advances, the sum of the vital force for the whole system continues to diminish; this loss of vital force being exhibited not only in the defective manifestation of voluntary and involuntary muscular powers, but in the diminished resistance of the vital powers of the blood, and of the cellular and muscular tissues to the change of matter in the animal body: hence, in tuberculous subjects, the rapid diminution of the red corpuscles of the blood, the deterioration of the vital qualities of the liquor sanguinis and of the blastema, the

diminished plastic power of the cells, the low calorific power, and the emaciation.

"4. That frequently, but by no means universally, the nutritive powers of the blood, as respects the nervous tissue, remain undiminished, this tissue not requiring for its nutrition compound principles identical with itself to be introduced into the blood with the food, and having a nutrition peculiar to itself. Hence the diminution of vital force is not exhibited in the nervous system, but, as the conductor of the force generated by the change of matter in the whole system, the nervous system remains intact. The particular condition of the vital force is, nevertheless, manifested through the nerves; hence activity and action without power, morbid irritability, etc." (pp. 109-10).

Chapter III is devoted to an examination of Tuberculous Deposits; under which head are included tuberculous or scrofulous pus; more solid deposits, including cicatrices; tubercle, the history and pathology of which is very ably given, and which the author believes to be without doubt a substance *sui generis*; and melanotic matter.

In Chapter IV, Mr. Ancell enters very fully into the subject of the Special Pathological Anatomy of Tuberculosis. The forms under which tubercle is developed in each organ and system of organs in the body, are elaborately but clearly described; and the chapter is concluded by some general observations and deductions from the facts developed. Among these deductions, we find the identity of tuberculous and scrofulous affections again impressed on our attention.

Chapter V treats of the Causes of Tuberculosis. The author first makes some remarks on the imperfect nature of our statistics of the disease, showing that the absolute frequency of tuberculosis is by no means determined by the statistics of the mortality of its most aggravated and fatal forms. Hereditary transmission, and the various predisposing and inducing causes of tuberculosis, are very fully examined, in a manner which renders it impossible for us to do justice to the author by attempting to give an abstract. There is a highly instructive section on the influence of climate, on which subject the author's views appear to agree very closely with those of Dr. Burgess, as developed in his work on the *Climate of Italy*. In the summary at the end of the chapter, we find the following remark:—

"The true cause of the disease is still unknown. There are certain external agencies which, in the present state of physical science, it would be unphilosophical to overlook, while it is impossible to assign the relation they bear to the etiology, such as the abstraction of the genial influence of the solar rays, and the operation of the forces of electricity and magnetism; and it is necessary, in continuation of the inquiry, to bear in mind the laws of electro-physiology, the magnetic properties of oxygen gas, the correlation of the physical forces as respects each other, and the correlation of the physical and vital forces." (p. 347).

In Chapter VI, we find an examination of the Essential Nature and General Pathology of Tuberculosis. Mr. Ancell first gives a brief view of the numerous theories which have been propounded with regard to this subject, from Hippocrates down to the writers of the present day. He then describes more fully the following doctrines:—

1. Theories of tuberculosis, in which the disease is referred to some error in primary digestion: (*a*) generation of an acid in the primæ viæ (Mr. Carmichael); (*b*) plethora of the vena portæ in its roots and branches (Dr. Todd); imperfect development of the chyle and lymph granule (Professor Schultz).

2. Theories referring tuberculosis to a special morbid condition of the lymph (Charmetton, White, Baumes, C. Hufeland, J. Simon, etc.).

3. Theory of defective respiration imperfectly replaced by the liver (M. Luigi Parola).

4. Theory of the essential inflammatory nature of tuberculosis.

5. Theory of debility of the organic nervous power (Dr. Copland).

6. Theory of a poison in the blood (Dr. W. H. Madden).

7. Theory of malnutrition: (*a*) vitiation of the blood in the process of respiration (M. Baudelocque); (*b*) disturb-

ance of the healthy relations of the oily and albuminous principles, and an excess of the latter (Dr. Hughes Bennett); (c) retrograde morphology (Dr. W. Addison).

Mr. Ancell "has no hesitation in declaring his opinion, that Dr. Hughes Bennett has advanced furthest in the investigation of the real nature of the disease".

Two instructive sections on the diagnosis and prognosis of tuberculosis follow; and the author then comments on the relation of tuberculosis to other blood-diseases: viz., scorbutus, cancer, gout, diabetes, granular disease of the kidney, cyanosis, typhus and typhoid fevers, and intermittent fever. The relation of tuberculosis to the last-named disease is very carefully examined, and the opinions of the various writers on the subject compared; and Mr. Ancell arrives at the following conclusions, which we transcribe, leaving it to our readers to determine how far they are in accordance with what they have been able to observe:

"1. The morbid condition of the blood produced by the malaria or poison of intermittent fever, is totally distinct from the morbid condition of the blood which attends tuberculosis.

"2. The intense and permanent poisoning of the blood by malaria renders it insusceptible of the morbid condition which constitutes tuberculosis.

"3. A slight degree of poisoning with malaria, or the casual occurrence of intermittent fever, does not render the blood insusceptible of tuberculosis; and its degree of insusceptibility bears some relation to the degree of impaludation.

"4. Individuals affected with tuberculosis in a high degree, either with or without the manifestation of local disease, are not cured by residing in a malarious district.

"5. The blood of individuals poisoned by malaria, recovers from the effects of the noxious influence after removal from the malarious atmosphere; and then, however complete the insusceptibility to tuberculous disease may hitherto have been, the susceptibility returns, and tuberculosis actually occurs on exposure to the inducing causes.

"6. In accordance with the position laid down at (4); individuals so acquiring tuberculosis are not cured by a return to a malarious atmosphere.

"7. In Great Britain, and many other countries, where complete impaludation of any very extensive district is not now likely to occur, it is not probable that the antagonistic influence of the paludal poison will exert any great effect on the amount of tuberculosis occurring in any district.

"8. It is probable that the fevers known as intermittent, remittent, or continued, occurring in different countries, have their origin in different kinds of poison introduced into the blood, some of which may produce antagonistic effects, and some not.

"9. The beneficial effects, as far as a tuberculous state of the blood is concerned, of a residence in a malarious atmosphere before the manifestation of local disease, or in its incipient stages, is highly probable; but, looking to this effect on the medical statistics of large numbers of individuals, as of troops serving at malarious stations, it cannot be held that the human race would gain anything by poisoning the blood with malaria to a sufficient extent to cure tuberculosis." (pp. 615-16).

In Chapter VII, Mr. Ancell treats of the Forms and Varieties of Tuberculosis; and in Chapter VIII, he gives an elaborate view of the Treatment of Tuberculosis. The indications of prophylactic and curative treatment are—

"1. To prevent the hereditary transmission of the disease.

"2. To prevent, in the propagation of the species, the production of the disease, or of those states of the constitution which act as predisposing causes.

"3. To prevent the development of the disease in the fetus.

"4. To correct the predisposition, and to prevent the development of the disease after birth.

"5. To cure the tuberculosis, and thereby to prevent the deposition of tubercles, or to render them innocuous when deposited." (p. 655).

We had hoped to give an analysis of some of the instructive remarks made by the author in this chapter; but find that we must be content with heartily recommending it, as containing valuable precepts.

We have thus attempted to give a slight sketch of a work which is truly a luminous encyclopædia of the subject of which it treats. It exhibits the marks of profound medico-

historical research; and contains the opinions, in a well digested form, of nearly every accessible author who has written on consumption and scrofula, from Hippocrates downwards. Mr. Ancell combines and compares these opinions, and deduces from them his own conclusions; hence the great principle which he seeks to prove, is never lost sight of—that tuberculosis is the common constitutional origin of consumption and scrofula, and is a blood-disease.

HOUSEHOLD CHEMISTRY; or, Rudiments of the Science applied to Every-Day Life. By ALBERT J. BERNAYS, F.C.S., Lecturer on Chemistry, Derby. New edition. 12mo. pp. 276. London: 1853.

THE practical turn given to chemical studies in the present day is very apparent; and in nothing is this more apparent than in the application of the rigid principles of the science to the elucidation of the phenomena of the kitchen and the dining-room. Liebig opened the way in this direction in his *Familiar Letters on Chemistry*, in which are recorded facts and principles, divested, to a great extent, of the uninviting aspect of a dry, technical nomenclature. The author of the work before us follows in the same path, and usefully and simply unfolds the theory and practice of Household Chemistry, which ought to be better understood than it now is. The work is essentially popular, and is neither intended for medical men nor for scientific chemists; but it is precisely such a book as we have often desired to put into the hands of intelligent patients, when we have wished them to comprehend, a little better than we could explain in a hasty conversation, some of the reasons for our dietetic prescriptions and cautions. We subjoin a short extract, as a specimen of the author's style and matter.

"The best method of BOILING MEAT intended for food is to introduce it into *boiling water*; if the boiling be kept up for five minutes, and then so much cold water added as to reduce the temperature to 165°, and the whole kept at this temperature for some hours, all the conditions are united, which give the flesh the quality best adapted for its use as food. When it is introduced into the boiling water, the albumen immediately coagulates from the surface inwards, and in this state forms a crust, which no longer permits the external water to penetrate into the interior of the mass of flesh. But the temperature is gradually transmitted to the interior, and there effects the conversion of the raw flesh into the state of boiled. The flesh retains its juiciness, and is quite as agreeable to the taste as it can be made by roasting. When the temperature of the interior of a piece of meat has not reached 144°, it presents a blood-coloured or underdone appearance.

"The flesh of poultry is sooner done than meat, because it contains little blood, and therefore requires a lower temperature.

"The use of lard in roasting is to prevent the extraction of the tasty constituents from the flesh by its juices, and evaporation of the water, which causes hardening.

"Now, although the introduction of the raw meat into boiling water is the best process for dressing it, it is the worst for obtaining soup. If the raw meat be placed in cold water, and this brought very gradually to the boiling point, there occurs, from the first moment, an interchange between the juices of the flesh and the external water. The flesh loses, while the soup gains in sapid principles, and extracts both lactic and phosphoric acids,—two most important constituents of the gastric juice.

"The best method of preparing so-called beef-tea, is to take finely-chopped raw beef, to mix it with its own weight of cold water, and, after the lapse of about three minutes, to heat it slowly to boiling. It should be allowed to boil for two or three minutes, and should then be strained through a cloth; when an equal weight of the most delicious and strong beef-tea (such as cannot be obtained by boiling for many hours), is at once obtained. When properly seasoned, it forms the very best soup that can be made.

"It has long been customary to ascribe to the gelatinous matter dissolved during boiling, which gives to concentrated soup the property of forming a jelly, the chief properties or peculiarities of the soup; but Liebig has shown that the

mistaken notion. The simplest experiments prove that the amount of dissolved gelatine in well-prepared soup is so small, that it cannot come into calculation in explaining its nutritive properties. Gelatine (isinglass is pure, glue impure gelatine) is, in itself, quite tasteless, and consequently the taste of the soup cannot be derived from it. Boiling water, when allowed to act for five hours on finely-chopped flesh, does not dissolve more than the fifth part of the matter soluble in cold water, even after the albumen has been separated by heating the cold infusion; and this fifth part, besides, does not consist of pure gelatine, but contains all the products dissolved out of the muscular fibre by long boiling.

"It is equally customary to ascribe great strength to dark-coloured soups. A little burnt sugar (caramel) or burnt onion, will give depth of colour to the beef-tea prepared after the above prescription."

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

PASTE MADE WITH SULPHURIC ACID AND SAFFRON AS A NEW CAUSTIC IN MALIGNANT ULCERATION OF THE FACE.

M. E. CAZENAVE, of Pau, relates, in *L'Union Médicale* for 22nd January, two cases of malignant ulceration of the face, in which he has successfully employed a local application, made from sulphuric acid and powdered saffron. The remedy is formed by pouring the acid on the saffron, and applying it in the form of a soft paste. Its corrosive action is immediately manifested on the diseased tissues: the paste dries, and falls off in two or three days, in the form of black crusts, which carry with them the eschar. The application is made several times: the wound assumes a healthy red tint, and cicatrization takes place. In one case, a year has elapsed, and in the other two years; and the disease has not returned.

The efficacy of this treatment is evidently dependent on the sulphuric acid; which, we believe, would succeed equally well if made into a paste with common flour, or any ligneous powder, as with saffron. A paste of sulphuric acid and flour would be worth trying in obstinate cases of phagedenic ulceration.

ELECTRIFIED OXYGEN, OR OZONE, IN THE TREATMENT OF ALBUMINURIA.

At the meeting of the Academy of Sciences in Paris, on January 17, M. ROBIN made a communication, with the view of showing that electrified oxygen, or ozone, mixed with air, might be of advantage in the treatment of albuminuria, by favouring combustion.

The author said that, at the time when his researches, and those of others, showed the extreme importance of slow combustion in the maintenance of the vital phenomena, other experiments had pointed out ozone as much more appropriate for maintaining combustion, than oxygen obtained by the ordinary chemical processes. Hence ozone, either pure, or mixed with air, would be a valuable agent in cases of asphyxia, in scrofula, in cases of poisoning in general, and in all circumstances where it is either desired to support the powers, or to stimulate combustion when reduced below its normal standard, or especially as a reanimating agent in cases where air and ordinary oxygen are found of no service.

Electrified oxygen is easily obtained, by the decomposition of water by the galvanic pile. It may be mixed with air, by causing a current to flow into the tube through which the oxygen is inhaled.

Two birds were rendered insensible; one was then introduced into ordinary oxygen, the other into pure ozone. The one which was introduced into the ozone recovered more rapidly, but manifested much agitation; while the other recovered quietly.

FOWLER'S SOLUTION OF ARSENIC IN CHOLERA.

Dr. O. SAEMANN, in the *Deutsche Klinik* for October 30, 1852, states that the observation that, in cases of pernicious intermittent fever, arsenic has been found of great service, led him to imagine that it might also be useful in cholera. He had no opportunity himself of giving this medicine; but Professor Burow, to whom he communicated his views, gave to twenty-

nine cholera patients, doses of four drops of the arsenical solution every hour or half-hour; and only one of them died. It is to be observed, however, that Dr. Burow also gave valerian, nux vomica, and opium, and sometimes also quinine.

Dr. Saemann thinks the subject worthy of further investigation. It must, however, be fairly tested by using the medicine as much as possible *per se*.

SURGERY.

ENTRANCE OF AIR INTO THE SUBCLAVIAN VEIN: APPARENT RECOVERY: DEATH IN THIRTEEN HOURS.

M. A. GIRBAL relates the following case in the *Gazette Médicale de Paris*, for January 22. It affords a good example of those cases in which death takes place from secondary causes, and not from the mere mechanical distension of the right side of the heart.

CASE. On June 20, 1850, he assisted Dr. Bertrand at Tarascon, (Bouches du-Rhone), in removing a scirrhus tumour from the neck and upper part of the chest of a gentleman, fifty years of age. Chloroform was administered, the tumour was removed, and the vessels were tied.

The operator, observing a small portion of diseased tissue behind the clavicle, endeavoured to detach it with the handle of his scalpel. It was removed without any traction; when a sudden flow of venous blood took place from the spot, and there was at the same time heard an acute and prolonged whistling sound. The patient was not at the time under the influence of chloroform. His face instantly became colourless, his countenance changed, and he uttered a slight plaintive cry. His extremities became cold; the pulse could not be felt; and the chest was covered with a cold sweat. Intelligence, speech, sensation, and motion were entirely lost. On examination of the heart, M. Girbal heard for about a minute a sound of *gargouillement*, distinctly masking the natural sounds. The resonance of that part was notably exaggerated. These symptoms continued three or four minutes; during which time, M. Bertrand compressed the opened vein by means of a sponge. The chest and limbs were rubbed; and alcohol and ether were held to the patient's nostrils. The syncope having closed, the sponge was left in its place, with some pieces of amadou on it, and the wound was dressed. In an hour, the pulse was almost normal, the heat of the body natural, the breathing free, speech easy; and the heart and lungs apparently healthy. This satisfactory state continued for thirteen hours, when the patient was suddenly seized, during the night, with dyspnoea, oppression, heat of the head, and redness of the face; and he died in an hour.

TUBERCULAR DISEASE OF THE VERTEBRÆ DIAGNOSED BY PERCUSSION.

Tubercular disease of the spinal column often causes sufficiently obvious external signs; but sometimes the swelling of the bones lies internally, causing no visible projection, and the only marked symptom is weakness, gradually amounting to paralysis, in the lower limbs. In such cases as these, M. Piorry, (*L'Union Médicale*, January 20, 1853), believes that he can form a diagnosis by means of percussion. This is performed with the patient placed in the prone posture, with a pillow under the abdomen. In this way, the situation and limits of the swelling can, according to M. Piorry, be accurately defined; and some cases are related, in which the nature of the affection under which the patients laboured, was thus diagnosed.

With M. Piorry, as is well known, percussion is the great means of diagnosis; but, while we allow that this is a valuable aid, we think that he rides his hobby a little too hard; and that the attempt to keep pace with him would end in a terrible downfall. In saying this we do not wish to discourage our readers, if they have sufficient power of appreciating sounds, from employing M. Piorry's plan in cases where they feel that their usual guides in diagnosis fail to aid them.

The treatment used by M. Piorry consists of rest, principally in the horizontal posture; avoidance of a long continuance in the erect position; nourishing diet, good wine, pure air, and light; iodide of potassium; and phosphate of lime internally. He has great faith in the phosphate of lime, on account of its being deficient in the bones. We are, however, disposed to ascribe any favourable results to the hygienic treatment and the iodide of potassium.

DISEASES OF CHILDREN.

CASE OF EXTENSIVE VISCERAL INFLAMMATION,
AND APOPLECTIC EFFUSION, OCCURRING IN
A FÆTUS IN UTERO.

In the *Deutsche Klinik* for November 27th, Dr. C. Hüter, of Marburg, after referring to several authors who have written on the subject of intra-uterine inflammation occurring in the fœtus, relates the following case, which we abridge.

CASE. U. M. H., aged 28, of small, weak conformation, was delivered, on March 28, 1852, after a tolerably easy labour, of a female child, apparently of the full period. It was apparently dead; but gasped several times while attempts to resuscitate it were carried on. These attempts, however, proved quite unsuccessful.

Post mortem Examination. Much blood escaped on making an incision into the back, and also from the vertebral canal. Beneath the dura mater, in the neighbourhood of the cauda equina, there was a clot of the size of a pea, and a larger one near the foramen magnum. The medulla oblongata was surrounded by coagula. A quantity of blood flowed from the vessels of the arachnoid, especially near the cauda equina. Between the skin and the galea aponeurotica, the whole skull, as far as the cheeks, was covered with a gelatinous effusion, here and there containing extravasated blood; and there was a general excess of blood in these parts. The cerebellum was surrounded with coagulated blood; and between it and the tentorium, were numerous small clots: blood was also extravasated in the tentorium itself. Within the cerebellum, there were six coagula, each of the size of a pea. The cerebrum was also very full of blood, and contained several extravasations. On the right side of the longitudinal sinus, there was a coagulum in the form of a leech. In the right choroid plexus, a varicose vessel was found. In the vicinity of the lateral ventricles, there was so much blood effused, that the cerebral mass could not be distinguished.

On opening the chest, much gelatinous exudation was found under the skin; but there was no serum in the pleura. The thoracic viscera, taken together, swam in water; the right lung swam in water, the lower lobe tending to sink; the left lung sank to the bottom of the vessel. The bronchial tubes in the right lung yielded some frothy mucus on pressure; those of the left less. The upper lobe of the right lung was firm to the touch, crepitated on incision, and yielded greyish frothy matter, but little blood: when it was incised under water, small bubbles of air escaped. The lower lobe was firm, crepitated less, but yielded frothy mucus on pressure. On section, white firm spots were found in this lung. The left lung felt firmer, and knotty, and was mostly non-crepitant. In the vicinity of the lower surface of the upper lobe, and the upper part of the lower lobe, it crepitated a little, and contained a little air.

There was not any increased quantity of fluid in the pericardium. The cavities of the heart contained firmly coagulated blood, which extended into all the openings, even through the foramen ovale, and adhered firmly to the walls of the organ. Some of the trabeculae in the right side of the heart were of a yellowish grey colour, and hard. On cutting through the septum, it was found to have degenerated into a yellow hard mass, from about three lines from the apex as far as the auricles, for a breadth of three or four lines. In the midst of this degenerated portion was found a cavity the size of a pea, from which purulent fluid escaped on incision; and nearer the apex there was a smaller cavity. On microscopic examination, pus corpuscles were observed.

Between the abdominal muscles and the abdomen, were found gelatinous masses. The umbilical vessels contained no blood. The intestines were glued to each other, and to the peritoneum, by plastic exudation. The peritoneal cavity contained a large quantity of serum. The large intestine was thickened, and contained much meconium. The small intestines contained thin, mucus-like masses. The mucous membrane was easily separated. The liver and spleen were very sanguineous. The right Fallopian tube was cemented by exudation matter with the small intestines, but was not itself inflamed. The muscles of the limbs were pale.

The mother was discharged well on the 8th April.

EDITOR'S LETTER BOX.

ON THE CASE OF POISONING BY ACONITE, AND
THE INQUEST AT THE CONVENT OF THE
GOOD SHEPHERD.

LETTER FROM DR. O'BRYEN TO THE EDITOR.

SIR,—As few complete cases of poisoning by tincture of aconite are on record, may I beg insertion in the *ASSOCIATION JOURNAL* of the following remarks, in addition to, and in explanation of, the account of the inquest which appeared in the number of last Friday, p. 71. The conduct of the jury and of the coroner were so unusual as to claim attention from the profession.

I was requested, on the 5th of this month, to visit some patients at Arno's Court, near Bristol, an establishment for the reformation of unfortunate females. Two were suffering from severe neuralgia of the face, and one (the individual whose case I am about to describe) complained of tape-worm, with which she had been afflicted for some years. I ordered her to take one drachm of the bark of the root of pomegranate, and one grain of quinine in water, every morning, fasting; and, after a week, to take half an ounce each of spirit of turpentine and castor oil, also in the morning. I directed for the other two proper diet, a mild aperient, and thirty drops of the following embrocation, to be applied externally over the seat of pain:—Tinct. aconiti (Flem.) ʒss; acet. morphiae gr. iv.; to be marked. "The embrocation for external use only; a piece of linen, the size of half a crown, to be wetted with thirty drops, and applied over the seat of pain, covered with oil-silk, and a bandage." Unfortunately, at 7½ o'clock, A.M., on the 10th inst., the pomegranate being prepared in water, and placed in a bottle next to the embrocation, the lady who undertook to administer it, poured, by mistake, rather more than a teaspoonful of the embrocation into a cup, and then half filled it with water, and gave it to E. Forty; who drank it at once, and in a few minutes became very thirsty, and complained of a great burning and pain in her stomach and throat, and drank two tumblers of cold water, and in fifteen minutes began to vomit violently, which she continued to do for two hours. At first, she stood up to vomit; on a second attempt, she fell back in the arms of an attendant, helpless as if dead. She was very restless; the pain in the epigastric region increased. After the first hour, she was unable to do more than turn her neck and head a little, and to vomit. She now had tenesmus and convulsive movements of the muscles. At nine o'clock, she began to look stupid, complained of vertigo, and was covered with cold sweats. At ten o'clock she was quiet as if asleep; at a quarter to eleven she was still conscious, replied to questions, and said, "Lord, have mercy on me"; she then apparently went to sleep, and was not discovered to be dead until half-past eleven o'clock, A.M. There were no general convulsions observed. Pain in the epigastric region was very marked up to the last.

Jan. 14th. My friend Mr. Prichard made the *post mortem* examination with me. We found the face looking swollen and dark-coloured, as well as the lips; the muscular system rigid; the pupils rather dilated; the eyes very bright. The expression of the countenance was that of a person who had died a violent death. The membranes of the brain were congested, but the brain itself firm and healthy. The lungs were also healthy, with some *post mortem* congestion from gravitation; when the thorax was opened, they did not fill the cavity. The heart was flaccid, and the walls of the ventricles were rather thin. The uterus was rather congested; the bladder empty; the sphincter ani was relaxed, and the anus very open. The stomach contained some mucus, and the membrane lining the large curvature was injected in patches, but otherwise natural. The abdomen contained thickened mucus, and the mucous membrane was in a high state of inflammation, abraded in patches; the membrane being in them dissolved and broken down. There were many spots of a very dark colour. The small intestines contained a large tape-worm, many yards long.

As I did not see the patient whilst suffering under the effects of the aconite, I have collated these symptoms from the very imperfect information of non-medical persons: pain in epigastric region, thirst, vomiting, vertigo, muscular prostration (as evidenced by her inability to stand), cold sweats, irregular convulsive movements of the muscles, some stupor of the countenance two hours after the dose was swallowed; in three hours, apparent sleep, but consciousness and speech to within half an hour of death. The state of the abdomen shows well the

irritant action of the poison. The grain of acetab morphine the deceased took with the aconite, neither appeared to produce sleep nor stop the pain.

I was summoned by the coroner to attend as a medical witness at the inquest, the deceased *having been attended by me* a few days before her death.

The conduct of the jury and coroner in this case deserves a few remarks. When the jury met at Arno's Court to view the body, they directed it to be undressed for them to examine it. The coroner informed me that *the jury could not permit me to be present, as they desired to make remarks they did not wish me to hear*. One of the jury insisted on taking the case out of my hands, and on nominating another surgeon to make the *post mortem* examination, without any reference to me. This gentleman the jury had agreed to appoint; but I declined to meet him under the circumstances, and intimated that I would retire at once. Such conduct appeared to me to be in contravention of the Medical Witnesses Act, 6 & 7 of William IV, c. 89, 1st clause, to which I beg to refer. After some discussion, my friend Mr. Prichard was ordered by the jury to make the post-mortem examination, and I was requested to assist. In the third place, I was ordered to leave the court during the *whole time the witnesses were examined*, without reason assigned, against which I protested, but in vain.

The effect of the jury taking the place of the medical witnesses in examining the body for themselves, was, that two spots of commencing decomposition on the abdomen were taken by them for marks of violence, and insisted on, even against my positive evidence to the contrary; and they apparently yielded when Mr. Prichard demonstrated the absence of the effects of violence in the tissues, and otherwise corroborated my statement. I say apparently, for Miss Ryder was recalled, and sworn to the fact, that no violence had been used to the deceased.

What shall I say of the exclusion of the medical witness from the court?—*a hitherto unheard-of proceeding*. I was thus prevented from hearing and judging of the facts of the case which might come out in evidence, and which, in most cases, would materially assist in deducing just conclusions. I had, however, taken care to examine all the witnesses myself, and had quite made up my mind that Emma Forty had died from the effects of about seventy drops of Fleming's tincture of aconite, given by mistake.

JOHN O'BRYEN, M.D.,

Physician to St. Peter's Hospital, Bristol.

Clifton, Bristol, January, 1853.

[We intend in an early number to draw attention to Coroners and their Inquests.]

PETITION TO PARLIAMENT AGAINST THE INCOME-TAX, FROM THE MEDICAL PROFESSION IN TORQUAY.

LETTER FROM DR. NANKIVELL TO THE EDITOR.

SIR,—The enclosed petition has been signed by all the medical men practising in Torquay; and at a meeting of the Medical Society, Dr. BATTERSBY and myself were deputed to forward it to Sir J. B. YARDE BULLER, one of the members for South Devon, and to request him to present it to the House of Commons; but, as Parliament had adjourned to the 10th Feb., when it is most probable the budget will have been decided upon by the Ministry, Sir J. B. YARDE BULLER was requested to suggest some mode, by which the petition might be laid before the Chancellor of the Exchequer earlier than the meeting of Parliament. In compliance with this request, he has kindly recommended the following plan:—

"Have a copy made of the petition and its signatures, with a note to the Chancellor of the Exchequer, telling him that a petition, of which that is a copy, has been placed in my hands for presentation to the House of Commons; and respectfully call his attention to it. These two documents I will forward to the Chancellor of the Exchequer; and in this way, I think, your object will be attained."

Our professional brethren here, I have no doubt, in common with all members of the profession throughout the country, think and feel the income-tax to be a great and grievous injustice to them; and they have considered it especially important at the present moment, to raise their voices against its re-enactment in its existing form, from the fact, that the Chancellor of the Exchequer has expressed an opinion against any alteration in its adjustment, though he states that the subject is open to further consideration. They likewise hope that you will have the kindness to insert their petition in our ASSOCIATION JOURNAL, as the surest means of bringing the subject before the

profession at large; and of inducing our brethren in all the large towns throughout the kingdom, to send similar petitions to the House of Commons, and in this way express the united voice of the profession against the continuance of a heavy burden and a flagrant injustice, which they have hitherto borne with too much patience.

I am, sir, your obedient servant,

C. B. NANKIVELL, M.D.

Torquay, Jan. 19th, 1853.

"The Humble Petition of the undersigned members of the medical profession, practising in Torquay and St. Mary Church:—

"This petition sheweth,—That your petitioners only derive from their professional exertions most uncertain and precarious incomes, and which of necessity cease under impaired health, in advanced life, and at death.

"That your petitioners are, for the most part, married men, with families, for whose education and present and future support, under the contingencies of illness, advanced age, and death, they have to provide by these uncertain and precarious incomes.

"That your petitioners feel it a great grievance, and cannot but consider it most unjust, that their professional incomes, thus precarious, should be taxed at the same rate as incomes derived from realized property, which are not affected by the health or age of the possessors, and which descend to their families after their death.

"Your petitioners, therefore, humbly pray that, in re-imposing the Property and Income Tax, your honourable House will so alter its adjustment as to press less grievously upon them, in common with all others alike depending upon temporary and life incomes.

"And your petitioners will ever pray," etc.

PARLIAMENTARY REPRESENTATION OF THE UNIVERSITY OF LONDON.

LETTER FROM DR. SNOW BECK, SECRETARY TO THE FRANCHISE COMMITTEE OF THE GRADUATES OF THE UNIVERSITY OF LONDON, TO THE EDITOR.

SIR,—In a recent number of the Journal (Jan. 7th), a letter appeared from Mr. Allen, Secretary to the York School of Medicine, in which we are informed, that "at a meeting of the lecturers of the York School of Medicine, the representation of the University of London in Parliament was thought highly desirable, inasmuch as the medical profession might thereby obtain a more direct voice in public affairs." The lecturers also inquire, "the opinions and intentions of the Committee of Graduates, as to whether the franchise should be conferred on the teachers of the Provincial Schools, irrespectively of their being graduates of the University."

When, in the autumn of last year, it was considered advisable to take active steps for procuring representatives in Parliament for the University of London, a "Franchise Committee" was formed at the public meeting of the 30th December, consisting of the principals and professors of the affiliated colleges, several members of Parliament, and the Graduates Committee, for the purpose of carrying out this object. The question for admitting the principals and professors of the affiliated colleges, both medical and general, into the franchise, became a subject of careful consideration, and, at present, remains undecided. However, the decision did not rest with the "Committee of Graduates", but with the "Franchise Committee", composed as above, in which the interests of the professors are fully represented. And without wishing in any way to anticipate the decision which may be come to, I may state, that some of the professors, who at the commencement of the movement most warmly supported the introduction of the "professorial element" into this franchise, have now given it up; whilst the inquiries of the "Franchise Committee" have led to the development of difficulties in the working of the scheme, which no means have yet been devised to surmount.

I feel that I am expressing the opinion of the Franchise Committee, when I say, that they will be much gratified to know they have the influential support of the medical profession in the provinces, as well as in London, in their endeavour to obtain representatives in Parliament for the University of London.

I am, etc.,

T. SNOW BECK, M.D.,

Secretary to the Franchise Committee.

January 14th, 1853.

NEWS AND TOPICS OF THE DAY.

AMALGAMATION OF THE ORDNANCE AND LINE MEDICAL DEPARTMENTS. There is a rumour, that the Medical Departments of the Line and Ordnance are very shortly to be amalgamated. Such a change will be one of convenience and economy to the Service. It has occurred to us that a very good opportunity would be afforded at this time to remove an expense which medical officers of the Line, rather unjustly, as it would seem by comparison with others, have long been subjected to. In accordance with present regulations, assistant-surgeons of the Line have to provide, at their own expense, a pocket case of instruments, and regimental and second-class surgeons, in addition, a capital case of instruments, for the public use. The latter case of instruments, according to regulation, costs about 30*l*. But the singular part is, that on promotion to the first class, the surgeon is no longer required to have this case of instruments, but is provided with one at the public expense. Now, in the Ordnance department, the assistant-surgeons and surgeons have always been provided with the required instruments at the public cost, just the same as holds in the Navy. Surely this appears only just, and equally ought to apply to the medical officers of all branches of the Service, all being made alike responsible for the proper care and keeping of the public property alluded to.—*United Service Gazette*.

ST. GEORGE'S HOSPITAL: MR. KEATE'S RESIGNATION. Mr. KEATE, who has so long and so ably filled the office of Surgeon to St. George's Hospital, has tendered his resignation of that post. It is believed, that Mr. C. H. Johnson, at present one of the Assistant-Surgeons, will be appointed to succeed him; and that Mr. Pollock will take the place of Mr. Johnson.

GLASGOW MEDICAL JOURNAL. There is at present on foot a project for reviving the Glasgow Medical Journal, under the editorial auspices of Dr. Weir, one of its former conductors.

THE COMMISSIONERS IN LUNACY. There has just been printed, by order of the House of Lords, a paper containing the report made to the Lord Chancellor by the Commissioners in Lunacy, of visits to insane persons during the six months ending the 4th of August last. Dr. Turner made 123 visits, saw 6,237 patients, and travelled 3,973 miles. Dr. Hume made 152 visits, saw 5,511 patients, and travelled 5,604 miles. Mr. Gaskell made 137 visits, saw 7,708 patients, and travelled 4,676 miles. Mr. Proctor made 100 visits, saw 5,515 patients, and travelled 3,809 miles. Mr. Mylne made 158 visits, saw 7,808 patients, and travelled 5,819 miles; and Mr. Campbell made 131 visits, saw 7,073 patients, and travelled 4,320 miles.

DR. J. DE CARRO, OF CARLSBAD. By the Carlsbad papers of the 12th instant, we learn that his Majesty, Otho I., king of Greece, has conferred the Order of the Saviour upon Dr. de Carro, as a mark of his esteem for this veteran physician, and in particular as a testimony of his services to humanity, in having introduced vaccination into Greece.

OBITUARY.

BRUCE, Samuel Barwick, M.D., of Ripon, Yorkshire, for many years Surgeon to the Forces, at Victoria Square, Grosvenor Place, London, on 24th Dec. 1852, aged 66. Dr. Bruce was born on 8th January 1786. He was the second son of Mr. Barwick Bruce, and the grandson of the Hon. J. O. Bruce, of Garilet, county of Clackmannan (who was some time judge of the Court of Common Pleas, in Barbadoes), by Jane, the daughter of General Samuel Barwick, who was governor of that island. Dr. Bruce entered the medical department of the army in 1804, but saw some of his earliest service afloat under Lord Nelson, in 1805; he was present at the capture of the Danish islands of St. Thomas, St. John, and St. Croix, in 1807, and he subsequently served at the siege of Fort Desaix, Martinique (for which he had a medal and clasp); at the capture of Les Saintes, near Guadaloupe, at the bombardment, and driving from their anchorage of the French fleet, in 1809; at the capture of Guadaloupe (for which also he received a medal and clasp), as well as at the capture of the adjacent islands, in 1810. Dr. Bruce served in the Peninsula in 1813, in America in 1814 and 1815, and was present at the severe actions before New Orleans, in January 1815; at the capture of Fort Boyer, etc. He joined the army in the Netherlands, under the Duke of Wellington, in May 1815; was present at

Waterloo, and at the subsequent capture of Paris. He died very suddenly, after an apoplectic seizure.

PEREIRA, Jonathan, M.D., F.R.S., on Friday, January 21st, at his residence in Finsbury Square, in his 40th year. He was Physician to the London Hospital, and an Examiner in Materia Medica and Therapeutics to the University of London. About five weeks ago, Dr. Pereira visited the College of Surgeons for the purpose of consulting Professor Quekett on a microscopical investigation; and whilst descending the stairs leading to the new building now erecting, missed his footing and fell heavily to the ground, thereby rupturing the tendon of the patella. In all probability, at the same time some internal injury was sustained by the heart or larger vessels; but no indication of this was evinced until twenty minutes before his death, when he felt a sudden and violent throb in the region of the heart, when he became fully aware that a speedy termination to his life was at hand. He sent for a medical friend in the immediate neighbourhood, informed him that he was dying, and requested him to remain with him and his family until life had passed away. Dr. Pereira was a man of portly bearing, good-humoured, and of great frankness of manner. Few men were possessed of such general and sound knowledge of subjects connected with his profession with so little affectation. He was an excellent observer in Pharmaceutical Microscopy and Chemistry. He had a good idea of what was practical; his literary judgment was very sound. He was author of *Elements of Materia Medica and Therapeutics*, a work of universal reputation,—the concluding portion of the Third Edition he was actively engaged on up to the time of his death. He also wrote a treatise on *Food and Diet; Selecta à Prescriptis*; and *Lectures on Polarised Light*,—the best familiar exposition of that abstruse subject in our language. He also contributed numerous articles to societies, journals, reviews, etc. His death has left a great void in English Pharmacology, as no one in England had a greater amount of knowledge on that subject. As a lecturer, he secured the attention of his class by an earnestness of purpose, aptness of experimental illustration, and the practical bearing of his remarks. Like John Abernethy, he was fond of introducing jocose anecdotes into his lectures, not only to secure attention, but as aids to memory. To those students who evinced a desire for information, he was ever most liberal in affording assistance, often devoting valuable time in making them thoroughly acquainted with the subject of their inquiries. Dr. Pereira was, at the commencement of his medical career, apprenticed to a general practitioner—attended the Aldersgate Dispensary—became its Apothecary—took his degree in medicine, and became Lecturer on Chemistry and Materia Medica at the Dispensary, where his lectures attracted many students from neighbouring schools of medicine. He continued there till the disruption of the medical staff of that establishment. He afterwards became Lecturer at the London Hospital, which post he resigned about three years since. He was also one of the physicians to that hospital up to the time of his death. He also lectured at the Pharmaceutical Society, and was Examiner on Materia Medica to the London University for many years. He attained his high position in the profession ENTIRELY through his own industry and acumen.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of members of the Association.]

- BERNAYS, Albert J.** Household Chemistry. 12mo., pp. 276. London: 1853.
- BILLING, Archibald, M.D., F.R.S.** DISEASES OF THE HEART AND LUNGS. 8vo., pp. 138. London: 1852.
- ***FULLER, Henry W., M.D.** Rheumatism, Rheumatic Gout, and Sciatica. London: 1853.
- MOREL, M.** Maladies Mentales considérées dans leur nature, traitement, et dans leur rapport avec la Médecine Légale des Aliénés. Planches. T. premier. Nancy, et Paris: 1852.
- OGILVIE, George, M.D.** Introductory Lecture delivered at the opening of the Medical Session in Marischal College and University, Aberdeen, on November 1st, 1852. 8vo., pp. 27. London: 1852.
- ***PARKER, Langston.** Nature and Treatment of Some Painful Affections of Bone. 8vo., pp. 16. London: 1853.
- ***WALTON, H. Haynes.** OPERATIVE OPHTHALMIC SURGERY. 8vo., pp. 628. London: 1853.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. V.

LONDON: FRIDAY EVENING, FEBRUARY 4, 1853.

NEW SERIES.

VERDICT OF MANSLAUGHTER RETURNED AGAINST MR. HICKS, BY A CORONER'S JURY.

THE verdict of "manslaughter", brought in against Mr. Hicks, surgeon, of Toddington, Bedfordshire, is so startling, and so suggestive of evils that ought to be speedily remedied in medical jurisprudence, that we feel ourselves impelled to comment on the details of the case.

The facts are these:—Mr. Hicks was called to attend a boy who, it was supposed, had injured his leg by a fall. As Mr. Hicks at first believed that the fibula had been broken, the limb was bandaged, and pasteboard splints were applied. Afterwards, as Mr. Hicks, jun., suspected that an abscess was forming under the knee, the splints were removed, and a poultice was applied to the whole limb. Next, Mr. BENSON, surgeon, of Luton, was called in; but not until the patient was all but moribund. This gentleman, assisted by Mr. TOMSON, made a *post mortem* examination, and found no fracture, but some pus infiltrated among the muscles below the knee-joint. On these evidences, they founded their very decided opinion, that *death resulted from disease of the brain, produced by the pressure of the bandage*. The jury, ruled by such a positive and unqualified assertion, returned a verdict of *manslaughter*; and, accordingly, Mr. Hicks was committed to prison under the coroner's warrant!

Surely, this is a rather important case for the consideration of medical men, who value life, liberty, and reputation; for it immediately suggests the query, "Who is safe?" Commitment for "manslaughter" may be, it seems, easily brought about, any day, for any practitioner who has the ill fortune to find two professional brethren ready to give a positive opinion against him, and a non-medical coroner disposed to respect dogmatic assertions. With less respect and more suspicion, we shall now say a few plain words about this rather portentous inquest.

Admitting the mistake in diagnosis, and that the first treatment of the case was quite improper for an abscess, still we do not feel ourselves compelled, by the authority of Messrs. Benson and Tomson, to leap, in their very agile style, to the conclusion that death resulted solely from the wrong treatment. We have seen cases of deep-seated abscesses in the neighbourhood of joints, which have terminated fatally, though the best mode of treatment had been employed. Absorption of matter often takes place, without any pressure from bandages. Whether the effect of accident or not, it is evident that there was local mischief, and, if not the result of the accident, the same cause which produced that local mischief in the limb *might* also lead to fatal mischief in the head. Or, is it not *possible* that the cerebral disorder may have been merely a coincidence, not in the least dependent either on the injury of the knee, or on the plan of treatment adopted? Who can say that the cerebral disease would never have manifested itself, but for the injury of the limb? We do not see anything in the

evidence to set aside these doubts, though Messrs. Benson and Tomson did not hesitate in stating their belief, that the cerebral disease must be attributed *solely*, as an effect, to the treatment pursued by Mr. Hicks. Surely, where so much room for modest and reasonable doubt existed; where the reputation of a fellow-practitioner was at stake; and where they knew that their mere opinion would be the main evidence in the case,—it would have been more becoming, in every respect, if the medical witnesses had been rather less dogmatical.

But, again, admitting the mistake of treatment, there is, or there ought to be, a wide distance between a mistake in medical practice and "manslaughter", which implies, as we think, a criminal degree of ignorance or neglect in the treatment of a case. Again comes the question—"Who is safe" if inquests are to be conducted in the above-mentioned style? Not, we reply, the most eminent and the most honest practitioners. We have known celebrated hospital surgeons who have unhappily punctured a distended bladder for ascites—who have opened an aneurismal tumour for abscess—who have even plunged the lancet into a hernial swelling—and who have committed many other fatal errors. We remember that "to err is human". We will even go so far as to say that Messrs. Benson and Tomson—clear, rapid, and positive as they seem to be in coming to conclusions—that even they themselves have sometimes made mistakes; that, if the veil which hides unknown errors could be lifted, it would disclose some few errors, even in their practice, as in that of the most skilful and conscientious of our profession. If great men, then, have made great mistakes, we can conceive it possible that Mr. Hicks, of Toddington, may have concluded that the fibula was broken after a fall; and that, on the faith of such a conclusion, he applied the usual splints and bandages, without being guilty of *manslaughter*.

We must now add a few facts, on which we shall not comment at any great length. Mr. Hicks, it appears, has been in practice more than forty years, and claims a legal right to practise, as having practised before the Apothecaries' Act of 1815. He has a son now studying at one of the London schools, who will shortly have finished his medical education; and another son is apprenticed to the father at the present time. It also appears that he has been called in by some of the patients of the two medical witnesses against him in this case. Mr. Hicks and his sons were *not invited* to the *post mortem* examination, *nor had they any intimation of it* until the day of the inquest! This is strange, to say the least of it; and sufficient, in itself, to impair the medical evidence of Messrs. Benson and Tomson. The coroner should have summoned the attendance of an impartial medical man, having no local associations in the neighbourhood; or, at any rate, he should have insisted on having two sides to the case, by the presence of some one to protect the interests of the accused party.

The practical lesson to be deduced from the whole affair is this—we want a fair and honourable code of medical

ethics, for the general guidance of the profession in many delicate cases where it is commonly found that the most incompetent are the most positive in their own opinions; and we also want impartial and thoroughly-educated MEDICAL CORONERS. Where a coroner's legal knowledge avails once, his knowledge of medical science would avail a dozen times. We venture to say that, had this painful case come under the notice of a *medical*, instead of a *legal* coroner, the evidence given by Messrs. Benson and Tomson would have been so qualified and abated, that we should have been spared the pain of commenting on a verdict, which we, last week, designated as manifestly "absurd and unjust."

It is said that, in Abyssinia, though the people are really fond of physic and addicted to begging for it, the practice of medicine is unpleasant for a nervous man. A Mr. Johnstone, while travelling there, had given some harmless pills to a chief who was ill. Afterwards, on awaking in the night, the amateur doctor was surprised to find his tent surrounded by natives armed with spears, and under the command of the wife of the patient. On asking the reason of this hostile display, he was quietly told that "the medicine had not yet operated well; and, as it was thought probable that the chieftain might die before morning, it was resolved, in that case, to send the doctor after him as quickly as possible." Luckily, the sick man recovered; but Mr. Johnstone was afterwards rather shy about dispensing physic in Abyssinia. There is something rather Abyssinian in the late rapid decision at Toddington.

Seriously, we must have some code of ethics among ourselves; or we must seek the aid of the legislature to prevent the recurrence of such cases. For, if inquests are to be conducted in the style on which we have commented; if mistakes in diagnosis are to be metamorphosed into manslaughter; if *post mortem* examinations on our fatal cases are to be made by our competitors closeted together; if their *ipse dixit* is to pass as law with coroners; then our profession may be styled a dangerous one *par excellence*. We may envy the safety and peace of mind of coal-miners and engine-drivers; for every morning as we go forth to our perilous duties, we must be haunted by the thought that, some day, our professional neighbours, assisted by a non-medical coroner, may kindly suggest to Government the propriety of inflicting upon us—emigration in the compulsory style.

THE STUDY OF BOTANY.

We propose to bring before the notice of the profession from time to time, some of the more interesting discoveries in Botanical Science which appear to have a bearing on Medicine in its Anatomical, Physiological, Therapeutical, and Hygienic departments. It has too often been the habit of some practitioners, especially in the surgical province, to deny the merits of the sciences which are collateral to medicine. Their condemnation proceeds upon an erroneous view of the value of these sciences, as well as of the mode in which they should be prosecuted. In the case of a medical student, the sciences must be viewed not merely as regards their bearings on the actual treatment of disease, but also as regards the influence which they exercise on his mental development. One of the most important uses of botanical science, for instance, to the student, is to train him to correctness of observation and accuracy of diagnosis; qualities which are most essential for the successful prosecution of his profession. Hence we argue that such studies should be

preliminary to his entrance on the more practical parts of his professional career, so that their influence may extend over the whole period of his studies.

No one can be a scientific physiologist, who does not embrace in his researches both the animal and the vegetable kingdom. The examination of vegetable tissues and organs, with their mode of development and their functions, has led to most valuable results in human physiology. The modern doctrines relative to cell-life in all its stages have been founded in the first instance on the phenomena observed in plants; and the subject of embryogeny has been elucidated in no small degree by the labour of vegetable physiologists.

The influence which climate and soil produce on the properties of plants must be studied by the scientific therapist, if he desires to know the qualities of the remedies he employs. The medicinal products of plants are materially affected by these circumstances. Look, for instance, at the difference between the secretion of the hemp plant as cultivated in India and in Britain. In the former country it has powerful narcotic qualities, while in the latter it is comparatively inert. Notice also the varying properties of the same species of umbelliferous plants, according to the situations in which they grow.

The plants which cover the surface of a country have also in their turn a marked effect upon climate, and assist in the determination of its nature. The physical effects of the removal of forests, for example, is a subject which calls for the attention of the climatologist. Humboldt remarks:—"By felling trees which cover the tops and sides of mountains, men in every climate prepare at once two calamities for future generations—the want of fuel and the scarcity of water. . . . Plants exhale fluid from their leaves, in the first place, for their own benefit. But various important secondary effects follow from this process; one of these is maintaining a suitable portion of humidity in the air. Not only do they attract and condense the moisture suspended in the air, and borne by the wind over the earth's surface, which, falling from their leaves, keeps the ground below moist and cool; but they can, by means of their roots, pump it up from a very considerable depth, and raising it into the atmosphere, diffuse it over the face of the country. Trees, by the transpiration from their leaves, surround themselves with an atmosphere constantly cold and moist. They also shelter the soil from the direct action of the sun, and thus prevent evaporation of the water furnished by rains." In this way the forests contribute to the copiousness of streams. In those mountains of Greece which have been deprived of their forests, the streams have disappeared. The sultry atmosphere and the droughts of the Cape de Verd islands are attributed to the destruction of forests. It is stated that in large districts of India, climate and irrigation have rapidly deteriorated from a similar cause, and that the government are now using means to avert and remedy the mischief. We thus perceive that the vegetable kingdom has a powerful influence in modifying the climates of the globe.

These are not the days in which a physician can acquire fame and reputation, who shows ignorance of the natural sciences. He cannot expect to secure the confidence of his patients, nor can he occupy, in a satisfactory manner, offices of responsibility, either in this country or abroad, unless he show himself to be conversant with these subjects. It is to the medical profession that the public look, in an especial manner, for enlightenment in science, and it is certain that without it the profession cannot continue to

maintain its eminent position. Let us hope that medical men are now recognizing, more than ever, the important bearings which the natural history sciences have upon their studies, and that the time is not far distant when the reproachful term *unscientific* shall not be applied with truth to any member of our noble profession.

MEDICAL HISTORY.—PAST ERRORS TEACH USEFUL LESSONS.

We find from various letters which we have received, that many of our readers are inclined to criticise the opinions we have expressed on the subject of Medical History. Some are disposed to think, that Medical History is of scarcely any importance whatever; others say, that we have underrated the state of knowledge concerning it; and a third class maintain, that if unknown and valuable facts do of a truth exist in the past book-world of medicine, they are too largely diluted by, and commingled with, absurd errors, to be worth the labour of being sought after. To all these assertions, we have one answer:—they are made without due consideration of the Philosophy of History, and without a sufficiently extended conception of the applications of historical information. Let us dwell a little on this answer, for it deserves attention, and affords us a basis on which to build arguments in opposition to the objections stated above.

In the first place, then, we freely admit, that a great amount of exceedingly valuable information of the Medico-Historical kind has already been collected by several competent authors,—by such men, for instance, as Sprengel, Le Clerc, and Friend. Our admiration of these writers goes so far indeed, that we would give them rank with such political historians as Hume, Gibbon, and Robertson. Can we say more in their favour? We can. The imperishable works of the medical historians referred to are text-books, from which every modern writer on the same branch of history must borrow information, and on which alone he might found the most valuable expositions. But, because we hold this high opinion of these learned text-books, are we to say that in them the subject of Medical History has been exhausted? As wise would it be for us to declare that the works of Hume, Gibbon, and Robertson, have exhausted those peculiar departments of history on which they treat, and that the immortal labours of our latter-day Hallams, Niebuhrs, and Grotes, have come into an unnecessary existence. We believe we may safely lay down as an axiom the assertion, *that the history of any science so useful, so extensive, and so ancient withal, as is the science of medicine, can never be exhausted.* We are desirous not to be misunderstood on this point. We use the word History in a dual sense, for in such a sense it should always be used and understood. The mere narration of events, the records of the lives of men, and so forth, are, it is true, historical labour; and so far history may have an end. But this is in fact only the half of the matter! the philosophical ideas, of which these mere historical narrations form but nuclei, remain, and not only call into play distinct forms of mental faculty, but open a field for investigation quite inexhaustible. Now we are bold to affirm, that the History of Medicine has as yet not even been entered upon in this last named philosophical lesson-teaching sense. It is not sufficient for us to know, that at such a time, some distinguished man lived, or some peculiar sect existed, or that a wonderful discovery was made. We want to be informed

what influence the man, the sect, or the discovery, had on his or on its time? what on after times? what influence he or it has now? We require to know, moreover, why those men who take rank as distinguished men are distinguished? what plans of investigation they pursued? what right they have to their distinctions? and, lastly, we would, if it were possible, discover the pit-falls and errors into which they fell. We repeat, that we would desire to know the errors of our distinguished men. This, strange as it may sound to some ears, is a legitimate wish. It has been said by one of the greatest men that ever lived, that “there is a soul of goodness in things evil, would men observingly distil it out”; and it may be, that no sentence of fifteen words ever expressed a more profound or accurate idea. The sentence, without losing either its force or its correctness, may be so modified as to express our present thoughts: “there is a soul of *truth* in things *false*, would men observingly distil it out”.

With the system of fighting with error, we are no friends; that system involves loss of time, loss of intellect, loss of everything; it were as wise to strike at shadows. But we do believe the *observance* and *remembrance of error* to be a wholesome and an excellent practice. In our lives we universally use this practice; and in sentences similar to these, “I shall be wiser next time”, “I shall take a lesson from that mistake”, etc., we almost hourly acknowledge the advantages of it; nay, we have it reduced to rule even, in the well known poetical proverb—

“The strongest plume in wisdom’s pinion,
Is the memory of past folly.”

And the practice here named, so useful in our special concerns, admits of a wider application, an *historical* one. For history, whether dealing with mankind altogether from first to last, or with classes of mankind, is, after all, but an expounded record of the wisdom and error, of the goodness and evil, of the joys and the sorrows, of the life, in short, of one vastly magnified long-living man. The History of Medicine may be conceived as the pictured life of a single mighty Esculapius, embracing in his career all medical men of all times, and yet typified in miniature in every living member of the medical body. Thus it may be said, that the acquirement of information on Medical History by the medical man, is nothing more than an endeavour on his part to fulfil the golden precept of the Delphian Temple, “to know himself”.

We have advanced too far on this occasion, to descend from the expression of general ideas to the introduction of particular statements. It will afford us, however, great pleasure to return to this subject, and to show, by reference to one or two interesting historical facts from the practice of medicine, the truth of the principle we are so anxious to establish, that the very errors of the past medical body might be turned to useful account.

But some one will ask, How can I raise myself to the standard of knowledge supposed above? How is it possible for me so to assimilate myself with the past, as to become a living personation of all medical men, back to the medicine god of Grecian mythology? We would be the last to affirm that such an accomplishment is in any way possible; but we do affirm that every one might advance towards it; and that he who approaches it nearest, shall be greatest in his own time, and shall dissolve least slowly in the future.

ORIGINAL COMMUNICATIONS.

CASES OCCURRING IN THE MEDICAL PRACTICE OF THE SUSSEX COUNTY HOSPITAL DURING THE YEARS 1849, 1850, AND 1851; WITH REMARKS.

By G. S. JENKS, M.D., one of the Physicians to that Institution.

THE following essay is compiled from three papers which I read before the Medico-Chirurgical Society, at Brighton, in the years 1850, 1851, and 1852. I was led to introduce these reports for discussion, as now I am to publish them from a conviction, first, that the results of hospital practice may be useful in their application to the exigencies as well as the statistics of a difficult and laborious profession; and, secondly, because I regard all institutions, supported by public charity, as having incurred a debt of usefulness to the whole community. The cases described occurred under my own care; and the nosological plan which I have adopted, is that of the Registrar General.

ATMOSPHERIC CONDITIONS IN 1849, 1850, AND 1851.

In 1849, the early part of January, and the latter part of March, were cold and dry, with sharp north-easterly winds, but the intervening period was unusually warm for the season, and the winds westerly. April, May, and June, were cold and wet, the mean temperature being below the average, with an excess of rain. The summer months, on the contrary, were warm and dry, without excessive heat, and with less rain than usual, the wind being from the east. The autumn set in very cold, but afterwards the season, till the end of the year, was, upon the whole, mild, and the weather damp and foggy, under a prevalence of wind varying from north-west to south-west.

In 1850, during the spring and summer, easterly and northerly winds generally prevailed, with dry weather. The autumnal and winter months, on the other hand, were characterised by frequent gales, and much rain. It may be predicated of the whole year, that it presented the phenomena of a mild, genial climate: for, excepting some sharp frosts, which did not last long, in January and March, the seasons were temperate, being remarkable neither for great heat nor cold, dryness nor moisture. The epidemic constitution of the year was not marked by any virulent outbreak of the usual maladies.

In 1851, the epidemic constitution was, upon the whole, favourable. The early part of the year, unusually warm and open, was followed by a somewhat ungenial spring. In the latter part of April, and the beginning of May, cold north-west winds, with chilling rains and sharp frosts in quick alternation, did much damage to vegetation, and destroyed nearly all the wall-fruit. Much rain fell during the months of June and July; and to this succeeded a long continuance of fine, warm, clear weather. Towards the end of autumn, the weather became very cold. November was remarkable for dry winds and sharp frosts: December, on the other hand, like the first month of the year, was singularly mild and open. The prevailing winds, till August, were westerly, with frequent heavy gales. During the fine weather which succeeded, they varied from north to north-east and north-west. The mean temperature of the two winter months, January and December, was 46°; that of the summer months was 61°.

EPIDEMIC DISEASES.

Looking at the vast extension of Brighton now going on, and the constantly increasing number of its inhabitants, amounting to 67,000, we must expect to approximate more nearly, every year, to the average rate of disease and mortality in other large towns. Of so growing a population, the most needy must be densely crowded, and not a small proportion of those in better circumstances

will be bestowed as to sanitary conditions. But, besides this, the free and constant intercourse with the metropolis and all parts of the country, and the cheapness and facility of travelling, bring us, besides a host of paupers, a continual influx of invalids, and convalescents from infectious maladies. Notwithstanding these extraneous sources of epidemic and contagious diseases, I believe that there has not, during the years embraced in this report, prevailed a greater amount than usual of these diseases, with the exception that thirteen cases of typhoid fever, some in its worst form, were admitted between June and December, 1851.

TYPHOID AND TYPHUS FEVER. In 1849, not a single case of typhus or typhoid fever came under my care; and, I believe, few, if any, under that of the other physicians. In 1850, two cases of typhoid fever were admitted: one a boy, eleven years of age; the other a young man, aged twenty-three. We could discover no eruption of a decided character in either case; but from the urgent abdominal symptoms—great tenderness and intolerance of pressure, severe diarrhoea, and yellow-ochrey stools—we inferred that Peyer's glands were affected; and, relying on Dr. Jenner's authority, we have denominated them cases of *typhoid*, not *typhus*, fever. In both cases there was delirium: but the boy exhibited the phenomenon of total loss of speech, without previous coma, on the sixteenth day after admission (being the twenty-fourth of the disease), his intellect remaining unimpaired. There was, however, very defective power of voluntary motion; he might have been said to be completely paralysed. When placed upright, his head rolled from side to side, or hung forward upon his chest. All his motions were impeded, and without precision. These symptoms gradually disappeared; and the boy made a good recovery.

Several cases were admitted under the head of gastric fever. They were not attended with symptoms of prostration, but were characterised by considerable disorder of the digestive organs, with fully developed fever. One case, towards the conclusion, became complicated with bronchitis; another was remarkable for a very frequent pulse, which persisted long after convalescence.

In 1851, fever of a typhoid type prevailed more extensively. According to the distinction now made between typhoid and typhus fever, I would say that five well-marked cases of typhoid fever came under my charge. Rose-coloured papulae appeared on the thorax and abdomen in three cases; red patches in one: and no eruption could be discovered in a fifth. Diarrhoea, with abdominal tenderness, especially in the right hypogastric region, occurred in four cases; costiveness, with abdominal tenderness, was present in one only. Profuse intestinal hæmorrhage happened in two cases, in one of which it was fatal. The admissions took place from the seventh to the eleventh day. One case terminated favourably on the eleventh day; another on the fourteenth; two on the twenty-first.

One poor boy, aged 16, died on the nineteenth day, from the effects of profuse hæmorrhage, which had begun on the fourteenth, at a time when the other symptoms promised a favourable issue. On examination of the body, thirty-two hours after death, decomposition had already commenced in the walls of the abdomen. The thoracic viscera were healthy; the liver showed no signs of disease; the spleen was softer, but not larger, than natural. The ileum, at its terminal portion, was extensively ulcerated. The ulcers were on the opposite side to the mesentery, of an elliptic form, the long diameter being parallel with the longitudinal axis of the intestine. Some were very long and very deep, the serous coat alone remaining intact. About the middle of the ileum there was a diverticulum about two and a half inches long, in which was a large and deep ulcer. The blood-vessels of the mesentery, and their ramifications between the intestinal coats, were enlarged, and injected with dark blood. Some large vessels were in immediate contact with the deep ulcers, especially those situated in Peyer's glands. The solitary glands were generally enlarged, and very conspicuous.

Three other cases of fever occurred, two in men, and one in a woman, which I have little doubt were mild examples of the prevailing epidemic; but as the chief characteristics of the typhoid type were absent, or only slightly manifested, they are classed as continued fever.

In the two men there was a complication of bronchitis. The woman had fever, without any complication. Two of the cases were admitted on the eighth day of the disease: the third, a groom, at the end of the third week. The case of the female terminated on the fourth day. The disease lasted longer than twenty-one days in both the men, being prolonged by bronchitis. Headache, constipation, and some abdominal tenderness, occurred in all three; but no eruption could be detected.

AGUE. In 1849, two cases were admitted. One was a servant girl, aged 19, who was attacked with the disease in Brighton. Besides these, two men applied as out-patients, with tertian ague, who had not been out of Brighton for five or six months.

ERUPTIVE DISEASES. In 1849, one case of small-pox, after vaccination, was admitted. It presented no febrile symptoms after the eruption broke out. Several cases of mild scarlatina, and of erysipelas, went through their course, without any phenomena worthy of remark; and the same was the case in 1850 and 1851.

ACUTE RHEUMATISM. In 1849, rheumatic fever, or that form of acute rheumatism attended with high fever and inflammation of the fibrous structures, in which the heart and pericardium are prone to be involved, was of frequent occurrence, especially among female servants, living exposed to draughts of air, in cold, damp kitchens, below the level of the street. Six cases were admitted; two males, and four females. Of the females, three, of the respective ages of 12, 15, and 16 years, suffered from pericarditis, or endocarditis, or both. One girl, S., aged 16, was seized with severe pericarditis, attended with copious effusion, soon after the appearance of the arthritic pains. Afterwards, and during the persistence of pericarditis, she was attacked with endocarditis, and subsequently with double pneumonia. She was discharged cured on February 13th, 1850, having been in hospital seventy-three days. I heard of her in the autumn as being quite well; but had no opportunity of examining the state of her heart. The girl aged 12 had pericarditis, endocarditis, and incipient pneumonia of the left side. The third, aged 15, had endocarditis, without any other complication. In the other three cases—two men and a woman, in the latter of whom the rheumatic attack appeared to be connected with uterine disorder—there were no cardiac symptoms. The duration of the arthritic affection was from one week to three. All the cases did well. It is worthy of remark, that, in the two cases of pericarditis, which preceded the affections of the endocardium and lungs, endocarditis and pneumonia were developed while the patients were under the influence of mercury and opium; and that all three cases of cardiac complication occurred in very young subjects.

In 1850, three cases only were admitted. In one of them, C. R., a woman aged 40, the disease was slight, and yielded speedily to purgatives, alkalis, and colchicum. A second, F. R., aged 18, had been bled and cupped for an incipient endocardial affection, and calomel and opium had already been administered before I saw her. The mouth became sore; the acute symptoms and pain were subdued in ten days. She remained thirty-four days in hospital. The endocardial murmur still existed, when she was discharged. The third, a young man, aged 20, suffered from a severe attack: both knees and ankles were affected, and afterwards the shoulder and wrist of the right arm. There was much external swelling and hardness about the throat. A harsh murmur with the first sound of the heart was heard on the third day after admission. This case was treated with purgatives in the beginning, followed by large doses of nitrate of potash. During the treatment, the pulse fell gradually from 88 to

40, and did not rise to 60, till nine or ten days had elapsed. All fever and pain had subsided in eight days. The cardiac murmur ceased long before his discharge, which took place on the twenty-seventh day after admission. I had no fair opportunity of trying the efficacy of lemon-juice in acute rheumatism.

SCORBUTUS. A case of scorbutus, in an old man of 73, was admitted, of greater severity than is often met with in our days. He had been ailing six months. His diet had been poor, and he had avoided vegetables, believing that they disordered him. Extensive vibices had appeared on his body, about six weeks before his admission, on July 2nd. These had been preceded for a month by very severe pains. These vibices, on the posterior and inner part of the left thigh, presented the appearance of large extravasations of blood. The skin covering these bruises, as they seemed to be, was hot, somewhat tense, and very tender under pressure. His sleep was prevented by constant pain; he suffered much from hiccup; and was extremely depressed in his spirits. His gums were spongy; livid fungous granulations had sprouted up around some bad teeth, and bled on the slightest touch. He was allowed a double portion of fresh vegetables with his food, and three oranges a day. He took the citrate of iron, with lemon-juice and cinnamon-water, thrice daily. In a month he went out quite well.

DISEASES OF VARIABLE SEAT.

CANCER. In 1850, a case of malignant disease of the œsophagus was admitted, in which the dysphagia became at length inability to swallow, from obstruction of the tube. This patient, a female, aged 50, had likewise prolapsus ani to an enormous extent. She died from inanition; yet, on opening the body, there was a copious deposit of subcutaneous fat in the anterior walls of the abdomen. The intestines were all of a dark colour, and much collapsed; the stomach was not larger than a portion of dilated intestine. About three inches above the cardiac orifice, was found a morbid growth adhering to the trachea, and surrounding and compressing the œsophagus for the space of two inches, so that its calibre was reduced thereby to about the diameter of a No. 3 catheter. In the middle of this constricted part, was a small excavated ulcer, which might have held a pea. This growth on section was of a buff colour, and had rather a firm consistence. In the cavity of the uterus, attached to the fundus, lay a small polypus, about as large as a horse-bean. On the os uteri was found a small ulcer, and on the surrounding parts were patches of abrasion of the mucous membrane, caused, seemingly, by the contact of acrid discharge from the contiguous ulcer. The rectum was of a very dark colour, exhibiting signs of intense congestion. The other viscera were healthy.

TUBERCULAR DISEASES.

PHTHISIS. In 1850, two men died from phthisis: one from profuse hæmoptysis. About the root of the left lung, were several irregular cavities; one of which, after the loose clots of blood were washed out, was found to contain a hard laminated coagulum adhering to its walls. The pulmonary artery was injected, with the hope of discovering the ruptured vessel, but without success. The other man presented an example of acute phthisis. Both lungs were filled throughout with innumerable milary tubercles, which, at the apices, had commenced the process of softening. In this case, there had been intercurrent pneumonia; the dyspnoea was extreme. In nine other cases of phthisis, cod-liver oil was exhibited with more or less advantage, but in all the cases with some relief. Where cavities existed, the benefit consisted merely of an abatement of cough, fever, and expectoration; the physical signs remaining the same, and the body sometimes, though rarely, acquiring more flesh. Where the disease was less advanced, the good effects were more conspicuous; not only did the fever, cough, night-sweats, etc., subside, but

the patients became fat and strong. This was especially observed in a girl of one-and-twenty, Parker, whose condition when admitted was most unpromising.

In 1849, the following case of tuberculosis of the lungs and intestines was admitted :

CASE. A girl, aged 21, was admitted Jan. 31st, with severe gastro-enteritis, for which she had been under homœopathic treatment. There were signs of ulceration of the intestines, with circumscribed peritonitis. She had hectic fever and diarrhœa. On examining the chest, the physical signs of tubercles in a state of softening were present at the apices of both lungs, but especially the right. The cough was very troublesome, and added much to her sufferings. Throughout the month of February, the ulcerated state of the bowels, and the diarrhœa and peritoneal inflammation consequent thereon, demanded our chief attention; but on the 11th March, she was seized with a severe attack of pleuritis of the right side, followed by abundant effusion. There was extensive dullness on percussion, and absence of respiration posteriorly, except quite at the upper part of the lung; but anteriorly there was vesicular breathing, and resonance on percussion, which was afterwards explained by adhesions which had tied down the base of the lung anteriorly to the diaphragm. She died, on the eleventh day after this attack of pleurisy.

Autopsy. The head was not opened. There were old partial adhesions of the pleura on both sides. The right pleural cavity contained about a quart of serum. There were old adhesions anteriorly, binding the lung to the diaphragm. Both lungs contained numerous tubercles. There was a small vomica at the apex of the right lung. The liver had undergone fatty degeneration. There were adhesions of the convolutions of the intestines in several places, and also to the parietes of the abdomen in the left iliac region. The ulcerations of the intestines, which were confined to the ileum, were visible through the peritoneal coat. Some appeared to have undergone a healing process; others were large and deep, spreading in the direction of the circumference of the intestine, and destroying the mucous and muscular coats down to the peritoneum. The mesenteric glands in the vicinity of the ulcerations were enlarged. The case was probably in the beginning one of intestinal tuberculosis.

In 1851, five men and one woman were admitted with phthisis pulmonalis. With but one exception, none of them presented the stethoscopic signs of the last stage of the disease. One woman died of the acute form of phthisis, which appeared to be accelerated by the retrocession of a cutaneous eruption, which had long troubled her. An examination of the body was not permitted. The other cases, after a sojourn in the hospital of from two to ten weeks, were discharged, some more, some less, but all much relieved by cod-liver oil. In one man, Richard Vernon, the good effect of this remedy was very remarkable. He had had the usual signs of softening of tuberculous matter at the apex of the left lung for two years. In February he entered the hospital for the second time. There were cavernous respiration and cough, distinct gurgling, and painful resonance of the voice. On percussion, amphoric resonance was elicited. After two months' treatment with cod-liver oil, this man was discharged, much improved in flesh and strength. He has persevered in the use of the oil, as an out-patient, ever since, and has been able to follow his employment as a milkman through the whole of the winter. He still preserves his condition, but the signs in the left lung remain unchanged. On the right side, where dullness on percussion and bronchophony existed, the disease seems to have been arrested. With an improvement of flesh and strength, under the use of the oil, the night-sweats disappeared, but the cough was not diminished in the same proportion.*

STRUMA. Ebenezer Vincent, æt. 10, a puny, emaciated boy, presented the following symptoms. An enlarged and tense

abdomen, without fluctuation, very tender when touched; the superficial veins being distended and numerous ramified. He had a troublesome cough, with much expectoration. Sibilant and sonorous rhonchi were heard at the base of both lungs posteriorly. He had hectic fever, and profuse night-sweats. Cod-liver oil, syrup of the iodide of iron, and a mixture for his cough, were administered internally. A liniment of camphorated oil, with iodide of potassium and laudanum, was well rubbed over the abdomen, night and morning. Sea-water baths were also ordered. In two months, the boy was discharged convalescent,—his improvement having gone on steadily from the beginning.

DISEASES OF THE BRAIN, SPINAL MARROW, AND NERVES.

MENINGITIS. The following case occurred in the year 1849.

CASE. G. F., aged 37, a man presenting much hebetude of countenance, and evincing great sluggishness of manner and hesitation in his replies, gave a very unsatisfactory account of himself. The most we could make out was, that he had been for some time failing in his health and mental faculties; that he had had several convulsive fits; and that he had vomited frequently of late, though his appetite was keen and he was solicitous about his meals. When admitted, there was incomplete paralysis of the motor nerves in the lower extremities, sensation remaining. He passed urine involuntarily, though aware of the desire to do so. His bowels were obstinately constive; his tongue foul. He made no complaint of his head; but was inclined to be somnolent. These symptoms became gradually worse; and finally merged into fatal coma.

Autopsy. The convolutions of the brain were found to be flattened. There was more congestion than natural. There was an abundant effusion of serum into the ventricles, and the tunica arachnoidea at the base of the brain was thickened and opaque.

Here was a case of chronic meningitis, in which, so far as we know, there had been no delirium, though there had been considerable disturbance of the intellectual functions.

In 1850, two cases of meningitis came under treatment; one tubercular, the other simply inflammatory.

CASE. Mary Dyer, aged 22, had been ailing seven weeks; but the cerebral symptoms had only been developed about a week before her admission on June 21st. At this time she was in a state of half stupor, being incapable of answering questions, but not unconscious. The pulse was frequent; the tongue dry and brownish. The stools and urine were passed involuntarily. For some days, the symptoms seemed to belong as much to typhus fever as to a topical affection of the brain. On the 28th, however, the stupor became more decided, and was accompanied with strabismus and dilated pupils. The following day, there was drooping of the left eyelid, and the mouth appeared drawn to the right side. She died on the next day.

Autopsy. I am indebted to Dr. Ormerod for a most careful inspection of the brain, and for the following account of it. Much blood oozed from the vessels of the scalp. The arachnoid of the vertex was dry. On removing the brain, a good deal of fluid escaped from the spinal canal. The vertex of the left hemisphere, and the upper, outer, and anterior parts of the right, were of a deep greenish yellow colour. In some of these parts, the opposed surfaces of the arachnoid were adherent. The discoloured patches were interspersed with whitish granules; and all lay enclosed within the meshes of the pia mater. The same changes and adhesions were found anteriorly between the hemispheres; and about the base were many of the same whitish granules, besides older adhesions, without any greenish infiltrated fluid. The convolutions of the brain were distinctly flattened. The cerebral substance was generally firm, and free from disease. The septum, however, and the under surface of the fornix, were so softened, as to run into shreds. The lateral ventricles contained each about two-thirds of an ounce of reddish fluid, more stained in the right than in the

* This man died, as I have been informed, in the second week of January 1853, rather suddenly, having been affected with phthisis for four years, during all which time he had been taking cod-liver oil.

left. In a few points at the bottom of some of the convolutions, the yellow matter in the meshes of the pia mater shaded off gradually into the soft and discoloured cerebral matter; and round such points, the brain was intensely injected to the depth of three or four lines. There was no tubercle of the brain itself; but there was tuberculosis of other organs, the lungs and kidneys in particular, to some extent.

CASE. The other case of meningitis occurred in a girl aged 16. She had been ill a fortnight. We could get no history of the case: her friends, having consigned her to the nurse, departed, and the poor girl could give no account of herself. She lay on her back, shivering, with her knees drawn up. When touched, she screamed. There was complete ptosis of the right upper eyelid; the pupil of the right eye was greatly dilated, and insensible to light; the left also acted but sluggishly. The face was flushed, and hot; the pulse 146; the tongue coated. She passed urine and feces involuntarily. She died early the next morning.

Autopsy. On removing the calvaria, the arachnoid was found opaque, and covered in various places with flakes of coagulable lymph. There was but a small quantity of fluid in the ventricles. The substance of the brain appeared healthy. The pons Varolii was a little softened, particularly on the right side, beneath which part there was considerable effusion. Some recent adhesions were found between the anterior and middle lobes of the cerebrum. No tubercles were visible in any part of the brain, or of its membranes. The kidneys were highly congested: purulent matter could be squeezed from one. The uterus, also, was highly congested. The ovaries, and other organs, were healthy.

APOPLEXY. CASE. James Clements, a boy 9 years of age, was admitted, October 2nd, 1850, with incomplete hemiplegia of the left side. We had no opportunity of obtaining his history, till a week after his admission. His mother then reported, that he had always enjoyed good health till the middle of September, when he sometimes complained of headache, and that his left arm gave him pain when he moved it. At this time, she also observed that he limped in his gait. She said that he had never had fits, neither had he convulsions during dentition; that he had never received any injury of the head or back; and was not subject to worms. When admitted, he had recovered a good deal of power of motion in the affected limbs, but dragged the left foot in walking. Sensation had remained unaffected. There was no facial paralysis; his speech had never been altered. The pulse was 96; the tongue coated; the bowels constipated; the urine pale, alkaline, and of sp. gr. 1.016.

This seemingly slight and imperfect paralysis in a child, who made no complaint of his head, led me to hope that it might not have been caused by hæmorrhage, or tubercle of the brain. I therefore ordered mild mercurial alteratives and purgative medicines; and he improved under this treatment. On the 14th, he appeared better, and more cheerful than usual; but, about noon, whilst sitting on his bed, and talking with the patients, he suddenly complained of pain in his head. Vomiting soon came on, and was followed by purging. The breathing became embarrassed; and coma quickly supervened. Leeches were ordered to the temples, and a blister to the nape of the neck; but before these remedies could be applied, he died.

Autopsy, twenty-one hours after death. The membranes of the brain were much congested. On slicing the cerebral substance, numerous bloody points were seen; but nothing worthy of remark was discovered, till the brain had been removed from the skull, when, on its being placed base uppermost, a spot of effused blood became visible externally, being situated nearly in the centre of the pons Varolii, and seen through the membrane and unbroken cerebral substance enclosing it. On examination, there was a considerable recent effusion of dark blood, partly coagulated, and partly fluid, occupying chiefly the central portion of the pons, but extending into the right side. Upon narrower inspection, a second clot was found further to the right side: it was

white, and rather hard, as if of older date, and lay in a distinct cyst, with walls having a gelatinous aspect, which, upon examination with the microscope, were found to be composed of fibro-cellular tissue. Part of these walls appeared to have been torn by the recent hæmorrhage. The distinction between the first and the second clot was very striking. No disease of the neighbouring capillaries, or large vessels, could be made out. The heart was quite healthy. There were no tubercles in the lungs. A small calculus lay imbedded in the dilated pelvis of the right kidney.

This case is interesting and instructive. It is remarkable by reason of the infancy of the subject; of the seat of the hæmorrhage; of the partial and mild nature of the paralytic symptoms on the first occasion, and of their general distribution and rapidly fatal character on the last. It appears by the Registrar General's Reports, that out of a great number of cases of apoplexy at all ages, the deaths from 5 to 10 years are the least frequent of all. They appear to be not uncommon under 5 years of age, by the same Reports. Indeed, Messrs. Durnet and Tonellé have published some observations on apoplexy in infants from 1 to 5; this work is mentioned by Andral, but I have not seen it. From 10 to 20 years, deaths from sanguineous apoplexy are not infrequent. It may be stated in general terms, however, that Abercrombie, Rochoux, Copland, Lallemand, Andral, and Burrows, give no cases under 16. Andral, indeed, in speaking of the relative ages of subjects of apoplexy, says,* "One of the rarest forms of apoplexy, that affecting the cerebellum, has been seen in an infant 7 years old." But this case did not fall under his own observation, and is not included in 398 cases collected by him. Dr. West gives the case of a boy, aged 11, where extravasated blood was found in the right ventricle, with laceration of the substance of the brain; and Dr. Alexander Campbell† has reported the case of a boy of the same age (11 years), who died from sanguineous apoplexy; a clot being found in the middle lobe of the right hemisphere.

Dr. Richard Quain, in an able paper published in the *London Journal of Medicine* for January, 1849, gives the histories of two cases of apoplexy in children; one where blood was effused in the right hemisphere, occurring in a boy 9 years of age; the other in the arachnoid, in an unhealthy female child, aged 2 years and 7 months. He has also collected, from various sources, twenty-three cases of "meningeal hæmorrhage", and fourteen cases of "cerebral and ventricular hæmorrhage", in subjects of from 1 to 14 years of age.

But, besides the extreme youth of Clements, I would observe that the seat of the hæmorrhage is remarkable. I believe it to occur very rarely in that situation at any age. Abercrombie gives one case only in an adult. Solly quotes this case; and adds another from Ollivier, who refers to a few cases by Serres; but the other authors above named give no example of it. Dr. Craigie says that cerebral hæmorrhage, with respect to its relative frequency of situation, takes place in the following order: The corpora striata, thalami nervorum optico-rum, the hemispheres, pons Varolii, crura cerebri, medulla oblongata, and cerebellum. But hæmorrhage into the cerebellum appears, upon investigation, to occur more frequently than into the crura cerebri, pons Varolii, or medulla oblongata. Rokitsansky says, that the cerebellum is comparatively seldom the seat of hæmorrhage, and the pons yet more rarely. Its occurrence in the corpora quadrigemina, the pons, and medulla oblongata, is quite exceptional; and it almost never happens in the corpus callosum, the fornix, and the hippocampi. Occasionally, however, when a large cavity is formed in the cerebrum, one or more small secondary cavities are found also in other parts of the brain, especially in the cerebellum and the pons.‡ This author, however, in describing the healing process of cysts, observes, as if oblivious of the former statement, that in the pons, where,

* Med. Gaz. xvii, 539.

† Ibid. xxxvi. p. 172, abridged from *Northern Journal of Medicine*.

‡ Sydenham Society's Translation, vol. iii, p. 367.

on the whole, apoplexy is *not very rarely* observed, only very small cavities heal completely.*

Referring to the narrative of the case, we find that the paralytic symptoms at first were on the left side of the body, the old clot being afterwards found on the right; that the nerves of motion had alone suffered, sensation remaining entire; and that the power of motion remained longer impaired in the leg than in the arm. The head and neck were never in the least paralysed; intellect, speech, and deglutition, remained perfect. While in hospital, the patient made no complaint of pain till the day of his death. The seizure terminated very rapidly: first producing incapacity of motion, then stertorous breathing and coma. So long as the extravasation was of small extent, and confined to one side of the pons, the arm and leg of the opposite side of the body were alone affected, and that incompletely; but at last, when a more considerable effusion of blood took place, and probably pressed upon the medulla oblongata, then general paralysis, and a fatal interruption to the respiratory function quickly ensued. This order of sequence has been observed before.

In 1851, two cases of apoplexy occurred, in a man and woman, of the respective ages of 66 and 64. The former was attended with hemiplegia of the left side; the latter of the right. The man left in six weeks, having recovered a fair share of motion and sensation in the paralysed parts. The woman required longer treatment before she received the same benefit, perhaps owing to a more liberal abstraction of blood than was absolutely required. A third case, that of a woman aged 43, was also admitted, and was under treatment when these reports were drawn up. Here there was hesitation of speech, with paralysis of the right side. The spastic rigidity of the fingers, the convulsive movements, and the contractions of some of the flexor muscles of the affected side, led us to suspect softening of the brain.

CEREBRAL ABSCESS. CASE. George Elphick, aged 28, was admitted Nov. 21st, 1849. He had a cachectic appearance, and an expression of great suffering. He complained of very severe, constant headache, and frequent giddiness, which had lasted six weeks. He had been subject to attacks of asthma, on catching cold, as long as he could remember; and had been for three months suffering from cough, with difficult breathing, and an abundant muco-purulent expectoration of a greenish yellow colour and offensive odour. The chest, except at the upper part on the left side, was universally resonant on percussion, indicating emphysema. The respiration, however, was feeble, with sibilus and rhonchus generally diffused. At the upper part of the thorax, on the left side, corresponding to the apex of the left lung, there was dullness on percussion, and the voice was more resonant than natural. He had great thirst, and a white, moist tongue; the pulse was 84.

The pulmonary affection yielded to the treatment. The expectoration gradually diminished, till it ceased entirely, and with it the cough and all febrile symptoms. The head affection, however, proceeded with increased intensity. The right side, before and behind, was the seat of incessant pain. His respiration was now easy; his pulse fell below 50. He complained of constant nausea, but invariably took his food with appetite. He only got snatches of sleep, and was constrained to keep, as much as possible, an upright posture. A fortnight after his admission, his left arm and leg became slightly paralysed; but subsequently, together with an amelioration of all the symptoms, he recovered the use of both. His intellect, memory, and speech remained unaffected throughout his illness. On the morning of the 4th December, no particular change had been observed in him: he took his dinner as usual. In the afternoon, he became dull, heavy, and somnolent, and afterwards gradually comatose, in which state he expired towards night, having been in hospital about five weeks.

Autopsy forty hours after death. The following report was furnished by Dr. Ormerod:—

Weather mild and damp. The surface of the brain was bloodless. About the vertex, the convolutions were flattened. The brain being removed, and placed upon the table, the right hemisphere fell outwards. On a section of this hemisphere, there appeared three distinct abscesses in the posterior lobe, containing respectively 3iv, 3ij, and 3j of green and rather foetid pus; there were distinct cysts to the two smaller abscesses. The surrounding cerebral substance was softer than natural. Posteriorly, there lay two or three small, hard, round nodules, about the size of peas—yellow without, softened within. The bones and membranes were quite healthy. In the chest, both pleuræ were universally and toughly adherent. The front of each lung was very emphysematous. The right lung was nearly healthy, save a small number of nodules near the apex. The bronchi were congested, and full of bloody mucus and pus. In the left lung, the bronchi were similarly affected, and the hard nodules were very numerous, especially about the apex. Here the whole substance felt hard and heavy; but, on section, nothing particular was detected. Even on dividing these nodules, nothing was evident beyond a hard, somewhat transparent, whitish mass, like a cicatrix. There was no tubercle in the lungs or bronchial glands; and no ulceration of the bowels. This condition of lungs is accurately described by Rokitansky, who calls it chronic pneumonia.

This case presents several objects of interest and importance. The study of the diseases of the brain is beset with difficulties; great circumspection, therefore, is necessary in forming a diagnosis. In this instance we expected to find either tubercle or abscess, or both, in the substance of the brain on the right side; the pain having been seated there, and the hemiplegia having occurred on the left half of the body. But we rather leaned to the suspicion of tubercle, because we had regarded the consolidation at the apex of the left lung to have been caused by tuberculous deposit. In this opinion we erred, for it proved to be a rare form of pneumonia. During the whole illness, the intellectual faculties remained intact. Now, when the surface of the brain—that is, the neurine or cortical part thereof—or its investing membranes, are inflamed (and the one can hardly be inflamed without involving the other), delirium generally supervenes, and the intellectual faculties are always greatly disturbed. The remarkable exemption from disturbance of the intellect, therefore, had led us to attempt a localization of the disease in the medullary substance of the brain, apart from the surface or its membranes; and accordingly we found “the membranes healthy, and the surface bloodless.”

In this case, no convulsions occurred; and there were neither rigidity nor contractions, which usually happen in softening of the brain. Lallemand has hazarded the opinion, that when the sound hemisphere is not compressed by the disease going on in its fellow, it will carry on the intellectual functions, in the same way that one eye or ear would supply a loss of the other. He regards, in fact, the brain as a double organ, one half being capable of performing the office of both; thus anticipating the doctrine of the duality of the mind, propounded by Dr. Wigan.

PARALYSIS. In 1849, galvanism was employed with great success in a case of hysterical paralysis occurring in a girl of 18; and also afforded much benefit to a woman aged 45, affected with hemiplegia; but it failed to produce any relief in a man aged 33, who was under treatment for paralysis.

In December 1850, a married woman, aged 40, was admitted, with hemiplegia of the right side of some months' duration. She stated, that she was seized while in bed, and could neither speak nor move the right side. She appeared confused at first; and, though she articulated distinctly, her speech was abrupt and quick. Her tongue was protruded naturally. Motion in the arm and hand was lost: partially so in the leg. Sensation remained in both extremities, but was by no means normal. There was no facial paralysis. This case was seriously con-

* Ibid., p. 395.

plicated with epilepsy. The menses had been absent six months. The epileptic attacks occurred about once a fortnight or three weeks, and rendered the prognosis most unfavourable. A long issue was made in the sinciput, as recommended by the late Dr. Prichard. Under this treatment, she was much relieved; but the epileptic paroxysms continued to recur at the same intervals.

A case of hysterical paralysis, in a girl of 19, was under treatment for six weeks. She was cured by cupping, repeated blisters, and purgatives of aloes with compound galbanum pill. She was of a florid and plethoric habit.

In 1851, some cases of paralysis were admitted, without any manifest head symptoms. A woman, Fawcett, aged 40, had incomplete paralysis of the right side, chiefly of the arm and hand, complicated with epileptoid fits, not of a severe character. Though she did not complain of her head, an issue was inserted in the scalp with the best effect. The woman left the hospital free from fits, and remained so as long as she was under observation as an out-patient. The use of the hand and arm was quite restored.

Another case of partial paralysis occurred in a woman aged 47. The right side had chiefly suffered, but for the last twelvemonth the left leg had been slightly affected. She had never had a fit, but was subject to attacks of giddiness, and now and then of double vision. She laboured under prolapsus ani, as the consequence of a long-continued and severe hæmorrhoidal affection. The treatment was chiefly directed to the restoration of her general health, which was much impaired, and the relief of the local symptoms. We thought the paralytic symptoms were relieved by a strong infusion of the flowers of *arnica montana* and *valerian*. She left the hospital convalescent.

Two cases of paraplegia, connected with angular curvature, gave no encouragement to keep them long in hospital in hope of benefit; a third, in a girl nine years of age, got speedily well, by rest and a dose or two of purgative medicine; a fourth, if it were a case of paralysis at all, was hysterical; but there was reason to believe that the subject, a girl 20 years of age, was a malingerer. The application of the hot iron and galvanism soon restored the use of her legs.

CASE. In a child, Sarah Meads, aged 9 years, the symptoms led us to suspect disease of the cerebellum. She seemed unable to walk without constant risk of falling. There was a singular titubation in her gait. She had the use of her legs, but not the perfect command of them. She made no complaint of her head. There was no pain, tenderness, nor irregularity of the spine; no pain in moving the hips; no tenderness either before or behind the trochanters; no flattening of the nates; no shortening of either limb, nor any appreciable difference of size. She was of ordinary intelligence; fed well; and slept well. She was reported free from worms, but passed one large lumbricus during her stay in hospital, which was extended to eighty-five days. Internally, purgatives and vermifuge medicines were exhibited—zinc, iron, tincture of cantharides, iodide of potassium, etc.: externally we employed shower baths, stimulating liniments and blisters to the spine, and an issue in the nape of the neck. She left the house without any permanent amendment. She could walk better, but the crooked gait and want of balance in progression remained.

EPILEPSY. In 1849, two cases occurred: one, from uterine disease; the other, according to the report, from worms.

CASE. — Marsh, aged 18, a fat, pale girl, of fair complexion, had been subject to epileptic attacks for a twelvemonth, either directly before or after the menstrual period. The catamenia were profuse, recurring every fortnight, and sometimes flowing unceasingly for a fortnight or three weeks. She complained of headache and palpitations. Each attack of epilepsy was preceded by an aura, beginning at the left knee, and ascending gradually to her chest, when she lost her consciousness. She was seen in one well marked fit after her admission, but never afterwards. The case was treated with infusion of digitalis,

beginning with a dose of 3ij, and gradually augmenting it to ʒiiss daily. Whilst taking the medicine, during a period of three months, she occasionally complained of vertigo and headache, but scarcely more than she had been liable to before. The pulse ranged from 72 to 100, and was slower at the commencement than at the end of the treatment.

In the other case, a girl 9 years of age, no fit took place in the house. She was smartly purged with calomel and jalap, and took sesquichloride of iron in infusion of quassia. Though she was reported to have worms, none were evacuated.

In 1851, the following case was admitted:—A farm labourer, 42 years of age, had been for nine years subject to epileptoid fits, in which he was insensible, but never violently convulsed. He had never bitten his tongue, and had never been observed to foam at the mouth. The fits occurred at irregular intervals, at night, generally in his sleep. He had a vacant countenance, and was rather deficient in intelligence. He had suffered from ague on three several occasions; the last being a month before admission. Turpentine, administered internally, did good for a time; then henbane and camphor. Moderate cupping and blistering relieved any weight or pain about the head. I prescribed the cotyledon umbilicus, which I have found very useful in several cases of epilepsy; but it did not receive a fair trial, as he soon left the hospital by his own desire.

DELIRIUM TREMENS. In 1849, two cases occurred, in which chloroform was administered by inhalation, with satisfactory results.

In 1850, a man died of delirium tremens, with typhoid symptoms. He was found to have a very large, fatty liver, which descended to the umbilicus, and spread laterally into the left hypochondrium. It weighed between six and seven pounds. Its inferior edges were flattened and thin; its upper surface was rounded. Its colour throughout was a faded yellow, like that of dried leaves. When it was bruised, a greasy mark was left on the scalpel. Oil-globules were found, on examination with the microscope. The gall bladder contained a notable quantity of bile, of the usual appearance. The spleen was of a loose, friable texture. The kidneys were healthy.

In 1851, one case of delirium tremens occurred in an elderly man, who, besides being addicted to spirits, took a great deal of laudanum. He was very noisy, and had had no sleep for five nights. His evacuations escaped involuntarily. The house-surgeon gave him immediately a drachm of laudanum in a pint of porter. He also ordered a pill, containing five grains of extract of hyoscyamus with one grain of opium, to be taken every second hour. The man took two pills, slept five hours, and soon recovered.

CHOREA. In 1850, two severe cases of chorea were admitted.

CASE. — Dale, a boy 10 years of age, had had rheumatic fever about three months previous to the attack. There was a slight but decided systolic murmur. He remained but a short time in the house, and was made an out-patient. Both sides of the body were affected, and he lost his speech; deglutition also became difficult. The shower-bath could not be persevered in, on account of the child's terror and resistance. He got well under the use of sulphate of zinc, in doses of from two to three grains, with extract of valerian and Barbadoes aloes.

CASE. James Mitchell, aged 12, was seized with chorea two months before admission, after an illness which, from the description, was probably rheumatic fever. There was no systolic or other murmur in the heart or vessels. This boy, in all his movements, whether of the head, trunk, or extremities, exhibited the most fantastic and ludicrous attitudes; but it was frightful to see him go down stairs, which, I understand, he contrived to do without ever meeting with an accident. The shower-bath, purgatives, oxide of iron, and sulphate of zinc, with valerian and Barbadoes aloes, were successively tried for two months—with benefit to his general health, it is true, but with very little effect upon

the convulsive movements. The liquor potassæ arsenitis was then administered, in doses of two minims three times a day. The improvement was marked and speedy. He was discharged, fat and in good health, in one month after this medicine was begun.

In 1851, three cases of chorea came under observation.

CASE. A youth, 20 years of age, was affected with involuntary twitchings and irregular movements of the left side of the body. His speech was hesitating, and he had occasional strabismus. These symptoms had existed for four months, as a sequence of rheumatic fever. This was the second attack of rheumatic fever. The first, a more severe one, had occurred ten years before, and affected all his joints. No abnormal condition of the heart could be detected. He was discharged well at the end of a month. The shower-bath was employed; and he took black oxyde of iron with Barbadoes aloes, which kept up a brisk action upon the bowels.

CASE. Reuben Weller, aged 12 years, had been affected for six months with chorea, succeeding to catarrh and severe rheumatic pains. He had great difficulty in articulation. Any attempt at voluntary motion was followed by the wildest contortions and the most ludicrous attitudes and grimaces. His sleep was sound, without any convulsive twitchings. Both sides of the body were affected: the left most so. The pulse was 67, regular. He took two minims of liquor potassæ arsenitis three times a day. The convulsions soon yielded to this remedy. In three weeks, he had recovered the command of the voluntary muscles, and he had improved in flesh, strength, and spirits.

CASE. Fanny Dowden, aged 10, a fair, weakly child, of nervous temperament, was admitted with chorea. This was the second attack; the first happened two years previously, and lasted six months. Both attacks were suddenly brought on by fright; the present one commenced three weeks ago. She had been troubled for some time with ascarides. Her face was only slightly affected; the speech not at all so. Her gait was very unsteady. Both arms were violently tossed about, if she attempted to use them. Her sleep was very unquiet, with frequent moanings. After the worms had been removed by purgatives and turpentine injections, the black oxyd of iron and the shower-bath were ordered. The latter being relinquished in consequence of the terror it inspired, and the former availing nothing after a month's trial, we gave from one to two minims of liquor potassæ arsenitis three times a day. In one week, improvement was manifest; in three weeks she was quite well, her general health being much amended.

NEURALGIA. In 1849, all the cases of neuralgia, with one exception—a man aged 61, who had facial neuralgia from diseased teeth—occurred in young females. In two instances, the trifacial nerve was affected; in the rest, five in number, the intercostal nerves were the seat of pain: on the left side in four, and on the right in one. Neuralgia of the intercostal nerves likewise occurred in two hysterical cases; and a severe attack of *tic douloureux* of the right side of the face happened to a girl who was admitted with peritonitis. All the cases of intercostal neuralgia, save one, were affected on the left side below the breast. In this situation, the pain, though great, never equalled in severity that of the face, where it reached a degree which Cotugno expressively calls *fulgura doloris*. The mode of treatment was adapted to the condition of the patients, according to the signs of congestion or anæmia, gastric or uterine disturbance, rheumatic or scrofulous diathesis, etc.; and consisted of local bleeding, derivatives, counter-irritants, purgatives, alteratives, tonics, and narcotics, singly or in combination, according to circumstances.

In 1850, the topical application of the hot iron, as recommended by Dr. Day, was generally attended with much benefit.

In 1851, an inveterate case of intercostal neuralgia, in a young woman who was labouring under leucorrhœa of long standing, and obstinate costiveness, began to yield to arsenic after the fruitless employment of purgatives, zinc, quinine,

iron, aconite, henbane, belladonna, the hot iron, and various injections. She, however, now left the hospital to go into the country.

Another woman, with a host of anomalous symptoms, and pains everywhere, who had been in hospital five times before, left it for the sixth time, apparently in very good condition; but, as she averred, not a whit benefited.

HYSTERIA. Among the cases of this description in 1850, was one of aponia, one of singultus, and one of hæmatemesis. The first and second got well after a brisk succession of local and internal remedies: the third deserves a more detailed notice.

CASE. Mary Childs, aged 19, a stolid-looking girl, short and fat, had been ailing six months, during three of which the catamenia had been suppressed, though she reported that she had never been regular. Her prominent symptom was vomiting of a bloody mucus, every day, about half-past seven in the evening; after which, pain of the stomach and head, of which she complained, became easier. Our suspicions were very early excited as to the truth of her statements, for no portions of food were ever detected in the fluid said to be vomited: nevertheless, the fact of the amenorrhœa, which had been ascertained, gave an air of probability to her tale. Not being able to come to any satisfactory conclusion as to the source of the hæmorrhage from mere inspection, I requested Mr. Hodgson to submit it to the microscope. He found abundant pavement epithelium belonging to the mouth, and a total absence of the columnar epithelium proper to the stomach. She was watched, and detected in sucking her gums. Of course, after this the hæmorrhage ceased, and she was dismissed.

[To be continued.]

ON THE MEDICO-LEGAL SIGNIFICATION OF CLOSURE OF THE FORAMEN OVALE, AS A SIGN THAT A CHILD HAS BEEN BORN ALIVE.

By CHARLES KIDD, M.D.

A FEW remarks on the question of closure of the *foramen ovale*, as a sign that a child has been born alive, may prove of interest. I will first relate a case which came under my observation, and which was the subject of a trial.

CASE. A young woman, a barmaid at a tavern, had contracted an intimacy with a young man in her own sphere of life, under the promise of marriage; she continued in her situation, even under the watchful eye of her mistress, who gave evidence in the case, up to the day on which the child was born—about three weeks before the time when it was found. The night before her confinement, it appeared in evidence, she went to bed as usual with her fellow-servant at about twelve o'clock. At two o'clock in the morning she awakened the latter, complaining of pain in the bowels, and sent for her mistress, who prescribed something hot, and went to bed again. Her fellow-servant stated that she was tired, and went to sleep. At about four o'clock, the child, to her utter dismay, was born. She had presence of mind enough to know that, if the child were discovered at six o'clock, when the inmates of the house were usually stirring, she would lose her place, and be disgraced. She accordingly wrapped the child in a rough towel, and, descending two flights of stairs, hid it in an unoccupied cellar. She left the service next day, with her mother, and went to reside in one of the suburbs of London. The child evidently died of cold and neglect in a few hours after having been placed in the cellar; for, if it had cried or made any noise, it could not have failed to be discovered.

On making a *post-mortem* examination, the child was found in a rather good state of preservation: it appeared to have been born at the eighth month. The lungs shewed somewhat equivocal signs that respiration had taken place: they floated in water, but not very buoyantly. In the heart was found a thick layer of lymph thrown across the foramen ovale, which was all but blocked up; and the obliteration of the ductus arteriosus had already been completed. The placenta was attached to the infant: whether this may have tended to keep up strong vital action in the child independently of the mother, might form a subject for speculation. In three other *post mortem* examinations of infants, which came under my notice about the same period, the signs of respiration were much less doubtful, and the children had apparently lived some time; yet there was not even the most imperfect attempt, in any of them, either at closure of the ductus arteriosus, or obliteration of the foramen in the auricular septum.

REMARKS. The complete closure of the ductus arteriosus, and the formation of a nearly complete septum across the foramen ovale, are proofs of the fallacy of the commonly received dicta of authors, who tell us that the former becomes obliterated from the sixth to the twelfth day, while the time of closure of the latter is less certain. Billard says, that the foramen is closed between the second and third day; but Dr. Handyside states that it remains more or less unclosed for life in one case out of eight. Dr. Taylor also, in his work on *Medical Jurisprudence* (4th edition, p. 403), observes, that he "has frequently found the foramen ovale open in children who had survived birth several hours." Again: the foramen ovale may become closed before birth, in consequence of intra-uterine inflammation, or some abnormal condition. Dr. Taylor refers to this subject. He says: "The closure of the foramen ovale has been known to occur as an abnormal condition previously to birth and the performance of respiration. One case is mentioned by Capuron (*Médecine Légale des Accouchemens*, p. 337); and another, of a very instructive kind, is reported in the *Medical Gazette* (vol. xxxviii, p. 1076). Other instances of this abnormal condition are adverted to by Dr. Chevers (*Med. Gaz.*, vol. xxxviii, p. 967), and it would appear that in these the arterial duct remained open, in order to allow of the circulation of blood, not only before, but subsequently to respiration. The children rarely survive birth longer than from twenty to thirty hours. Dr. Chevers justly remarks, that 'Cases of this description are of the highest importance in a medico-legal point of view, as they fully disprove the opinion maintained by many anatomists, that obliteration of the foramen ovale must be received as a certain evidence that respiration has been established.' It would, therefore, be unsafe in practice to rely upon the closure of this aperture as proof of live birth, without other good evidence: and in no case can its patency be regarded as a proof that a child has come into the world dead." (p. 404.)

With regard to the ductus arteriosus, the observations of Dr. Chevers, referred to by Dr. Taylor (*op. cit.* p. 400), go far to point out the fallacy of depending on its condition as a test of the child having lived. This passage may be closed before birth; and it has even been found, when there was strong reason to believe that the child had not survived birth more than ten minutes, in as advanced a stage of closure as if it had been born some days.

It would be beyond the scope of this paper to discuss the other signs of live-birth, as the floating of the lungs, signs derived from the umbilical cord, etc.; but my object has been to draw attention to the fallacy of placing too much confidence in the dicta found in many medico-legal works, and to point out how far our most modern authorities are disposed to trust to the closure of the foramen ovale and ductus arteriosus, as signs that a child has been born alive.

Kingland, January 1853.

THE HOUR OF BIRTH IN 2019 CASES.

By R. U. WEST, Esq.

It is generally understood that accoucheurs have "plenty of night-work"; but I am not aware that any one has attempted to show in what proportion the night-work preponderates.

		First set of 700.	Second set of 700.	Third set of 619.	Total 2019.
8 hours of night.	P.M. 11—12	42	33	37	= 112
	A.M. 12—1	25	23	16	= 64
	1—2	43	28	28	= 99
	2—3	40	37	26	= 103
	3—4	30	50	24	= 104
	4—5	29	34	25	= 88
	5—6	33	37	40	= 110
	6—7	33	37	30	= 100
	Total . .	275	279	226	= 780
8 hours of day.	A.M. 7—8	27	31	28	= 86
	8—9	29	20	32	= 91
	9—10	18	29	33	= 80
	10—11	37	29	33	= 99
	11—12	31	31	26	= 88
	P.M. 12—1	26	28	21	= 75
	1—2	25	26	23	= 74
	2—3	26	24	19	= 69
	Total . .	219	228	215	= 662
8 hours of evening.	P.M. 3—4	22	25	23	= 70
	4—5	25	17	17	= 59
	5—6	18	26	12	= 56
	6—7	20	20	28	= 68
	7—8	30	20	31	= 81
	8—9	33	27	22	= 82
	9—10	28	28	23	= 79
	10—11	30	30	22	= 82
	Total . .	206	193	178	= 577

The statistics here given shew the hour of birth in 2019 cases which I have attended, and they certainly bear out the popular idea on the subject. In order to prove that the proportions given are not accidental, I have divided the total number of cases into three nearly equal sets of 700, 700, and 619, from which it will be seen that, although there may be some discrepancy when single hours are taken, yet the gross number in each period of eight hours presents a remarkable uniformity. It will readily be understood that these tables give only part of the truth, for some of the births which took place in the earlier hours of the *second* eight hours—"the eight hours of day"—must have involved an *attendance* breaking into the night-hours. Consequently, the eight hours when the smallest number of births took place,—viz., those of "the evening",—were those least likely to require night-watching.

Alford, Lincolnshire, Jan. 29th, 1853.

ARSENICAL CONFECTIONARY. An inquest was lately held at Ashford, upon two brothers killed by eating the painted ornaments of a Twelfth cake. Professor Taylor, who analyzed the stomachs of the deceased children, said that he had detected arsenic. The quantity discovered did not exceed a quarter of a grain. The yellow colour of the ornaments was produced by orpiment, or sulphuret of arsenic. The green colour of the ornaments was imparted by the arsenite of copper, which is very poisonous even in minute doses. During the two last years Dr. Taylor had met with ten fatal cases from children eating these ornaments.

BIBLIOGRAPHICAL NOTICES.

REPORT TO THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA, vindicating the Rights of CHARLES T. JACKSON to the Discovery of the Anæsthetic Effects of Ether Vapour, and disproving the Claims of W. T. G. MORTON to that Discovery. Presented to the House of Representatives of the United States, on the 28th of August, 1852, by Hon. EDWARD STANLY, of North Carolina, and Hon. ALEXANDER EVANS, of Maryland, Members of the Select Committee on the Ether Discovery. Printed by Authority of the Minority of the Committee. 8vo., pp. 57.

THE nature and object of this publication are sufficiently indicated by the title-page. In this country, the chief merit of originating the discovery of etherisation seems to be thought by those who have taken the trouble to weigh the evidence, to belong to Mr. MORTON. Such at least is the award of a high authority, whose work lies before us at the moment; and the reader will likewise find it sustained at the commencement of an admirable review of the whole subject of anæsthesia and anæsthetic agents, in the British and Foreign Medico-Chirurgical Review, in 1852. The present authors however—or rather we should employ the singular number, for Mr. EVANS merely contributes a brief notice of his approval at the end—the present author then, takes up the cudgels manfully in behalf of Dr. JACKSON. Shortly after the discovery was promulgated to the world, Mr. Morton presented a memorial to Congress, praying, in a consideration of its use by the army and navy of the United States, for an appropriation of money from the treasury. The application was resisted by Dr. JACKSON, on the ground that he, Dr. JACKSON, was the real author of the discovery. On this, the matter was inquired into by a select committee of five, whereof a majority of three came to the conclusion, that Mr. Morton was the rightful claimant. The minority, however, strongly persuaded of the injustice of this decision, now come forward with a powerful exposition of their reasons for dissenting from their colleagues; showing that the preliminary training and after pursuits of Dr. JACKSON were of a kind peculiarly calculated to qualify him both for conceiving the idea and nursing it to maturity; giving us his account of the circumstances which led him to try the ether on his own person, and of the success of the experiment; and producing testimonials from eight individuals, to the purport that he had made them acquainted with the anæsthetic properties of ether at different periods between 1841 and 1846, the latter being the date at which they were brought into prominent notice. Further on, we come to a “verdict” of what is termed a “jury of the vicinage”, consisting of a host of medical men resident in Massachusetts, who testify to the high character of Dr. JACKSON, and assert their belief that to him alone any honours or rewards that Congress may think proper to bestow, are exclusively due, so far as the great fact of discovery is concerned. To this is subjoined a similar manifestation of opinion on the part of thirty-seven members of the Massachusetts Medical Society. Our countryman, Sir C. LYELL, is shown to take the same view of the question in a letter to Dr. JACKSON, where he expresses his surprise at the insignificance of the rival pretensions. On the other hand, Mr. Morton is charged with having wrongly represented the decision of the majority of the Committee of Congress as emanating from that body collectively; and of enlarging the apparent size of a medal awarded him by the French Academy, with a view of giving it a higher significance than was really intended; his great object being to turn the discovery to a profitable account.

It must be admitted, that the minority have put forward a strong case for their client, and one which at least makes it incumbent on the public to suspend its final judgment, until after hearing any reply that may be forthcoming from the opposite party. The question is one of no inconsiderable interest. Not only are we bound in common gratitude to render honour where it is due, for so benefi-

cent a gift to suffering humanity; but recent experience also brings to mind how eagerly those passages in the history of distinguished men are sought out, which expose their inner life, and show by what circumstances and tendencies they were conducted to the achievements which excite our wonder and admiration.

The circumstances which immediately led Dr. JACKSON to make a trial of ether, are stated as follows in his own words:—

“Having been appointed geologist and chemist to the State of Maine in 1836, I opened a large chemical laboratory, the next year, for instructing my pupils, and for making the chemical analyses for the State, and had frequent occasion to experiment with chlorine gas, and had accidents to myself, as well as to my pupils, by the breakage of vessels filled with this gas. Vapour of alcohol was at that time the remedy we used for relief, and, not finding it to answer the purpose satisfactorily, I soon after tried the inhalation of sulphuric ether vapour, which from 1837 to 1841, was the means in habitual use in my laboratory for relieving persons from the effect of the action of chlorine in the lungs.

“In the winter of 1841-42, I made the discovery of anæsthesia by ether vapour.

“The circumstances were as follows:—In the winter of 1841-42, I was employed to give a few lectures before the Mechanics’ Charitable Association in Boston: and in my last lecture, which I think was in the month of February, I had occasion to show a number of experiments in illustration of the theory of volcanic eruptions, and for my experiments I prepared a large quantity of chlorine gas, collecting it in gallon glass jars over boiling water. Just as one of these large jars was filled with chlorine, it overturned and broke, and, in my endeavours to save the vessel, I accidentally got my lungs full of chlorine gas, which nearly suffocated me, so that my life was in imminent danger. I immediately had ether and ammonia brought to me, and alternately inhaled them with great relief.

“The next morning my throat was severely inflamed and very painful, and I perceived a distinct flavour of chlorine in my breath, and my lungs were still much oppressed. I determined, therefore, to make a thorough trial of the ether vapour, and for that purpose went into my laboratory which adjoins my house in Somerset Street, and made the experiment, from which the discovery of anæsthesia was deduced. I had a large supply of perfectly pure-washed sulphuric ether, which was prepared in the laboratory of my friend, Mr. John H. Blake, of Boston. I took a bottle of that ether and a folded towel, and seated myself in a rocking-chair, placing my feet in another chair, so as to secure a fixed position as I reclined backward in the one in which I was seated. Soaking the towel in the ether, I placed it over my nose and mouth, so as to inhale the ether mixed with the air, and began to inhale the vapour deeply into my lungs. At first the ether made me cough, but soon that irritability ceased, and I noticed a sense of coolness, followed by warmth, fullness of the head and chest, with giddiness and exhilaration. Numbness of the feet and legs followed, and a swimming or floating sensation as if afloat in the air. This was accompanied with entire loss of feeling, even of contact with the chair in which I was seated. I noticed that all pain had ceased in my throat, and the sensations which I had were of the most agreeable kind. Much pleased and excited, I continued the inhalation of the ether vapour, and soon fell into a dreamy state, and then became unconscious of all surrounding things. I know not how long I remained in that state, but suppose it could not be less than a quarter of an hour, judging from the degree of dryness of the cloth, which, during this state of unconsciousness, had fallen from my mouth and nose and lay upon my breast. As I became conscious, I observed still there was no feeling of pain in my throat, and my limbs were still deeply benumbed, as if the nerves of sensation were fully paralyzed. A strange thrilling now began to be felt along the spine, but it was not in any way disagreeable; little by little sensation began to manifest itself, first in the throat and body, and gradually extended to the extremities, but it was some time before full sensation returned, and my throat became really painful.

“Reflecting upon these phenomena, the idea flashed into my mind that I had made the discovery I had been for so long a time in quest of,—a means of rendering the nerves of sensation temporarily insensible to pain, so as to admit the performance of a surgical operation on an individual without his suffering pain therefrom.” (pp. 5-6.)

It is alleged, that Mr. Morton not only obtained his

knowledge of the anæsthetic effects of ether from Dr. Jackson, but at the time of the communication was completely innocent of any acquaintance even with the existence or the very name of such a substance. Here is an account, attested on oath, of a curious, and, as it proved, momentous interview, which took place in the latter gentleman's laboratory; a second witness also describing the scene in equivalent terms:—

"I, George O. Barnes, of Plymouth, in the Commonwealth of Massachusetts, depose and say, that in the fall of 1846 I was a student in chemistry with Dr. Charles T. Jackson; that in the month of September I was at work in the back room of Dr. Jackson's laboratory, when Mr. W. T. G. Morton passed through the room, as I supposed to go into the house, which adjoins the laboratory. He soon returned, having in his hand an India-rubber bag belonging to Dr. Jackson. As he went into the apparatus or glass-room, I heard Dr. Jackson ask Morton what he wanted to do with the bag. He replied that he had a refractory patient, who would not allow him to take out her tooth, and that he wished to act on her imagination, so as to induce her to submit to the operation; that he meant to fill the bag with air, meaning, as I understood, atmospheric air, which would give it a formidable appearance. He then asked how he should go to work to distend the bag. 'The lungs or a pair of bellows,' said Dr. Jackson, 'can do that.' 'But,' continued Dr. Jackson, 'your proposition, Morton, is very absurd; the patient will not be deceived in that way; you will produce no result, and will be denounced as an impostor.' 'I don't know that,' replied Morton; 'I think, with this bag under my arm, well blown up, that I could make her believe anything.' While saying this, he placed the bag under his arm, and, pressing the bag with his elbow several times, illustrated the manner in which he would operate. 'If I could once get her mouth open,' said Morton, 'I would have her tooth out. Why,' said he, 'a man once bled to death by the mere force of imagination.' As he was proceeding to give an account of this experiment, Dr. Jackson interrupted him, and said, 'Pooh! you don't credit such a story as that, surely! I advise you to have nothing to do with this idea of using atmospheric air to deceive your patients; it will only injure you.' Morton replied, 'I don't care. I'll blow it up.' Morton then left Dr. Jackson, and was going from the glass-room, where the latter part of the conversation had been principally held, into the front room towards the street door, with the bag swinging in his hand, when Dr. Jackson followed him, took the bag from his hand and threw it on the floor. There had been also some conversation concerning nitrous oxide, but not one word concerning sulphuric ether; and Morton had not asked Dr. Jackson to suggest to him anything to prevent pain during his operations of extracting teeth. Dr. Jackson then addressed him, and said, 'Now, Morton, I can tell you something that will produce a real effect. Go to Mr. Burnett's, the apothecary, and get some very strong sulphuric ether,—the stronger the better,—spatter it on your handkerchief, put it to your patient's mouth, take care that it be well inhaled, and in a minute or two perfect insensibility will be produced.' 'Sulphuric ether!' said Morton, 'what is that? Is it a gas? Have you got any of it? Show it to me.' Dr. Jackson went to the laboratory case, and took down the bottle of sulphuric ether, which Morton examined, and smelt of as though he had never seen the article before, saying it was 'queer-smelling stuff.' 'Are you sure,' said Morton, 'that this will do it?' 'Yes,' replied Dr. Jackson, 'I am sure.' * * * *

"Either on the afternoon of the same day, or the next day, I am not positive which, Morton came to announce the success of his trial. He stated that he tried it on a patient with complete success; for, while he extracted a tooth, the person was insensible, and knew nothing about it. Dr. Jackson expressed no surprise, but appeared as if he had expected this result. Mr. Morton intended soon to perform another extraction. Dr. Jackson then said to him, 'You must go to Dr. Warren, and obtain his permission to administer it at the Massachusetts General Hospital, and if possible it should be in a capital operation; for the people will not believe in the insensibility to pain in case of a mere tooth, since it is very common for patients, in an ordinary case, to say that it did not hurt them, when the twitch is very sudden, and the operation skillfully performed; this proof would not be regarded by the public as satisfactory.' Morton strongly objected at first to going to the hospital; that everybody could smell the ether, and it would not be kept secret, which it was Morton's object to do. He asked if something could not be put into it which would conceal the ether odour. Dr. Jackson replied, 'Yes; some French essence, as the oil of

Neroli, may answer in a measure, and a pleasant perfume will be left on the patient;' remarking, laughingly, 'the scent of the roses will hang round him still.' After some argument, and Dr. Jackson's further insisting upon it, Morton promised to go to the hospital." (pp. 20-21.)

We have rather overstepped our limits in giving the above extracts, because they appear to contain the pith of the whole controversy. Supposing the authenticity of these statements to be unassailable,* we do not see how any one can object to the conclusion of the members of the Massachusetts Medical Society, "that, in relation to the great discovery of etherisation, Dr. Jackson was *the head*, and W. T. G. Morton *the hand*"; unless, perhaps, on the score of its being too favourable to the latter gentleman. We should rather compare them to the inventor who discovers and applies, and the workman who imitates; to the physician who recommends a new remedy, after first satisfactorily testing its safety and efficiency, and his professional brother who adopts it and finds it to answer in his own experience.

OBSERVATIONS AND REPORTS ON THE TREATMENT OF INTERMITTENT FEVER BY PHOSPHATE OF LIME AND SULPHUR. By A. BLACKLOCK, Esq., Assistant-Surgeon, Madras Army: with Cases by J. ANDERSON, M.D., and JOHN DREVER, Esq. 8vo. pp. 103. Madras: 1852.

WE have here a novel theory of the cause of fever; and a new mode of treatment founded on that theory. Mr. BLACKLOCK says: "The whole train of reasoning in the present paper is founded on observations which have led to the belief that loss of phosphates from disintegration of nervous tissue, or their deficiency in the circulating fluid, is a predisposing cause of fever." His argument proceeds in this way:—There are two acids in the nervous tissue, the *cerebric* and the *oleophosphoric*, the deficiency of either of which is likely to be followed by constitutional disturbance; the former is most abundant in the sympathetic ganglia and the grey matter, while the latter is most abundant in the white nervous substance. Quinine, which most resembles cerebric acid, has been found most useful in those fevers which appear to have their origin in some defect of the constitution of the nerves of organic life; but cases are frequently met with where there is no decided derangement of important organs, and which yet experience little or no relief from quinine. The author is here led to the belief that *phosphate of lime* will make good the deficiency most frequently leading to fevers among the natives of India. He thinks it time to inquire, whether there may not be two classes of cases, one requiring alkaloid remedies, the other earthy phosphates.

The primary cause of intermittent and remittent fever, he has been led to consider to be "a loss of balance between the nervous tissue and the other soft tissues of the body, ascribable, in a large proportion of cases, to a deficiency of phosphates in the nervous matter." He first tried phosphate of lime and magnesia on himself, as he was passing large quantities of phosphates in his urine; but with only temporary relief. On combining it, however, with sulphur, he found the phosphate to be retained in the system. Mr. Blacklock then proceeded to administer the medicine to soldiers of the Madras army, labouring under intermittent fever, with, according to his account, highly favourable results. The phosphate of lime, most easily obtained by calcining sheep's bones, is mixed with one-sixth of its weight of sublimed sulphur. The dose is two drachms, thrice a day, in treacle or in sugar and water.

"It should be continued steadily till the usual period for the

* The "minority", we should observe, do not quite clear up the difficulty occasioned by a statement of Mr. Horace Wells, who relates, that having tried the nitrous oxide on himself, while having a tooth extracted, and in several other cases, with success, in 1844, he mentioned the results to Drs. Warren, Hayward, Jackson, and Morton, "the last of whom expressed themselves in the disbelief that surgical operations could be performed without pain—both admitting that this *modus operandi* was quite new to them—and these, he says, are the individuals who now claim the discovery."—*A History of the Application of Nitrous Oxide Gas, Ether, and other Vapours, to Surgical Operations.* By Horace Wells. Hartford, 1847.

expected fever has passed without any febrile return. Four drachms may be given at the first, if the patient be very weak when first seen, or if there be any urgent necessity for at once cutting short the fever. Half a drachm thrice a day, is considered a suitable dose between the ages of two and five; one drachm from five to twelve; and after that age, two drachms thrice a day."

Dr. ANDERSON, after giving the reports of fifteen cases of uncomplicated intermittent fever, thus expresses his opinion on the merits of Mr. Blacklock's remedy.

"So many slight cases of ague recover without any treatment, or after one emetic or purgative, and the failure of the remedy in the remaining seven cases was so signal, and contrasted so strongly with the effect of the bark or quinine, which had eventually to be employed to prevent the return of the paroxysms, that I suspect Mr. B.'s powder possesses very feeble antiperiodic powers. Many slight cases of intermittent fever will, I doubt not, recover under its use; and as it is a cheap remedy, it deserves a further trial, especially in the cases of natives, to whom Mr. B. has given it most extensively and successfully."

We have thought it right to bring before the notice of our readers the novelties contained in Mr. Blacklock's pamphlet; but we hope that the fact of our having done so will not be regarded as any evidence of our adopting them as truths or real discoveries.

REMARKS ON THE EXTERNAL APPLICATION OF IODINE IN ERYSIPELAS, with Suggestions for its Use in PUERPERAL FEVER. By HUGH NORRIS, Surgeon. Pamphlet. pp. 12. South Petherton, Somerset: 1853.

THIS is a reprint from the *Medical Times and Gazette* for 11th December, 1852, of a paper read by Mr. NORRIS before the Crewkerne and Yeovil Medical Association. He first speaks of the local application of iodine in erysipelas, and then treats of its use in puerperal fever.

In erysipelas, the author has, for four years, applied the tincture of iodine in nearly thirty cases of idiopathic erysipelas, with a favourable result in all. Its *modus operandi*, he is inclined to believe, is as much constitutional as local. Mr. Norris does not claim priority, but refers to a pamphlet published some years ago by Dr. Davies, of Hertford, *On the Use of Iodine locally applied*. He has not, except in very mild cases, depended solely on the iodine; but has given salines, or wine and tonics, according to the necessities of each case.

In puerperal fever, Mr. Norris, inclining to the doctrine of the erysipeloid nature of the disease, submits, that the "very early and free application of the tincture of iodine, or rather, of a *pigmentum iodinii*, much stronger than the pharmacopœia tincture, over the whole surface of the abdomen, might prove of service". He and some of his medical friends have tried this remedy in several severe cases, with low peritonitis, great tympanitis, exhausting diarrhoea, suppression of the renal discharges, and a tendency to death by asthenia. The rational internal treatment was employed at the same time.

"The immediate effects of the iodine application were manifest relief to the peritoneal tenderness, and rapid subsidence of the tympanitis, and in the cases I attended, at least, such comfort followed its use, and so sensible were the patients of the benefit it appeared to occasion, that, although productive of extreme pain at the time of application, they would again and again beg me to repeat it, 'because it did them so much good'."

In conclusion, Mr. Norris believes he has at least adduced strong reasons for giving the local application of a solution of iodine a full and extended trial in puerperal peritonitis; for he has shown in his own practice—

"1. That a very free and oft-repeated application of a strong pigmentum iodinii over the whole abdomen, in the low peritonitic form of puerperal fever, is not injurious. 2. That, as a counter-irritant, at least, it is actually beneficial. 3. That we have good reason, from analogy, to hope it may possibly in some cases be found to exercise an influence *sui generis* over the peculiar kind of inflammation, with which we have to deal in treating the worst forms of puerperal fever."

PERISCOPIC REVIEW.

BOTANY.

CELLULOSE COMMON TO ANIMALS AND PLANTS: RELATIONS OF THE VOLVOCINEÆ.

As regards the analogies between animal and vegetable structure, one of the most interesting discoveries of late years, is, that cellulose is not confined entirely to plants. The researches of Külliker, Löwig, and Schmidt, have shown that the mantle of many ascidians contain cellulose. Schacht states that in phallusia (one of the ascidians) it constitutes the intercellular substance, but does not, as in the plant, form part of the cell-wall itself; while in *cyathia*, and some other ascidians, the cellulose forms free fibres. The observations of SIEBOLD, WILLIAMSON, COHN, and BUSK, have led to the conclusion that the family of the volvocineæ is to be considered as vegetable and not animal. These authors have determined that their structure, their mode of reproduction, and the existence of zoospores (moving spores), with vibratile cilia, shew their alliance to many of the algæ. Cohn has succeeded in demonstrating the characteristic reaction of vegetable cellulose (blue colouring by iodine and sulphuric acid) in the envelope-cell of *stephanosphaera* (one of the volvocineæ).

Cohn further states that all analogy of structure and development, as well as natural relationship, indicate that the volvocineæ are to be placed as a special family under the tribe Palmelleæ, of the order Algæ. They are allied to the green-snow plant (*chlamydococcus*), a unicellular alga. The distinction between them consists in this, that in *chlamydococcus* the individuals produced by the division of the green globules separate after the absorption of the parent envelope, and continue to live as distinct individuals; while in volvox, the new cells produced by the division of one green primary cell remain connected by the persistent parent cell as a common envelope, and move about as a well defined body composed of many cells.

CIRCULATION OF THE SAP IN PLANTS.

The circulation of the sap in plants has long been a subject of dispute among physiologists, and there is still much obscurity connected with it. HOFFMANN has recently examined the subject. His experiments were conducted by making plants absorb a weak solution of ferrocyanide of potassium, and afterwards a solution of chloride of iron, by means of which a blue colour was produced in the tissues in which the two substances met. He found different results according as the roots were entire when the absorption took place, or were cut across. In the former case, the fluid entered certain cells and vessels and was excluded from others, while in the latter it entered all indiscriminately. In the lower classes of cellular plants, fluids were found to pass through all the cells of the plants, and no particular course could be detected. In Ferns the fluid did not penetrate the scalariform and closed spiral vessels, which were ascertained to contain air. In Monocotyledons the unrollable spiral vessels, and the annular vessels, were found to be air-carrying and not to contain sap. In the case of Dicotyledons, the spring sap, before the leaves are developed, seems to pass through the spiral vessels and the bark. In summer there is a rapid ascent of crude sap, a descent of unelaborated fluids after every fall of rain by leaf absorption, and a descent of elaborated fluids from the leaves to all parts of the plant. When the summer sap flows in moderate quantity, it ascends in the cellular tissue, the newest woody tubes, and the delicate elongated cells surrounding the vascular bundles; but when the absorption of fluid is rapid and large, the sap passes all into the spiral vessels, which are made to part with a portion of their air. When fluid is absorbed by the leaves, there is a rapid descent of unelaborated sap, which passes into the spiral vessels as well as the cells surrounding them. These experiments of Hoffmann confirm the opinion of Bischoff and others, as to the aerial contents of spiral vessels, and show that they only contain sap in certain circumstances, such as the rapid entrance of much fluid, or accumulation of sap in spring before the transpiration by the leaves has commenced.

MOHL gives the following views of the circulation in plants. Watery fluids are absorbed by the cells of the root, and after passing into the wood, ascend through the stem and branches. As proofs of this, he states, that if a ring is cut out of the bark of a tree, down to the wood, there is no interruption of the passage of sap upwards to the parts above the wound; but if the wood is cut through while the bark is uninjured, the passage is

the plant above the wound speedily dries up. After passing through the stem and branches the sap reaches the leaves, and in passing through their cells it parts with much watery fluid, is elaborated by the action of air and light, and is thus fitted for the purposes of nutrition. Its after course is from the leaves to the bark, and then to the lower parts of the plant. If a ring of bark is cut from a stem, the growth of the part below the wound is, as it were, arrested, the stem does not become thicker, and, in the case of the potatoe plant, there is no production of tubers; on the other hand, the growth above the wound is unusually augmented, very thick layers of wood are deposited, the fruit is produced in larger quantity and is ripened sooner.

FORMATION OF THE CELL-MEMBRANE.

The formation of the cell-membrane has usually been referred to a kind of protoplasm, or azotized matter, which is deposited in a regular manner round the cavity of the cell. AGARDH, however, has recently maintained that, in place of a homogeneous membrane, there is found in the cell-walls a multiplicity of fibrillæ, which by their union and crossing form the cell-wall. He has traced this especially in *conferva*, *melagonum*, *Griffithsia equisetifolia*, and *polysiphonia complanata*. In some sea-weeds, as *Codium Bursa*, he finds numerous loose fibres, which seem to form the tissue. In place of referring the origin of spiral fibres to the mode in which the thickening matter is deposited, he considers the fibres or fibrillæ as elementary organs. These views seem to coincide with those promulgated by Dr. Martin Barry, and which have been recently adopted by Dr. Cobbold from an examination of the contractile tissue of actinia, in which he has demonstrated distinct spiral fibres.

SOURCE OF NITROGEN IN PLANTS.

The source of nitrogen in plants has been chiefly referred to ammonia, which is present in the form of carbonate in the air, and is given off by decaying animal and vegetable matters. That nitric acid contributes to the supply of nitrogen has also been conjectured. The source of this nitric acid is stated to be thunderstorms, which cause a union between the oxygen and the nitrogen, or perhaps the ammonia of the air. M. BANAL, a French chemist, has recently shown that nitric acid is much more abundant than Liebig and others have supposed. He examined carefully the water collected in the rain gauges of the Paris Observatory, and his mode of investigation has been approved by Dumas, Boussingault, and Arago. He states that the following are the monthly average quantities of the substances found in these waters:—

Nitrogen . . .	129 grains in a cubic metre.
Nitric acid . . .	294 "
Ammonia . . .	55.7 "
Chlorine . . .	35 "
Lime . . .	100 "
Magnesia . . .	32.7 "

These experiments show that the quantity of nitric acid is very large, and that rain water thus supplies a valuable source whence plants can procure nitrogen.

ANATOMY AND PHYSIOLOGY.

ON THE FUNCTIONS OF THE MEMBRANA TYMPANI, AND ITS MUSCLES, IN THE HUMAN EAR.

MR. TOYNBEE, in a paper recently published in the *British and Foreign Medico-Chirurgical Review*, Jan. 1853, has endeavoured to determine the exact functions performed by the two muscles of the tympanum, viz., the *tensor tympani* and the *stapedius*.

With regard to the *tensor tympani*, anatomists are pretty well agreed that its action is to draw tense the membrana tympani, and, at the same time, to compress slightly the fluid in the labyrinth. The functions, therefore, of this muscle, appear to be: 1, to prevent the membrana tympani being thrown into such extensive movements by loud sounds, as would injure its functions, or even produce a rupture of its laminae; 2, to prevent it being injured or ruptured by a concussion of the air in the external meatus, through a blow on the ear; 3, by drawing the membrana tympani tense, to enable it to withstand the pressure against its outer surface of foreign bodies accidentally pushed into the ear, and against its inner surface of air forcibly introduced, as during the act of blowing the nose; 4, by slightly compressing the fluid in the vestibule, when it presses the base of the stapes gently inwards, it prevents the expansion of the auditory nerve from being injured. In its functions, the tensor

tympani muscle thus appears to be analogous to the circular fibres of the iris.

The *stapedius muscle* has generally been looked upon as an aid to the tensor tympani. Careful examination appears to leave no doubt that the two muscles are antagonists, and that, while the tensor tympani has the function of drawing tense the membrana tympani, and of compressing the labyrinthine fluid, the stapedius muscle relaxes the membrana tympani, as well as the fluid of the labyrinth. This opinion was advocated by Treviranus and by Huschke, in 1845; and Mr. Toynbee has experimentally shown its correctness. The following observations are condensed from Mr. Toynbee's paper:—The circumference of the base of the stapes has been considered by anatomists as being connected to the margin of the fenestra ovalis, by means of a ligament. If the circumference of the base of the stapes be carefully examined by means of a lens magnifying three or four diameters, it will be apparent that it presents a free surface, bounded by well-defined margins. This is called the *circumferential surface* of the base of the stapes, which, in the recent state, is covered by a very delicate layer of cartilage; and this surface articulates with the inner part of the fenestra ovalis. To the margins of the articular surface of the fenestra ovalis, the margin of the articular surface of the base of the stapes are connected by two distinct circular ligaments, between which there exists an articular cavity, and in this cavity the base of the stapes moves to and fro like to a piston in a cylinder. In order to ascertain in what way the stapes is influenced by the action of the stapedius muscle, the following experiment was performed. By means of a small pair of cutting forceps, a section was made through the cochlea, a portion of which was allowed to remain connected with the vestibule. The scala vestibuli of this portion will be observed to be filled with fluid as far as the margin of the section, which fluid is of course continuous with the perilymph in the cavity of the vestibule. If the stapedius muscle be now pulled, or if the neck of the stapes be moved slightly backwards, the fluid in the exposed part of the scala vestibuli will be found to recede slightly into the scala vestibuli, and its surface to become concave; as soon as the stapes is allowed to return to its quiescent state, the fluid again passes into and fills the scala vestibuli, and assumes a rounded surface. Independently of this action on the contents of the vestibule, the stapedius muscle produces a slight degree of relaxation of the membrana tympani. It would therefore appear that the stapedius muscle is the direct antagonist of the tensor tympani, and that it is called into action in the process of listening; it would appear to act as the analogue of the radiate fibres of the iris.

The above observations indicate that one function at least of the membrana tympani, the muscles and ossicles of the tympanum, is to act as the analogue of the iris in the eye, and to regulate the amount of sonorous undulations that are to pass to the labyrinth.

ON PHOSPHENE, OR THE LUMINOUS SPECTRUM PRODUCED BY PRESSURE ON THE EYEBALL.

Several articles have appeared in the French medical journals during the last two or three years, on the subject of phosphene,* and the *Gazette Médicale* for January 15th contains a summary of some observations made by M. SERRE, of Alais, at a meeting of the Academy of Medicine.

Abrupt pressure on the eyeball, behind the line of juncture of the cornea and sclerotic, causes, at the *opposite point* in the interior of the organ, a sensation of a luminous ring. It varies in colour: it is generally whitish—sometimes blueish. The included space may be quite dark, or slightly clear: in the latter case, it contains a second ring, concentric with the first, and of a deep tint. This annular luminous appearance constitutes *phosphene*.

The ring is sometimes quite circular, sometimes elliptical, sometimes interrupted at one or more points. According to M. Serre, the ring is never entire; it always presents a lacuna, which is invariably directed backwards, and is less in the image on the temporal side than in others, especially in the supra-orbital image. This indentation has not been noticed by Müller or by Brewster, who have directed particular attention to phosphene. Dr. Dechambre, who writes the notice of M. Serre's communication in the *Gazette Médicale*, doubts whether the interruption is of so constant occurrence as is described by M. Serre. He has several times succeeded, by pressure on the inner side of the eye, in producing an unequal circle, broken at a number of points, but *without a lacuna*. A slight degree of

* From *phos*, light, and *phew*, I cause to appear.

pressure gave rise to the appearance of a segment of a ring; and probably the interruption in the circle would be due to insufficient pressure.

The phenomenon lasts only one or two seconds, if the pressure be rapidly made, so that the eye receives a sort of shock. If the pressure be continued, the image is gradually effaced, in a variable space of time. Its intensity is greatest when the eye is in the greatest amount of darkness. The experiment succeeds best just after transition from a very light to a dark medium.

At the same time with the image on the opposite side, there is often perceived, at the seat of the pressure, a second image like the first, but smaller and less luminous, and requiring great attention to perceive it. The indentation appears turned in the same direction as that of the other image. The double spectrum is produced whether the eyes be closed or open.

Several explanations of this phenomenon have been offered. Sir D. Brewster explains it by supposing that the retina undergoes pressure at two points—one at the part directly pressed on, and the other in an opposite direction. A ring of liquid is formed round each of these points. If pressure on the cornea does not produce phosphene, it is because it ends in the *punctum cæcum*. This explanation, which is accepted by M. Serre, is at present that which is most satisfactory.

M. Serre has endeavoured to apply this phenomenon to the physiology and pathology of vision. What is the meaning of the phenomenon? It means, first, that a mechanical impression on the retina gives rise to a sensation analogous to that produced by its proper stimulus, light; secondly, that the impression made is transmitted to the opposite point of the retina, in virtue of a physiological law, and without the intervention of known physical laws. M. Serre states that the crystalline lens is traversed at its centre, by the line passing from the point of contact to that where the object is perceived. If this be true also for images formed by the action of light, the inversion of the image produced by the crossing of the rays, becomes corrected without the intervention of any operation of the mind. This theory is, however, founded on uncertain data, and scarcely agrees with the explanation of phosphene given by Sir D. Brewster, and adopted by M. Serre.

M. Serre has applied the phenomenon of phosphene to the diagnosis of some diseases of the eye, especially paralysis of the retina. The phenomenon is not always produced at will, nor at the first trial; but it is impossible to find it absent during several days, without concluding that the retina has lost its power.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

THE FURUNCULOID EPIDEMIC.

THE year 1852 has been distinguished by two epidemic visitations, one of them appalling in severity, the other less destructive, but extraordinary, if not unique, in several respects. We allude to the *small-pox*, and to the (so called) *furunculoid epidemic*. On the present occasion we shall speak of the latter disease, tracing its chronology up to the end of 1852; next its territorial extent; and lastly, portraying its pathological character.

CHRONOLOGY. An epidemic of boils, carbuncles, and whitlows, particularly the latter, is described as having occurred as long ago as the year 1834, in the neighbourhood of the Lower Pyrenees, among the soldiers of the 57th regiment of the line. This is noticed by M. Tholozan, in a paper recently read by him at the Société de Biologie, which has just been published in the *Gazette Médicale de Paris* of Jan. 1, 1853.* He relates, that M. Marten, head-surgeon of the Hospital of Colmar, had seen several causes of this epidemic, and collected accounts of many more. Eleven cases of phlegmon of the hands and forearm had come under his own observation, and reports had reached him of one hundred and one similar cases, fifty-three of which occurred in 1834, and forty-eight in 1835. He likewise speaks of the contemporaneous occurrence of many cases of erysipelas, erythema, "eruptions dartreuses", "boutons hémorrhoidaux", abscesses in different regions, particularly in the limbs; boils, carbuncles, some cases of "charbon", and a tendency to phlegmonous gangrene, especially abscesses in the palmar aspect of the hand and fingers, extending along the upper and lower arm. Gangrene, exfoliation of tendons, and caries of bone, are spoken

of as common occurrences. Emollients, narcotics, and general and local blood-letting, were often found powerless in the treatment. Free incisions were practised, and proved frequently useless; the disease being marked by "a principle of malignity which paralysed the effect of treatment". The epidemic disappeared in the winter, and re-appeared in the following March. He attributes the disease (probably without sufficient reason) to high living, the abuse of spices and other stimulants, and to a high atmospheric temperature.

No further notice appears of this epidemic until the spring of 1851, when papers on the subject appeared in the *Medical Gazette* and *Lancet*. We shall endeavour to show, however, that a tendency to carbuncle existed, though in a limited degree, for five or six years previously. The following account is collected from a paper read at the Epidemiological Society, July 7th, 1852, by Mr. Hunt, from a notice by Dr. Kinglake, which has more recently appeared in the periodicals, from a pamphlet by Mr. Ludlow,* and from various private sources. No statistical accounts of this epidemic have yet been published, with the exception of those collected from the Registrar-General's weekly reports by Mr. Hunt. These, however, are confined to the *deaths from carbuncle*, which, having been in this country the only fatal form of the disease, may be taken as an index of its severity and prevalence in the metropolitan districts, to which the registry is restricted. We shall extend this inquiry to the end of 1852. The following table will convey all the information which can be obtained from this source. It shows the rise, progress, and advance of the mortality from carbuncle, up to the present time; and discloses important chronological facts.

DEATHS FROM CARBUNCLE in the Metropolitan Districts, from 1840 to 1852 inclusive. The twelve years may be divided into three periods:—

In 1840, 41, 42, 43, the average was $3\frac{1}{4}$ per annum.

1844, 45, 46, 47,	"	8	"
1848, 49, 50, 51,	"	18	"

Last quarter of 1851, 9 deaths; rate, 36 per annum.

First quarter of 1852, 16 deaths; rate, 64 per annum.

Second quarter of 1852, 5 deaths; rate, 20 per annum.

Third quarter of 1852, 16 deaths; rate, 64 per annum.

Fourth quarter of 1852, 11 deaths; rate, 44 per annum.

Single Years.

In 1846 were registered 3 deaths from carbuncle.

1847	"	15	"	"
1848	"	20	"	"
1849	"	15	"	"
1850	"	19	"	"
1851	"	19	"	"
1852	"	48	"	"

During the seven years previous to 1847, the average number of deaths was only $4\frac{1}{4}$ per annum.

It also appears, that the epidemic of carbuncles commenced in the year 1847, and that, from that time until the summer of 1851, the deaths observed a general average of about four times the amount of the previous annual average of seven consecutive years; and that, during the year 1852, in which 48 deaths occurred, there were nearly three times as many deaths as the annual average of the previous five years, and nearly eleven times as many as the annual average of the seven years ending in 1846. The anthracic mortality during the severe epidemic of 1852, is thus distributed in the different months:—

Deaths.		Deaths.	
In Jan. 1852, were registered	8	In July,	4
February,	5	August,	2
March,	4	September,	10
April,	3	October,	3
May,	0	November,	5
June,	2	December,	2

In the present month (Jan. 1853), during the first two weeks of the month, there were no less than five deaths registered; which shows that the epidemic is still raging with as much malignity as ever.

This monthly table shows that, unlike the above mentioned epidemic in the Lower Pyrenees, in 1834–5, which disappeared in the winter, and re-appeared in the following March, the visitation of 1852 has raged most severely in January and September, disappearing only in May. It appears, in short, to have been entirely unaffected by the temperature of the atmosphere; nor does its course appear to have been influenced either by the re-

* M. Tholozan says, that the earliest notice he has met with of the existence of this epidemic, is in Bayle's *Pratique Moderne de la Chirurgie*, tom. III, article "Panaris"; wherein he states, that in 1760 and in 1767, in the Hospital of London, a great number of cases occurred of whitlow, accompanied with caries, &c. It is impossible, however, to identify these visitations with the present epidemic.

* *On Carbuncular Inflammation of the Lips, and other parts of the Face.* By Harvey Ludlow, Esq., F.R.C.S., late House Surgeon to St. Bartholomew's Hospital. London: 1852. pp. 13. This pamphlet is very interesting.

remarkable drought of the last spring, or the not less remarkable excess of moisture prevailing in the autumn.

TERRITORIAL EXTENT. If the chronology of the furunculoid epidemic is remarkable, its universal prevalence at one and the same time, in different quarters of the globe, is not less so. In England, it has prevailed not only in the metropolis, on both sides of the river, but in every part of the country, both inland and at the coast. Dr. Kinglake, Physician to the Somerset and Taunton Hospital, says he has not only observed it in his own immediate neighbourhood, but has put himself in communication with various medical practitioners in different parts of the neighbourhood (represented by radii of twenty miles and upwards), who have all spoken to the fact of its extraordinary prevalence, in one or other of its forms, in each of their respective localities.* Mr. Hunt reports, that he has seen it on the northern coast of Kent, and heard of it on the southern coast of Hampshire; that he has traced it to every part of the metropolis, to Oxford, Cambridge, Bristol, Manchester, and to several counties of England and Wales. In short, we shall feel obliged by a communication from any of our associates who have not met with it in any part of England, Wales, or Scotland. Tidings have reached us of its prevalence in Ireland and Scotland, in France and Austria. The American journals speak of it as common in New York, Philadelphia, and Washington. In a letter from Dr. Bowerbank, of Spanish Town, Jamaica, dated 28th March, 1852, he says:—"We have had numbers of persons suffering lately from boils, whitloes, and carbuncles. I see the same prevalence noticed in some parts of America." Private accounts have also reached us of its existence in the Cape of Good Hope; and, indeed, it has been present wherever our inquiries have as yet extended.†

PATHOLOGICAL CHARACTER. The epidemic appears to have assumed some shades of difference in various places and at different seasons, as to the precise form and locality of its development; and, among these, the following have been noticed by different observers: viz., 1. *Carbuncles* of every variety, and in almost every region of the body, often showing a remarkable tendency to gangrene; 2. *Furuncles* or *boils*, in every conceivable locality, varying much in size, and often appearing in rapid succession, from one to twenty at a time, for weeks or even months together; 3. *Whitloes*, chiefly superficial, attacking not one finger only, but sometimes several at once; 4. *Felons* (as they are called in America), that is, collections of purulent matter beneath the theca, or tendons of the palmar aspect of the hand or fingers, often terminating in gangrene or caries; 5. *Styes*, or purulent tumours in the tarsi; 6. *Ecthyma*, consisting of a number of small boils or pustules, appearing simultaneously or consecutively, on various parts of the body; 7. Superficial collections of purulent matter beneath the epidermis, in various regions, sometimes commencing in vesications, and tending to ulceration. The carbuncular form of the disease often commences with a black central spot (*charbon*), which is not unlike the true plague-spot; indeed, two of the cases which occurred in St. Bartholomew's Hospital, both fatal, presented, Mr. Ludlow says, "several features of resemblance to the recorded instances of malignant pustule". This may account for the extraordinary mortality attending the disease, and which has prevailed in spite of free incisions, sometimes repeated, and careful constitutional treatment. The fatal cases appear to have occurred chiefly, though not exclusively, in subjects of an advanced age. Thus, in the four deaths which occurred in one day in London, on the 18th of January, 1852, all the persons were about the same age, 68.

Like all other epidemics, the carbuncular has been most fatal among the asthenic and needy portion of society; but the influence of the disease has pervaded all ranks. Mr. Cooper Forster, Surgeon to the Surrey Dispensary, in a paper in the *Lancet*, May 3rd, 1851, describes the epidemic as varying in its development according to the class of society to which the patient belongs; those of the better class having been subject to *acne*, and, having been cured of that complaint, becoming again the subjects of it; while the middle classes are described as visited with true boils in all parts of the body, in some few cases becoming carbuncular: but he has observed the carbuncle to be more common among the poor. The subjects of boils he describes as persons of all habits and constitutions, sickly and healthy, male and female.

CAUSES. The etiology of all epidemics is involved in impen-

trable obscurity. It seems to be the very nature of "pestilence" to "walk in darkness". The prevalence of boils has been attributed to diet, to temperature, to moisture, to drought; but the epidemic has prevailed under all diets, in all countries, at every season, in the temperate and torrid zones, in hot weather and in cold, in extraordinarily dry and in deplorably wet weather; and it is quite certain, that at present we are perfectly ignorant of any existing cause, proximate, remote, or even predisposing, for the existence all over the world, for years together, of a strange tendency to the formation and discharge of purulent matter, chiefly on the surface of the body; for in this consists the development of the disease. It cannot, however, be doubted, that there is some previously depraved condition of the blood, which is thus naturally relieved by elimination.*

With one exception, no writer has yet described the epidemic as in any degree contagious. That exception, however, is important. The *Medical Gazette* for March 7, 1851, contains the report of a lecture delivered by Dr. Laycock in the Medical School of York, on what the distinguished physician terms "a new exanthem", and which he afterwards describes as consisting of boils, which he believes to be the result of a contagious matter, originating in the first instance with brutes, and then transmitted from one individual to another, and not through the medium of the atmosphere. Dr. Laycock, in fact, believes it to be "strictly contagious"; but we are bound in honesty to confess, that we cannot discover in the report of his lecture any evidence of the soundness of this opinion.

To sum up the past history of this remarkable epidemic in few words, we may call attention to the following points:—1. Its tardy and insidious commencement nearly six years ago; its sudden aggravation during the last fifteen months; and its steady and unmitigated prevalence up to the present time, unaffected throughout by meteorological changes, and varying but little in the various latitudes to which it has been traced; 2. Its universal and contemporaneous diffusion over every portion of the globe from which accounts have been received; 3. Its extremely rare fatality, probably not one in fifty thousand of those who are attacked falling victims to its virulence.

THE SMALLPOX AT ZANZIBAR.

The *Semaphore de Marseilles* contains a letter, dated Zanzibar, September 6, 1852, from which the following is an extract. "Smallpox has made frightful ravages both at Zanzibar and in the neighbouring country. Senahillis, Hindoos, blacks—in short, the entire population, with the exception of the Europeans—paid their tribute to the terrible scourge, the germ of which was brought from Muscat by a vessel of the Imaum. In the Persian Gulf and in that of Oman, where cholera had already raged, thousands of victims have succumbed. The disease has spread with frightful rapidity, not only along the eastern coast of Africa, but also in the interior of that continent. The mortality was there so great, that caravans have ceased to circulate, from want of a sufficient number of able-bodied persons to effect the carriage of goods from the interior to the sea-shore. Along the coast, hands are likewise wanting for the conveyance from the sea to Zanzibar. Our market, consequently, suffers from it, and the small quantity of merchandize now in the stores has become the object of the most extravagant competition among the merchants of the place, who cannot without the greatest difficulty, and at immense sacrifices, complete the cargoes of their vessels. The disease is now on the decline at Zanzibar, and hitherto no European resident, or seaman has been attacked by it. It is true we only allow our seamen to communicate with the shore for the wants of the service, and moreover the blessings of vaccination preserve us from contagion. The natives of the country, seeing the happy effects of that preservative which they declined using when it was still time, now crowd to demand the favour of being vaccinated by one of our countrymen, who, though not a physician, is very skilful in performing the operation. In order to encourage them by example, we caused all our servants to be vaccinated, and I need not tell you that they all escaped the effects of the disease."

FEVER EPIDEMIC AT CROYDON.

We learn from the newspapers, that a fatal form of typhus fever is prevailing in the town of Croydon and the adjoining villages. We would be glad to receive an account of it from any member of THE ASSOCIATION in that neighbourhood, who is able and willing to furnish it.

* See an interesting paper on the subject, by Dr. Kinglake, in the *Monthly Journal of Medical Science*, July 1852, p. 18.

† We cannot conceive a more important use which the Epidemiological Society can make of their facilities for foreign correspondence, than to ascertain whether the epidemic has been absent any where.

* Mr. Hunt asserts (*Lancet*, May 24th, 1851), that a similar epidemic, though to a minor extent, prevailed after the cholera of 1832, 3, 4. This appears to be confirmed by the already quoted account of the epidemic, which prevailed in the neighbourhood of the Lower Pyrenees in the years 1834-5.

STATISTICS OF THE FOUNDLING HOSPITAL AT BARCELONA.

In the *Boletín de Medicina, Cirugía, y Farmacia* for December 26, 1852, the following statistics are given of the Foundling Hospital at Barcelona.

The children have very lately been transferred from the general hospital of Santa Cruz to the old house of Misericordia. It appears that, during the last six years, the number of admissions and deaths has been as follows.

Year.	Admitted.	Died.
1847	652	586
1848	578	401
1849	654	511
1850	617	520
1851	607	554
1852	610	475

Total, 3778 3047

This shows a mortality of 83 per cent.

The authorities have taken measures to remedy this lamentable state of things, by removing the children to a more commodious building.

According to M. HERVIEUX, (*Union Médicale*, 1852, Nos. 130 and 140, and *Brit. and For. Med.-Chir. Review*, January, 1853, p. 293), out of four thousand children annually admitted into the Foundling Hospital of Paris, three thousand, or 75 per cent. die. To explain this, impoverishment of the blood, over-crowding, and the insufficiency of nursing, have been referred to: but M. Hervieux ascribes the mortality chiefly to the too prolonged maintenance of the horizontal posture. The infants are, it is calculated, kept lying on the back for twenty-two out of the twenty-four hours. The children die, in fact, of cold and hunger; from the continuance of the horizontal posture, the temperature becomes lowered, the limbs chilled, the circulation languid, and the respiration embarrassed: the skin becomes indurated, and visceral congestions take place.

Another cause of disease and mortality to be taken into account, is the feeding. Four, six, or eight times a day, can scarcely be considered sufficient. At present, the eighty-four infants at the *crèche* have only nine nurses and two night nurses to attend to them; while M. Hervieux considers that one woman cannot pay suitable attention to more than two infants.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the meeting of the Committee, on Tuesday, the 25th ult., after the customary business had been gone through, and the various acknowledgments of grants had been read, the Treasurer made his usual report of the state of the finances, by which it appeared that the Fund was largely in debt to the Treasurer for advances.

The Treasurer also reported, that he was in communication with a benevolent gentleman from the West of England, who was about to erect six small houses, which he proposed placing at the disposal of the Committee, for the reception of some of their annuitants. It was resolved, that such offer be gratefully accepted.

The following cases were then presented:—

I. A medical man, with wife and five children, accustomed to a seafaring life, and destitute of employment. To assist him in obtaining such employment, and the means of obtaining a livelihood, £10 were directed to be placed in the hands of Mr. Toynbee, the Honorary Secretary to the London Committee.

II. A gentleman, æt. 74, possessed of the highest testimonials, who had lived the laborious life of a faithful assistant, but who now, as years had increased upon him, as well as the infirmities of age, was incapacitated for active duty, and found himself, at an advanced age, without the means of support. It was resolved to make a grant of £15 to him, in two half-yearly portions; and to place him upon the list of candidates for an annuity.

III. This case was miserably poor, disabled from obtaining employment by paralysis agitans. He had been previously relieved, and was now voted only £5, in the hope that he might yet find employment as a writer.

Cases IV, V, VI, VII, VIII, were referred for further inquiry, or as being incomplete from one cause or other.

NOTICE TO MEMBERS:—PAYMENT OF SUBSCRIPTIONS.

MEMBERS who have not yet paid their Subscriptions, are requested to forward the amount due, either to the Treasurer (Sir CHARLES HASTINGS), or to the Secretary of the Association, at Worcester.

Gentlemen, joining the Association, are required to observe the 24th rule, which states, that "each member is to pay one guinea annually; and that the subscription commences on the 1st of January in each year, and must be paid in advance."

JAMES P. SHEPPARD, Secretary.

NOTICES BY THE EDITOR.

A LIST OF THE MEMBERS of the Association is preparing for publication. It will include all the new members up to date. Gentlemen who have new members to propose, ought, therefore, to do so without delay.

MEMBERS and others are requested to send books, manuscripts, and letters for the EDITOR, to his residence, Essex House, Putney, London; or to the office of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London.

Dr. CORMACK will attend at the office, to receive members, every WEDNESDAY, from four to a quarter past five, p.m., when not unavoidably prevented by other duties.

To prevent delays or mistake it is particularly requested that all advertisements and letters connected with the alteration of addresses, or with the commercial department, be addressed to the publisher, Mr. THOMAS JOHN HONEYMAN, and not to the Editor.

EDITOR'S LETTER BOX.

CLAIMS OF THE UNIVERSITY OF LONDON TO ELECT REPRESENTATIVES IN PARLIAMENT FOR THE MEDICAL PROFESSION.

SIR,—In your last number, there is a letter from Dr. SNOW BZCK, Secretary to the Franchise Committee of the University of London, in which he states, that "they will be much gratified to know they have the influential support of the medical profession in the provinces, as well as in London, in their endeavours to obtain representatives in Parliament for the University of London". In the same letter, there is quoted a resolution of the Lecturers of the York School of Medicine, an affiliated school, who think the scheme "highly desirable, inasmuch as the medical profession might thereby obtain a more direct voice in public affairs"; and are only solicitous to know whether the franchise should not be conferred on them, the said teachers, respectively of their being graduates of the University.

This leads me to observe, that the just desire which has so long been felt by the medical profession, to have a certain number of representatives of their own in Parliament, to advocate their interests, and stand up for their just rights, has lately appeared to me in some measure to have given place to an agitation which is being actively carried on (it is said, not without some prospects of success) to obtain a representative for the University of London. Now, I have no objections that the University of London, and every other university in the kingdom that has now no representatives, and possesses a respectable and sufficiently numerous body of graduates, should have the privilege of sending one or more representatives to Parliament. Such a set of enlightened and educated constituencies would surely be better than many of those with which Committees of the House of Commons have lately had to deal, and of which many yet remain to be dealt with, before the scandals of our representative system can be abated. In the new Reform Bill which is said to be impending, such a distribution of political power would be to place it in safer hands, though of course less palatable to the masses, before whom everything must now give way, than to lower the franchise, or give more members to large and already too powerful constituencies; but that the graduates of the University of London are to be allowed, or are competent, to choose one or more members of Parliament, to represent the interests and command the confidence of the great body of the profession in this country (including the many physicians in London and the provinces who are graduates of other universities), is a pretension that cannot for one moment be listened to. Of the physicians practising in England and Wales, not one in twenty is a graduate of the University of London; and yet these last are to choose persons to represent not only their fellow-graduates of

other universities, but the large and respectable body of general practitioners who possess no medical degree from any university! Nor is there the least security that the member to be given to the university will be the sort of person on whom even the fraction of medical men who contribute to form his constituents, will be able to rely, as being practically acquainted with, and thoroughly devoted to, the interests of the profession; for the University of London is made up of an aggregation of affiliated schools and colleges in London and throughout the country, a considerable proportion of which are not medical, but theological seminaries, and (the members of the church having their own academical institutions at Oxford and Cambridge) theological seminaries of a peculiar cast, for the training of ministers of the various dissenting denominations. It has, hence, other graduates besides medical ones to swell the numbers of its constituent body. It grants the degrees of M.A., LL.D., and similar literary and philosophical distinctions, for which the alumni of these dissenting theological colleges, and others not studying for the medical profession, become candidates.

It appears, then, that the member who is supposed to give the medical profession a more direct voice in public affairs, is to be elected, not by a small section of that profession even, but by a mixed constituency, one portion of which will certainly take very little interest in medical questions, but a great and active one in questions of a peculiar political and religious hue. Can any reasonable person doubt which class of questions is likely to have the most weight in determining the choice of a representative?

There is only one university in the United Kingdom, that of Edinburgh, in which its medical graduates would have a preponderating voice in the election of a Member of Parliament, were one to be conceded to them; and, inasmuch as they are engaged in practice, in great numbers, in their native places and elsewhere throughout the country, they would certainly have a better title to act on behalf of the medical profession, than the comparatively small number of graduates of the University of London. Still, they are not the profession; and, although the number of those taking their degree of M.A. at that university, preparatory to entering upon other pursuits in life, is now extremely insignificant, a degree not being required for entrance upon such pursuits; yet it might be expected speedily to increase, so as to affect the purely medical character of the constituency, were the privilege of a vote attached to it.

I freely acknowledge that the question, how a hearing is to be obtained for the claims and interests of the profession in Parliament, is one of extreme difficulty, and which can scarcely be entertained by our public men without raising up a host of similar demands on behalf of other professions and great public interests—demands which, it might not be difficult to show, have a less solid ground to rest upon, but which would not the less embarrass and complicate the subject. But let not the medical profession imagine that this question can be settled to their satisfaction by a measure so partial as enfranchising one learned constituency (and that the youngest of those who yet remain unenfranchised), and forming a mixed electoral body, in which there is no security, and, in point of fact, no right to expect that the medical element shall predominate.

G. PATERSON, M.D.

Tiverton, 31 January, 1853.

P.S.—I trust that I shall not be misunderstood as intending to cast a reflection upon the University of London, on account of its being open to persons of all religious persuasions, any more than I would be supposed to cast blame upon its founders for not making it exclusively a medical school. But I ask, if the University of London be not exclusively a medical school, and if its non-medical graduates, or at least an active and influential portion of them, will have views and interests of their own at heart, for which they will naturally seek an exponent in the person of their representative, what becomes of that influence in public affairs which the medical profession is taught to expect from the enfranchisement of that particular University?

NEWS AND TOPICS OF THE DAY.

ALLEGED HOMŒOPATHIC CURE OF THE OCULAR DISEASE OF MARSHAL RADETSKY.

The great temporary impulse which was recently given to the homœopathic imposture in Vienna, by the case of the celebrated Marshal RADETSKY, was the subject of conversation in the

medical circles of London, during the visit of Professor JAEGER, of Vienna, at the time of the Great Exhibition. An authentic narrative of the facts of the case will, however, we dare say, be still acceptable to our readers.

The *Monthly Journal* for the present month, contains, Professor Jaeger's explanation of the case.

In January, 1841, Dr. Hartung, physician to the Austrian army, and to Count Radetzky, wrote from Milan to Professor Jaeger, for advice respecting a disease of the eye, with which the marshal was affected. The patient was seventy years of age, and reckoned fifty-six years of military service. He was vigorous and robust, but subject to catarrhal and rheumatic affections, which became more frequent and intense with the approach of old age. The history of the attack of disease of the eye is thus given by Dr. Hartung:—

"The marshal, on the 9th of October, 1840, during the manoeuvres of the camp at Pardenone, exposed himself for six hours consecutively, and on horseback, to the overpowering heat of the valleys, and the currents of air on the heights. He was suddenly seized, in consequence, with violent fever, accompanied by severe pain in the forehead and temples: there arose, at the same time, an inflammation of the right eye, and of the soft parts around it; and the globe of the eye was pushed considerably from the orbit. The pain was so severe that the patient could scarcely endure it, and was obliged to go to bed. During the night, the intensity of the affection diminished, so that his excellency was able next day to attend a military parade, and some days after to return to Milan.

"The inflammation of the eye, as well as the fever and pain, soon disappeared; but, in addition to the old infirmities, there remained a greater degree of redness of the eyelids and swelling of the conjunctiva than formerly, and a tumour was now perceptible to sight and touch in the external angle of the eye, which caused the globe to protrude from the orbit.

"This aggravation, however, did not prevent his excellency from retaining the command-in-chief, nor from occupying himself, as before, with the affairs of the service.

"The treatment was, from the commencement of this attack, as it had been previously, strictly homœopathic, the remedies having been administered in the following order:—

"1. Aconit. 2. Baryt. carbon. 3. Zincum metall. 4. Anacardium orient. 5. Calc. carbon. 6. Euphrasia. 7. Mercurius Hahnemannii. 8. Merc. sublim. corros. 9. Antimon. crud. 10. Digitalis."

As these remedies failed to produce benefit, Dr. Hartung diagnosed the growth of a fungus in the orbit; and Professor Flarer, of Pavia, diagnosed a scirrhus tumour.

Dr. Jaeger was, at the time when he received Dr. Hartung's communication, with one from Dr. Flarer, ordered to proceed to Milan, to consult and report on the case of Marshal Radetzky. After examining the patient, the consultants were informed by him that "he would be treated by no other physician than Dr. Hartung, and in no other way than according to the homœopathic system." Drs. Hartung and Flarer still adhered to their opinions as to the nature of the disease; while Dr. Jaeger regarded it as the product of a rheumatic periobitis, which, having taken an unfavourable turn, must have degenerated into a scirrhus disease. Yet he believed that, if an increase of inflammatory action took place, a cure might supervene after an evacuation of pus. As this view, however, did not meet the assent of Dr. Hartung, the basis of the report to Vienna was the original diagnosis,—the presence of a scirrhus degeneration of the soft parts within the orbit, threatening to pass into the state of cancer.

Some weeks after having returned to Vienna, Dr. Jaeger heard, by a letter from a relative of Count Radetzky, that the pain had increased, and that there was a copious discharge of pus; and this was confirmed by a report addressed to the minister of war.

While this change was going on, Dr. Hartung, after effectually throwing impediments in the way of Professor Flarer, who was again called to the patient, wrote to Dr. Jaeger "that the marshal, having continued to be treated according to the principles of homœopathy, had got well; that the fungous tumour of the orbit had disappeared; that the pain had ceased: that the eye had recovered its mobility, and that the change of fungus into carcinoma was no more to be dreaded; and he regretted that Dr. Flarer had not had an opportunity of convincing himself with his own eyes of the favourable change!"

After some controversy had taken place on the subject, nothing more was said till 1849, when the victories of the marshal aroused in the homœopaths the idea of trying to gain thereby a new triumph for themselves; and the case has hence been paraded,

with false premises and conclusions, and injurious imputations with regard to Dr. Jaeger.

Dr. Jaeger concludes by reiterating his conviction, that the disease was from the beginning nothing more than simple rheumatic periorbitis, which had gone on to suppuration. The diagnosis was difficult; and on this, of course aided by no small amount of assurance, the homœopaths have blazoned forth the cure of malignant disease of the eye in Marshal Radetzky, as a splendid triumph of homœopathy. Dr. Jaeger completely demolishes their pretensions.

THE LATE DR. PEREIRA. A Sermon, in commemoration of the decease of this lamented Physician, will be preached in the Chapel of the London Hospital, on Sunday Morning next, at Eleven o'Clock precisely, by the Rev. E. J. Nixon, Chaplain of the Hospital.

HOMŒOPATHY IN EDINBURGH. "I would willingly have been spared the occasion of referring, even for a moment, to other losses than those we have sustained by the hand of death. Our own act—justified by a stern necessity, and imposed upon us by a due regard to the interests of science, and the honour of our profession—has severed from us some who were our late associates in the business of the Society, all of whom we would have gladly retained, and none of whom we can afford to lose: but they were not of us. They had abjured the faith in which they were educated, and in virtue of which they had obtained status, and honour, and emolument; they vilified the doctrines which they once taught, the teachers whom they delighted to honour, and the brethren with whom they took counsel together; they absented themselves from the colleges, and societies, and convivial meetings in which they once took delight; they waged war against their quondam friends, and against their former selves; and all this without a vindication, or, at best, with but a feeble and abortive attempt to palliate their conduct. The patience and forbearance which we long manifested, were exhausted and overcome; and, by an almost unanimous voice, we declared them no longer members of the Medico-Chirurgical Society. We commiserate their position: we lament the injury done through them to a noble profession; but we rejoice in the hope that the age which has seen the rise of this fatal apostasy, may, long ere its close, witness its decline and downfall, when, after years of penitence, our alienated brethren may be received again into the fellowship and the privileges which they have so recklessly sacrificed."—(From Dr. BEOBIE'S Valedictory Address, on resigning the chair of the Medico-Chirurgical Society of Edinburgh, Dec. 8th, 1852.)

THE INCOME TAX ELUCIDATED.—The In-come Tax is a funny Thing. It is a Tax up-on a Man's In-come. A Man's In-come is all the Mo-ney he gets in one Year. Many a Man has no-thing else in the World than the Mo-ney he gets in one Year. He pays In-come Tax on all that Mo-ney. He pays Se-ven Pence out of ev-e-ry Pound of it. Mo-ney is pro-per-ty. If a man has No-thing else than the Mo-ney he gets in one Year, that Mo-ney is all his Pro-per-ty. So if he pays In-come Tax up-on it, he pays a Tax on all the Pro-per-ty he has got. But ma-ny Men have a great deal more Pro-per-ty than the Mo-ney they get in one Year. Some have Twen-ty Times as much Pro-per-ty as that. Yet they only pay a Tax on the Mo-ney they get in one Year. They pay no more than Se-ven Pence out of ev-e-ry Pound of that Mo-ney. They do not pay a Far-thing out of all their o-ther Pounds. So, the In-come Tax is a Tax on all one Man's Pro-per-ty and on on-ly Part of a-no-ther's. Mr. GLAD-STONE says this is just. If Mr. GLAD-STONE had no-thing but what he could earn, he would not be so well off as he is now. And yet he might have to pay Se-ven Pence out of ev-e-ry Pound he was worth. Mr. GLAD-STONE would not be glad then. He would be Sor-ry. I do not think he would call the In-come Tax just a-ny longer; do you?—*Punch*.

APPOINTMENTS.

[*An asterisk is prefixed to the names of members of the Association.]

BLAKE, V. W., Esq., was elected, on the 5th of January, to be one of the Medical Officers of the Birmingham and Midland Counties Lying-in Hospital, in room of Dr. Elkington, resigned.

BROOKE, Charles, Esq., F.R.C.S., elected Assistant Surgeon to the Westminster Hospital.

FINCHAM, G. F., M.D., elected Assistant-Physician to the Westminster Hospital.

***KIRKMAN, William P., Esq.,** appointed Assistant-Surgeon to the Suffolk County Lunatic Asylum.

MILLER, James, M.D., elected Physician to the St. Marylebone General Dispensary, in the room of Dr. Wadham.

ORFORD, W. C., Esq., was elected, on the 5th of January, to be one of the Medical Officers of the Birmingham and Midland Counties Lying-in Hospital, in room of Dr. Mackay, resigned.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were members of the Association.]

GREEN, Joseph Septimus, Esq., Surgeon at Newcastle-upon-Tyne, on Saturday, January 15, aged fifty-four.

GREGORY, George, M.D., at his residence, 6, Camden Square, London, on the 25th January, from disease of the heart and consequent dropsy. Dr. Gregory was a man of integrity, talent, and learning; but his popularity as a practising physician was impaired by his abrupt and unpremeditated remarks when called in consultation. His principal works are: 1. *Elements of Medicine*, which went through six editions; 2. *Lectures on Eruptive Fevers*; and 3. The article, *Small-Pox*, in the *Cyclopædia of Practical Medicine*. He was, likewise, the author of various papers on different subjects, but particularly on Small Pox and Vaccination, in the Medical Journals. His scepticism as to the advantage and propriety of vaccination recently attracted considerable attention, but did not diminish the confidence of the public or of the profession in the value of the discovery of the immortal Jenner. Dr. Gregory held the office of Physician to the Small-pox Hospital, and Lecturer on Dermatic Pathology in the School of St. Thomas's Hospital.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of members of the Association.]

BLACKLOCK, A. Assistant Surgeon, 23rd Regiment, W.L.I. *TREATMENT OF INTERMITTENT FEVER BY PHOSPHATE OF LIME AND SULPHUR.* 8vo., pp. 103. Madras: 1853.

EMERITUS. *MEDICAL REGISTRATION AND THE PRESENT CONDITION OF THE MEDICAL CORPORATIONS.* Second Edition. 8vo., pp. 38. London: 1852.

GRAINGER, R. D., Esq. Report to the General Board of Health on the Present Mode of CONVEYING SMALL-POX AND FEVER PATIENTS TO THE HOSPITALS in public vehicles. 8vo., pp. 17. London: 1852.

JAMAICA CENTRAL BOARD OF HEALTH. Report presented to the Legislature under the provisions of the 14th Vict., ch. 60, and printed by order of Assembly. 8vo., pp. 289. Spanish Town: 1852.

JAMAICA CENTRAL BOARD OF HEALTH. Appendix to Report. 8vo., pp. 282. Spanish Town: 1853.

KAHN, Joseph, M.D. *ATLAS OF THE FORMATION OF THE HUMAN BODY IN THE EARLIEST STAGES OF ITS DEVELOPMENT; compiled from the researches of the late Professor Dr. M. P. Erdl.* Illustrated by sixty figures in thirteen plates. 4to. London: 1852.

PARKIN, John, M.D. *Statistical Report of the EPIDEMIC CHOLERA in JAMAICA.* 8vo., pp. 61. London: 1852.

SKODA, Dr. Joseph. *AUSCULTATION AND PERCUSSION.* Translated from the Fourth Edition. By W. O. MARKHAM, M.D. 8vo., pp. 346. London: 1853.

WYNNE, James, M.D. *Abstract of Report of the General Board of Health on EPIDEMIC CHOLERA in the UNITED STATES in 1849-1850.* Presented to both Houses of Parliament by command of Her Majesty. 8vo., pp. 93. London: 1852.

THE ASSOCIATION MEDICAL JOURNAL is published at its own office every Friday evening.

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For every additional line	0 0 6	For a page	5 5 0
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N.B.—Members of the Association receive the Journal, free by post, as a matter of right. To others, the terms of subscription are—For one year, unstamped, £1:6:0; ditto, stamped, £1:10:4.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. VI.

LONDON: FRIDAY EVENING, FEBRUARY 11, 1853.

NEW SERIES.

PARLIAMENTARY REPRESENTATION OF THE MEDICAL PROFESSION.

VERY inadequate ideas are commonly entertained regarding the importance of obtaining Parliamentary Representation for the Medical Profession; and it seems unfortunately to be looked upon and written about as *an end* which can only be reached by a toilsome struggle through thorny and devious paths, rather than as *the best means* of carrying out the liberal and just measures of medical reform, which are alike demanded by the interests of the profession and the requirements of the public health. It is also to be regretted that direct representation—the method which it is most difficult to support—is that which has most engaged the attention of pamphleteers and journalists, who continue to expend an amount of energy upon a hopeless cause, which, if diverted to another and an easier means of getting our profession represented in Parliament, might speedily produce fruits.

The past history of parliamentary reform, the present views of our leading statesmen, and the general tone of public opinion, clearly indicate that it is a vain delusion to suppose that the legislature will ever be induced to bestow parliamentary representation upon the medical profession, as a profession; and for this simple but sufficient reason, that, if such a privilege were once conceded to a profession, it might with plausibility be claimed by a host of other special and class interests. If the truth of this view of the case be admitted, the subject at once becomes disencumbered of the many vexatious questions, which its mere mootings has already suggested as likely to arise between rival corporations; and the inevitable conclusion is forced upon us, that, if we are at all to be represented in Parliament, it can only be, for the present at least, in the same way in which other special interests have been in times past, and are now, there represented. Lawyers, West India planters, brewers, and the Pharmaceutical Society, are not recognised in the British constitution as entitled to send members to the House of Commons; yet all of them, by individuals of their respective bodies, have successfully fought their battles in that arena. Is it not folly, then, to be wasting our time and our powers of agitation in a futile attempt to create new and peculiar constituencies, through whom we may hope to make known within the senate our wants and our wishes? Would it not be more rational to adopt a similar course with those to whom we have already referred? Would it not be more easy and more useful to seek out one, two, or three *bond fide* practitioners, good men and true, who will consent to sit in Parliament for such small constituencies as would be willing to return them, and who would not demand from their representatives a slavish attendance on the routine business of the House, or an active participation in every political discussion? This is the only common sense view of the subject; all other schemes for the parliamentary representation of the medical profession are impracticable, and, however abundantly

they may furnish texts for discussion, they will assuredly never yield any practical result.

As regards the attempt now being made to obtain a member for the University of London, we heartily wish it the success which the justice of the cause demands; but we would also desire to see the claims of the elder universities of Scotland treated with equal justice. In none of the non-represented universities do we believe that the medical graduates would be able to command the issue of the poll: and we fully concur with Dr. PATERSON, of Tiverton, in the sentiment expressed in the conclusion of his letter (p. 113 of last number), where he says:—"Let not the medical profession imagine that this question can be settled to their satisfaction, by a measure so partial as enfranchising one learned constituency (and that the youngest of those who yet remain unenfranchised), and forming a *mixed electoral body, in which there is no security, and, in point of fact, no right to expect that the medical element shall predominate.*"

DUBLIN MEDICAL PRESS UPON EXAMINATIONS REAL, NOT VERBAL.

THE *Dublin Medical Press* has reprinted our leading article of the 21st January, entitled, "Examinations Real, not Verbal"; and although "not concurring in all the opinions offered", our contemporary fully admits that "the period has arrived for a free inquiry into the merits and defects of the present system of examination".

The *Medical Press*, however, does us injustice in supposing that we intended to assert that the London University deserves the honour of the "discovery" that *real* should be added to *verbal* examinations; for all we said was, that she has begun prominently to adopt the improvement, and that for this the profession owe her their thanks. We were aware that the Apothecaries' Society—a body constantly but ignorantly and unjustly spoken of by the *Dublin Medical Press*—has for years adopted *real* examinations in *Materia Medica*, in addition to verbal ones, and has not been content with the candidates telling them whence colchicum or cubebs came, and the natural and Linnæan order of the plants, but has likewise required them to know the drugs when they saw them. And we were aware that the microscope has been introduced upon the examination table of the University of Edinburgh, so that there will be less danger of the embryo doctors being unable, when looking down upon it in the instrument, to indicate "the white matter of Schwann", although very accurate as to its exact linear measurement. All that we insisted on was, that this principle should be fully carried out, and that, in addition to the present verbal examinations, the student should be examined in the objects themselves. We trust, for his own sake, that our contemporary of Dublin does not imagine us to be so one-sided and absurd, as to think that anatomy or chemistry, or any other science, can be learned systematically without books, that is, without the assistance of all those who have preceded us, and who have enabled us to master with ease what they discovered with painful toil. All we

assert is—and we are certain that every candid man who knows anything of the matter will agree with us—that by the present system a student may pass an examination in anatomy, in chemistry, materia medica, and the practice of physic and surgery, with very little knowledge of the sciences themselves, and with merely an acquaintance with the words which represent them; and that the prevailing system of examination fosters this mistaken direction of the pupil's industry. We rejoice to learn from our contemporary that the Colleges of Surgeons of Dublin and of London are at this moment engaged in considering this subject; and we trust that the result of their deliberations will be the needed reformation.

We are not of the number of those who love great and sudden changes. We have a strong conservative bias; and can fully sympathise with those who have been actually engaged as examiners for years, who have adopted many improvements themselves, and who daily see where other changes might be effected were it not for circumstances which they cannot singly control. But, on the other hand, like every one who watches the progress of our Anglo-Saxon institutions, we know that all of them require public supervision and public discussion. However annoying it may be to the actual workers to be overlooked and scrutinized, yet suggestions *ab extra* are useful, and often quicken into vigorous life much that might have remained dormant without such a stimulus. Our institutions demand *progress* as well as *stability*: two principles which must work together in our medical corporations, if they are to live and grow, to rise and not to fall. We would repeat then, that what we conceive to be imperatively wanted is, *an addition to the prevailing system*. Let the present plan of systematic examination in words be still carried out, but let there be likewise an examination of the practical knowledge of the candidates in the things themselves. Many of the present staff of examiners, who are highly capable from long experience and ripe acquirements of testing the general requisitions of young men, may neither be willing, nor able to act as demonstrators of anatomy or manipulating chemists. But surely there can be no insuperable difficulty in appointing for this purpose examiners who are engaged in the daily practice of anatomy, of chemistry, materia medica and botany; and who therefore being up to the actual state of their sciences, would examine the candidates on the dead body, and with tests, retorts, drugs, and plants previously to their verbal trials. On the other hand, it is possible that none might be more fit than the present examiners to investigate, at the bedside of the patients, the actual acquaintance of the pupil with manipulations, diagnosis, and treatment.

THE MEDICAL BENEVOLENT COLLEGE.

In our advertising pages of to-day appears the Sixth List of Contributors to the Funds of the Medical Benevolent College. It represents an addition of about £1450:0:0 to the £10,641:15:6 formerly advertised. We hope, and we believe, that the great popularity of this institution will command for it a career of much honour and usefulness. Subscriptions, already flowing with so good a stream into its treasury, are likely to receive a great accession at, and in connexion with, the First Festival, which is appointed to take place on the 4th of May, under the presidency of the Right Honourable the Earl Manvers.

It is gratifying to observe that, in many instances, the same names appear as donors to the "Medical Benevolent College", and to the "Benevolent Fund" of the Provincial Medical and Surgical Association. We trust that a good and generous disposition towards both charities may continue and increase; and that each of us may lay to heart the great truth that, after providing for the wants of ourselves and those immediately dependent upon us, an obligation remains to assist our poor brethren to the extent of our ability,—ever bearing in mind that "it is more blessed to give than to receive".

ADULTERATIONS OF FOODS AND MEDICINES.

THE want of members of our profession, and indeed of almost any class of scientific men in Parliament, is undoubtedly a source of much evil to the community. Party questions absorb almost the whole of the time and energy of the representatives of the people, and subjects connected with the public health can scarcely gain a patient hearing; and when they are reluctantly entertained, the manner in which they are discussed seldom tends to any solid reform, simply because there are few members in either House sufficiently well-informed in the science and practice of hygienics to elucidate such subjects. Were it otherwise, the returns of "Inland Revenue" would no longer disgrace England by exhibiting, as items of income, some hundred thousand pounds as the nation's money profit on those death-dealing compounds called "patent medicines", or on the beastly and demoralizing advertisements by which many of them are obtruded upon society by some of the metropolitan and by almost all of the provincial newspapers. This is an evil to which it will be our duty to make constant reference so long as it remains unredressed.

We are glad, in the mean time, to observe that a correspondent of *The Times*, in Tuesday's paper, forcibly calls attention to the necessity of legislative interference for the purpose of suppressing the nefarious practice so prevalent of adulterating every species of food and condiment. He suggests as a remedy, the appointment of a body of scientific men to assay the food of all classes.

In the following remarks we entirely concur:—

"It seems to me that the powers of such an official body should be large, while the penalties it should be enabled to inflict should be small. The mere publication of the facts in the *Gazette* would be a very severe penalty to the fraudulent tradesman, and a great encouragement to the honest one. The men to fill such offices as these curators of the public food would have, might speedily be found; and what employment could fifteen or twenty of our scientific men be more wisely or profitably engaged on—especially as their services would be occasional—than in protecting their fellow-countrymen from the grievous mischief of adulterated food? And, were the work well done, would the country have the slightest objection to give a just remuneration for their services? I should also suggest that weights and measures might be placed under the control of the same board."

The health of the public certainly requires the appointment of such an official board of assayers; and we would propose that their duty should embrace the testing of medicines as well as of articles of food.

ORIGINAL COMMUNICATIONS.

ON INTESTINAL OBSTRUCTIONS.

By BENJAMIN WEBSTER BROWN, M.R.C.S.Eng.

(Read before a Meeting of the Midland Branch of the Provincial Medical and Surgical Association, at Nottingham, December 2nd, 1852.)*

It is my intention to attempt to point out, first, the causes; secondly, the diagnostic signs; thirdly, the treatment of obstructions of the intestines; and lastly, to illustrate my paper by the history of some of the most interesting cases which have fallen under my own observation.

CAUSES. We are aware that the intestines are endowed with a peculiar property, viz., the peristaltic motion; and it would appear they are assisted in this by a fatty network substance—the omentum,—formed by several duplicatures of the peritoneum, and suspended in front of the alimentary canal.

It seems requisite for the purposes of life, that this peristaltic action should be preserved uninterrupted, to propel the fecal contents onwards; and hence we might at once be led to conclude that some serious derangement to the animal economy would arise from its suspension, whether the cause be mechanical or otherwise.

Experience teaches us there are several causes which have a tendency to retard or suspend the peristaltic action, and entirely obstruct the intestines; amongst these we may class obstinate constipation; ileus; intussusception; stricture of the canal; tumours; hernia, etc.

Before we proceed to obstruction of a more formidable character, we will take its most common cause—constipation of a more or less aggravated kind. This may exist *per se*, and yield to simple treatment; sometimes it is constitutional, and no particular ill consequences ensue primarily; some people, however, suffer considerably from an idiopathic condition, and if remedial means have for a length of time been neglected, a morbid state is very frequently set up in the intestinal tube, and the foundation of more serious mischief is laid, as producing an enlarged colon and rectum; this happens, however, in females more than in males.

But constipation may be symptomatic, as in enteritis, peritonitis, intussusception, stricture of the rectum, or of any other part of the intestines, hernia, etc. It is sometimes the direct cause of some of these maladies, and becomes the harbinger of a more alarming crisis, if not relieved.

Persons who addict themselves to the taking of large quantities of opium, or laudanum, most generally have a constipated state of the bowels, which under peculiar circumstances, or certain stages of disease, may become obstinate, and finally lead to real obstruction. Obstruction in the intestines will frequently be produced by taking into the stomach hard and indigestible substances; as improper food; the swallowing fruit-stones, or other like bodies, which are apt to lodge in the fecal passages, and produce irritation. I have seen a kidney-bean, on a *post mortem* examination, incarcerated in the appendix cæci; in another instance a plum-stone; each of these was the cause of permanent obstruction, and death. Permanent obstruction, accompanied with very acute suffering, occurred in the case of a young lady who had swallowed a large quantity of cherry-stones.

Constipation generally accompanies scirrhus of the pylorus, as well as stricture of the œsophagus, from the small quantity of nourishment which is received into the intestines.

Impacted scybala are a frequent cause of obstruction to the passage of the upper portion in the canal. These will most generally be situated in the rectum; but this unnatural condition of the alvine contents will also take place in other parts of the large intestines, as in the colon, which

has become enlarged sometimes by long neglected constipation, and will lead to alarming results if not dislodged by remedial measures. This is more likely to occur here, from the sacculated structure of this part of the canal.

Spasmodic colic, or constriction of some part of the intestinal canal, is an occasion of obstruction. This may be brought on from constipation, the taking of improper nourishment, or the immoderate eating of acid substances or unripe fruit; drinks too, which are of an acrid character will be a source of it. Instances, indeed, occur in the practice of every medical man, in which, on one or more of these causes, invincible obstruction and inflammation supervene.

Obstruction very frequently arises from intussusception, or the inversion of some part of the intestines; and this may be *progressive* or downwards, or *retrograde* and upwards. A preternatural position of parts is liable to occur in any portion of the canal. From the construction of the parts, the most probable place for such a derangement is at the point where the tube terminates in the cæcum. Instances, however, are on record, in which portions of the colon have descended into itself, and even through the rectum, and *per anum*, so as to represent the appearance of a procidentia.

Intussusception most commonly takes place in the small intestines, in which there may be more than one volvulus. Children who have died from teething and convulsions, have been found on *post mortem* examination, with several volvuli in this portion of the tube, which in some instances, apparently, during life, produced no great inconvenience, and consequently were scarcely suspected. When this has occurred, it has been imagined by M. Louis, that owing to the peristaltic action of the bowels, the parts may again have resumed their normal condition.

Whilst at St. Bartholomew's Hospital, I remember a female subject, apparently about twelve years of age, being brought into the theatre for demonstration before the class. Mr. Abernethy had commenced his lecture on the abdominal viscera, and the small intestines nearly throughout their whole length were found in a state of intussusception, yet none of the usual appearances of inflammation were present. I saw Mr. A. draw out or unfold at least a dozen volvuli; and from the absence of inflammation and adhesions, the intussuscepted parts were drawn out without the least difficulty. What the symptoms or history of the case were during life, it is impossible to say; but Mr. A. at the time delivered some useful remarks.

It has sometimes been questioned how intussusception of the intestines can occur? Mr. Hunter affirmed that the abdominal muscles possessed no influence in forming a volvulus, although a prolapsus ani might be produced by their united agency, as in hard straining, etc. I think, from my own experience, and from the numerous instances on record, that it is probably produced by spasm, the result of cold, or as we have before mentioned, of improper aliments and drinks, or the sudden cessation of diarrhœa of a peculiar character, as well as from sudden emotions of the mind. I have had cases under my own care wherein intussusception has been immediately preceded by a severe attack of diarrhœa, accompanied with considerable twistings across the umbilical region. Others have come under my notice which have been the result of some sudden surprise and alarm, thus giving a shock to the nervous system.

Falling, or jumping from a great height has brought on obstruction in the intestines of an invincible kind; a portion of the ileum has been found to have passed through an opening in the diaphragm into the pleural cavity, and strangulation has ensued. From some such cause, or external violence, or even spasm, a rent has been produced in the mesentery, and a portion of intestine has passed through and become strangulated, and thus obstruction has taken place. A part of the colon has been found in a state of strangulation, having passed through a small opening in the diaphragm several inches into the cavity above.

From a morbid condition of the parts, adhesive bands of organized lymph will frequently be found in the abdomen,

* From the pressure of matter, we have been reluctantly compelled to omit some of the introductory paragraphs of Mr. Brown's paper.

which lead to a permanent obstruction. The intestines have on examination been found glued together in several parts by bands of adhesive lymph; consequently, there has frequently been a contracted condition of the larger portion of the tube. Amongst the French archives, we find an account of a youth of fifteen, who, having neglected a call of nature for several hours, in consequence of not being able to find a place of conveniency, besides being exposed to a cold wind, became ill; he felt a degree of tenesmus, but no effort could procure an evacuation. Warm fomentations were applied over the abdomen, which had become very painful and tumid; enemata were administered, and other means were made use of; yet, although some hardened fæces were brought away, there was no abatement in the severity of the symptoms, which presented every feature of internal strangulation. Death ensued in about ten days from the commencement of the attack. A *post mortem* examination discovered a high degree of peritonitis; the intestines were glued together by the effused lymph, which had formed adhesive bands. The state of the upper portion of the abdomen was found to be a distended condition of the bowels, but the loop of intestine, which was crossed at this point there, was not exist below the ileum. At this point there were bands, and where, consequently, constriction with numbness. The larger portion of the tube was so contracted as to be very unnatural in appearance, and was more like cords; there was also a rent in the mesentery beyond the cæcum, and through this opening a large portion of intestine had passed, and became strangulated.

The next morbid affection to which the alimentary tube is liable, frequently preventing the proper passage of the fæces, and ultimately in most instances terminating in a permanent obstruction, is a scirrhus-contracted state of the rectum. This generally occurs in people, and more frequently in women, who are somewhat advanced in life; it may be confined to a particular part of the bowel, or nearly its whole length may become affected. Sometimes there is more than one constricted portion of the gut, and the diseased part is most frequently found in a gristly condition, accompanied with ulcerated portions of the bowel beyond the constriction. I have found the cæcum near its caput in a scirrhus state, which ultimately produced invincible obstruction, and death under very acute suffering.

This morbid condition of the parts appears to be the result of a slow, chronic kind of inflammation which has been set up, producing, as already observed, a thickening and disorganized state of the bowel, which progresses more or less rapidly: permanent obstruction, which no remedial art can cure, takes place ultimately. A case of this kind will sometimes carry the patient off in a few hours, after intense suffering: or it may be protracted to a much longer period, unaccompanied, apparently, by any severe pain; and the patient will die of starvation.

Occasionally, cases occur where there is obstruction arising from congenital contraction of the intestines. The infant shortly after birth will suffer from vomiting and constipation, which are unrelieved by any of the means usually adopted. A *post mortem* examination reveals the cause of all such suffering; there is an impervious condition of, perhaps, the greater portion of the rectum, or of some other part of the alvine canal.

Then, again, we have hernia under its several and direful forms, cases of which present themselves to the notice of almost every practitioner, whether of a simple kind, or those of a more formidable nature. On these, however, I need not here further enlarge.

Thus I have endeavoured to point out the principal causes which give rise to obstruction in the alimentary tube. There may be a few others, as malignant or other tumours, etc., but it is not necessary that I should dwell longer on these.

DIAGNOSIS. We have already remarked that constipation is frequently constitutional as well as symptomatic. Without waiting to describe the former condition further, it will be well for us to endeavour to point out the *diagnostic* signs which appear to present themselves in the

several causes of intestinal obstruction of a more serious character; which, we have said, may be *mechanical*, or otherwise. And here considerable acumen and experience are requisite. In the former case especially, every practitioner knows the difficulty with which he has to contend, before he can in any way satisfy himself with the precise nature of the affection, or seat of the obstruction; and, after all, he is more generally left in extreme doubt, so true is the remark of Hippocrates, "*judicium difficile*." The general history of a case of this kind, the character of the symptoms, the suddenness of the attack or otherwise, connected with other circumstances, will, in some instances, enable him to draw a just conclusion; but, in other cases, or learning their history, symptoms, and the *post mortem* appearances, and consulting these with his own experience, relieves him but little of his perplexity; so that it appears there is no class of symptoms so characteristic or constant, as will enable him at all times to come to a correct diagnosis.

A scirrhus, or diseased state of the pylorus is usually distinguished by a dense, heavy, yet circumscribed pain in the right hypochondrium. Pain is experienced after each meal, accompanied with a rejection of the food which is taken; constipation, frequently of an obstinate character, invariably accompanies this form of disease. In some cases, where the parietes of the abdomen are thin, the indurated part may be felt.

In a case of intussusceptio, there is mostly considerable difficulty experienced in distinguishing its real character, so varying is it in its attacks. It is, however, generally preceded by an uneasy sensation across the umbilical region, with a dragging down sort of sensation in the intestines, and the pain, which occurs at intervals, in some instances is severe. Sometimes the affection comes on by degrees, and is accompanied with invincible constipation; or it immediately succeeds a severe attack of spasmodic diarrhoea. A gurgling noise is sometimes heard in the abdominal cavity, as if nature made an effort by the peristaltic action to remove the obstruction; and this is marked with a severe increase of pain. Frequently the patient will express himself as having his "bowels fast and tied together." There is, usually, considerable nausea and vomiting of bilious matter; this, however, at first, is not always present; but, as the case becomes aggravated, it is ever an attendant symptom, and it is not unusual to have all the characteristic features of a case of strangulated hernia present; but the absence of any tumour or hardness in the abdominal openings will at once relieve our suspicions on this point, especially when other circumstances are considered. At the onset, the state of the pulse is frequently little affected; sometimes, however, it is full and hard, with pyrexia, and the tongue is generally much coated. Tenesmus prevails without the power of defæcation.

As the symptoms continue, and no evacuations follow, the abdomen becomes considerably enlarged and resonant. The pain, which is fixed and local generally, is little increased on pressure, unless inflammatory action have commenced; during the severe paroxysms, however, if the case last some days, the patient will exhibit an occasional heavy and suppressed moan; frequently the agony is so great, that he will cry out aloud, no relief being obtained by the various postures he may adopt. The respiration, generally, is little affected. As the obstruction remains invincible, the abdomen becomes tympanitic; and, with the vomiting fæcal matter, hiccup occurs. The respiration becomes hurried and short; the pulse sinks, and cold sweats supervene, as the sure preludes of death.

Intussusceptio will be distinguished from peritonitis, enteritis, or hepatitis, by the absence of the usual symptoms of pyrexia in the one, and by the pain and tenderness in the other being much increased on pressure. In peritonitis, the patient can scarcely bear the bedclothes to come in contact with the abdomen; and the position chosen is to lie with the body bent considerably forward, the legs being drawn upwards, in order to relax as much as possible the abdo-

minal muscles. Besides, in these inflammatory affections the respiration is quick and short, and carried on as much as possible by the ribs, so as to ease the diaphragm; considerable pyrexia is always attendant; the pulse beats from 120 to 130 or more in a minute; it is generally feeble, but frequently hard and wiry. In peritonitis or enteritis there is grating of the teeth, as a sign of intense pain of which there is little intermission: whereas, in intussusception, there are intervals of fifteen or twenty minutes between the paroxysms of pain, until the symptoms become more aggravated as the case advances. The skin in pyrexia is usually hot and dry; in intussusception it is cold and moist. These, I believe, are the usual characteristics attendant upon obstruction in the intestines, arising from intussusception: but, of course, as we have remarked, they are more or less variable.

A scirrhus or constricted state of the rectum is usually preceded and accompanied by constipation, and very generally terminates in permanent obstruction of the intestines. It may, sometimes, be known by the pain which is experienced within the anus, or along the sacral and lumbar regions, increased at each evacuation, which, as the disease makes progress, seldom occurs more than once in five or six days. If the constricted portion have existed some time, we may generally form a tolerably correct diagnosis of the case, if we bear in mind other circumstances. The stools are frequently streaked with blood and mucus; and are unnatural in their shape, being more or less flattened.

As the disease advances, tenesmus is frequent, and each scanty stool now is not only streaked with blood and mucus, but discharges of matter likewise take place, when ulcerations have commenced. As there is generally no pyrexia, the pulse is little affected; the tongue is much furred but moist; there is occasionally a hectic flush on the cheeks, the countenance being little disturbed; the patient complains only of occasional pain in the abdomen, which he describes as being of a heavy and forcing character; nausea and vomiting generally, but not always, accompany these cases. The abdomen becomes enlarged and resonant, but without any preternatural heat of the skin. Pressure made by the hand does not increase the pain; enemata are mostly returned on each endeavour to throw them up the bowel. The patient at first will not appear to suffer much in health; but as no evacuations follow the means which have been adopted, an examination *per anum* becomes necessary, and if we judge from the symptoms collectively, little doubt will remain on our minds as to the nature and seat of the occlusion. If the constricted part be situated beyond the reach of the finger, the cautious introduction of moderately sized bougies will aid in forming a right conclusion. Of course, as the constriction increases, and an invincible obstruction to the passage of the fecal contents from above supervenes, the features of the case assume a far different form, and the patient ultimately dies from exhaustion.

I have stated above that organised adhesive bands will frequently occur near the caput cæci and colon. These may have existed for several years without producing much inconvenience; but, continuing to increase in substance by the addition of fresh morbid matter, they induce a constricted state of the part, which has resulted in a permanent obstruction to the passage of the feces; and here all the symptoms of internal strangulation, or spasmodic ileus, may present themselves. The attack will sometimes come on almost suddenly; the pain across the umbilicus, and in the lower part of the abdomen, will appear to be most excruciating; the patient will writhe under it, and put himself in almost every attitude, in the hope of finding some mitigation of his sufferings, and die in a few hours.

Impacted scybala, if seated in the transverse arch of the colon, may be frequently detected through the walls of the abdomen, by pressure with the hand; and, as the symptoms of obstruction become more urgent, there will be considerable enlargement above, in consequence of flatus having collected in the small intestines. When scybala are seated in the rectum, and cause obstruction, they are usually discovered by an examination *per anum*.

Cancerous and other tumours of a malignant character will sometimes form amongst the intestines, and give rise to obstruction. These, if situated in the rectum, are readily discovered by digital examination; and, if higher up, as in the cæcum, or colon, they may occasionally be felt through the abdominal parietes. However, to form our diagnosis aright, we must be guided by the symptoms which have been present throughout, as well as by the history of the case.

When the obstruction is dependent upon incarcerated or strangulated hernia, the symptoms and appearances are so well known to us all, that it is almost impossible we should be at a loss to arrive at a correct diagnosis; so that it would be a waste of time to attempt to describe these. I will therefore pass on to consider the third part of my paper, viz., the treatment demanded in each case.

TREATMENT. It is well known to every practitioner, that there are no symptoms so perplexing as those which result from a constipated condition of the intestines. It would be impossible, however, in the present essay, to do more than give a general outline of the chief causes which lead to this condition, bringing on disease, and so frequently terminating in permanent obstruction. These I have endeavoured to point out as fully as a paper like the present will allow, as well as to describe the symptoms whereby we may arrive at a just diagnosis; but, as those causes and symptoms are constantly varying, much judgment is required in the treatment; for every case of this kind is itself a subject for special study.

Without dwelling on those cases of simple constipation, which almost daily come before us, I will proceed to the treatment of those which are of a more obstinate and too commonly invincible character.

The symptoms may indicate that the passage of the alvine contents is obstructed by a distended bladder, an uterus enlarged from pregnancy, or by other causes which produce pressure upon the rectum. These cases will frequently yield to ordinary treatment; but, if the obstruction be referrible to other causes, such as spasmodic constriction, the lodgment of hard and indigestible substances, the collection of hardened feces in the colon or rectum, intussusception, or the strangulation of some portion of the intestinal tube, stricture of the rectum, or to other mechanical causes of occlusion, the result of our treatment most frequently becomes exceedingly doubtful, and on many occasions it is unavailable. This is shown to be the case, by the mortality which occurs from this class of diseases.

If the obstruction be dependent on scybala which block up the rectum, they should at once be carefully removed *digitis et aliis instrumentis*, and the bowel washed out with an injection of warm water. When the colon becomes enlarged from long and habitual costiveness, and filled with a collection of indurated feces, etc., which prevent the passage of the alvine contents from above, enemata of turpentine, or olive oil, and warm water, or linseed infusion, should be repeatedly injected through a tube carried high up the bowel. The introduction of O'Beirne's tube as far as into the colon, has been proposed, and warm water has been thrown with some force; but, in doing this, some caution is necessary, lest the bowel should be ruptured. Calomel and colocynth, and castor oil in small and repeated doses, should be given. Should the case prove obstinate, and there are severe tormina, attended with nausea and vomiting of bilious matter, hot fomentations should be applied over the abdominal region. An effervescent saline draught may be given to allay the sickness. The administration of an emetic, after the rectum has been emptied, has, in several instances, removed the obstruction, after other means had been tried in vain. If, however, inflammation threaten, the application of leeches to the abdomen, or the use of the lancet, must be resorted to. Very often a case of this kind will continue obstinate for many days, unaccompanied with inflammation.

When the obstruction arises from spasmodic colic, or intussusception in some part of the intestinal tube, our object should be the prevention of inflammation. If symptoms of an inflammatory nature show themselves, and the

pulse be full and hard, accompanied with tenderness of the abdomen, venesection should be adopted, as well as the application of leeches to the part, together with hot fomentations. Where practicable, it is advisable to place the patient in a warm bath of 95° to 100°; emollient clysters are to be administered; and five grains of chloride of mercury, combined with ten grains of the compound extract of colocynth, should be given, and followed by repeated doses of castor oil. If there are violent tormina and spasm, it will be very proper to give a full dose of opium or laudanum; the former in a pill of two grains and a half, combined with three of calomel; the latter in a dose of sixty drops, in any agreeable liquor. This plan will frequently act as a charm. In some cases of obstruction, the persisted use of strong purgatives is absolutely mischievous. If intussusceptio be suspected, half a drachm of tobacco should be infused in half a pint of warm water, and the liquor thrown up as an enema. Emetics have been recommended, and quicksilver has been given in large quantities, with the belief that by its mechanical property the volvulus would be destroyed, and the parts restored to their normal condition; but some judgment is necessary in its administration, lest the mischief be increased instead of relieved. If, however, active purgatives have been administered for several hours, and no evacuations follow, they should be discontinued, and only those of the mildest nature given.

In most cases of obstruction in the intestines, a similar plan of treatment appears to be the one best calculated to relieve the mischief in a medicinal point of view. When the obstruction does not yield to this, chloroform has been recommended; and when symptoms of a severer character supervene, which threaten to extinguish life, it becomes a question how far relief can be obtained by resorting to surgical aid. We are aware, however, there are very few cases of this character which demand operative interference, and those are indeed exceedingly difficult to distinguish.

After a judicious medical treatment has been persevered in for several days, in certain forms of obstruction, without the desired relief being obtained, and symptoms supervene, accompanied with stercoraceous vomiting, etc., are we justified in having recourse to an operation, and exploring the cavity of the peritoneum? We are convinced that the patient will die, if no other means are resorted to than those we have already adopted: shall we cut through the walls of the abdomen, search for the cause of obstruction, and endeavour to remove it? This question is a very important one, and requires much serious consideration. The fact, however, that the abdominal parietes, in consequence of intestinal obstruction resulting from some mechanical occlusion (as well as for the removal of diseased ovaries, etc.), have been cut through, when other means have failed in affording relief, and in several instances with success, might sometimes tempt us to an operation; but, unfortunately, before such a procedure can be justly determined upon, the case has generally been too far advanced. It should be remembered, moreover, that there have been instances of obstruction which have resisted the most judicious medical treatment for two or three weeks together, and the patients have, at length, recovered without an operation. On the other hand, where there was neither vomiting nor inflammation present, they have been carried off within a few hours.

In certain cases of intussusceptio and strangulation, the surgeon, by an operation, might be enabled to relieve the abnormal state in the one, and divide or break down the bands which produce constriction in the other; but, in most cases of internal strangulation, as well as in a scirrhus-contracted condition of the tube, the operation would be wholly inexpedient. It is just to observe, however, that whenever such an operation has been determined upon, it should be undertaken in a warm atmosphere; and the less manipulation is used, the better. Of course, no one would be bold or mad enough to attempt an operation of this kind without a consultation.

It is a question to be decided, whether the place of constriction be situated in the small or large intestines. After

witnessing the several volvuli amongst the small intestines, in the instance where Mr. Abernethy with such ease unfolded the intussuscepted parts, I have sometimes been tempted to inquire, in certain cases of suspected intussusceptio, etc., whether an incision through the *linea alba* might not with safety be made. We know, however, that frequently the invaginated portion, in consequence of an inflammatory process having been set up, becomes firmly adherent; thus proving that, in a case of intestinal obstruction dependent on intussusceptio, internal strangulation, or constriction from adventitious bands, the attempt to overcome the evil by a surgical operation, in the manner we have proposed, can only be looked upon as an extremely hazardous one; and the operator might even be stamped as the murderer of his patient. Indeed, the operation of gastrotomy has been severely condemned by some, amongst whom is M. Hevin, formerly a celebrated surgeon on the continent,* as being exceedingly futile. Encouraged, however, by the marked success which has attended the practice of several others, if I felt convinced that a case of obstruction was dependent on intussusceptio, or strangulation from adventitious bands of recent formation, which threatened to extinguish my patient's life; and if I had ascertained the whole history of the case, besides having apprised the patient and his friends of the grave alternative, and having received the sanction of some skilful and experienced surgeon, I doubt whether I should hesitate to explore the peritoneal cavity by an operation, with the design of restoring the abnormal condition of the tube, and thus removing the cause of obstruction. Judging from the French writings, a celebrated continental surgeon has lately operated with distinguished success in some cases of this character; and it is recorded, that two cases out of three recovered.

The great danger we have to encounter in the operation of cutting through the walls of the abdomen, in certain forms of intestinal obstruction, is the wounding, to a considerable extent, the peritoneum; but is it not warranted in the operation of strangulated hernia? in that of paracentesis abdominis? or in the extirpation of diseased ovaries? In the operation of tying the external iliac artery, we are aware, the peritoneum is carefully pushed aside, and left intact; so, in some cases of intestinal obstructions, it has been proposed to make an opening into the colon from the lumbar region, where the bowel can be reached behind the peritoneum; and here the membrane is preserved. But I much question the propriety of such an operation, if an artificial anus is intended, since, if the patient survives the operation, he really must become an object afterwards loathsome to himself and to those around him.

When the obstruction proceeds from a scirrhus-contracted condition of the rectum, we can seldom do more than adopt palliative means. The forcible introduction of clysters, or of bougies of any kind, cannot be too severely reprobated; by such practice, the bowel is likely to be ruptured, and a false passage effected.

In the treatment of incipient stricture of the rectum, the most simple yet nutritious diet should be adopted, as milk, sago, beef-tea, jellies, etc., and the bowels kept relaxed. The cautious introduction of bougies of various sizes will sometimes be of advantage to the patient, by their gentle dilatation of the constricted part. Various have been the means adopted, or proposed, for the cure, or mitigation of the disease. Desault employed flexible rolls of lint coated with some ointment, and these he gradually enlarged. Morgagni adopted a mercurial plan of treatment. But when there is complete occlusion of the rectum, thus forming a barrier to the further passage of the feces, medical and surgical treatment will generally prove equally unavailing. However, when the abdomen becomes tumid from the obstruction, with intervals of occasional severe pain, etc., hot fomentations may be applied, and enemata of various kinds, as the infusion of linseed with laudanum, etc., should be administered; but, although this plan may serve to lessen

* Recherches Historiques sur la Gastrotomie dans le cas de Volvulus, par M. Hevin.

the sufferings of our patient, he will ultimately die of starvation. The same result will occur when the disease is situated in other portions of the intestinal tube. Malignant tumours, likewise, which tend to cause an obstruction, can only be dealt with by treatment of the mildest character. Tumours of this kind, seated in the lower part of the rectum, with a broad basis, when attempted to be removed by the knife or ligature, usually terminate very unfavourably.

Should the obstruction be dependent on hernia, of course, when it is strangulated or incarcerated, the sooner reduction is effected the better. If alarming symptoms threaten, the measures which we are called upon to adopt must be prompt; the taxis, the warm bath of 95° to 100°, or the injection of a tobacco enema; or what is now preferred, the use of chloroform; each, or all of these should be employed without loss of time. Opium may be given, and venesection sometimes employed; but if these fail to allow us to return the protruded parts into the abdomen, I would, without hesitation, proceed to an operation. The operation for the relief of strangulated hernia has too frequently been considered a cruel and dangerous one. I do not, however, exactly coincide with this opinion, when the operation is *early* performed by one who knows his anatomy well: the many deaths which have followed the operation have been mainly owing to its having been too long delayed, and indeed until fatal symptoms had already commenced. I think I am borne out in this by the sad mortality resulting from cases of this kind, which have been brought into the wards of our great hospitals in London. I have been particularly struck with this: it is owing, as I have said, chiefly to the operation having been too long delayed; the cases have generally been trifled with before the sufferers are brought into the hospital. If I may be allowed to allude to my own experience, I have resolved to operate *early* in the cases which have fallen into my own hands, when other means of reduction had failed; and I am happy to say, with complete success. I am pleased to acknowledge having done so on one occasion in the presence of my friend in the chair, under circumstances too of peculiar difficulty; my patient was seventy-two years of age, and yet lives in the enjoyment of excellent health; there was a large protrusion of omentum and intestine (inguinal hernia), which had become entangled, besides which there were strong adhesions, not of recent formation. Now, if we consult the writings of the Parisian surgeons, we shall generally find that their practice is an *early* operation, and we know with what success.

Intestinal obstruction arising from an imperforate anus, or a partially impervious rectum, must be treated in the manner the case usually demands.

CASE I. I remember the case of a young man, which came under my late father's care, shortly after I had commenced my apprenticeship; but, from the long distance of time, five-and-thirty years, I am unable to do more than give a general outline of the case. The patient, a farming servant, took cold, and in a day or two afterwards complained of severe cutting pains across the umbilical region which extended downwards. Obstinate constipation ensued, and the pains occurred at intervals of every ten or fifteen minutes. Vomiting of bilious matter frequently took place. The usual plan of treatment had been pursued for some days: purgatives had been given—opiates and enemata administered; venesection was had recourse to: and fomentations were applied to the abdomen; yet no evacuations had been procured, even on the seventh day from the commencement. The pain became now more excruciating, and the general symptoms appeared more urgent. The abdomen became very resonant. Quicksilver was next given, but with no improvement. At length, it was decided to have the opinion of Dr. Alexander, then residing at Leicester. The case was concluded to be one of intussusception; and Dr. A. now directed a tablespoonful of quicksilver to be given every half-hour; adding, that this was the only chance left of saving the patient's life. At first, there was no remission of the symptoms; but, after more than seven pounds of mercury had been administered,

the obstruction gave way, and the patient's life was saved, by the bowels being well emptied.

REMARKS. The administration of quicksilver in these cases has been condemned by some. Mr. Hunter thought it might with propriety be given where the intussusception was *retrograde*; and that by the peristaltic action, the parts might become normal. However, he holds out a caution, that portions of the quicksilver may find their way between the containing and inverted bowel into the angle of reflection, and by pushing it further on, increase the disease it is intended to cure. But here we have an instance where the patient's life appears to have been saved by the use of quicksilver alone; but pushed, certainly, to an amount larger than I have found on record.

CASE II. Thomas Cluloe, a labourer, aged 54, was suddenly seized with severe gripings across the umbilicus, which, increasing, caused him to send for me. He appeared to be suffering from some severe obstruction in the intestines. There was continued urgent tenesmus, without evacuations; there were considerable fulness and resonance of the abdomen. The pain was severe at intervals, but not increased on pressure. Pulse 78, and feeble. The man had now been two days without an evacuation. I gave him calomel combined with extract of colocynth, the black draught, castor oil, etc. Enemata were administered; hot fomentations with turpentine were applied to the abdomen. No evacuations followed on the tenth day, and the symptoms becoming more urgent, with vomiting of bilious matter, I gave my patient two pounds of quicksilver in four doses, but without avail. On the fourteenth day, he took a large spoonful of *newly-fermented yeast* every half-hour; and before he had taken a pint, there was a plentiful evacuation. I have seen great benefit result in several cases of intestinal obstruction from the administration of newly-fermented yeast: this has appeared to overcome the obstruction, when other means have proved abortive.

CASE III. Miss K., a remarkably fine-looking young lady, about 23 years of age, had joined an evening party of friends. She appeared to enjoy excellent health, and exhibited all the vivacity natural to her age. After, however, she had retired to her chamber, the inmates of the house were alarmed during the night with hearing her screams. She was writhing with agony. There was intense pain over the umbilical region, which was increased on pressure. Constant nausea, without vomiting, was also attendant, as well as urgent tenesmus. Hot fomentations were applied over the abdomen; calomel combined with opium, and castor-oil were given in repeated doses; and enemata were administered, yet without any evacuations being procured, or remission of the symptoms. Leeches were applied over the abdomen, and venesection was had recourse to. Notwithstanding, however, the prompt treatment which had been adopted, the young lady's sufferings continued to increase, and she expired, in little more than twelve hours from the commencement of the attack.

As there was considerable mystery hanging about this case, as to the cause of the symptoms, their severity, and the suddenness of the attack, it was thought more satisfactory to make a *post mortem* examination. The abdomen was exceedingly tumid and resonant. On laying it open, the stomach and intestines appeared distended with flatus, and presented all the signs of incipient enteritis. The stomach felt somewhat hard, and its larger curvature was considerably discoloured. An opening made into its cavity at once explained the cause of all the symptoms during life. There was a mass of *unbroken* cherry-stones, which seemed, as it were, cemented together with other matter, completely blocking up any outlet by the pyloric portion. It was then recollected that Miss K. had eaten very heartily of some ripe cherries, with other *bonbons*, during the evening, and had foolishly neglected to cast away the stones. There was a mass of nearly a pound of these indigestible substances. It is difficult to learn whether anything more could have been done to save this lady's life; but a question suggests itself,—Would a powerful emetic have dislodged the foreign mass, had we been aware of its existence?

CASE IV. Elizabeth Barnett, a healthy-looking child, ten years of age, began to complain of great pain in her bowels, particularly at the lower part of the abdomen, on the right side. There were all the symptoms of intestinal obstruction present: obstinate constipation, with nausea, and vomiting of bilious matter. Pyrexia prevailed, the pulse being 120 and upwards. The pain at first appeared to be circumscribed; but, as the case advanced, the abdomen became exceedingly tumid, and was tender to the touch. Calomel, mixed with sugar, was given in small doses, with castor oil, etc. Leeches were applied over the seat of pain, with hot fomentations, etc.: but everything proved abortive, either to procure evacuations, or relieve the child's sufferings. She died on the third day. Permission was granted to examine the body. On reflecting back the abdominal parietes, the small intestines were found to be greatly distended with flatus, and exhibited patches of inflammation. A further search discovered that a kidney-bean had slipped into the appendix cæci: it had swollen considerably, in consequence of its locality, and caused inflammation of the appendix. This had extended to other portions of the intestines, and invincible obstruction was the direct consequence. The appendix had lost its usual curved form, from the bean having got into it as far as half its length.

REMARKS. In this case, it would appear, no medicinal treatment could be of any avail, and the diagnosis would necessarily be difficult and uncertain. The question, however, here suggests itself,—Suppose the cause of the obstruction could have been distinctly traced during life, would it have been safe, and should we have gained anything, by making an early opening through the *linea semilunaris*, and, by gentle manipulation, trying to dislodge the foreign body, and place it in the axis of the canal?

CASE V. Mr. David Ferriman, of Wymeswold, aged 45, a painter and stone engraver, having been out on business, in the month of January, 1829, called, late in the evening, on his return, at an inn for a glass of ale. He took out his purse to pay for it, and it appears that there were some loose characters sitting in the bar, who, observing Mr. F. had a sum of money in his possession, waylaid him after he had left the house. He was robbed of his money, and also his watch. The night was dark. The alarm created, however, was so great, that Mr. F. had no power to offer the slightest resistance; and such was the effect produced on his mind, that although he met two or three persons shortly afterwards, and even passed close by the residence of a magistrate, he could make no complaint. He was so confounded, that after he reached home, a length of time elapsed before he could be induced to give any account of what had happened. The shock, however, was too much,—so great as to interrupt some of the functions which are necessary for the preservation of life. There were no alvine evacuations afterwards. Intussusception had evidently taken place. There was, however, no real amount of positive suffering, except at long intervals. As the case advanced, the abdomen became exceedingly tumid, and there was occasional vomiting of bilious matter. The pulse continued steady nearly throughout: the tongue was thickly coated. Hot fomentations were repeatedly applied to the abdomen. Nearly all the list of purgatives had been tried, and quicksilver, with the administration of enemata, simple, as well as of tobacco, but without avail. The abdomen became tympanitic; hiccup supervened, with cold sweats, and death closed the scene on the fifth or sixth day. No *post mortem* examination was permitted.

CASE VI. Mr. William Peat, aged 50 years, a farmer, who resided about two miles distant, had always enjoyed excellent health. He rose as usual in the month of January, three or four years ago; and being a man of active habits, began to sweep away the snow which had fallen heavily during the night. The weather had been excessively cold, and a pond was frozen over where the cattle were wont to drink. Mr. P. was in the act of breaking the ice with a crow-bar, when he was suddenly seized with a severe attack of diarrhoea, attended with considerable

gripping. In a short time afterwards, I was summoned to attend Mr. P., and when I entered his room, he was writhing with agony. He bent his body forward; his hands were placed on the lower part of the abdomen, on the right side. He described the pain as being just above the inguinal opening, and as if his "*bowels were being torn asunder.*" The symptoms were such as usually accompany a case of strangulated hernia; but a careful examination showed that the abdominal openings were quite free. There was urgent tenesmus, attended with nausea, but without vomiting; the pulse beating about 80, and feeble. Fearing inflammation, I took away fourteen ounces of blood from the arm, gave four grains of the chloride of mercury and ten grains of extract of colocynth, with repeated doses of castor-oil; but it was clear I had to contend with an invincible obstruction in the intestinal tube. Fomentations to the abdomen were constantly applied, and enemata were administered. The severity of the symptoms and pain continued unmitigated; no evacuations took place; and the patient expired at about nine o'clock the same evening, being about thirteen hours only from the commencement of the attack.

REMARKS. No examination was here permitted after death; but the fact of the patient having risen in his usual state of good health,—the sudden, yet severe attack of diarrhoea, succeeded immediately by intense pain in the lower part of the abdomen, on the right side, and circumscribed, without the least trace of hernia, convinced me that the case was one of intussusception, or internal strangulation, certainly terminating in an extraordinarily rapid manner. That the whole of the symptoms arose from cold, if the case was one of intussusception, there appears little doubt, the patient having, on the day previous, being very thinly clad, been exposed to a bitter cold north wind. It is well known that cold will bring on diarrhoea; and, spasm ensuing, intussusception will frequently follow.

CASE VII. About thirteen or fourteen months ago, I was requested to attend on Ann Kinton, aged 44 years, and the mother of a numerous family. I found her in bed on my arrival. She complained of great pain and fulness in the abdomen. There was frequent tenesmus, but it appeared there had been no evacuation during several days past, except a very small one, which was scybalated, and effected by very hard straining, attended with great pain. I learned there had been a constipated condition of the bowels for about two years, and that defæcation had never been effected without considerable suffering, and only once in seven or eight days; that latterly each stool had been of a very flattened shape, and frequently streaked with blood. Before this woman sent for me, she had taken a large dose of Epsom salts and infusion of senna, as well as some castor oil, but without the slightest relief, since no evacuations were procured, and the pain became severe. There was now constant nausea, without vomiting. The skin was cool, and the pulse beat 73, full, yet soft; the tongue was much coated, but moist. The abdomen was very large and resonant, without tenderness on making gentle pressure. The pain in the abdominal region was not now very distressing, and only occurred at long intervals. Still there were great restlessness and uneasiness, attended with an aching sensation across the lumbar region, and extending along the course of the sacrum. I prescribed chloride of mercury, combined with extract of colocynth and croton oil, besides the black draught. The vomiting, however, became more urgent, and thinking this might arise from the croton oil, I now omitted this, and the patient was directed to take no aperient except small and repeated doses of castor oil. Enemata were repeatedly administered: and two grains of calomel, combined with one grain and a half of opium, were given at bed-time. As no evacuations had been procured on the tenth day, I wished to try the effect of a tobacco enema, and I waited some hours to watch the result. There was the usual symptom of great prostration of the vital powers produced by this enema, but nothing passed off by the bowels except what had been injected *per anum*. It was now evident that some mechanical obstruction existed; but a digital examination detected nothing.

the rectum. If there existed a constriction in this part, it was higher than the finger could reach. When a small-sized bougie was attempted to be introduced, it met with resistance about six or seven inches high. Different sized bougies were carefully tried, but with the like result,—each became coiled, if much pressure was used. The patient's friends now wished to have the opinion of Dr. J. C. Williams, of Nottingham. This gentleman saw the woman on the evening of the 21st of August, 1851; there were no very urgent symptoms. All attempts, however, to give an enema proved ineffectual; it passed no further than the constriction. On the following morning, after Dr. Williams had seen the patient, I was resolved to try the introduction of O'Beirne's tube; it, however, met with the same resistance the other instruments had done, and returned in a coiled form. When I repeated my visit in the evening of the same day, to my great surprise, the poor woman stood looking out of her window, and said, "*I am taking another look round before I go, for I am dying in health.*" She then sat up, and took some tea with her family. As Dr. Williams had seen her, she now expressed a wish to try whether any thing more could be done for her if she went to the Nottingham General Hospital, and asked me if I should object to this, and whether it would be safe for her to risk the journey, a distance of ten miles. Of course, to gratify her wish, I assented, provided she travelled in a covered conveyance, on a bed or mattress; at the same time, I assured her that little more could be done by medicine. On the following day she was no worse, and her wish was gratified by her being admitted into the Nottingham General Hospital. A consultation took place, and I believe attempts were made to pass some bougies, etc. Unexpectedly, however, on the following day, the poor woman ceased to breathe. No evacuation had been procured. Hearing of her death, I felt naturally anxious to know whether a *post mortem* examination had taken place, and if so, what were the appearances of the intestinal tube. Accordingly, I wrote to Dr. Williams, and received his reply, with an inclosed description of the morbid appearances. The following is a copy of a letter written by Joseph White, Esq., the resident surgeon of the hospital:—

"In the case of Mrs. Kinfon the principal seat of stricture was in the rectum, about seven inches from the anal extremity; a smaller amount of contraction existed lower down, though this was easily passable. The colon was ulcerated in patches throughout the greater part of its length; though most extensively in the transverse portion. The other viscera were all healthy. The stricture would with difficulty admit the point of the little finger; and the bowel immediately above was thickened and corrugated, so as to form a valve, preventing the passage of any matter downwards."

CASE VIII. Samuel Marshall, aged 60 years, a bricklayer by trade, was suddenly seized with all the severe symptoms which accompany a case of strangulated hernia. His sufferings appeared horrible. He threw himself on the floor, and rolled about in agony; then he would as quickly rise, with his hands firmly pressed on the lower part of the abdomen; but no position or place gave him the slightest relief. He never had had hernia, but had frequently felt some severe cutting pains along the abdomen. Calomel, castor oil, and calomel combined with a full dose of opium, were given. Enemata were administered; no relief, however, was obtained; the symptoms presented a darker aspect, and the man died in less than twenty hours of intense suffering. An examination after death showed a constricted condition of the intestinal tube near the caput cæcum coli. This, it appeared, had been progressing for some years past, and fresh morbid matter being continually laid down, a tough and constricted band had been formed, which gradually becoming closer, strangulation of the gut ensued.

CASE IX. A few months ago, I attended a case of intestinal obstruction, arising from internal strangulation. A young woman had for several months before complained of cutting pains across the umbilical region. When I was summoned to visit her, there was considerable nausea, accompanied with

occasional severe pain in the abdominal region, and which extended downwards. I learned that she had been confined to her bed for more than a week before I was requested to see her; she had taken castor oil of her own accord; a few days before she took the oil, she had a severe attack of diarrhoea attended with much pain. She informed me that she had frequently felt a dense pain in the lower part of the abdomen, on the right side, and that constipation had prevailed to a considerable extent. There was now considerable tenderness from the right hypochondrium downwards, but without the least tumidity of the abdomen. I could distinctly feel a circumscribed hardness nearly opposite the cæcum, or descending portion of the colon; and it was evident that the locality of the obstruction was in or near to these parts. It was, however, with the greatest difficulty that an enema pipe could be introduced up the rectum, and very little injection would pass, being quickly returned. The mildest aperients, and calomel combined with opium, were given. To attempt an operation, as suggested in another part of my paper, even if in other respects it might appear practicable, in this instance was forbidden by the symptoms. Death occurred early on the third day after I first saw the patient. A *post mortem* examination proved that a portion of the descending colon was constricted by a firm band of lymph not of recent formation, and the appendix cæci had become attached at its extremity to the descending portion of the colon, and formed a ring, through which a portion of the ileum had passed and became strangulated. In most of these cases the abdomen is considerably resonant and tympanitic, but in this instance it was perfectly flat.

Wymeswold, Leicestershire, February 1853.

THE CLIMATES OF THE WORLD, IN REFERENCE TO THEIR EFFECTS ON MAN'S GENERAL WELFARE AND DESTINY.

By T. G. HAKE, M.D., Physician to the Suffolk General Hospital.

At the present hour, when millions of human beings are leaving their homes in Europe, or contemplate doing so, for countries which may or may not possess a climate similar to that which gave them birth, it cannot fail to be perceived that many interesting inquiries are thereby laid open to science, on which none but the physiologist can enter with advantage.

If the race of man, then, in all its varieties, affords a general expression of the existing climates of the world, in reference to the circumstances which contribute to healthy organisation; if one climate maintains, while another modifies more or less the characteristics of human beings, as is undoubtedly the case, it cannot be out of season to make this investigation: With what result to his own physical conformation and moral character, and more especially to that of his descendants does man, born in a congenial climate, emigrate at random into different zones?

Having examined this subject in its many bearings, both by collating the written observations of travellers made cursorily without any immediate scientific object, and by questioning intelligent persons from our colonies, and other newly formed states, I premise with confidence that it is one which is most important and curious. To take a common example;—What a diversity of effects must obviously arise from one member of a family taking up his permanent abode in a portion of the American, and another in a part of the Australasian continent. Both regions afford climates which are called delightful and healthy; but their separate influence on the organisation of the European is already perceptible. Indeed, it has been forcibly argued that man cannot travel out of his own zone without entailing extinction on his race. Be this as it may, an inquiry into the subject of isogenetic*

* I venture to introduce this term in order to mark the distinction between zones of equal gentility of climate, and those of like temperature, or isothermal zones, both of which differ from each other, and from geographical zones, as much as the magnetic differs from the common equator.

or congenial zones is of sufficient moment, under the existing conditions and inevitable redistribution of nations, to give basis to a branch of science; nor will it be passed over without due consideration in this series of papers.

The classical ethnographer is of opinion, that the human race is essentially migratory; that while it has enjoyed the character of being so from its origin, it is in obedience to the same instinct that it persists in pursuing its migrations into lands still unsubdued or unpeopled. But if it were true originally that the human race, being of common stock, fulfilled one of its great ends in spreading itself over continents, does it follow that the physical conformation of man is calculated to endure these changes of climate indefinitely? The race of man, physiologically considered, has its limits, like animal beings generally, many species of which have disappeared, some within our own time. Granting then, that after one or more migrations a particular race has become acclimated, as the Saxon, the Dane, and the Norman in this country, is it to be supposed that further migration, beyond our isogenetic zone, is in accordance with natural laws, especially at this not early period of human history, when disease to so large an extent is hereditary, and early death so general, as to mark an epoch in man's limited career?

In answer to these inquiries it may be assumed, that the type of man's physiological condition is expansive to a great degree, and that change of character in it is not incompatible with its integrity; but that, beyond certain limits, such change as is effected by diversity of climate does hasten the fulfilment of the natural law of its extinction.

With these preliminary remarks, the subjects intended for discussion may be approached in detail.

Climate, it will be found, is intimately associated with the history of countries. The Olympic games, the Greek drama, in common with the arts both of architecture and sculpture, are in some degree due to the influence of a cloudless sky. Rome owed her exterior splendours, Italy her palaces and unrivalled frescoes, to the same southern clime; while the vivacious Frank, rejoicing in an atmosphere scarcely less pure, delights in the imitation of Athenian taste and Roman example, with their avenues, statues, and fountains. But the Englishman, enjoying equal, if not greater advantages, all of which are due to the climate of his native country, appeals neither to sun nor sky; he is content to expatiate on the luxuriant verdure of his fields and hedgerows—on the perfection of his stock—on the breed of his cattle—on the manly character of his countrymen: and for the rest, he exercises his privilege of grumbling, however unjustly, at the ever-varying weather and leaden sky, through which these unexampled benefits are maintained.

What meaning, then, is to be attached to the expression, *a good climate*, in the widest acceptation of the phrase? Though the sun of Greece may have inspired the dream of an Acropolis, and its realization; and somewhat later, but in the same spirit, may have marked out the boundaries of an eternal city on the plains of Italy,—of what avail is it, if human welfare prove not commensurate in duration with the glories of Nature? But so it is; the greatness of the South has been due to other causes than climate: it has arisen from a combination of human elements, the admixture of races having mainly contributed to the great result, the enduring monuments of which, climate alone was unable to sustain. Yet, that some climates are better suited than others to the development of man—to the formation of his genius—to the growth of his physical powers—to the production of his supplies—is scarcely to be disputed. What country or region, then, beyond all others, has proved the most congenial to man;—and in what does its geniality consist?

Excellence of climate is that quality which secures to any country its aptitude for the maintenance of intellect, strength, and health in the highest perfection, and for the rearing and growth of the supplies best adapted to the support of man. Some may, at first sight, pronounce this

definition to be too strictly economical—too exclusive of the pleasures derivable from sunshine and a perpetual spring. But who can dispute the supreme blessing of health? And when this is once admitted, it cannot but be allowed that food, one of its chief sources, must take a prominent place also among human benefits.

Nevertheless, it is highly probable that the custom of undervaluing—indeed, abusing this climate, boasts a high antiquity. King Charles the First, with true discrimination, was among those who saw the subject in its true light: he observed, that in no other country was it possible to take exercise in the open air for so many days during the year as in England. And yet it has been reserved for the nineteenth century—that epoch of our scientific agriculture, of our success in sciences, in mechanical arts, in all that has its source in the intellect and energy of man,—to discover in how great a degree all this is due to climate.

Looking to exercise then as one grand source of health, let it be considered how many fine days, or portions of fine days, occur in all parts of England, however diversified, during the year. To the advantage our temperate climate thus affords, are attributable the vigour and symmetry of the men, and the corresponding beauty and freshness of our women. What other country boasts its pedestrians, who have accomplished the feat of walking over a thousand miles in a thousand hours? Where else are we to look for a race of prize-fighters like that which, through moral, not physical influences, is now disappearing? To descend in the scale, to what but to the climate of this country is the perfection of the horse attributable; and not of the horse only, but every other kind of animal?

As a grazing and agricultural country, England can scarcely be surpassed; but it is unnecessary to do more than allude to the produce of her soil, whether vegetable or animal. If the superior excellence of our stock is attributable in the first instance to breed, no other influence than the climate could have perpetuated it; for the same stock, imported into less favourable regions, is known to deteriorate rapidly.

This utilitarian view may appear novel to those who have been in the habit of associating the spontaneous productions of the earth, and a perennial spring, with all that is desirable in climate,—who, unaccustomed to the details of science, fall readily into the luxurious dream of the poet, in crediting the idea that the man of temperate zones can with impunity settle down within intertropical countries. But the true tests of a climate are seen in the quality of its productions; the constitution and temperament of the people living under it; the age to which they attain; and other circumstances of a like character, to which reference will be hereafter made.

This country owes its productiveness to the somewhat equable fall of rain which occurs throughout the seasons; to the moisture and warmth preserved to the land by a clouded atmosphere, which, by preventing a radiation of heat from the surface, tends materially to neutralise the effects which would else accrue from a high latitude. But these circumstances alone, while they might preserve it from becoming ice-bound during winter, like other countries of the same, and of still more southern latitudes, are not sufficient in themselves to create the truly temperate climate we inhabit; other causes, of a most admirable and unique description, are to be looked to, not only in characterizing our zone, but in extending its geographical boundary over a great part of Europe.

A lake of warm water, having a maximum temperature of 86° Fahr. in the Strait of Florida, stretches across the Atlantic, from Cape Hatteras to the Azores; it greatest breadth being 120 miles, and its entire extent equal to that of the Mediterranean Sea. The origin of this tepid lake, whose waters are directed ultimately to our coast, and the western shores of Europe, is the Gulf of Mexico—an enormous cauldron, measuring one thousand miles in length, and seven hundred in breadth; having above it a tropical sun, which maintains a very high temperature in its waters.

From this great sea, both the name and source of the Gulf Stream are derived. After passing between Cuba and Florida, and taking the direction of the American coast, it turns eastward, preserving a mean velocity, from the commencement of its course to the Azores, of 38 miles a day; having a temperature of about 9° Fahr. above that of the surrounding ocean in the Strait of Florida, which decreases so gradually in its passage to the east, as to have lost only 5° Fahr. Opposite the south bank of Newfoundland, a distance of 1,300 miles, it still retains a heat of 8° or 10° above that of the adjacent seas, communicating its temperature to the superincumbent atmosphere.

The warmth diffused over the Atlantic Ocean by this means would be sufficient—such is the calculation—to raise the entire column of air covering France and the British Isles, on a winter day, from freezing point to summer heat—a fact which accounts for the comparative absence of ice in the North seas, and affords the true explanation of the mildness of our climate, and that of adjacent countries.

But, while its influence, by means of the atmosphere, thus affects a large extent of climate, the Gulf Stream itself washes our western shores. The waters of the Atlantic are still warm as they wash the coasts of Connaught, while their effect is perceptible along the shores of Norway, and to the very borders of the Arctic Ocean.

And lastly, among the tributaries of our temperate climate, is the south-west current of air, which is the prevalent wind of the northern hemisphere. Its gusts occupy the track of the Gulf Stream. They waft the warm moist air, arising from the contact and evaporation of its waters, over the coasts of Western Europe; they are felt in the same warm fitful gusts, from Cape Finisterre to the North Cape, as in the Atlantic, penetrating into the Baltic, and reaching to the Russian plains. It is the influence of this current which gives to the western coasts of these islands, from Cornwall to the Hebrides, almost the same isothermal line.

Bury St. Edmunds, Suffolk, January 1853.

CASES OCCURRING IN THE MEDICAL PRACTICE OF THE SUSSEX COUNTY HOSPITAL DURING THE YEARS 1849, 1850, AND 1851; WITH REMARKS.

By G. S. JENKS, M.D., one of the Physicians to that Institution.

(Concluded from p. 104 of last number.)

DISEASES OF THE HEART AND BLOOD-VESSELS.

In 1849, a case of very extensive disease of the heart was admitted, accompanied with distressing orthopnoea and oedema of the lungs. The man survived only two days. In early life, he had had acute rheumatism, afterwards chorea; and, five years before admission, he had undergone another severe attack of rheumatic fever.

Autopsy. The sternum was observed to be prominent. Old adhesions of the pleurae of the bases of the lungs to the diaphragm were found. Serous effusion had taken place on both sides; nearly a quart on the right, and about a pint on the left. The lungs were oedematous throughout, constituting the serous apoplexy of the lungs of authors. The heart was very large; the pericardium universally adherent. The right side of the heart was healthy, except some fatty degeneration at the apex of the ventricle. On the left side, there was great excentric hypertrophy. The mitral valve was thickened and rigid. The aortic valves were also much thickened and rigid, and so bound down as to have admitted of regurgitation. The endocardium presented a good-sized white patch just below the aortic valves. The abdominal viscera were healthy. The head was not examined.

In 1850, the following cases occurred:—

CASE. Esther Cain, aged 21, after a tedious and imperfect recovery from acute rheumatism, was admitted in an anemic state; whether as a result of that disease, or of the suppression of the catamenia, is doubtful. There was disease

of the mitral valve, indicated by a loud, harsh murmur. The albuminous state of the urine led us to suspect also disease of the kidney. She died from anasarca and bronchitis.

Autopsy. Fluid was found both in the pleural and peritoneal sacs. The lungs were oedematous. There was an adherent pericardium, easily separable in the front and at the apex. The heart was large and flabby. Attached to the free edges of the mitral valve, were some wart-like excrescences, apparently not of long standing. The kidneys were large, pale, and firm; the capsules peeled off easily, disclosing the parenchyma, intersected by reddish streaks, giving it a mottled appearance. The liver was healthy.

CASE. Benjamin Emery, aged 67, had been ill for six weeks. He suffered from dyspnoea, palpitation, pain in the right arm, together with pain in the hepatic region, and much oppression in both hypochondria. The countenance was anxious; the pulse jerking and resisting. There was a musical murmur with the second sound of the heart. It was not agreed what this proceeded from; but I suspect there was some aortic regurgitation, from the character of the pulse. Under the use of blue pill with squills and digitalis, and a diuretic draught, the congestion of the liver and spleen was removed, and the dyspnoea greatly relieved.

Two girls, of the respective ages of 16 and 20, were under treatment for disease of the mitral valve, produced by acute rheumatism. Both suffered from dyspnoea and palpitation; and in both the heart was enlarged. They left the hospital much relieved. The younger one died, I am told, not long since, in the country.

I cannot help here reverting to the fact, so often presenting itself, of very young subjects, especially females, being affected with disease of the heart as a result of acute rheumatism. We have here three bad examples; and we shall find that, out of three cases of acute rheumatism admitted in 1850, two—one a girl of 18, the other a youth of 20—had symptoms of endocarditis; while a man of 46 had no cardiac symptoms whatever.

In 1851, a case of hypertrophy in a woman aged 51, without signs of valvular disease, was admitted. Palpitation was constant, but under exertion it became vehement and distressing. There was a whizzing sound with the pulse, high up beneath the sternum, which made me suspect dilatation of the arch of the aorta.

Another case, in a girl aged 13, was of a very serious character. It had been originally brought on by a severe attack of acute rheumatism. There was a loud endocardial murmur at the base. The heart was enlarged. Pain, palpitation, and dyspnoea, were induced by exertion.

DISEASES OF THE ORGANS OF DIGESTION.

GASTRO-ENTERITIS. A case of this description, admitted in the year 1849, has been already described under the head of tubercular diseases.

In 1850, a case of gastro-enteritis, with severe and protracted diarrhoea, in a scrofulous female, aged 28, terminated fatally. An examination of the body was not permitted. From the history and concomitant symptoms, there was reason to regard this case as one of intestinal tuberculosis.

DYSPEPSIA. In 1851, twenty-one cases were admitted under this head; fifteen occurring in females. In some instances, the symptoms exhibited a sub-inflammatory character. There were total anorexia, nausea, a dry red tongue and fauces, a sense of heat internally, and diarrhoea or constipation, with epigastric or abdominal tenderness. These cases were relieved by the application of leeches to the seat of tenderness or pain, followed by blisters. Effervescing draughts with hydrocyanic acid, and cold acidulated drinks or ice, are useful. When the inflammatory symptoms are subdued, mild mercurials and purgatives restore the healthy action of the secreting and excreting organs; and due attention to diet completes the cure.

Dyspepsia with gastrodynia and pyrosis is common. Pain in the stomach after taking food, in women of a leucoplegmatic temperament, with or without leucorrhoea as a

concurrent affection, is, with few exceptions, soon relieved by bismuth. I usually prescribe a powder with from five to ten grains of nitrate of bismuth, ten or fifteen grains of carbonate of magnesia, and three or four grains of compound powder of kino. The bismuth, in these non-inflammatory cases, appears to have the effect of freeing the stomach from its morbid sensibility, and of restoring its normal action. Emetics are often of great use. When leucorrhœa exists to any extent, the infusion of quassia, with sulphate of zinc, is of good service. Pyrosis, in subjects beyond the middle period of life, or of advanced age, should be regarded with suspicion. It is often connected with organic lesions.

HÆMATEMESIS. A case of hæmatemesis, which occurred in 1851, deserves mention on two accounts: first, by reason of the great loss of blood, which nearly extinguished life; and next, on account of the effect of remedies.

CASE. — Sibney, aged 42, a nurse in a family, was admitted May 25th. Five years ago, she was ill seven weeks with vomiting and severe epigastric pain, supposed to indicate disease of the liver. About four months since, she was seized with pain at the pit of the stomach, followed by vomiting of blood to the extent of a pint and a half, as reported; and had several fainting fits in consequence. This attack was succeeded by a weekly discharge of blood from piles, which greatly reduced her strength. On the day of her admission, May 25th, she had suffered a great loss of blood by vomiting. Her bowels having been obstinately confined for some time, the house-surgeon's first care was to remove this impediment. Next day, gallic and sulphuric acids were ordered, with ice and iced drinks, etc. In the evening, two drachms of oleum terebinthinæ were given.

May 27th. Much the same. The following draught was ordered:—*R. Plumbi diacetatis gr. ij; aceti destillati 3j; aquæ dest. 3xj. Fiat haustus 2dis vel 4tis horis sumendus.* In the evening, the vomiting of blood continuing, she was for two hours in a state of extreme syncope, requiring wine and ammonia, and the application of hot sinapisms to the epigastrium, chest, and extremities. When she had somewhat recovered, another dose of turpentine was administered.

May 28th. Some blood was still vomited, though less copiously. Her exhaustion was extreme. Wine, and the best nourishment she could take, were ordered; and the following draught was prescribed:—*R. Olei terebinthinæ ℥x, ex ovi vitello; tinct. matico 3ss; aquæ pimentæ 3iss. M. Fiat haustus 3tiâ quâque horâ sumendus.* A blister was applied to the epigastrium.

May 29th. No return of hæmorrhage had taken place since last report, which, indeed, was the last time it occurred. She remained in hospital till July 9th, when she was discharged convalescent.

The quantity of blood lost by this woman must have amounted to several pints. There were no evident signs of hepatic disease; but, as blood had been discharged by the hæmorrhoidal vessels, as well as by the stomach, some obstruction of the vena portæ probably existed. Are we to attribute the suppression of the hæmorrhage to the matico? I have not much experience of the effect of this remedy administered internally.

CHRONIC VOMITING. A very obstinate case of chronic vomiting occurred in a young woman, a cook, aged 26. She had suffered for some years with heartburn, pyrosis, and gastrodynia, now and then attended with obstinate vomiting, for which she had been in a London hospital. She was admitted December 17th, having already been ill three weeks. Her appetite was good, but she vomited nearly the whole of her food (without much nausea) in a semi-digested state, mixed with mucus, sometimes with bile, and now and then with some blackish matter. The catamenia were regular; the tongue pale and flabby; the bowels were moved with difficulty, even by the most active purgatives. She was not otherwise ill. She was under treatment for two months. Effervescing draughts with hydrocyanic acid, ice, creasote, bismuth, opium, dilute sulphuric acid with sulphate of

magnesia and infusion of hops, strong purgatives, and enemas, failed in checking the vomiting. The only thing which relieved her, and effectually stopped the vomiting, was a pill with seven grains of Barbadoes aloes and one minim of undiluted sulphuric acid, taken once or twice a day. This opened the bowels freely and regularly. She was able, while taking it, to retain all her food, and became plump and fat.

INTESTINAL OBSTRUCTION. The following case, admitted in 1850, was interesting in many respects:—

CASE. Eliz. Stagle, aged 61, of a corpulent habit, was admitted March 30th. Her illness began a month before admission. At first, she was seized with severe pain in the bowels, vomiting, and obstinate constipation. By the report of the medical attendant, stercoraceous vomiting ensued. At length, however, the bowels were relieved; but sickness, pain, and great distension from flatulence, remained. She was nearly eight weeks in hospital, which, added to the time she was under treatment out of the house, made the duration of her illness little short of twelve weeks. Notwithstanding the evidence of very serious and obstinate obstruction of the bowels at the commencement of the attack, she suffered from uncontrollable diarrhœa all the while she was in hospital. The distension from flatulence for some time was enormous, but at length seemed to yield to large doses of camphor. She was in constant pain, and at no time could bear pressure in the left iliac region without complaint. She had a return of stercoraceous vomiting in the last week of her existence; the diarrhœa persisting. An erysipelatous inflammation of the mouth and fauces came on, with sloughing of the soft palate. She died May 22nd.

Autopsy. On examining the intestines, the colon, just above the sigmoid flexure, was found firmly agglutinated to the ileum. Around the colon was a thickened mass, which on section appeared to be composed of distinct collections of soft yellow matter. Within the colon were displayed, from above downwards, large ragged ulcers; the mucous membrane being destroyed to a great extent. At the point of agglutination to the ileum, were many fistulous passages; the proper canal of the intestines seeming nearly obliterated. One of these ragged, fistulous openings, larger than the rest, ran from the cavity of the colon into that of the ileum. Below this, the mucous membrane of the colon was healthy. The mucous membrane of the ileum was thickly set with small round ulcers on both sides of the perforation. There were also fatty liver, diseased kidneys, and a fibrous tumour of the uterus.

DISEASES OF THE URINARY ORGANS.

ALBUMINURIA. In 1849, two cases occurred, both in women.

CASE. Catharine Turrell, aged 18, was admitted on Jan. 31st. About two months before, she had been discharged from the hospital, having been eight weeks under treatment for amenorrhœa. She was rather fat, and of a florid complexion. The catamenia had not appeared for five weeks, and then very sparingly. Her chief complaint now was of severe pain in the loins, which impeded her movements. There was much tenderness on pressure on each side of the spine, in the region of the kidneys. The pulse was of moderate frequency and strength; the tongue clean; the bowels open. She passed a large quantity of pale urine, which on examination was acid, of specific gravity 1·010, and abundantly albuminous. The pain of the back was greatly relieved by cupping. Towards the end of February, the urine was less abundant, of specific gravity 1·020, but still albuminous as before. Anasarca of the lower extremities now first appeared. About the middle of March, the abdomen began to enlarge. The urine became thick and muddy, from a copious deposit of the lithates. The specific gravity rose to 1·026, at which point it remained till the middle of April, when it fell to 1·015, and afterwards, in July, to 1·005, without any remarkable increase in quantity. The anasarca went on increasing till it had invaded the cellular tissue of the loins and lower part of the abdomen.

It became necessary to puncture the legs and thighs, to prevent cracks and ulcerations of the over distended skin. In the month of June, fluctuation was very evident in the abdomen. About the end of July, profuse diarrhoea set in, which, though restrained and moderated by remedies, was never wholly suppressed. The mouth became very sore from aphthae. The dropsical symptoms gradually but wholly disappeared at least ten days before death; the serous exudation process having been transferred to the bowels. She died from exhaustion, Sep. 20th.

Autopsy. The head was not examined. The right pleura had several old adhesions. The apices of both lungs presented several tubercular deposits. The heart was small, but healthy. The great omentum was adherent at each ring. The mucous membrane of the intestines had several patches of intense congestion, but no ulcerations. The liver had undergone fatty degeneration. Both kidneys were very much enlarged; their structure was much confused with a whitish deposit. Numerous stellate veins were observed on their surfaces. A scrofulous abscess was found in the fundus of the uterus. The left ovary was enlarged, adhered to the uterus, and contained scrofulous matter. The state of the right ovary was not noted; but my impression is, that it also adhered to the uterus, and had undergone similar disorganisation to the left one. Enough, however, was found to explain the persistent amenorrhoea.

This case of albuminuria nearly corresponds to Rokitsansky's third form of Bright's disease, which is frequently fatal; but it will perhaps occur, that there was no proportionate relation between the changes of structure in the kidney and the great amount of albuminuria and other morbid processes. But, in fact, the renal change of structure is not the cause of *all* the morbid states, nor even a measure of their intensity. Rokitsansky, Walshe, and others, look upon Bright's disease as primarily a disease of the blood, the anomalous condition of which fluid has a peculiar relation to the kidney, and is followed by the secondary and visible disorganisation of the renal tissue. As the deposition goes on increasing in the kidneys, the excretory function of those organs becomes partly mechanically and partly dynamically interfered with; and hence the blood acquires a secondary morbid crasis. Rokitsansky thinks that albuminuria consists in a disturbance of the catalytic function of the kidney, arising from the homologous infiltration of the renal tissue. Albumen is in part deposited in the channels of the tubuli themselves. Albuminuria and granular kidney, however, are not necessarily associated; for the former may exist without the latter.

Regarding Bright's disease as having its origin in the blood, it may be asked why it affects the kidney? This question will admit of an answer, probably, when we can explain why tubercle is chiefly attracted to the lungs, cancer to the mamma and uterus, gout and rheumatism to the joints. This primary morbid condition of the blood, whatever it may be, there is little doubt, is generated in the body, and, like the diseases just mentioned, arises from some constitutional predisposition to these imperfect organic processes, without which none of the supposed causes of Bright's disease would produce it.*

The peculiarities of the blood in Bright's disease, as ascertained by analysis, are abundant serum of low specific gravity, excess of fat, excess of urea, and deficiency of albumen; but they are probably secondary. Rokitsansky thinks that the nature of the renal affection in this disease consists of an inflammatory process, which proceeds from a stage of hyperæmia to one of stasis, and then gives rise to the peculiar product which accumulates in and alters the appearance and structure of the kidney. It is sometimes acute, but generally chronic, with occasional exacerbations. The granulations are the Malpighian bodies and urinary tubuli charged with the above-named product.†

* Some pathologists, however, of high authority in our own country, as Drs. Owen Rees, Todd, and G. Johnson, are of opinion that Bright's disease is a fatty degeneration of the kidneys.

† An excellent monograph on the nature and treatment of Bright's disease was published by Frerichs in 1861.

The treatment of this case was directed, in the first instance, to subdue the acute symptoms, by moderate cupping, purgatives, diaphoretics, the vapour bath, etc. In the chronic stage, recourse was had to various preparations of iron, diuretics, hydragogue cathartics, etc. At length, the diarrhoea, and the extreme debility thereby induced, demanded all the assistance of art, in order that we might relieve, since we could not cure our patient.

CASE. The other case of albuminuria occurred in a woman, 31 years of age, unmarried, and following the occupation of a nurse. She said she had been long subject to giddiness and shortness of breath, with much wheezing, but no cough. Two days before admission, she was seized, while blowing her nose, with violent pain in the head, which went on with increasing intensity, and formed her chief complaint. She had vomited several times, and felt constant nausea. Before admission, she had taken calomel and purgative medicine, and leeches had been applied behind the left ear. Pulse irregular; respiration asthmatic and feeble. Sibilus was general on both sides; but the chest sounded well on percussion. She had abundant leucorrhœa. The urine was highly albuminous. A blister was applied to the nucha, and a draught, with digitalis, squills, and decoctum scoparii comp. was ordered every fourth hour. The next day, the digitalis was omitted, on account of her complaining of great faintness. On the 20th December, six days after admission, the headache was much better, but she complained of severe pain in the loins, and could not bear pressure. She was cupped to six oz., with relief. The following day, a seton was inserted in the nape of the neck.

Dec. 27th. The head and back gave very little pain. The leucorrhœa had ceased. The urine still albuminous in the same degree. Pulse 80, regular. Respiration free.

This woman improved in all respects save the state of the renal secretion, which continued to throw down much albumen, on the application of the usual tests. The seton appeared beneficial, and the diuretics, which acted most beneficially, relieved the chest. She was discharged free from complaint; but albumen was still found in the urine.

In 1850, the following case deserves a detailed notice:—

CASE. Maria Hunt, aged 30, much emaciated, subject to hectic fever, with night sweats, had been ill a year. She suffered severe attacks of pain in the region of the left kidney, passing downwards towards the bladder; and had pain in making water. There was a discharge of pus with the urine. Under the use of the pareira brava and creasote, she gained flesh and strength, and was much relieved. She left the house at her own desire, when there was very little purulent deposit in the urine. Subsequently, while taking balsam of copaiba, a measly-looking rash broke out upon her. She said she had had measles. After this, an attack of pneumonia of the upper lobe of the right lung, of a low, asthenic character, with profuse expectoration of a dark, thin, red matter, not foetid, set in. She quickly sank, and was delirious the day before death.

Autopsy. The left lung was free from adhesions, and contained a few tubercles. The right lung was generally adherent, and the apex was crushed and broken down in the attempt to disengage it. The upper portion of the superior lobe was infiltrated with a dirty, reddish fluid, which exhaled a foetid odour, so that Dr. Ormerod, who made the examination, was of opinion that the disease had proceeded to a gangrenous termination. The lower portion of the same lobe was a greyish, soft, friable mass, yielding some puriform matter when squeezed. The whole lobe contained miliary and chalky tubercles. The right kidney had lost its natural structure, and consisted merely of several sacculi containing a thickish, white, chalky-looking fluid. The ureter was obliterated. The left kidney was large, flabby, with a softened, tubercular deposit at the upper part; while the lower was occupied by a large scrofulous abscess, communicating with the pelvis, which contained some purulent matter. The other abdominal organs were healthy.

In 1851, two cases of albuminuria came under notice.

CASE. A farm labourer, Stephen Wheatley, aged 29, was ad-

mitted in March. He looked pale and bloated, and puffy about the under eye-lids. He was anasarcaous, and had a cough, with difficulty of breathing. There was dulness on percussing both sides of the chest, and abundant fine crepitation arising from oedema of the lungs. The heart-sounds were feeble, but natural. The liver was enlarged. Six months ago, he caught an ague, which only recently had left him. It returned soon after admission, with a quartan type, but was checked after the third paroxysm. The urine was copious and pale, slightly acid, of specific gravity 1.011, and highly albuminous. He took the potassio-tartrate of iron, with bitartrate of potash, every morning. Quinine was prescribed for the ague. Under this treatment, the anasarca was removed, and the respiration rendered easy. He was discharged April 30th, free from cough, dyspnoea, or dropsical symptoms, feeling, as he said, quite well. The urine, when last examined, was of specific gravity 1.018, and much less albuminous.

CASE. Another farm labourer, James Tidy, aged 34, was admitted, with a bloated countenance and puffy eyelids. The parotid and submaxillary glands were swelled. The ankles were oedematous. There was tenderness of the epigastrium and right hypochondrium. His health had been failing for two years. Latterly, he had suffered from palpitations, and a sense of fluttering at the epigastrium. No organic lesion of the heart was manifested. The urine was very albuminous; specific gravity, 1.014. The potassio-tartrate of iron, with the bitartrate of potash, was also prescribed for this man. In the course of a month, he felt so much better, that he returned home. The urine was nearly free from albumen, and the specific gravity had risen to 1.021.

DIABETES. In 1850, two cases of diabetes mellitus came under treatment, with the result of greatly reducing the quantity of urine, and maintaining a correspondence between it and the quantity of liquid taken as drink; so far improving the condition of both patients: but no other change was effected, the saccharine property of the urine remaining unaltered.

In 1851, two cases were admitted. Disulphate of quinine with alum, liquor potassæ arsenitis, and carbonate of ammonia, the last in as large doses as could well be swallowed, were tried. They all moderated the diuresis; but the carbonate of ammonia produced the most decided effect.

DISTENSION OF THE BLADDER. A woman, aged 37, was admitted in the year 1849, six weeks after confinement, with a tumour of the abdomen, resembling the gravid uterus at about the fifth or sixth month of pregnancy. The account she gave of herself was, that the size of the abdomen was not much diminished after parturition. She nursed her child for a fortnight, when her milk left her. A month after her confinement, she was attacked with severe headache, nausea, and vomiting; all which symptoms continued unintermittingly, and with increasing violence, up to the time of her admission into hospital. As there was frequent and difficult micturition, and no enlargement of the uterus could be detected on examination *per vaginam*, Mr. Hodgson passed a catheter, when a large quantity of urine was drawn off, and the tumour wholly disappeared. It was at least a month before the bladder recovered its tone; the urine being alkaline and bloody, and having a muco-purulent sediment.

I have narrated this case on account of the instructive lesson it conveys. The patient had been sent to the hospital from the country, under the belief that she laboured under some organic disease of the uterus—an error into which others might have fallen, who, in like manner, had trusted to external appearances only.

DISEASES OF THE UTERINE ORGANS.

AMENORRHOEA. In 1849, there was a girl, aged 19, who had never menstruated; but for three or four monthly periods there had been decided attacks of fever, lasting about three days. These ceased under treatment, but the catamenia did not appear.

In 1851, seven cases were admitted under the head of amenorrhoea and chlorosis. I have clubbed these affections together, for they are so nearly allied, as to be frequently no more than comparative degrees of the same malady. Amenorrhoea, it is true, is sometimes a mere accident, or depends on a temporary disorder of health; in which case, the function returns when the cause of its arrest is removed. There are cases, again, in which the menses have never appeared at all. Two of the cases referred to were of this kind, occurring in young women, aged respectively 18 and 19 years. In these cases, there is probably some defective development of the sexual organs. I have not met with chlorosis in these subjects. Some pathologists regard chlorosis as primarily a blood-disease, and amenorrhoea merely as a consequence; but I question whether there is not a more intimate relation between the two affections, than a *plus* or *minus* quantity of red corpuscles in the blood. Anæmia often occurs in women, without suppression of the catamenia; and were chlorosis merely a blood-disease, uninfluenced by menstruation, it should occur in males as often as in females. All these cases, complicated with some defect in the healthy crasis of the blood, are cured by preparations of steel. Those which depend on plethora or other causes require corresponding treatment.

RHEUMATIC AFFECTIONS.

LUMBAGO and SCIATICA. A good number of cases were admitted in 1850 and 1851. They yielded almost entirely to absolute rest and topical treatment. Cupping, when the symptoms are acute and recent, afterwards blisters, and a few passes of the hot iron, were found of great service. This is nearly reviving the practice of Cotugno.

SUBACUTE and CHRONIC RHEUMATISM. With regard to the internal treatment, much depends on the constitution of the individual; hence no single remedy will suit all cases. In old cases, and scrofulous habits, cod-liver oil is useful. When there is a suspicion of a syphilitic taint, alternative doses of mercury and iodide of potassium succeed; but in ordinary cases, purgatives, vapour-baths, alkalies, diuretics, and other eliminatives, produce good results. Cupping, blisters, and the hot iron, are also useful external remedies.

CUTANEOUS DISEASES.

PSORIASIS. In 1849, a girl, aged 12, had psoriasis affecting the greater part of the body. Small doses of liquor potassæ arsenitis were given, and she was discharged cured in February 1850, the skin having recovered its natural colour.

SYCOSIS MENTI. In 1850, there was a severe case. In the treatment of this affection, I commonly direct slight scarifications to be made in the inflamed bases of the tubercles: a practice which I have seen adopted in Rome in this disease, and also in bad cases of tinea capitis, with excellent effect.

LEPRA. In 1851, liquor potassæ arsenitis was found beneficial in two cases.

ECZEMA. A man, aged 56, had an eczematous eruption, affecting both legs, with much swelling. The complaint soon yielded to Plummer's pill, and liquor potassæ in decoction of sarsaparilla. Eczema in elderly persons is often a troublesome complaint, and difficult of cure: but one of the most troublesome examples of it occurred in a boy aged 15. The eruption chiefly affected the extremities, particularly the hands, but the trunk did not escape. The subject was robust and healthy; the potash with sarsaparilla failed; the liquor potassæ arsenitis with dilute precipitate ointment succeeded. He was discharged apparently well, April 23rd, having been in hospital fifty-six days; but he subsequently applied as an out patient, suffering from the same complaint.

ERYTHEMA NODOSUM occurred in two females, complicated with rheumatism in one case, and with irregular menstruation in both. Feverish symptoms attended the eruption in both instances.

ACCIDENTAL POISONING WITH CORROSIVE SUBLIMATE.

A case of this kind was brought to the hospital.

it presented some circumstances worthy of notice, I will relate it.

CASE. Henry Godley, aged 23, presented himself, June 17th, with face flushed and eyes suffused, and appeared in a state of great agitation. He breathed with difficulty, and complained of intense burning pain in the throat and in the pit of the stomach. He had inquired, it seems, at a chemist's for something to destroy vermin, with which his person was infested. Now, either not receiving sufficiently clear instructions, or mistaking them, he swallowed a drachm of corrosive sublimate dissolved in half a pint of water, instead of using it as a lotion. He vomited immediately, and probably discharged the greater part of the poison; but was instantly seized with the burning pain above mentioned. Mr. Penfold made him quickly swallow the white of eggs, and copious draughts of milk. Leeches were applied to the epigastrium; and, later, a dose of castor-oil was administered. 18th. The oil had acted: but nothing unusual was observed in the stools. He still suffered internal pain, and complained of soreness of the mouth and throat. The tongue was red; the gums rather spongy; the lips were dry, red, and swollen. Same treatment. 19th. He was feverish, and thirsty; complained of more pain, and burning internally. The epigastrium was tender. More leeches were ordered, and saline effervescing draughts were prescribed. On the 25th he was discharged quite well.

This case exhibits a fair example of the irritant effects of mercurial poisoning. It was a remarkable circumstance that the effects of so large a dose of the poison should have been confined to the mouth, œsophagus, and stomach. There was no diarrhoea, nor any other sign of intestinal irritation; no difficulty of passing water; no ptialism. It may be presumed that this soluble salt of mercury had been converted into a comparatively innocuous compound by the antidotes given for that purpose, and, therefore, those textures only with which it came into immediate contact, suffered from its corrosive action; very little probably having been carried into the circulation.

The above is a condensed report of 490 cases of disease, treated in hospital during the three years mentioned. The deaths amounted to 18, being in the ratio of about 3·6 per cent. They occurred as follows:—Typhoid fever complicated with hæmorrhage and abscess, 2; Meningitis, 3; Sanguineous apoplexy, 1; Abscess of the brain, 1; Delirium tremens and diseased liver, 1; Cancer, 1; Phthisis, 5; Bright's disease, 2; Hypertrophy and valvular disease of the heart, 1; Obstruction and ulceration of the bowels, 1.

Brighton, January 1853.

ON THE MEDICO-LEGAL SIGNIFICATION OF CLOSURE OF THE FORAMEN OVALE.

By JOHN C. BLOXAM, Esq.

THE perusal of an article in the ASSOCIATION JOURNAL of the 4th current, by Dr. C. Kidd, on the Medico-legal Signification of Closure of the Foramen Ovale, induces me to offer a few remarks on the same subject.

The formation of the foramen ovale, and the mode of its closure, have often appeared to me to be misunderstood. The foramen is not formed like a hole punched out of a piece of paper, and is not, except as the consequence of disease, subject to have a layer of lymph thrown across it. The formation of the foramen resembles a slit cut through a piece of paper, which admits of being held in such a position as to form an oval-shaped opening; but it also admits of being held in such a position as effectually to close this aperture. In the new-born infant, the structures round the foramen are, also, so formed that the two lips of the opening admit readily of being made to overlap one another. Now, prior to inspiration, I apprehend that the parts remain in a position which preserves the patency of the foramen, but upon an effectual inspiration being made, the altered relative position of the different parts of the heart, (caused

partly by the distension of the right ventricle, through the expanding influence of the act of inspiration, whereby it becomes filled with blood), as well as the altered position of the whole organ, through the descent of the diaphragm, causes the opening to be, practically and functionally, completely and instantaneously obliterated, in consequence of the two lips of the opening being brought into the same plane. The lips, when thus brought into contact, and overlapping one another, gradually unite; but the opening is effectually closed without such union.

It is very easy for an observer to be deceived as to the patency of the foramen, especially when the examination is made with the heart *in situ*. The foramen may have the appearance of being completely obliterated, and yet, upon some accidental movement of the parts, the two lips may be made to slide upon one another, so as to leave a small opening between them; or they may be brought into different planes, and the opening thus be restored to its original dimensions. From my own observations, I have no doubt that the foramen may, in some cases at least, be restored to its original dimensions some considerable time after respiration has been thoroughly established.

Newport, Isle of Wight, February 1853.

ON MEDICAL METEOROLOGY.

By T. MOFFAT, M.D., F.R.A.S.

FOR some years I have kept a register of daily observations of the barometer and other meteorological instruments, the amount of atmospheric ozone, and the dates of the commencement of diseases, as they occurred; and from what I have observed, I readily concur with the opinion of Dr. Addison, as stated in his article on "Requirements in Meteorological Tables", that the changes of the weather are prejudicial to health, and that mean readings of meteorological instruments do not show the connexion between the prevalence of diseases and atmospheric conditions. I feel confident that meteorological tables cannot be of any value, in a medical sense, unless they are formed of daily observations, and include the date of commencement of individual diseases; for even a slight increase or decrease in the readings of the barometer, with a change in the direction of the wind, leads to an increase in the number of cases, or to their entire removal. I have observed that the following diseases,—viz., apoplexy, epilepsy, infantile convulsions, and sudden deaths, premature labour, menorrhagia, uterine pains, diarrhoea with sickness, and with or without cramps, toothache, neuralgia, etc.,—seldom occur without decrease of the readings of the barometer and changes of weather; that snow and hail showers are, all but invariably, accompanied by seizures of apoplexy, epilepsy, and sudden deaths; and that ozone never appears without a decrease in the readings of the barometer, and that its presence or absence in the air depends entirely on the direction of the wind.

Of the number of cases of apoplexy which occurred in the years 1850 and 1851, fifty per cent. took place on days of decreasing readings of the barometer, and fifty per cent. happened on days after such readings; one hundred per cent. occurred with fall of temperature, and they all took place with a direction of wind from the S.E. and S.W. points of the compass. Of the cases of epilepsy in the same years, sixty-nine per cent. occurred with decreasing readings of the barometer, and ninety-eight per cent. took place with decreasing readings of the thermometer. Of the cases of toothache, ninety per cent. commenced with fall of the barometer, and seventy per cent. with fall of temperature. Eighteen out of twenty-three cases of premature labour occurred with decreasing readings of the barometer, and either a reappearance or an increase in quantity of ozone. Of seven sudden deaths, five occurred with wind from N.W. with hail showers. All the diseases above enumerated observe a similar rate of per centage, to similar readings of the barometer and thermometer. Directions of the wind appear to influence the prevalence of certain diseases; for all

the cases of rheumatism which came under my notice in the same years, commenced with directions of the wind from southern, north-western, and intermediate points; as also did all the cases of bronchitis and pleurisy. All the cases of infantile convulsions commenced with the wind in the W. and N.W. points. All the cases of erysipelas took place with a wind from N. and S. and intermediate points, by way of W.; while toothache and neuralgia occurred with the wind from all points of the compass; but these two last diseases, diarrhoea, and some others, are *invariably followed by a decrease in the readings of the barometer, and a change in the direction of the wind.*

The following may be viewed as a type of a meteorological process, and of the class of diseases which accompany it. If the wind continue from the northern points of the compass, that is, from points between N.W. and S.E. by way of E., the barometer readings will remain high, there will be few or no cases of disease, and no ozone; but if the wind passes into southern points, that is, to points from N.W. to S.E. by way of W., the readings of the barometer will decrease, there will be toothache, neuralgia, and diarrhoea, etc.; there will be ozone, and general changes in the weather; and when any of these diseases occur, *when the wind is in the northern points*, they are a certain indication that decreasing readings of the barometer will follow in a few hours, and ozone will be detected, or not, just as the northern or southern current prevails.

These conclusions are the result of close and uninterrupted observations during four years.

Hawarden, Flintshire, February 5, 1852.

BIBLIOGRAPHICAL NOTICES.

PATHOLOGY AND TREATMENT OF HYSTERIA. By ROBERT BRUDENELL CARTER, Member of the Royal College of Surgeons of England. 8vo. pp. 161. London: 1853.

For a young author, Mr. CARTER's choice of a subject may appear to be a bold one. Hysteria, with its Protean manifestations, inscrutable mental and moral states, sexual sympathies, and admixture of real and imaginary, true and feigned complications, may well demand the study of a lifetime, and an experimental acquaintance with human nature and its infirmities, such as we expect to find only in those of mature years, and who have devoted themselves to much observant intercourse with mankind. But Mr. Carter enters with no ordinary advantages upon the task he has undertaken, and has succeeded in fulfilling it in a corresponding manner. He has, as he tells us in his preface, enjoyed the confidence, and assisted in the practice, of one who was extensively known by his successful treatment of the most inveterate hysterical disorders. To the memory of this gentleman,—the late Mr. Stephen Mackenzie, of Leytonstone, who was overtaken a short time ago in the midst of health and increasing reputation and usefulness, by sudden death from accident,—the book is appropriately dedicated; and we are given to understand, that on his opinions and precepts the views of the author have been formed. The book, at the same time, bears ample evidence of independent thought and study having been brought to bear upon the subject; and, in its style and arrangement, is highly creditable to the abilities and judgment of the author. We shall endeavour to give, in the shortest possible compass, an idea of its contents.

Mr. Carter altogether sets aside those theories of hysteria which seek for its origin in a physical cause, whether that cause be some unknown state of the general constitution, or irritation of particular organs, as of the uterine system. In his view, it is purely mental in its origin, and is to be considered a disease of emotion. By the term emotion, he explains himself to mean certain vivid feelings or sensations associated with an idea of pleasure or pain, and aroused by objects either perceived, or remembered, or

imagined, or by the remembrance of other prior emotions. After tracing the effects of emotion, in the state of health, upon the muscular, circulating, and secreting systems of the body, and pointing out the influence of attention directed towards any portion of the organism, in rendering it not only prone to gradual changes of nutrition, but also to become the habitual outlet for any strong emotion, the author proceeds to apply these facts to the subject of hysteria. Women are more liable to its attacks than men, because they are more under the influence of emotion, and because there are many powerful emotions—and those not alone confined to the sexual passion—which, in the state of society in which we live, they are called upon to repress and conceal. And it is laid down as an invariable rule, that the paroxysm will be violent, in exact proportion to the length of time during which the feelings giving rise to it have been concealed. Females are at the same time peculiarly exposed to circumstances, such as the periodical recurrence of menstruation, and the disturbances to which that function is liable, that tend to concentrate and fix the attention upon the reproductive system. Anæmia, chlorosis, and other conditions of impaired health, are not to be regarded as causes of hysteria; though, by weakening the body, they diminish the power of resisting emotional influences, and thus augment the proclivity to the disease.

The convulsive paroxysm is considered by the author to be the essential characteristic of the disease, and all the other manifold phenomena which are usually recognized as hysterical, to be merely secondary and non-essential. If the fits occur alone, or are accompanied with certain physical complications only, the case is called simple hysteria; if involving much moral and intellectual, as well as physical derangement, it is called complicated. But a more important classification of cases of the disease, according to the views of our author, is that which refers to the mode in which the emotions giving rise to the paroxysm have originated, whether they are original or remembered; and in the latter case, whether suggested involuntarily, or recalled at will. Each case will thus be brought under one or other of the heads of primary, secondary, or tertiary hysteria. The primary cases are those which are excited by some original and fresh emotion, to the action of which the system has not before been subjected. The attack may exhaust itself in one paroxysm, but it generally leaves its subject in a state of greatly increased susceptibility—so much so, that emotions not sufficient to produce a first attack may readily give rise to subsequent ones. In particular, whatever recalls to memory the original exciting cause, as conversations, the visits and sympathy of friends, or brooding over an all-engrossing subject of contemplation, is extremely apt to renew the paroxysm. Such attacks, following upon remembrance of the emotions to which the primary attacks were due, are termed secondary hysteria, and often constitute a severe and protracted form of disease. But if these remembered emotions happen to be of a pleasurable character, there are many temptations to a patient to endeavour to recal them spontaneously, and thus to induce paroxysms which render her an object of sympathy, interest, and indulgence—if not purposely, at least by a ready surrender of the counteracting power of the will. A certain amount of practice will not fail to increase the facility with which this can be done. And thus arises the third class of cases—those of tertiary hysteria, in which the paroxysms are designedly excited by the patient, through the instrumentality of voluntary recollection, and with perfect knowledge of her own power to produce them. This necessarily supposes a deterioration in the moral tone of the character, and an indulgence in habits of falsehood and deception, which, if not checked, may be carried to extraordinary lengths. It is to this tertiary form of the disease, that all cases of complicated hysteria are to be referred.

It naturally follows, from the views which we have laid before our readers, that the treatment of hysteria advocated by Mr. Carter is essentially of a moral nature. If there is any morbid condition or diathesis present which, by its

debilitating effect upon the system, may increase the proclivity to hysteria, such state will of course be treated by appropriate remedies. But he cautions us against supposing that these remedies, or any therapeutic agent whatever, can cure hysteria. On the contrary, therapeutic agents often do harm, and perpetuate the disease, especially when it has passed into the tertiary form.

"As soon as the deceptive element comes into play, the practical complicity of the medical attendant is sought as one of the patient's most secure strongholds, and frequently is quite essential to the success of her schemes. Hence arises that insatiable desire for remedies, with which all who have seen tertiary hysteria are familiar, and that excess of confidence in the practitioner, which is always exhibited until his suspicions are aroused. The professional man who has once sanctioned imposture, by sending medicines for the cure of self-produced illness, becomes at once an ally, whose aid is the more important because unconsciously rendered. And moreover, when to the voluntary production of convulsive attacks is added the simulation of disease in some individual organ, the frequent application of medicines for the relief of the local affection, and the medical belief in its reality, which such applications imply, is likely to hasten the arrival of that last epoch in the history of simulative hysteria, when the continued attention from the malingerer brings its own retribution, and actually produces the morbid condition which she has feigned."

The treatment of the primary and secondary forms of hysteria is very briefly discussed, to make room for that which, with the views of the author as to its nature and phenomena, forms a principal portion of the book—namely, the cure, by moral management and control, of cases of the tertiary form. Space will not permit of our giving an analysis of the author's plan of treatment. Suffice it to say, that it proceeds upon the principle of taking away from the patient all motives for deception, or the voluntary production of convulsive attacks, by satisfying her that the full extent of her deception is seen through by her medical attendant, and may be exposed to her humiliation and shame, if she do not abandon it. Of course this cannot be fully carried out without her removal for a time from all the influences and indulgences of home, and the interference of well meaning, but injudicious friends. Nor is it enough merely to eradicate bad habits and principles—good ones must be formed and instilled in their place, before she can be restored to her friends and society as cured. The task is one in which, as the author justly observes, "however much the practitioner may possess of firmness, coolness, and tact—however much knowledge of human nature generally, and of the character of the individual under his charge—none of these powers or acquirements will be found either redundant or superfluous." It is not every one, indeed, who is in a position to carry out the instructions given in Mr. Carter's book, for the treatment of this aggravated form of hysteria; but to all they will furnish useful hints for the regulation of their intercourse with its unfortunate victims, and for the bringing moral influences to bear upon them.

TREATISE ON AUSCULTATION AND PERCUSSION. By Dr. JOSEPH SKODA. Translated from the fourth edition, by W. O. MARKHAM, M.D., Assistant-Physician to St. Mary's Hospital. 8vo. pp. 346. London: 1853.

THE profession is indebted to Dr. MARKHAM for presenting to them, in an English dress, the classical work of Dr. SKODA. The version is accurate and elegant; and it is accompanied by a sensible and well-written preface from the pen of the translator, who, along with the author, rightly considers that it is a prevalent mistake to trust too exclusively in our diagnosis to auscultation and percussion. The peculiar views of Skoda have of late years been so largely explained and criticised in English works, that we will not, upon the present occasion, enter upon their discussion, but content ourselves by recommending Dr. Markham's volume as the best source whence to derive a knowledge of these important doctrines.

MEMOIRES DE LA SOCIÉTÉ DE CHIRURGIE DE PARIS. Tome Troisième. Fascicules 2me et 3me. 4to. pp. 255. Paris: September 1852, and January 1853.

WE have received two fasciculi of the Transactions of the Surgical Society of Paris, with a proposition of exchange, which we most willingly accept. On the present occasion, we can do nothing more than indicate the titles of the essays contained in the Transactions; but we intend to notice some of them more in detail in our Periscopic Review.

1. On the Communication of Certain Ovarian Cysts with the Fallopian Tube. By Dr. Adolphe Richard. 2. Tracheotomy in Croup: Case of a Child twice attacked with Croup in Two Years, and twice operated on successfully. By M. P. Guersant. 3. Researches on Lymphorrhagia and Dilatation of the Lymphatic Vessels. By M. Demarquay. 4. On some Surgical Diseases of the Insane. By Dr. Deguise. 5. On Concussion of the Brain. By Dr. S. Fano. 6. Report on Dr. Fano's Memoir. By M. Chaiassaignac. 7. New Improvements in the Treatment of Vesico-Vaginal Fistulæ. By M. Maisonneuve. 8. On Cysts of the Maxillary Bones, and their Treatment. By M. A. Forget. 9. On Neuroma, with a Case of numerous Neuromata. By M. Houel. 10. Report on M. Houel's Memoir. By M. Lebert. 11. Case of very large Scrotal Hernia, with Gangrenous Ulceration of the Bladder, Urinous Infiltration of the Sub-Peritoneal Cellular Tissue simulating Hernia of the Bladder. By Dr. Pytha. 12. Some Remarks on Localised Traumatic Paralysis. By M. Debout. 13. New Cases of Rupture of Angular Anchylosis of the Knee, according to the Method of M. Palasciano. By M. Bonnet (of Lyons). 14. Chronic Hydrarthrosis; Pedunculated Sub-Synovial Abscesses simulating Fibrous Bodies in the Knee; Synovial Cysts, etc. By Dr. Verneuil.

French surgeons, from Ambroise Paré downwards, have done much for the advancement of our profession; and although some of them occasionally promulgate doctrines, or propose operations, such as we should be reluctant to adopt, we must feel ourselves under deep obligations to them. The Transactions of the Surgical Society of Paris contain much that is valuable. The authors of several of the articles deservedly enjoy an extensive and honourable reputation, as promoters of improvement in surgical pathology and practice; and the essays are no less creditable to the French school of surgery than to those whose names are appended to them.

PERISCOPIC REVIEW.

TOXICOLOGY.

DEATH FROM THE INHALATION OF CHLOROFORM DURING SURGICAL OPERATIONS.

Among the now innumerable cases in which chloroform has been administered with the object of procuring insensibility to pain during surgical operations, about twenty-five cases have been recorded, in which death was the immediate result of its inhalation. We cannot suppose that all the deaths which have occurred have been made public; yet, even allowing the number to be doubled, the small proportion which they must bear to the total number of cases, shows that they supply no argument against the judicious use of chloroform; at the same time, they teach us the advisability of using at least moderate precautions when we employ so potent an agent.

We propose to exhibit the cases in a tabular form; and in so doing, we shall avail ourselves of the elaborate paper published by Dr. SNOW, in the *London Journal of Medicine* for April, May, and June, 1852, adding such cases as we have met with in other journals since that date. We may also refer to Mr. NUNNELEY's numerous experiments and observations, published in the *Transactions of the Provincial Medical and Surgical Association* for 1849.

TABULAR VIEW OF RECORDED CASES OF DEATH FROM CHLOROFORM.

No.	Date.	Name.	Age.	Operation.	Apparatus.	Quantity used.	Time when death occurred.	Symptoms.	Post mortem appearances.	Reference.
1	Jan. 28, 1848.	H. Greener.	15	Toe-nail operation.	Table-cloth.	One drachm.	Two minutes.	Rigidity of muscles; pulse weaker; eyes closed, but on opening them they remained so; mouth open; lips and face blanched.	Lungs congested; epiglottis and larynx reddened; heart healthy, dark fluid blood in both cavities; very little in left. Brain rather congested. Liver, kidneys, and spleen, congested.	Lancet, 1848, vol. i, p. 161.
2	Feb. 23, 1848.	Mrs. Simmons	—	Extraction of teeth.	Apparatus of Dr. Morton of Boston (sponge partly filling a glass globe).	—	Two minutes?	Pallor while inhaling; convulsive action in limbs and body; pulse and respiration ceased at two minutes.	Lungs and bronchi congested; congestion of pleura, and extravasation. Heart flaccid, empty, deeply stained; bloody fluid (3vj) in pericardium. Brain normal. Blood quite fluid everywhere; mixed with some air in sinuses of dura mater.	Medical Gazette, vol. xli, p. 277.
3	Mar. 1848.	Patrick Coyle.	—	Operation for fistula in ano.	—	Thirty drops.	One minute.	Signs of pain, by putting hand to part; sinking of pulse. Was suffering from phthisis.	Lungs tuberculous; pleura adherent. Heart enlarged, pale, and soft; 3ij-ij of serum in pericardium; blood dark and fluid in vessels. Brain healthy.	Ibid., vol. xliii, p. 682.
4	—	Young woman.	—	Amputation of distal phalanx of finger.	Handkerchief.	A drachm.	Instantly.	Slight coughing; a few convulsive movements; instantaneous death; scarcely any bleeding from wound.	No inspection.	Ibid., vol. xlii, p. 84.
5	May, 1848.	Mdlle. Stock.	30	Opening an abscess.	Handkerchief.	A drachm and a half or two drachms.	Almost instantly.	Complained of choking; face pale; countenance changed; breathing embarrassed; foaming at mouth.	Lungs engorged in lower lobes; pulmonary vesicles dilated by artificial respiration. Heart flaccid, of usual size, empty. Brain firm. Blood thick. Air in veins generally, and in pulmonary artery.	Ibid., vol. xlii, p. 211.
6	1848.	C. Desnoyers.	22	Transcurrent cauterisation of diseased wrist.	Apparatus.	Not stated.	Five minutes.	Not stated.	No account of inspection.	London Journal of Med., May, 1852, p. 417.
7	Dec. 7, 1848.	Young gentleman.	—	Intended toe-nail operation.	Not stated.	Not stated.	Almost instantly.	Not stated.	No account of inspection.	Ibid., p. 418.
8	Jan. 19, 1849.	John Griffith.	31	Removal of hemorrhoids.	Napkin.	Three drachms.	Ten minutes.	Face and neck of livid leaden hue; eyes turned upwards; pulse imperceptible at wrist; whole body relaxed.	Lungs congested. Heart large, flabby, and empty; left ventricle rather soft. Brain healthy.	Ibid., vol. xliii, p. 712.
9	Jan. 24, 1849.	J. Verrier.	17	Intended amputation of finger.	Piece of gauze spread over face.	About a drachm and a half.	Six minutes.	Pulse at wrist ceased; respiration continued for a time, ceasing gradually.	Lungs very black. Heart flaccid and empty. Brain healthy; much black uncoagulated blood in sinuses. Blood fluid.	Ibid., vol. xliii, p. 745.
10	Feb. 20, 1849.	S. Bennett.	—	Amputation of toe.	Handkerchief.	Half an ounce.	—	No bleeding at end of operation. Inspiration noticed after pulse had ceased.	Lungs, trachea, and bronchi, congested. Heart rather large, flabby, auricles empty. 3j of fluid blood in each ventricle. Nothing remarkable in head. Kidneys congested.	Lancet, 1849, vol. i, p. 205.
11	Aug. 23, 1849.	Madame Labruno.	—	Intended extraction of teeth.	Handkerchief.	—	Instantly on applying 2nd supply to complete	Countenance suddenly pallid; features altered; pupils dilated; convulsive rolling of eyes; failure of pulse.	No inspection.	L'Union Médicale, Sep. 8, 1849.

No.	Date.	Name.	Age.	Operation.	Apparatus.	Quantity used.	Time when death occurred.	Symptoms.	Post mortem appearances.	Reference.
12	Oct. 10, 1853.	J. Shorter.	48	Toe-nail operation.	Inhaler (used by a non-medical person.)	Not stated.	—	Struggled a minute, then became still; skin cold; pulse soon ceased; respiration became slow, and ceased, having continued after the cessation of the pulse.	No inspection.	Medical Gazette, vol. xlv, p. 757.
13	Nov. 1849.	— Jones.	A girl.	Intended removal of eye-ball.	—	About a drachm.	Instantly.	Not described.	No inspection.	<i>Ibid.</i> , p. 1007.
14	Nov. 1849.	Young lady.	—	Intended extraction of tooth.	Sponge, covered with a napkin.	Several doses.	Suddenly at commencement of sixth attempt.	Stretched herself out, and foamed at mouth; died suddenly.	Lungs healthy. Heart soft and flabby, empty. Blood fluid. Brain normal; membranes slightly congested.	Medical Times, vol. ii, p. 230.
15	Feb. 1850.	Artillery-man.	—	Amputation of phalanx of finger.	Handkerchief.	A drachm.	—	Face pale; pulse and breathing ceased.	Lungs emphysematous. Right cavities of heart contained fluid blood. Less blood than usual in sinuses of dura mater and in brain.	London Journal of Med., 1852, p. 420.
16	June, 1850.	A. Scott.	34	Removal of portion of hand.	Napkin.	—	A minute and a half.	Bleeding suddenly ceased.	Lungs, brain, dura mater, and kidneys, much congested. Heart feeble and flabby; not much blood in it.	Medical Gazette, vol. xvi, p. 80.
17	Sep. 20, 1850.	James Jones.	24	Intended amputation below knee.	Lint, sponge, and towel.	A drachm and afterwards half a drachm.	—	Slight convulsive action of left eyelid; froth at mouth.	No inspection.	
18	April, 1851.	John Holden.	—	Intended operation on penis.	Handkerchief.	Half a drachm: ditto repeated.	Suddenly.	Not stated.	No inspection.	
19	June 10, 1851.	Madame Simon.	36	Extraction of teeth.	Handkerchief.	About 50 minims.	Less than a minute.		Lungs somewhat congested, and emphysematous. Heart flaccid, of moderate size. Dark fluid blood, with some fibrinous clots, in both cavities; most in right. Chloroform found in organs by chemical process.	L'Union Médicale, 29th Jan. 1852.
20	July 8, 1851.	Thomas Hutton.	45	Extirpation of testis.	Handkerchief.	Seventy minims, in four doses.	Soon after operation was commenced.	Flow of blood, and pulse ceased; one or two deep inspirations after.	Lungs, dura mater, and kidneys, congested. Heart flabby and soft; contained but little dark fluid blood.	Medical Times, 1851, vol. ii, p. 98.
21	Oct. 1851.	Elizbth. Hollis.	37	Intended operation for cancer of os uteri.	Handkerchief.	Eight or ten drachms.	Uncertain.	Not stated.	No inspection.	<i>Ibid.</i> , 1852, vol. ii, p. 620.
22	June, 1852.	Young man.	23	Ligature of arteries for aneurism by anastomosis.	Apparatus.	—	About ten minutes.	Sudden cessation of pulse; respiration continued; red colour returned to face.	Lungs healthy, but collapsed. Right cavities of heart contained fluid blood; left very little. Blood everywhere fluid.	Medical Times and Gazette, 1852, p. 310.
23	May 22, 1850.	Man in Stockholm.	30	Intended operation for hydrocele and diseased testicle.	Cotton placed in cone formed of folded towel.	A drachm and a half: then a drachm.	About five minutes.	Face and body pale; eyes rolled upwards and inwards; breathing became slow, and ceased.	Brain rather soft, slightly œdematous. Heart flaccid, of normal size; vessels on surface distended; left cavities empty, right, and great veins, filled; lungs posteriorly, larynx, and bronchi, congested. Blood everywhere thin & fluid.	London Journal of Med., 1852, pp. 423 and 695.
24	June 27, 1851.	Madame W.	32	Intended extraction of tooth.	Sponge in a handkerchief.	Twenty-five drops.	Very soon.	Speech trembling; stretched out limbs; face livid; eyes haggard; head and arms fell.	Heart soft, flaccid. Organs much congested with fluid blood, containing air.	Gazette Médicale, Oct. 2, 1852.
25	Aug. 10, 1852.	Mr. Martin.	—	Application of potassa fusa to ulcers in leg.	Not stated.	Not stated.	A few months.	Mouth and eyes open, breathing irregular, face pale, eyes turned slightly upwards, pupils dilated.	No examination.	Monthly Journal, Oct. 1852.

Several points suggest themselves for consideration, principally with regard to the cause of death.

1. Dr. Snow lays much stress on the necessity of sufficiently diluting the chloroform; and, as is well known, is much opposed to the plan of using a handkerchief or napkin, which appears to have been the only apparatus used in most of the fatal cases. In the *London Journal of Medicine*, April 1852, p. 323, he says: "There is no reason to believe that any of the accidents from chloroform have arisen from the continued exhibition of the vapour well diluted with air. On the contrary, the sudden manner in which the alarming symptoms came on in every case, shows that they were produced by the respiration of air containing not less than eight or ten per cent. of the vapour; and, from the history of the cases, it is most probable that the heart was disabled, in most instances, by the direct action of the chloroform. No systematic means were taken for properly diluting the vapour with air, in any case in which death has happened. The chloroform was exhibited on a handkerchief, or towel, or piece of lint, in all the cases but three; and, in two of these, it was not applied by a medical man. In order to show how easily accidents may happen with chloroform, I must beg attention to a few circumstances connected with its physical as well as physiological properties. On a former occasion, I showed (*Medical Gazette*, vol. xliii, p. 414), both from experiments on animals, and the amount of chloroform consumed in inhalation, that the average quantity of it in the blood of an adult patient, when insensible to the surgeon's knife, is about eighteen minims, and that, if twice that amount were present in the blood, it would suffice to cause death, even if it were uniformly distributed. Now thirty-six minims of chloroform, when in the form of vapour, only occupy thirty-seven and a half cubic inches, or very little more than a pint. It is true, that the vapour of chloroform does not exist in a separate state at the ordinary temperature and pressure of the atmosphere; but air, when saturated at 60°, contains rather more than twelve per cent. of the vapour; and, supposing the air to contain ten per cent., which it does when the chloroform dew point is at 55°, the thirty-six minims would be contained in 375 cubic inches of air, more than half of which might possibly be in the lungs at one time." To prevent this result, he recommends and uses a special apparatus fitted with valves; and would also have the chloroform diluted with an equal part of rectified spirit, when—as must often occur when an inhaler cannot be conveniently procured—a handkerchief or sponge must be used. The effects of chloroform, administered in this way, are slower in being produced; but then the chance of a fatal result is much diminished. This is a valuable suggestion; and an equally important point to be attended to, in our opinion, is that, during operations, it should be the special business of a competent person to watch carefully the effects of the chloroform on the patient from the commencement of inhalation. Of course, no medical man—and no one else should attempt to give chloroform—would think of at once closing up the nostrils and mouth of the patient with a saturated handkerchief, sponge, or lint, to the exclusion of atmospheric air.

2. The symptoms and *post mortem* appearances recorded, point to arrest of the heart's action as the cause of death; and in the majority of the autopsies, this organ is mentioned as having been soft and flabby. Yet, according to Dr. Snow, it has not in any case been extensively diseased: while he has "several times given chloroform during surgical operations, when very marked disease of the organ existed, and to a great number of old people, in whom the arcus senilis in the cornea might lead to suspicion of its being affected with fatty degeneration." While then, heart-disease is scarcely a contra-indication to the use of chloroform, it should make us exceedingly careful to administer it slowly, and to watch its effects; and with these precautions, we may adopt Dr. Snow's view, that it will then be even beneficial. "The action of chloroform on the circulation, when sufficiently diluted with air, is that of a stimulant. It has a very marked effect in preventing syncope during surgical operations; and, as syncope is attended with danger in diseases of the heart, there is reason to believe that the careful administration of chloroform is a means of safety to patients who, notwithstanding the heart-disease, have to undergo an operation. Moreover, the pain of even a slight operation has generally the effect of accelerating the pulse to about twice its natural frequency; and it is well known that mental excitement, muscular exertion, or any other cause which has such an influence on the circulation, may occasion sudden death where there is disease of the heart; but, as the pulse usually remains of its natural frequency and force during an operation under the effects of chloroform, this circumstance further confirms the

conclusion, that the careful use of this agent is a source of safety, and not of danger, to the patient with heart-disease. In these patients, however, I think it desirable to conduct the inhalation in such a manner that excitement and struggling may be avoided, and not to prolong the use of chloroform longer than is absolutely necessary, for protracted insensibility is sometimes followed by depression. I am happy to be able to quote the opinion of Dr. Sibson, who has paid great attention to the subject of chloroform, in favour of its employment under certain circumstances where there is disease of the heart. He says: 'persons, the subjects of heart disease, when the dread of a severe operation is great, may sometimes be peculiarly benefited by the careful and short production of anæsthesia during the cutting part of an operation.' *Medical Gazette*, vol. xlii, p. 111.

Is the action of chloroform on the heart local, or does the paralysis of this organ take place through the influence of chloroform on the excito-motor system? This is a question open to investigation.

3. With regard to the treatment in cases where chloroform appears to be inducing a fatal effect, we know but little. Mr. Nunneley suggests sudden dashing of cold water on the face and chest, or producing a moderate stream of air by means of a fan,—moderate interrupted pressure on the chest and abdomen being at the same time employed. Dr. Snow places great reliance on the performance of artificial respiration, which, he believes, "would restore the patient in most instances, if it were put in force within half a minute after the breathing had ceased." He also advises that blood should be taken from the jugular vein, if the patient does not very quickly begin to show signs of returning animation.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

COMPARATIVE VALUE OF ANTHELMINTICS.

The subjoined paper is reprinted from the *Dublin Quarterly Journal of Medical Science* for February.

Dr. KÜCHENMEISTER has examined the various vermifuges, by immersing the living intestinal worms of fowls, cats, and dogs, in albumen, at a temperature exceeding 77° Fahr., and adding the anthelmintics in the form of infusion or of powder. In some cases, a mixture of warm milk and water was substituted for the albumen. The experiments were not continued for more than from forty to forty-eight hours, if the worm had not been killed before the expiration of that time. Dr. Küchenmeister made use of electricity as the most delicate reagent for proving the occurrence of the death of the worms. In the first place, electricity cannot be considered as a vermifuge. The author subjected a female *Heterakis vesicularis*, taken from a partridge that had been killed, to the action of a rotatory apparatus, which was kept up with longer or shorter intervals during an entire day. The animal was not destroyed by the experiment. He next tried the remedies employed for the removal of tæniæ, and first tested kousso in the following manner. A living *Tænia crassicolis*, procured from a cat, was placed at four o'clock in a mixture of albumen and dolichos pruriens. The worm appeared to be perfectly well in this mixture, and at two o'clock on the following afternoon exhibited most vigorous movements. It was now transferred to a vessel containing a mixture of infusion of kousso and some of the infused as well as of the fresh powder, with albumen. The temperature of the mixture was 99°·5° F. On its introduction, the worm quickly extended itself; after some time it was found to be dead, its colour having changed to a dirty reddish-yellow. Two *Tænia serrata* were placed at half-past one in the afternoon in a mixture of albumen and kousso; at two o'clock they were dying, and at three completely dead. Two *Tænia serrata* from the same dog were brought into contact with kousso and milk at half-past one in the afternoon, and at two o'clock were dead. Two *Tænia serrata* were placed at half-past one in the afternoon in albumen, mixed with decoction of pomegranate root and with some of the powdered root: they died in three hours. Two others were placed in milk mixed with the decoction only: they died in three and a half hours. A *Tænia crassicolis* was put into a mixture of albumen with ethereal extract of male fern: it died gradually in three hours and three quarters. A number of *Tænia cucumerina* were placed in a mixture of albumen and oil of turpentine: they were dead in an hour and a quarter.

A number of the same were put into a mixture of albumen and castor oil; they were lively at first, but died in seven hours. Similar worms were put into a salad, composed of pieces of lettuce.

watered herring, boiled potatoes, large pieces of onion and garlic, albumen, vinegar, and a large quantity of oil. They died in eight hours. Lastly, the author tested the vermifuge powers of the brown oxide of copper: fifteen grains were administered in the course of four days to a strong cat. When the body was opened, the entire intestinal canal was found to be full of fluid, yellow, flaky faeces; the intestine was softened, and denuded of epithelium, especially at the termination of the ileum, where the adjoining Peyer's glands were much swollen, particularly in two situations, one of which was an inch and a half long by one-third of an inch broad; the other was nearly circular, and its diameter one-third of an inch. The cat had been purged. The tæniæ and ascarides it contained were lively. It would hence appear that this substance is inefficacious as a vermifuge, and dangerous to the system.

The following table contains the results of the above experiments:—

In milk boiled with koussou tæniæ died in half an hour.	
In a mixture of oil of turpentine and albumen, in 1 to 1½ hour.	
In decoction of koussou with albumen	1½ " 3 hours.
In decoction of pomegranate root with milk ..	3 " 3½ "
In decoction of pomegranate root with albumen	3 " "
In ethereal extract of male fern with albumen	3½ " 4 "
In castor-oil with albumen	8 " "
In salmagundi with garlic and onions	8 " "

Koussou therefore seems the most efficacious remedy against tæniæ. When pomegranate bark and male fern root fail, their failure may be owing to the habit of administering a laxative in from four to six hours after the exhibition of the vermifuge, by which the latter may be carried beyond the worm. With regard to pomegranate root, it must be observed that in large doses it occasions diarrhoea. The same remark applies to castor-oil. The author also alludes to cold water, strawberries, dolichos pruriens, and filings of tin. When tæniæ are placed in water containing ice, they are instantly benumbed, and if allowed to remain in it, they will always be found at the end of ten hours to be quite dead. Strawberries may be useful as a mild remedy in cases of tapeworm; if large quantities of them be taken on an empty stomach, entire portions of the worm will often be passed. Dolichos pruriens, with which the author tried many experiments, appears to possess no power of destroying worms.

The author has also minutely studied the medicines recommended for the removal of round worms. In albumen, these worms behave as the tæniæ; in water at about 77° F., they live for some days, but swell, stiffen, become longer, thicker, and more sluggish; they lose their power of suction, and their motions become slow and only partial,—they resemble leeches which have gorged themselves. In general, however, the males and young neutrals resist the effects of water longer than the mature, impregnated, egg-bearing females, which become quite rigid and inflexible, and swell considerably. Milk and whey affect the worms like water.

The following are the results of the author's experiments:—
1. An ascaris lived from eighteen to twenty hours in albumen into which some camphor had been introduced. 2. A mixture of oil of turpentine and albumen killed some ascarides which were placed in it from two and a half to six hours. 3. Ascarides lived forty hours in albumen and wormseed, whether the latter was employed in the form of powder or infusion. 4. Some ascarides were placed in albumen mixed with santonine; they did not die in it, nor did they die in a watery infusion of santonine. When santonine was dissolved in oil, especially in castor-oil, and mixed with albumen and ascarides, the latter died in ten minutes. An injection of santonine and castor-oil was thrown up the rectum of a cat, and produced numerous motions containing dead worms; and on killing the cat, the entire of the lower portion of the intestinal canal was ascertained to be free from worms, while four were found near the stomach quite rigid and extended, and retaining but little life. A *Tænia crassicolis*, however, was found in the intestines, and appeared to be quite uninjured and very lively. 5. A mixture of albumen and aniseed, with a strong infusion of the latter, killed the worms in about twenty-four hours. 6. Parsley, mixed with albumen, killed ascarides very slowly. 7. Flour of mustard and albumen destroyed them in about four hours. 8. In rue the worms lived upwards of twenty-four hours. 9. The same was the case with millefoil. In contact with tansy, valerian, and camomile, great numbers of them lived for twenty-four hours. With onions and garlic they perished in from ten to fifteen hours. A decoction of cloves, with or without albumen, killed them in twelve hours. In an infusion of ginger, with or without albumen, they lived about twenty-four hours. Petroleum,

mixed with albumen, killed them in less than six hours, as did also oil of cajeput and albumen.

A series of vermifuges, taken from the class of balsamics, namely, assafœtida, ammoniacum, balsam of Peru, extract of juniper, and Venice turpentine, was tried in like manner. In all these the worms lived more than twenty-four hours. Of the class of empyreumatics, the following were tried:—Oleum Chaberti (a mixture of four parts of oil of turpentine, and one of the animal oil of Dippel), oil of amber, castor-oil, tar water, creasote, wood-vinegar, and wood-soot. In these, for the most part, the worms lived from twenty-four to forty-eight hours; except the wood-vinegar, in which they lived rather more than twelve; and creasote, in which they died within two hours. Of bitters, the author tried aloes, gamboge, ox-gall, wormwood, myrrh, gentian, quassia, hops, bitter orange, and acorus calamus; in all these the ascarides lived from twenty-four to forty hours. Of astringents he tried pure tannic acid, pomegranate root, koussou, extract of walnuts, cinchona bark and quina, elm bark, willow bark, the flowers and stalks of meadow sweet, oak bark, dragon's blood, catechu, and kino. In these the worms died in from twenty-four to thirty hours, with but two exceptions, namely, tincture of galls and pomegranate root, both of which killed them in the space of eleven hours. Of saline preparations, sulphate of soda, chloride of sodium, and the roe of the herring, were tried. In the first, the worms died in from fifteen to eighteen hours; in the second, in from two to six; and in the roe of the herring, in four hours. The following metallic poisons were experimented on: arsenic, calomel, corrosive sublimate, and the salts of tin, of lead, and of copper. Corrosive sublimate alone destroyed the worms in so short a time as two hours; all the other metallic salts required a much longer period. From these experiments it would appear that santonine mixed with oil is the most powerful vermifuge, then chloride of sodium, the roe of the herring, garlic, onions, etc. The author advises that santonine should be given as a vermifuge, mixed with oil, in the proportion of from two to five grains, to an ounce of castor-oil. This solution should be given in the doses of a teaspoonful until the effect is produced. As auxiliary treatment, chloride of sodium, herring-brine, mustard, onions, and garlic, may be employed.—*Froriep's Tagsberichte über die Fortschritte der Natur- und Heilkunde*. Pharmakologie, Band 1, p. 317.

COMPOUND EXTRACT OF COLOCYNTH AND COMPOUND COLOCYNTH PILL.

At a recent meeting of the Pharmaceutical Society, reported in the *Pharmaceutical Journal* for December 1, 1852, Mr. ALFRED ALLCHIN stated, that he had found the compound colocynth pill of the new London Pharmacopœia to differ most materially in its medicinal effects from the compound extract of colocynth of the Pharmacopœia of 1836, being often much more powerful.

Dr. GARROD undertook to test the medicinal effects of the two preparations; and his results, which seem to satisfactorily set the question at rest, are published in the *Pharmaceutical Journal* for January 1, 1853. Most of his experiments were made on patients in the wards of University College Hospital. The compound colocynth pill (1851) was given in twenty-two cases; the compound extract (1836) was administered in fifteen cases. The patient thought the compound pill stronger than the compound extract in one trial; the compound extract was stronger than the pill in five; while, in the remaining trials, the patients could not distinguish any difference between the two preparations. The pill was accompanied by griping (noticed and spoken of by the patient) in six trials; the extract was accompanied by griping in four trials.

From these results, Dr. Garrod thinks that "we are fully justified in concluding that the compound colocynth pill of the London Pharmacopœia (1851) certainly does not possess more purgative action than the compound extract (1836). The result is slightly in favour of the latter preparation being the more powerful; but certainly no difference of power of the slightest practical importance to the physician can be detected."

Before the publication of the Pharmacopœia in 1851, there had been in common use a compound colocynth pill, the formula for which existed in the Edinburgh and Dublin Pharmacopœias. It was, we believe, of about the same strength as the compound extract of colocynth. We subjoin the formulæ for the three preparations.

Compound extract of colocynth. (Ph. Lond. 1836). Colocynth pulp, ℥vj; purified extract of aloes, ℥xij; powdered scammony, ℥iv; powdered cardamom seeds, ℥i; soap, ℥iij; proof spirit, cong. i.

Macerate the colocynth in the spirit for four days with a gentle heat; add the aloes, scammony, and soap, to the expressed liquor; then evaporate to a proper consistence, the cardamoms being added towards the end.

Compound colocynth pill. (Ph. Lond. 1851). Extract of colocynth, 3i; extract of aloes, powdered, 3vj; scammony, powdered, 3ij; cardamom (husked), powdered, 3ss; soft soap, 3iss.

Mix the powders together; then, the rest being added, beat all together to form a mass.

Compound colocynth pill. (Ph. Edin. et Dubl.) Aloes and scammony, of each, 3i; colocynth pulp, 3ss; Castile soap, 3ij; sulphate of potash, 3i; oil of cloves, 3i.

These are made into a mass: the Edinburgh Pharmacopœia directs rectified spirit to be used instead of soap.

EDITOR'S LETTER BOX.

THE RECENT INQUEST IN THE CASE OF ACCIDENTAL POISONING, AT THE CONVENT OF THE GOOD SHEPHERD.

LETTER FROM FRANCIS GRIGG, Esq., ONE OF THE JURY.

SIR,—My attention has been drawn to a letter in your Journal of the 28th ult., by Dr. O'BRYEN, relative to a recent inquest in a case of accidental poisoning by aconite, at the Convent of the Good Shepherd, in the parish of Brislington, county of Somerset.

Dr. O'Bryen states, that the conduct of the coroner and jury (of which I was a member) was so unusual, as to claim attention from the profession. He says also, that when the coroner and jury met at the convent to view the body, the coroner informed him that the jury could not allow him to be present, as they desired to make remarks, which they did not wish him to hear: that one of the jury insisted on taking the case out of his hands, and on nominating another surgeon to make the *post mortem* examination, without any reference to him: also, that he was ordered to leave the court during the whole time the witnesses were examined, without reason assigned, against which he protested, but in vain. He goes on to state:—"The effect" (I suppose he means the cause) "of the jury taking the place of the medical witnesses, in examining the body for themselves, was, that two spots of commencing decomposition on the abdomen were taken by them for marks of violence, and insisted on, even against my positive evidence, to the contrary; and they apparently yielded, when Mr. Prichard demonstrated the absence of violence in the tissues, and otherwise corroborated his statement. I say, apparently, for Miss Ryder was recalled, and sworn to the fact, that no violence had been used to the deceased." Lastly, he writes:—"What shall I say of the exclusion of the medical witnesses from the court? A hitherto unheard of proceeding! I was thus prevented from hearing and judging of the facts of the case, which might come out in evidence, and which in most cases would materially assist in deducing just conclusions. I had, however, taken care to examine all the witnesses myself, and had quite made up my mind that Emma Forty had died from the effects of about seventy drops of 'Fleming's tincture of aconite,' given by mistake."

In reply to Dr. O'Bryen's first charge, "of unusual conduct in the coroner and jury, in that they would not allow him to be present when they viewed the body", I beg to say that, although on such an occasion the coroner and jury can exclude any person, yet they would not have done so in this case, if Dr. O'Bryen's manner had been less officious, and his interference not such as to delay or interrupt the proceedings, by wishing to instruct the coroner and jury as to their duty. I beg also to say, that there is nothing unusual in a coroner and jury requesting that another medical man, who had not been previously connected with the case, should conduct the *post mortem* examination. I do not see why Dr. O'Bryen should feel aggrieved at his being requested (not ordered) to leave the court, as each witness would be called and examined separately. Such a proceeding, I believe, so far from being unusual on such an occasion, is one which is generally adopted in courts of justice.

The jury, I am sure, will be considered by the profession, and the public generally, only to have done their duty in desiring an examination of the body, when, in their opinion (at the time of viewing the body), there appeared two marks, re-

sembling bruises (one of them very large), on either side of the abdomen; especially when coupled with the fact, that persons, at different times, in passing along the high-road late at night, had heard cries, or screams, proceeding from the convent. The jury were afterwards perfectly satisfied, from the evidence of Mr. Prichard, that the marks on the body were merely the result of decomposition. Miss Ryder's having been recalled was for the jury to understand from her, whether she was quite certain that she gave the dose to the deceased from the bottle containing the aconite. She replied in the affirmative; and then the jury felt no longer any hesitation in giving their verdict. I mention this, as, on the Thursday previous, Miss Ryder, from distress of mind, seemed rather confused in giving her evidence. Miss R. was also asked if the deceased were treated unkindly; she replied, No; that the deceased, Emma Forty, was beloved by all the inmates, in consequence of her amiable disposition. I repeat again, in reply to Dr. O'Bryen's inquiry as to what he should say regarding the exclusion of the medical witness from the court, styling it "a hitherto unheard of proceeding",—that such a proceeding is usual in courts of justice; and why should it have been otherwise in an inquiry into the almost sudden death of an inmate of such an establishment as the Convent of the Good Shepherd?

I feel sorry that Dr. O'Bryen should be possessed of so bad a memory as to make a statement of the symptoms of the deceased, subsequent to her taking the poison, so widely different to that which appears in the *Mirror* and the other Bristol papers of the 15th and 22nd January last, from the evidence deduced, and there correctly shown; to which I would most particularly call your attention. There were four reporters present, and I consider their concurrent statements as worthy of credence.

FRANCIS GRIGG, one of the Jury.

Hengrove House, Brislington,
near Bristol, February 2, 1858.

[In some courts, medical witnesses are not allowed to hear the testimony of the other witnesses; but the practice has not been sanctioned by any medical jurist of eminence. In the present case, Dr. O'Bryen ought either to have been present at the examination of the body, or his exclusion ought to have been distinctly stated to be essential for the reasons assigned by Mr. Grigg. We thoroughly believe that the coroner and the jury acted according to their view of what was right; but still we think that the exclusion of Dr. O'Bryen requires a much stronger and more circumstantial vindication than Mr. Grigg has supplied. The point, however, is too narrow for further discussion in our pages, where we cannot allow important principles to be lost sight of, by our discussing the mere personalities which are attached to them.—EDITOR.]

ABUSE OF THE CHELTENHAM GENERAL HOSPITAL.

SIR,—I had just finished reading your excellent articles in the Journal for January 28th, on "The Abuse of Hospitals and Dispensaries", and on "The Shabby Tricks of the Guardians of the Ledbury Union", when the *Cheltenham Journal* of this week was put into my hands, containing a specimen of the *pleasing* results which medical men may expect from their attempts at "memorialising the various committees and boards of governors to stop the present wholesale distribution of medicines and advice to out-patients". I subjoin the passage in the newspaper to which I refer:—

"CHELTENHAM GENERAL HOSPITAL. ANNUAL MEETING. The annual meeting of the subscribers to this charity was held in the Board Room on Monday last; the President of the institution, F. Monro, Esq., in the chair. There were only from fifteen to twenty subscribers present, including the Revs. F. Close, F. D. Gilby, and C. B. Trye; Messrs. Tart, Basevi, C. T. Cooke, Humphris, D. J. Humphris, G. E. Williams, G. A. Williams, W. Hasell, T. Henney, Brandon, Iredell, Bradshaw, R.N.; and Drs. Gibney, Dalton, Comyn, Hawkins, Cannon, Bagnell, etc.

"PAUPER PATIENTS. Mr. DALTON, surgeon, took the opportunity, at this stage of the proceedings, of handing in a cheque for £10 from the guardians of the Winchcomb Union, with a request that its receipt might be acknowledged to Mr. Trenfield, the clerk to that union. He (Mr. Dalton) also took the opportunity of saying, that it was much to be regretted that the guardians of the different unions were in the habit of recommending pauper patients to these institutions, to the injury and loss of the hard-working surgeons of the unions. He did not speak on his own account, as he did not now fill the office of medical officer."

union; but he knew, from experience, that such a practice existed. "Mr. TARTT said, as far as the institution was concerned, it was out of their power to refuse any patient who came to them suffering from a casual accident.

"The Rev. Mr. TRYE regretted that Mr. Dalton had left the room, for he was quite sure that the guardians were not open to the imputation cast upon them; indeed, the impression out of doors was quite the other way, namely, that a great many cases were treated by the union medical officers, which ought by rights to be brought to the hospitals. (Hear, hear.) It was impossible that the poor could be treated so well in their own confined cottages as they could be at an institution like this. Then it was only a common act of charity to bring them here; and he was quite sure that no medical gentleman of any standing would complain of such a thing. (Hear, hear.) He believed the practice Mr. Dalton complained of received the sanction of the Poor Law Board.

"Dr. HAWKINS. Yes! and the Poor Law Board recommends that, in parishes where there are hospitals, the Board of Guardians should subscribe to them, so as to have a right to send patients to them.

"The Rev. Mr. TRYE. For the express purpose of relieving the rates.

"Dr. HAWKINS. Yes.

"The Rev. Mr. CLOSE. I thought that Mr. Dalton's ten pounds and his speech did not tally very well together.

"Mr. G. E. WILLIAMS. I ought to say, that I have known my friend Mr. Dalton for many years, and I am quite sure he is the last man to make any complaint which he did not believe to be correct.

"The matter then dropped."—*Cheltenham Journal*.

I much fear that it will be more difficult than you imagine, to convince committees of public charities that anything is an abuse which brings grist to their mill. They consider their responsibilities simply to consist in sustaining and enlarging the benefits of the charity; and think little, and care less, respecting the rights of their medical officers. Medical men, therefore, in their attempts to establish themselves in a more just and remunerative position, must take higher ground than that upon which any memorial to a body of exclusive executives can possibly be planted; and at once insist on their right to be placed in the same position as their brethren of the kindred professions, who, as in the instance in question, are often more ready to oppose, than to support them.

If it be true, that they who wait by the altar should live by the altar—that the labourer is worthy of his hire—the barrister of his fee—the soldier of his pay,—why should we not decline to continue a practice which (to use your own words) "tends to diminish the public estimation and proper money value of professional advice"? The tactics of the day point out to us that the only chance of success lies in agitation; and, as a first step in the right direction is half the battle, let every hospital and dispensary practitioner place at once before the public the alternative—*remuneration or resignation*. It may be that, for a time, inferior persons may supply the vacated places; but John Bull has too much good common sense not to perceive that he has but "gained a loss" by the substitution of the raw recruit for the experienced man.

JUSTITIE AMATOR.

IMPORTANCE OF MEDICAL HISTORY.

LETTER FROM HENRY DAYMAN, ESQ., TO THE EDITOR.

SIR,—I have read with much interest your articles on the "Study of Medical History, as a necessary part of Medical Education"; and they have suggested to me a few remarks, which I now offer, partly in extension of your own opinions, and partly to vindicate the claims of that old-fashioned scholarship on which the apparent success of modern science may have cast a slur.

In spite of the objections which some of your readers have raised, I venture to affirm that every thinking person, who has looked into the matter, is satisfied that the ulterior advantages you have set forth, are real; and that your words have not been the mere expression of a fanciful theory. But, since there is one result to be looked for, to which no allusion has been made, and since the operation of that result is immediate, and requires neither special pleading to enforce, nor a mind unusually credulous to take in, perhaps it will not be out of place to draw attention to it at once. It is the profit in store for those who investigate the means by which the great men of old have achieved their greatness. Let us take one example, then which there is none more striking on record. The history of Harvey's

celebrated discovery is well known. The doubts and difficulties which for a long time, in the face of positive demonstration, prevented the doctrine from being established, have been often narrated. The reserve of the public, and the opposition of the profession, were equalled only by the firm and deliberate perseverance of the illustrious author himself. But, I would ask, may we not trace the success which at every step followed this great induction, to the influence of the dialectic school in which Harvey had been trained?

On the other hand, it may be urged, that instances are not wanting of men who have attained eminence by the unassisted energy of their natural gifts. Of this sort was John Hunter: and while we confess that education can lay down no laws for the guidance of such minds, since it is of the essence of genius to endure no bounds but those of its own imposing, it may be well worth our while to attempt an analysis of the principles which have actuated and supported these master-spirits in their career.

To a careless observer, many of the speculations of John Hunter must at first have appeared like the dreams of an enthusiast; and, indeed, if the determination of purpose which he manifested throughout life had been exhibited only by fits and starts, as if he obeyed no adviser but caprice, his efforts of thought might, to say the least of it, have been justly charged with inconstancy. But it was far otherwise with John Hunter: he had consecrated his life to the fulfilment of a divine mission; and the subordinate failings of his mind (of which hasty temper was a conspicuous one) had no power to withdraw him from his great work: he never relaxed from that disinterested activity to which, as if by a severe necessity, he had been wrought up; and of which, on the other hand, there was no perceptible increase. It may, therefore, be said of John Hunter, that his mind presented "the calmness of an intensity kept uniform by the nature of the human mind forbidding it to be more, and by the character of the individual forbidding it to be less. The habitual passion of his mind was a pitch of excitement and impulsion, almost equal to the temporary extremes and paroxysms of common minds; as a great river, in its customary state, is equal to a small or moderate one when swollen to a torrent."

Becoming thus personally acquainted, so to speak, with the fathers of our art, the student would discover by what methods they earned for it the epithet *learned*; and that this distinction was bestowed on medicine, not in consequence of their attainments in medical information, but from their intimate knowledge of the mechanism of the instrument through which that information was conveyed. Our ancestors both wrote and spoke in the Latin tongue; and it was their wisdom to believe and teach that science could only be known when its language was understood.

There is yet another point connected with this subject, which is well worth our attention: I mean the effect which the study of history would be likely to have on the *style* of medical composition; for I hold, that a general standard of excellence may be observed in medical, no less than in every other kind of writing. Nor does the introduction of technical terms, which is indispensable in the language of science, necessarily weaken the force, or take from the purity of the style. The ancients would certainly warn us not to burden the sense with hard words: above all, they would remind us that we are forbidden, equally by the canons of good taste and the laws of universal scholarship, to coin words from the Greek or Latin languages, which may be given as well in plain English; or to thrust into the currency of our literature an alloy compounded of Latin and Greek roots. I cannot but think that such words as "mentalisation" and "sociology" are tainted with this vice.

Lastly, I would ask your objectors to consider the means by which the efficiency of editors themselves is secured; but I must defer this and other parts of the subject to a future opportunity.

HENRY DAYMAN, Surgeon.

Milbrook, Southampton, Feb. 5th, 1853.

FORMULA FOR TIC-DOULOUREUX.

LETTER FROM J. W. BEAUMONT, ESQ., TO THE EDITOR.

SIR,—Those who have seen a patient suffer from an acute attack of facial neuralgia, when the pain has been so intense as to render life, for the time being, burdensome, will surely rejoice when anything is suggested likely to give relief. Having had a very large number of cases to treat, I have tried almost every remedy and almost every combination, but have found none so efficacious

as the following. It is one for which I do not for a moment claim novelty; but having seen so much good from it, I cannot forbear, on grounds of humanity and benevolence, from communicating it to others. It is as follows:—

R. Ferri potassio-tartratis ʒij.
Vini opii ℥lxxx.
Aqua cinnamomi ʒviii.

M. Ft. Mist.

Give two tablespoonfuls three times a day, or three tablespoonfuls at once, if the pain be very severe.

I do not pretend to say *why* this particular combination should be *apparently* so much better than others, but certainly I have not known it yet to fail.

J. WILSON BEAUMONT, M.R.C.S.,

Late Resident Surgeon of the Wakefield Gen. Dispensary.

Mirfield, Yorkshire, February 5, 1853.

PETITION AGAINST THE INCOME TAX FROM THE PRACTITIONERS OF SHREWSBURY.

LETTER FROM DR. BURD TO THE EDITOR.

SIR,—A petition, similar to the one agreed upon by the medical men at Torquay, has been signed by all the medical practitioners in Shrewsbury; and Mr. E. H. Baldock (one of our borough members) has kindly consented to present the petition, and urge its prayer by every means in his power. I hope that the members of the profession in other towns will also follow the good example of their Torquay brethren, and raise an unanimous voice against such a continued injustice.

EDWARD BURD, M.B. & L.M.Cantab.

Shrewsbury, Feb. 7th, 1853.

THE NECESSITY OF PETITIONING AGAINST THE INCOME-TAX.

SIR,—Parliament has already assembled; but what has the profession done to relieve themselves from the unjust oppression of the Income-Tax? A great effort, on the part of the Provincial Medical and Surgical Association, could not fail to produce a powerful impression. This might either be accomplished by the assembling of a Special General Meeting at some central or convenient place, such as Birmingham or London; or by the Branches holding special meetings, and petitioning separately. The Income-Tax Committee of the Provincial Medical and Surgical Association cannot be expected to accomplish any beneficial result, unless they receive, in some such way as I have suggested, the countenance of their colleagues.

I am,

A VICTIM OF THE INCOME-TAX.

February 8th, 1853.

NEWS AND TOPICS OF THE DAY.

THE LETTSOMIAN LECTURES of the Medical Society of London will be delivered this year by Professor Murphy, commencing on the 9th of March. The subject which he has selected is "Parturition as illustrating the importance of a competent education in the practice of midwifery".

GLASGOW MEDICAL JOURNAL. The prospectus has appeared. The work is to be published quarterly; and No. I. is advertised to come out on the 1st of April. We understand that we were correct in naming Dr. Weir as the editor. It is evident from the prospectus, that this new medical periodical is started, not as a commercial speculation, but for the praiseworthy purpose of fostering local talent and industry.

MEDICAL BENEVOLENT COLLEGE. We recently announced, that the Bishop of Oxford had kindly consented to preach in Vere Street Chapel, in aid of the funds of the College. We have now the satisfaction to state, that the Bishop of London has promised to preach, in Trinity Church, St. Marylebone, in furtherance of the same object.

BATH UNITED HOSPITAL. At the annual meeting of this institution, P. B. Duncan, Esq., in the chair, it was stated, that during the year, the in and out patients numbered 13,976. The receipts amounted to £3,739 14s., and the expenditure to £3,536 5s.

INCREASE OF LUNACY IN MARYLEBONE. In the first half of 1851, there were 316 in the asylums and workhouses of the parish; in the first half of 1852, that number had increased to 494, being an addition of 180 lunatics to those already chargeable on the funds.

DR. DALTON. A proposal is on foot to erect a statue in memory of the late Dr. Dalton, the author of the atomic theory, in the Ardwick cemetery, where his remains were interred, and to found two scholarships in Owen's College, Manchester, one chemistry in and the other in Mathematics, the learned doctor having been eminent for his success in applying mathematics in the elucidation of chemistry. The Mayor and the Bishop of Manchester are earnest in supporting the proposed subscription.

SUSSEX AND BRIGHTON EYE INFIRMARY. During the year 1852, there were admitted 1,359, being a considerable increase of patients on the previous year. The late Clement Deacon, Esq., bequeathed £448 17s. 6d., and N. A. H. T. presented a donation of £100. Two wings were lately added to the Infirmary, which have increased the beds to twenty-eight.

ADVERTISEMENTS.

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IN THE PRESS.

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[ADVERTISEMENT.]

13, PIERREPONT STREET, BATH,

3rd February, 1853.

SIR,—As my Letter is not allowed admission into the body of our JOURNAL, I request you will place it extra limites, and that you will publish this with it.

I am, Sir, your obedient servant,

JOHN BARRETT, F.R.C.S.

To Dr. CORMACK,

Editor of the Association Medical Journal.

TO THE EDITOR OF THE ASSOCIATION MEDICAL JOURNAL.

SIR,—The publication in the PROVINCIAL MEDICAL AND SURGICAL JOURNAL for December 23, 1852, of a discussion affecting my character—a proceeding, I believe, without precedent in the history of the Branches; the very great irregularity, according to all laws of debate, of interrupting me, whilst in possession of the meeting, by a motion not even put as an amendment to that before the meeting; the impossibility of my afterwards defending myself under protest, as I otherwise should have done, without admitting a right which I cannot think of admitting; and the common justice there is in allowing every man an opportunity of defending himself when attacked (and, virtually, I have been again attacked by the publication of this report)—oblige me to request your insertion of the following remarks.

I shall not, however, argue on the right claimed by the meeting of considering such questions. I protest against it; and the manner in which that right has been supposed to be established, and which is really nothing more than the old "*sic volo, sic jubeo, stet pro ratione voluntas*", will not deter me, when occasion arises, from arguing against it. But I should prefer such an occasion, as would in itself clear the arguments I might use from all appearance of being influenced by personal considerations.

In my letter, which has been appended to the report of the meeting, it is stated why, with Mr. W. Bush, I volunteered my evidence in Mr. Cox's favour. With the trial, I think, the subject ought to have rested. In and out of the profession, I was not singular in this opinion. But there it was very soon determined that it should not rest; within two or three days, the programme for Mr. Cox's ruin was out. He was to be driven with ignominy from this Society and that; to be stripped of his appointments; the College of Surgeons was to be applied to, to demand his diploma; and then, disgraced himself and his family beggared, he might hide himself in one of our colonies—an emigrant, if not an outcast.

However galling it may be to his enemies, events have shown that a man who, for a series of years, has conducted himself kindly and honourably, cannot be thus crushed. *Nemo repente turpissimus fuit*. The public has felt this; and his patients have shown that they do not believe the charges against him. Nor have his own patients been the only ones to show this. To attack another man behind his back, is always a mean, and sometimes a dangerous, course. That attack is still going on. It will prove as futile as it is contemptible.

When Mr. W. Bush and myself left the court, we had no intention of having anything more to do with the matter; but when we saw what was contemplated, we did not feel justified in standing by and seeing a man crushed, most unjustly, as we did then, and still do, believe. But how was our object to be effected, except by showing the public that the adverse evidence was not to be depended on? By far the most important part of this evidence was that of the medical men: it was this on which mainly rested the counsel's allegation of fraud. It was put to the jury by the judge, and he did not desire "the jury to dismiss the medical part of the case from their consideration"; he did not recommend "the jury to look at the broad facts of the case, and not the evidence of the medical witnesses". It was necessary to bring before the public, in such a manner as they could understand, such an array of argument and authority as would upset it. It would have been idle to have confined ourselves to the medical profession: they did not require information on the subject. With the public, not with the profession, rested the question of Mr. Cox's ruin.

We were not the first to introduce the subject to the public;

nay, more, to the drawing-room, to the ladies. The Bath papers had already given full reports of the trial: the editor of one had written a leader on it. We found the subject in the hands of the public, and there we dealt with it.

It is objected, that my letter had a tendency to injure the medical witnesses. My answer is, that their evidence had a tendency to ruin Mr. Cox, and if erroneous, as I contend it was, to ruin him unjustly. But, if what I stated against them be true, they, at any rate, suffer only from truth being against them; whilst Mr. Cox might have been ruined from their error being against him. I disclaim all personal ill will towards them. I readily acknowledged their respectability when attacking their opinions. Nothing I have written would have been illegitimate, had it been suggested to Mr. Cox's legal defender at the trial; and then the press would have made it public. Would the press have been immoral in doing this? Then it has to answer for immorality in what it has published. Let this Branch of our Association arraign the press, appoint their champion, arm him with their most tried weapons;

"And when he thus doth ride abroad, may I be there to see."

I had no selfish object to serve in writing this letter. I have lived to very little purpose, if I have not long since learnt that, in taking such a step as I have in favour of a just though unpopular cause, a man exposes himself to much that is unpleasant, much that interferes with the ease of life. "*Nonne melius multū fuisset, otiosam ætatem et quietam, sine ullo labore et contentione traducere*." Were I a disciple of Epicurus or Paley—did I believe that ease or expediency should be our guide, I should certainly have acted on the suggestion which Tully did not follow.

It was not that either Mr. Bush or I justify the introduction of such subjects to the public under ordinary circumstances. We need not deal in protests when facts are so ready to our hand. I am sorry to occupy your space; but it is more just to give in full the following extract from the report of the "Anniversary Meeting of the Bath and Bristol Branch", as it appears in the JOURNAL for 1850, p. 412:

"Mr. Hunt here rose to make some strictures upon the manner in which their reports had hitherto appeared in the provincial newspapers. He had no objection to the publication of the reports, if the list of cases were left out; but to publish that such and such a case was read by so and so, savoured of quackery, and did not accord with the respectability of the profession. He therefore moved an amendment, to the effect that the list of cases should not be published in the report. The Secretaries defended the publication of the list of cases in their report, and stated, that it had been customary to request one or two local reporters in the town in which their meetings were held, to attend, in order to proclaim to the public their proceedings. They had nothing further to do with the reports in the newspapers; and, unless a resolution were come to by the meeting, that reporters should not be admitted at all, they could not be answerable for the publication of any part of the proceedings. Mr. Norman, and several other of the most influential and respectable gentlemen present, utterly repudiated the sentiments expressed by some of the speakers; and expressed their acknowledgments of the obligation the Association was under to the public press, and to the total absence of any right on the part of the meeting to say to its representatives what part of their proceedings should, or what part should not, be reported in their columns. Mr. Bartrum, as Secretary, especially bore testimony to the courtesy the reporters had always evinced, as well as the judicious character of the reports given of the proceedings of the Association."

This "judicious character" thus highly lauded by the Secretary, will, no doubt, be evident by the following titles, which I extract from the list which Mr. Hunt informs me was that he quoted when complaining of such lists appearing in the newspapers:—"On a Case of Imperforate Urethra; and on a Case of Imperforate Anus"—"History of a Case of Laceration of the Perineum during Parturition": I believe, the only members who spoke in support of Mr. Hunt were myself and Mr. W. Bush; and I clearly remember, that my ground of objection was, that, under the circumstances, there was no sufficient reason for introducing a mention of such subjects to the public; and there were very strong reasons why it should not be done. Were we inclined to use it, the Branch would evidently furnish us with a *tu quoque*. But

"Non tali auxilio, nec defensoribus istis
Tempus eget".

And I will also say,

"*Nec venenatis gravidâ sagittis,
Fusce, pharetrâ.*"

There is far higher ground, there are far better weapons of defence. They resolve themselves into two questions:—Are there no circumstances which justify the introduction to the public of subjects not ordinarily brought before it? Did the occasion on which we acted present such circumstances?

We had to quote and argue on diseases. Supposing it had been necessary to refer to functions, could we find no high authority for such reference? Say that nothing can justify this, aye, and when very broadly done, and you must tear from British literature some of its noblest, its wittiest, nay, its most moral pages. I talk not of the accidents of language, nor even of those occasional blemishes which we bear with, because we cannot remove them without endangering what is so intimately mixed with them, but I mean those deliberate and intentional introductions of such subjects which form part of the character of an author—I mean not those writings which we keep on a dark shelf in our libraries, but those great British Classics which, as fathers, as husbands, as brothers, we do not selfishly confine to our study, but which we place, in splendid binding, and with beautiful illustrations, on our drawing-room tables. What department of British classical literature shall I—or, rather, which may I not—instance in proof? Look at Milton, who wrote

"to assert Eternal Providence,
And justify the ways of God to man."

Read his allegory of Sin; his description of Adam and Eve in Paradise, in the bridal bower; their conduct immediately after the Fall, and when returning conscience alarms for the consequences. And mark how indignantly he justifies such references—goes out of his way to—Ah! he was not a member of the Provincial Medical and Surgical Association, or he would have been better instructed.

Then there was Pope, whose object was to "hit the folly as it flies"; and he hit hard too, by the means in question. Thus he hit the

"reverend sire, whose want of grace
Had made him father of a nameless race";

when he says of him—

"Still to his wench he crawls on knocking knees,
And envies every sparrow that he sees."

Alexander Pope! how could you place this in your *Moral Essays* (Ep. i, 232)? or how could you think of describing what happened to Sir Balaam's daughter (Ep. iii, 392)? or how could you dare to redeem from the difficulties of old Chaucer, and present, in your own flowing numbers, what followed from the union of January and May? Surely we are abettors of your immorality, when we allow you to remain in our libraries, say nothing of admitting you into our drawing-rooms!

Sterne,—you who wrote sermons!—what were you thinking of, when you wrote *Tristram Shandy*? If there be Widow Wadmans in the world, how immoral of you to describe them! Say that the Sorbonne did subtilize till it made theology an indecency, how immoral of you really to defend the dignity of religion, by turning on them their own weapons!

But it is not only in our classical literature, it is also in the best part of our everyday press, that we find these ordinary rules departed from when occasion demands. Look at the extracts the *Times* published from the *Guide to the Confessional*. Is anything I have said half so plain as what is there stated? How many other instances might I quote!

But to come nearer home. It was only last summer, that the Rev. H. Seymour, a clergyman of the Church of England, brought forward in this city, to a crowded meeting, in reply to Cardinal Wiseman, details of conduct the most horribly licentious and disgusting. Ladies, it is true, were not present, but youths were there. I am not censuring the reverend orator; he deemed the occasion justified what he did. So did many of his clerical brethren; so must some of those medical men who censured me the other night, for they clustered round him on the platform. But then they had popular feeling with them,—the cause we espoused had had popular feeling raised against it.

It is not many years since I had to give evidence on a trial of infanticide, before Mr. Justice Erle. Just as females were about to be ordered out of court he interfered and said he wished them to stay, adding "if this case be conducted as it should be, nothing need be said, which under the circumstances

a female should not hear, and for the good of society I wish them to hear." He knew what kind of evidence would be given, for he had the depositions before him; and if a charge rests against me, still more would the evidence then given and which he did not interrupt, make it rest against him. Can that be immoral which an English judge on the Bench sanctions?

"Credat Judæus Apella,
Non ego."

Look at the case of Kirwan, now occupying so painful a part of public attention: is there not at least one point in the medical evidence which demands investigation, which appears to have weighed with the jury, which has most mistakenly been made the foundation of a horrible suggestion in a leading journal, and which could not be dealt with except by the plainest out-speaking on subjects never ordinarily referred to, and to which the attention of the profession has been invited? There life and death tremble in the balance. Would any member of our Association condemn a letter, which was afterwards shown to have saved an innocent life, no matter how plainly it spoke out to the public? He would not. And is the character,—are the best and dearest interests of a professional brother, likewise no sufficient grounds for speaking plainly to the public on subjects to which we would not ordinarily refer? This word "brother" we often use, but if it implies anything, it implies duties on the part of those who use it, rights on the part of those towards whom it is used. I have some grateful recollections of a time when this was felt by others in the profession towards myself. I hope I have not forgotten the lesson.

It has been said that my letter might find its way to the drawing-room table, and pollute the minds of some wives and daughters. Is there not one book which, happily for this country, we place in the hands of every person, without restriction? And do we, therefore, consider ourselves guilty of what is immoral or improper? And yet there have not been wanting those who have said that this book is indecent (*ut quidam minuti philosophi censent*). I do not suspect either of the two gentlemen who attacked me of this. They certainly threw some hard words at me, but I should be sorry to do them an injustice in return. I will, therefore, not class them with those "minute" philosophers who could see nothing but the little difficulties in the aspirations of Cicero, nor with those against whom Berkeley entered the lists; still less will I intimate that they belong to another branch of the same school, who titled mint, anise, and cummin, the trifles of the law, whilst its eternal principles of truth, justice, and mercy, they neglected or outraged. But this I do say, that in such an attempt as they have lately made, they are going on a false principle; that they are paving the way in our profession, it may be unconsciously, for that "minute" moral philosophy which finds its satisfaction in conventional views, and which is ever in danger of losing sight of "those sublime laws of right, which had the ethereal heavens for their birth-place, and God alone for their author; which the decays of mortal nature cannot vary, nor time cover with oblivion; for the divinity is mighty within them, and waxes not old."

And now, in leaving this subject, I have no wish to deny the pain it has given me to differ from so large a number of my professional brethren. I am very far from denying them what I claim for myself,—the credit of upholding what they believe to be right; but there are occasions, in the life of every man, when we have to determine between what we see would be convenient, and what, with all its dangers, with all its annoyances, we deeply feel to be right. On such convictions I have acted; and were I to seek a formula for my medico-ethical creed, I could not find a better than in the language of one who most happily combines the physician, gentleman, and scholar:—

"In nostrâ hæc republiâ, quod verum est, sit pro re—pro imperio, religio veri—pro lege supremâ, populi salus! Sit unitas in communitate, in communitate unitas! Ad hæc tuenda et conservanda sit nullum inter nos jusjurandum! Si ullum, in verba hæc—'Experientia! Amor! Amicitia!' Verba ipsius Harvey—verba omnium ætatum, temporum, locorum! Leges, mores, etiam diplomata regia, humana omnia mutantur. Amor et amicitia a Deo sunt, et manent."

I am, Sir, your obedient servant,

JOHN BARRETT, F.R.C.S.

13, Pierrepont Street, Bath,
29th December, 1852.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. VII.

LONDON: FRIDAY EVENING, FEBRUARY 18, 1858.

NEW SERIES.

THE COLLEGE OF PHYSICIANS OF EDINBURGH AND THE UNEQUAL PRESSURE OF THE DIPLOMA STAMP-TAX.

LAST year, during the assembly of Members of the Provincial Medical and Surgical Association at Oxford, a meeting was held by British graduates in medicine practising in England and Wales; and a committee was formed for the purpose of attending to their interests in connexion with the measure of Medical Reform proposed by the Association, and the contemplated charter of the London College of Physicians. This committee has not been asleep; and through their energetic secretary, our colleague Dr. Tunstall of Bath, they have been in useful and friendly communication with the Royal Colleges of Physicians of London and of Edinburgh. From a correspondence published in the former series of this Journal, for December 8th, 1852, p. 648, between the Secretary of the Graduates' Committee and the Registrar of the London College of Physicians, it appears that the latter body entertain no unkindly feeling towards gentlemen practising as physicians in England and Wales without their license, and are desirous, by a fair and liberal scheme, to incorporate all physicians practising on this side of the Tweed into their College, under the then appropriate name of the Royal College of Physicians of England. In fact, throughout the recent negotiations and public discussions arising out of the publication of the Medical Reform Bill by our body, it has been universally felt that the London College of Physicians of the present day is sincerely disposed to concur in and promote any measure which is calculated to benefit the profession; and that they are resolved on the one hand to co-operate with our Association in obtaining a just and liberal bill, and on the other to assist in carrying *pari passu* through Parliament charters for the Scottish and English Colleges of Physicians, by which all honourable practising physicians should be incorporated into the Colleges of their respective kingdoms. We are only stating the expressed opinion of the profession both in England and in Scotland, when we declare such an incorporation to be wise and conciliatory in its immediate consequences, and bountifully fraught with future benefits to legitimate medicine, especially by its protecting us better than at present from the degrading taints of homœopathy, and other money-paths, by which needy or greedy men, under the assumed cloak of physic, endeavour to enrich themselves.

To facilitate the accomplishment of so desirable an object as this general incorporation of physicians, it is evident that a vigorous effort ought to be made by the parties more immediately interested, to induce government to remit the diploma stamp-tax during the year of grace proposed by the new charter; so that so unfair and onerous an impost should not in any degree be allowed to shut the door which the College of Physicians of London are about to open.

Impressed with this conviction, the Committee of British Graduates considered how they could best bring influences

to bear upon Government; and, among other steps which they deemed proper, they stated the case to the College of Physicians of Edinburgh. It was found that that active and enlightened body had already deliberated upon the question, and were prepared, upon every fitting occasion, to urge a remission of the objectionable stamp tax. On the 1st current, they adopted the following petition to Parliament, which very clearly exposes the flagrancy of the grievances complained of:—

Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The Humble Petition of the Royal College of Physicians of Edinburgh, given under their common seal this first day of February, one thousand eight hundred and fifty-three years,

HUMBLY SHEWETH—

That your petitioners were incorporated by Royal Charter in 1681.

That this Royal Charter points out the advantage of having all the Physicians incorporated into a Royal College, and renders it imperative on those practising in Edinburgh to belong to it.

That by the aforesaid Charter no one can be admitted a Fellow of the College of Physicians, unless he has graduated in medicine in some University.

That comparatively recently a tax of £25 has been imposed on the diploma of every Fellow of the College.

That a similar tax of £10 is imposed on the diploma of every graduate of a Scottish University.

That as most of the Fellows of this College are graduates of one or other of the Scottish Universities, they thus pay to Government in this tax the sum of £35.

That the diplomas of graduates in medicine of the London University, and of the Queen's University, in Ireland, are not liable to this duty.

That many Fellows of the Royal College of Physicians of Edinburgh have removed to England, and are there engaged in practice.

That the new Charter of the Royal College of Physicians of England contemplates the admission of these gentlemen into that body at a fee of £15; and that the Royal College of Physicians of Edinburgh are of opinion that it would be of great advantage to the profession and to the public, were all practising physicians incorporated into the Colleges of their respective kingdoms,—an arrangement which has been aimed at in every Bill for Medical Reform introduced into Parliament.

That by the existing Stamp Acts, Fellows of this College, joining the College of England, will have again to pay a tax of £15.

That it appears to your petitioners unfair and injurious that the graduates of Scottish universities thus situated should thus pay three taxes: *first*, on graduation; *second*, on admission to the College of Physicians of Edinburgh; *third*, on admission to the College of Physicians of England.

That it also appears to your petitioners that the exemption in favour of the London University, and Queen's University of Ireland, which are new institutions, entirely supported at the public expense, is calculated to injure the schools of medicine in Scotland, by creating an invidious distinction, which ought not to exist.

May it therefore please your Honourable House to take the premises into your early consideration, and to amend the existing Stamp Acts, so as to place all graduates in medicine on an equal footing.

And your petitioners, as in duty bound, will ever pray, etc.

Signed and sealed by the PRESIDENT and SECRETARY, in name and on behalf of the Royal College of Physicians, at Edinburgh, this first day of February, eighteen hundred and fifty-three years.

COURT MARTIAL ON THE CONDUCT OF MR. UMPHELBY, IN RELATION TO MILITARY ETHICS.

DUELLING is likely soon to become—if it be not already so considered—as ungentlemanly a means of adjusting a quarrel or avenging an insult, as it is undoubtedly an absurd and unchristian practice. The altered tone of public feeling upon this subject has, we believe, been brought about partly by enlightened and powerful articles which have from time to time appeared in the *Times* newspaper, but chiefly by its having transpired that linen-draper, tailors, and “snobs” in general, were in the habit of “demanding satisfaction”, and giving and receiving it by firing pistols at one another, charged with ball or blank cartridge according to the discretion of the seconds—just as obtains, or did obtain, among men of undoubted fashion. What was unassailable on the ground of its absurdity, brutality, and sinfulness, has not been able to withstand the imputation of snobbishness: a fact which clearly proves that a satire is often better than a sermon, and that we ought not to ascribe unmitigated levity to the Frenchman when he cries, *Vive la bagatelle!* nor undervalue the services of our eccentric, but true-hearted and most useful contemporary, Mr. *Punch*.

The circumstance of a young medical officer of the Bengal Army having been lately tried by a court martial, for *not* sending a “hostile message”, in the old and till lately approved style, to a fellow by whom he had been wantonly assaulted, has elicited a trial and a verdict for which every rightly constituted mind must feel deeply thankful. The verdict not only does full justice to the courage of our colleague, Mr. UMPHELBY, in refusing to comply with a misnamed code of honour, but it likewise shows that a soldier and a gentleman need no longer fear being cut or cashiered, should he decline to sin against the laws of God and man by fighting a duel with every tipsy comrade or reckless bully by whom he may be injured or insulted.

Mr. Umpelby was put on his trial

“For conduct disgraceful to the character of an officer and a gentleman, in having, at Calcutta, on July 7, 1852, subjected himself to the indignity of being publicly kicked by Mr. A. P. Pennefather, a clerk in the office of the Administrator-General, without adopting any sufficient measures, either immediately, or for three days, to obtain reparation for such insult.”

The court martial returned a verdict of “NOT GUILTY”, and “honourably acquitted” the accused. This decision has been “approved and confirmed” by the Commander-in-Chief; so that we trust and believe that duels may never more be heard of in our armies.

THE MEDICAL SOCIETY OF LONDON AND THE SCIENCE OF PHYSIOLOGY.

MANY of our readers have probably seen, in the *Athenæum* of last week, a report that a movement is on foot for establishing a physiological section, in connexion with the Medical Society of London. We have ourselves been aware for one or two weeks past that such a scheme was in contemplation, and have only been waiting to see the matter in a further state of development, in order to comment upon it. The course pursued by our excellent contemporary

has removed this hesitation; and we proceed, therefore, to place before our readers such information as we possess on the subject.

It is true then, that the attention of the Council of the Medical Society of London has been directed by one of the Fellows of the Society (Mr. Richardson) to the importance of forming a section devoted solely to the prosecution of physiological investigations; and a series of propositions from that gentleman are, we believe, at this time before the Council of the Society, and are receiving its best attention. We cannot state more concerning the extent and nature of these propositions than has been stated in the *Athenæum*; viz., that “the Members of the section are to meet in the rooms of the Society; and that it is proposed that persons not belonging to the Society shall be permitted to join the section”.

It is scarcely requisite for us to say, that the project meets with our fullest approbation. It is not creditable to the scientific world of London to be without a society specially devoted to physiological studies; and the more so, because in this day the applications of physiological knowledge to the practice of medicine and surgery are universally acknowledged and acted upon. We like, too, the principle involved in the present project, that of making the new institution a section of another institution, rather than a separate Society; and are delighted to know that so active and flourishing a body as the Medical Society of London has been requested, in the present instance, to consider the practicability of this principle. If we might be allowed to make one observation on the manner in which sections should be added to standing societies, it is this: that, while it should be the object of the section to further in every way the interests of the parent institution, it should also be the object of the central society to allow the members of the section, within certain defined limits, the power of self-government, and such freedom of action as is due to gentlemen and to scholars.

In conclusion, we have only to add, that we shall watch the further development of this movement with great interest; and shall be happy to offer every assistance which it is in our power to bestow, to a society formed for the purpose of prosecuting with sincere zeal the all-important science of physiology.

THE VERDICT AGAINST MR. HICKS.

WE have inserted at p. 156 a letter from Mr. BENSON referring to our article in the number for February 4th, p. 95, on the verdict of manslaughter recently returned against Mr. Hicks, of Toddington, by a Coroner's Jury. While the force of our general remarks is in no way impaired by Mr. Benson's statements, his share in the case is deprived of some of the grounds upon which our remarks might be made personally applicable.

A DUELLIST, according to Samuel Johnson, is:—“1. A single combatant: 2. One who professes to study the rules of honour.” In exemplification of the latter sense, he quotes the following from Ben Jonson:—

“His bought arms Mung not liked; for his first day
Of bearing them in field, he threw 'em away;
And hath no honour lost, our duellists say.”

ORIGINAL COMMUNICATIONS.

REPORT OF THE READING PATHOLOGICAL SOCIETY FOR THE YEAR 1852.*

By T. S. LITTLE, Esq.

(Read on the 4th of August, 1852.)

MALIGNANT DISEASE. Mr. GAMBLE presented a specimen of encephaloid disease, which had perforated the skull of a man aged 56. He was a pauper patient, of short stature, sallow complexion, and dark hair; he had usually enjoyed good health. A year ago, the disease was first accidentally noticed, and then it formed a flattened and rather hard tumour of about the size of a crown-piece, occupying the upper part of the temporal fossa. It gradually increased in size, and, in the last month, occupied the space bounded by the parietal eminence behind, the orbit in front, the median line above, and the zygoma below; its circumference was very irregular, and it had many offshoots. It was soft, very elastic, and not painful; the skin was but little discoloured; numerous large veins and the temporal artery ramified over it. The edges of absorbed bone were easily felt around the main part of the tumour; they were irregular, very elastic, and denticulated. The shape of the head was much altered, and the right eye protruded considerably. The patient had no headache, nor any disturbance of the cerebral functions, till three days before his death, when, after violent shivering, he had epileptic fits, became semi-comatose, and died.

Post mortem Examination. The cranium was very thin; a portion of it, as large as a crown-piece, was entirely absorbed, and through the opening thus formed the main portion of the tumour protruded: there were also smaller openings through which other portions of the tumour had escaped. The tables of the bone forming the edge of the large opening were widely separated, whilst those of the smaller openings were not. The encephaloid mass adhered to the dura mater and to the bones, and considerably involved the external tissues. Its consistence was tolerably firm and white, except in the centre, where it was soft, and dark from the presence of blood. The outer portions were much softer than the central mass. The brain was healthy, but considerably flattened by the pressure of the tumour.

Mr. Gamble thought that the disease had originated in the diploë.

Mr. BULLEY presented a fine specimen of osteosarcoma, which occupied the right wrist and part of the ulna. The tumour measured fourteen inches in circumference, and nine inches from side to side, and consisted chiefly of bony cells.

The patient was an ostler, aged 46. Sixteen years ago, a horse kicked his right hand, bending it violently backwards: this injury occasioned active inflammation, which terminated in ankylosis of the wrist. A few months afterwards, a tumour arose on the back of the wrist, and acquired considerable size: it was punctured, and a quantity of fluid discharged. Other treatment was adopted, but without benefit. The tumour enlarged, increased in hardness, and then remained almost stationary. He was advised to allow nothing to be done to it, and he resumed his occupation. A few months ago, he received a blow on the tumour; the skin was broken, and there was smart hæmorrhage. This was soon followed by darting pains in it, and by dark red patches on its surface; fistulous openings formed, and from them there was much hæmorrhage; the pain became especially severe at night, and the strength was rapidly failing. Amputation was performed about three inches below the elbow-joint. The patient soon recovered; and two months after the operation was in excellent health.

Mr. HARRISON presented a specimen of cancer of the bladder in a woman aged 70. In September 1851, she was anæmic and cachectic; she had had hæmaturia twelve

months, and the hæmorrhage had sometimes been profuse. A small fungus, protruding from the meatus urinarius, was removed, and nitrate of silver applied. A month later, the bladder was felt, by means of a catheter, to be hard, rugose, and unyielding: there was pain in it. The urine contained mucus mixed with cretaceous masses. After awhile, the pain became agonizing, and a tumour appeared in the right groin. In April 1852, the patient died, exhausted by pain and hæmorrhage.

Post mortem Examination. The bladder was much thickened, and studded with cancerous deposits of various sizes; its mucous membrane was ulcerated in some places. There was a cancerous mass, of the size of a walnut, in the left lumbar region. The kidneys, the rectum, the ovaries, and the uterus, were healthy.

Mr. Harrison cited the authority of Dr. Cross and Professor Walshe, to show that uncomplicated cancer of the female bladder is very rare. Dr. Cowan had seen two such cases.

Mr. VINES presented a specimen of encephaloid disease of the right ovary of a child aged seven and a half years. At the age of five and a half years, the child had occasional pain in the bowels and sickness, and also a red vaginal discharge, which recurred at intervals of three, four, and six weeks. The mammary glands gradually enlarged, and at seven and a half years appeared to be fully developed. About six weeks before the child's death, the abdomen became much swollen and tender, and there was severe pain in it, especially at night. The appetite failed, the stomach rejected all kinds of food, and bilious-looking matters were frequently vomited. She died much emaciated.

Post mortem Examination. There was about a pint of straw-coloured fluid in the peritoneum. The abdomen was nearly filled by an enormous tumour, which had its origin in the right ovary, and weighed four pounds and a half. The left ovary and Fallopian tube were perfectly free. The uterus appeared to be fully developed.

A point worthy of notice in this case, is the coincidence of malignant disease in an ovary with the early development of the sexual organs.

Dr. WELLS exhibited the uterus, ovaries, and rectum, of a woman, who had died in the hospital. When admitted, she was much emaciated: the abdomen was tympanitic, and contained a large tumour. After a few days, vomiting came on, with great prostration. As there had been no evacuation from the bowels, the rectum was examined, and found to be strictured, so that neither a finger nor a tube could be passed up it. In consultation, it was considered inadvisable to attempt to form an artificial anus. Two days afterwards, the patient died.

Post mortem Examination. The left ovary was as large as a child's head; the right was of the size of an orange, and sacculated: it pressed on the rectum. The rectum was obstructed by cancerous deposit, and its canal was not larger than a quill.

During the discussion, Mr. May said that, in any case in which it seemed advisable to form an artificial anus, he would make an opening into the cæcum or ascending colon, by cutting down to the peritoneum, and then applying potassa fusa, so as to produce a slough of that membrane, with adhesion of the intestine; by which all risk of effusion into the peritoneum would be avoided. He considered this mode preferable to that of Amussat, in which the colon is opened behind. He viewed the colon merely as a receptacle, like the bladder, and believed that all the vital functions of the bowels were performed in the small intestines.

PERFORATION OF THE STOMACH. The case was reported by Dr. M'INTYRE, of Odiham, and communicated by Dr. Cowan.

The patient was a labouring woman, of spare habit, who had not been well for several months; she chiefly complained of pain in the epigastrium after meals. In the afternoon of the 23rd August, whilst engaged in reaping, she was seized with violent pain in the left lumbar and iliac regions, and immediately became faint, cold, and

* From the great and increasing demands upon our space, we have been obliged to omit several paragraphs.

covered with profuse perspiration. At half-past nine in the evening, when first seen by Dr. M'Intyre, she was in a state of collapse. There was pain all over the abdomen, but it was most severe on the left side, and was increased by pressure; the abdominal walls were retracted; there was thirst, and the tongue was dry and brown. The bowels had not acted since the morning of the preceding day. The diagnosis was, that perforation of a bowel existed; and she was treated by opium in repeated doses.

August 24th, at 3 A.M., she was easier. At 9 A.M., the extremities were warmer, and the pulse somewhat improved. The countenance was still cadaverous; she had slept a good deal early in the morning, and was still sleepy; the pupils were contracted; there was urgent thirst, and slight retching.

August 25th. She had passed a very bad night, and was evidently sinking. She died at 3 P.M., about forty-eight hours after the seizure.

Post mortem Examination. In the peritoneal sac there were about three pints of green ropy fluid, of the consistence of mucilage. The peritoneum and bowels were highly inflamed, and covered with recent lymph. The stomach was collapsed; on its anterior surface, about two inches from its cardiac orifice, there was a perforation, into which the forefinger easily passed. Its edges were firm, and slightly funnel-shaped; the tissues around were highly vascular and much thickened; near the perforation there was a small superficial ulcer surrounded by slight redness. The ascending and half of the transverse arch of the colon were distended with flatus; the remainder of it was strongly contracted. The lower extremity of the ileum was of a dark purple hue.

CONGENITAL INTESTINAL OBSTRUCTION. Mr. HARRISON related the case of an infant boy, of full size, who two hours after birth vomited large quantities of green bilious fluid; the urine passed freely; everything given was immediately rejected; the vomiting continued to the evening of the third day, when the child died. Injections were tried, but they would not pass; a small flexible catheter was introduced its whole length up the rectum, but it neither brought anything away, nor was it stained by meconium.

Post mortem Examination. The liver was healthy; the right kidney was absent; the stomach and the upper half of the intestines were distended with a greenish flaky fluid; the lower half was extremely contracted; the large intestines were a mere cord dotted with dark matter.

The mother of this boy had had six children, four of whom had died of congenital disease: one of diseased heart, and three of this affection; the first of these lived ten days, the second five days, and the last three days.

PURULENT CYSTS IN KIDNEY. Mr. MAY exhibited a kidney, in which there were several cysts filled with pus: it was taken from a boy, aged 17, who, three days before his death, complained of frequent desire to pass his urine, of pain in the loins, and vomiting.

OBSCURE RENAL DISEASE. Mr. HARRISON presented the kidneys of a man, aged 61, whose principal symptom was rapid breathing with great distress. There was no thoracic disease; the pulse was natural; the skin cool; the urine abundant, and free from albumen. He died more from asthenia than from coma.

Post mortem Examination. The bladder was much dilated and hypertrophied. On the surface of the kidneys there were many cysts filled with sabulous matter; the pelvis and ureter were dilated.

EMPHYSEMA FOLLOWING PHTHISIS. Dr. WOODHOUSE related a case. The patient was a man who had been in the hospital three times during the last eighteen months. On the first occasion, he was under Dr. Woodhouse, and his symptoms were those of confirmed phthisis. He was discharged at the end of his eight weeks. After a few months he was admitted under Dr. Cowan, and, in a short time, again discharged. About a month ago he was re-admitted under Dr. Woodhouse with symptoms of well-marked

emphysema. He was somewhat relieved by treatment; but one morning he suddenly expired in a paroxysm of dyspnoea.

Post mortem Examination. The sternum having been removed, the lungs appeared unusually prominent, on their surface there were numerous vesicles, some of which were of the size of a walnut. In the apices of the lungs there were some tubercles, and some condensed and corrugated points, which were apparently the cicatrices of former cavities; there were also other tubercles surrounded by hepatized lung. The lower lobes were much congested and partially hepatized.

EPILEPSY: LARGE BRAIN. Mr. MAY related the case of a gentleman, aged 40, who for the last fifteen years of his life had been subject to epileptic fits, during which he was generally thrown on his face, and then only rescued from suffocation by an attendant altering his position. In the fits his right humerus had been many times dislocated, but this accident had latterly been prevented by a bandage. He was at last found lying on his face dead, having been suffocated in a fit.

Post mortem Examination. The brain was pale, and weighed sixty-four ounces; the cerebrum fifty-eight, and the cerebellum six.

POISONING FROM BITE OF A FERRET. Mr. JESTON, Jun., related the case of George P., who came to him on the 14th May, complaining of intense pain in the point of one of the fingers of the right hand; the finger had been bitten by a ferret three weeks before. On the 18th, a small abscess was found in the situation of the bite and was laid open. A few days afterwards the patient had a shivering fit, and complained of great weakness, headache, and inability to get out of bed: there was a claret-coloured spot on the cheek and forehead. On the 23rd, the right side of the body was covered with red spots varying in size from a pea to a shilling; the lymphatics of the arm were inflamed, and the glands in the axilla were enlarged: there was great dyspnoea and prostration. Stimulants were freely given, and he began to rally; in a few days the spots disappeared and he got better. On the 27th the left half of the body was affected in the same manner as the right had been: the pulse was sixty; there was great debility, with very slow deep-sighing respiration. A glass of wine or brandy was given every hour; the arm was put into a bath, and the bowels were regulated by enemata. The stimulants were continued, and on the 2nd June the spots had disappeared, and the patient seemed to be going on favourably.

INDUCTION OF PREMATURE LABOUR. Mr. VINES related two cases in which he had performed the operation.

The first was a twin-case. The woman, having had several severe labours, for the completion of which instruments had been used, readily consented to be delivered at the seventh month. On the 21st July, about noon, the membranes were punctured and a great quantity of liquor amnii escaped. In the night of the 22nd, labour pains commenced; on the morning of the 23rd the os uteri was dilating and the pains were strong. The first child was delivered by the feet about noon, still-born, and the second in the same manner about half-an-hour afterwards: the latter was born alive, but died in a fortnight.

In the second case, the woman was of short stature and had an exceedingly narrow pelvis: she had been three times delivered of still-born children; the last of them in the seventh month. On the 22nd Oct., at 4 P.M. the membranes were punctured, and three or four pints of liquor amnii escaped; shortly afterwards she had a shivering fit, which quickly ceased on covering her with warm blankets. In the afternoon of the following day, the child was expelled still-born. The presentation was of the breech. The mother rapidly recovered.

Mr. Harrison said he had induced premature labour twice in the same individual. The first time, in the seventh month, he separated the membranes with a male catheter, and then gave ergot of rye: the labour was completed in

seventy-two hours; the child was born alive, but soon died. The second time, in the eighth month, the membranes were punctured with a stilettoed catheter and the liquor amnii let out; the labour was completed in thirty-six hours: the presentation was a breech one, and the child was asphyxiated. The mother did well.

Mr. May mentioned the case of a lady whom he had attended in two labours, in which he had been obliged to perforate the head. During the third pregnancy he advised the induction of premature labour. Without difficulty he introduced a sponge-tent into the os uteri. The next day he was summoned in great haste: there had been excessive hæmorrhage, and the floor was deluged with blood. He proceeded to deliver her, and then found a placental presentation. Without losing more blood, she almost immediately expired.

PURPERAL BLOOD-POISONING. Mr. HARRISON stated that Mrs. —, aged 36, was delivered of her second child on the 8th March, 1852: the duration of the labour was eleven hours. After the sudden escape of the liquor amnii and when the head was engaged in the outlet, the pains ceased for two hours and a half, then recurred, and, in an hour and a half more, the labour was completed. The outlet was narrowed by an undue prominence of the coccyx; the presentation was face to pubes; the child was a boy and weighed ten pounds: the placenta was extracted in a few minutes; the uterus contracted well, and there was no hæmorrhage.

Second day. She was comfortable in every respect.

Third day. She had been disturbed by the child and felt languid.

Fourth day. She had a good night, and made no complaint. The pulse was 90 and soft; the face flushed, the mouth and tongue dry, and she had slight thirst, the skin was moist, the urine abundant, the lochia moderate in quantity and healthy: there was not much milk. Mr. Harrison concluded that there was a general disturbance of the system, with interrupted secretion. He ordered hydragryi chloridi gr. j.; opii gr. ʒ., quartis horis sumend.; also saline mixture with antimony; and barley water, beef tea, and a little wine and water, for diet; warm water was injected into the vagina, and a hot bran poultice applied to the abdomen for an hour three times a day.

Fifth day, (morning report). She had had a good night: her expression was natural; the tongue moist, clean at the tip and edges, and coated with yellowish fur in the centre. To continue the medicines.

(Evening report). The pulse was more frequent than in the morning; the patient felt perfectly well, with the exception of being a little languid.

Sixth day. She had had a good night; had vomited a large quantity of bile, and expressed herself much relieved, the pulse was as yesterday; the complexion clear; tongue dry in the centre; the bowels had been twice relieved by medicine, and the evacuations were healthy; urine was abundant, and loaded with lithates. She was ordered effervescing medicine with ammonia, soda-water and brandy, and beef-tea.

(Afternoon). The bowels acted three times, and vomiting occurred three or four times. At night the patient felt so well that no one sat up with her. During the night she vomited three or four times.

Seventh day, (morning). She was rapidly sinking. The lochia were now offensive. Some unmixd bile had been once vomited or rather gulped up. Her intellect was clear. There was slight delirium in the evening, and she died at 9 P.M.

Post mortem Examination. A deposit of fresh lymph was found on the ovaria and between the intestinal convolutions. A quantity of bile was present in the stomach and duodenum.

This lady was of remarkably even temperament, and before her confinement was in perfect health. Mr. Harrison attributed her death to the influence of a poison, which was generated in the system, and which the secretory organs were unable to eliminate.

ON DISTICHIASIS.

By WHITE COOPER, F.R.C.S., Senior Surgeon to the North London Eye Infirmary, and Ophthalmic Surgeon to St. Mary's Hospital.

It has been observed by Paley, in his *Natural Theology*, that "in general we may remark in how small a degree those who enjoy the perfect use of their organs, know the comprehensiveness of the blessing—the variety of their obligation. They perceive a result; but they think little of the multitude of concurrences and rectitudes which go to form it".

A forcible illustration of the truth of this is afforded by the affection called distichiasis, in which the simple circumstance of a few hairs growing in a wrong place, or taking a wrong direction, is sufficient to embitter a man's existence. The following case presents a sad picture of suffering from this cause, extending over no less a period than two-and-twenty years.

CASE. Captain R. T., aged 44, 2nd regiment Madras Light Cavalry, was brought to me by Mr. R. J. Pollock, of Kensington, December 18th, 1852.

The following is the official report of his case by the regimental surgeon:—

"OPHTHALMIA. R. T., Captain 2nd Regt. L. C., 25 years resident in India, of a spare habit of body, temperament nervous, habits moderate.

"30th July, 1852. He was placed on sick list on 30th of last month, in consequence of a sprained ankle. Leeches were applied, which removed the pain and swelling; and he has now recovered entirely from that accident, but is suffering so much from his eyes, and his general health is so bad, that there is no prospect of his being able to return to duty.

"Captain T.'s eyes are constantly kept in an inflamed and painful state by trichiasis. There is great redness of the conjunctiva of the eyeball and eyelids; the vessels being turgid with florid blood, forming chemosis. There is considerable opacity of the cornea, rendering vision indistinct; and there is more or less constant pain, and a sensation as if particles of sand, or some gritty substance, had insinuated themselves under the eyelid, accompanied by heat and pricking pain. There is a watery secretion constantly going on in the day-time, that becomes glutinous at night, causing the eyelids to stick together. The eyelids are slightly inverted, and a considerable number of hairs of the upper eyelids are turned inwards against the eyeball; and, although their extraction gives temporary relief, they cause much greater irritation when they begin to grow again.

"This ophthalmic disease is of 22 years' standing.

"When living at Bussorah, in 1829, he had a severe attack of ophthalmia, from which he did not perfectly recover, and was sent to Bombay, and eventually to Europe, for further treatment.

"When in Europe, he placed himself under several eminent oculists; but they did not observe any defect in the eyelids, although he has now reason to believe that trichiasis existed at that time. In England, however, his general health improved, and the disease of his eyes subsided. Soon after returning to India in 1835, his eyes became worse than ever; and he was subjected to a variety of treatment, bleeding, purging, blistering, setons, tonics, alteratives, etc. He had the hairs repeatedly extracted from the cilia; but when they grew again, they took their usual course towards the tunica conjunctiva, and, by constant irritation of that membrane, produced pain and chemosis. Eye-washes and salves were at the same time had recourse to, but all proved ineffectual. His general health became involved; and in 1840, Dr. C. sent him for two years to the Neilgherries, where his health improved; and Drs. B. and S. excised a piece of skin from each eyelid; but the operation did no permanent good. His eyes, on leaving the hills, became as bad as ever. In 1842, he went to Madras, on staff duty, where the oculist endeavoured to contract the eyelids by the application of sulphuric acid;

and on this failing, strongly urged Captain T.'s return to Europe. This, however, he was unable to do, and has ever since remained in India; having the hairs pulled out every week or so, and using nitrate of silver lotion.

"With this palliative treatment, he has continued doing regimental duty: the duty of a cavalry corps constantly subjecting his eyes to irritation, from dust and sand thrown up when at drill. He is now nearly blind, and his general health is bad. He has frequent heaviness and oppression in his head, tenderness and heat in the epigastrium after a meal, and suffers in various ways from dyspepsia, which latter affection is very much aggravated by the depression of spirits induced by the state of his eyes. Altogether, his case is now a very urgent one; and, being clearly of opinion that a speedy return to his native country holds out the only reasonable chance for his recovery, I subjoin the following certificate."*

On taking a general view of Captain T.'s eyes, when he first applied to me, the appearances were as follows:—The upper lids appeared shortened and somewhat thickened; there was a full growth of lashes, which were agglutinated together by thick secretion, which was also accumulated in considerable quantity in the corners of the eyes; there was a constant flow of tears, requiring the frequent application of a handkerchief; the conjunctiva of each eye was reddened, and much stained with the characteristic olive tint produced by nitrate of silver; the corneæ were turbid from deposit of lymph in several places; and there was abrasion of the epithelium in more than one spot.

On examination, the cause of all this mischief was at once apparent. In addition to an unusually luxuriant fringe of eyelashes taking the proper direction, there appeared on the free surface of the margin of each upper lid, an additional row of fine hairs, growing close to the ocular margin, and directed obliquely inwards, so that they swept against the front of the eyes during every act of winking. The right lower lid presented a similar supernumerary row, extending along the greater part of the edge. In the left lower lid, there was a tuft of five strong hairs, which were directed full against the cornea.

The case, taking it altogether, presented a remarkably perfect example of that rare disease, true distichiasis, or double row of eyelashes. I say rare; for, although nearly three thousand patients pass annually under my observation at the two ophthalmic institutions to which I am attached, and elsewhere, three or four cases only of distichiasis (in contradistinction to trichiasis) present themselves.

There was clearly but one course to pursue, namely, to remove the bulbs of the whole of the cilia; for no other proceeding affords complete relief in these severe cases.

On the 21st December, the margin of the right upper lid, including a strip of the integuments, fibres of the orbicularis and hair-bulbs, were carefully dissected from the tarsal cartilage, and the edges of the wound drawn together by sutures.

On the 27th, a similar operation was performed on the left upper lid.

On the 3rd January, 1853, the margin of the right lower lid, and the tuft of cilia on the left lower lid, were removed.

The operations were very painful, and somewhat tedious; but I was ably assisted by Mr. Pollock, and Mr. Baker of St. Mary's Hospital, to whom my thanks are due.

The sutures were in each instance removed twenty-six hours after the operation, and the wounds healed with great rapidity. The following sketches were made immediately after the parts had been removed.

The following extract from a letter from Captain T., dated January 21st, will show his present condition as compared with his previous state.

"Before the operations, my eyes, consequent on the disease I was labouring under, but which was not understood when I returned to England in the year 1832, were continually watering, and in an inflamed state, which caused

great uneasiness and partial deprivation of sight; and until the supplemental row of eyelashes was removed, this irritation was kept up, causing much pain, which ceased on the lashes being extracted with tweezers. I have been suffering upwards of twenty years from this disease. Since the operations I have been quite a different man; my eyes seldom or never water, though they have been so recently cut, and I feel assured that, after they have fully recovered their natural strength, the watering will cease altogether."

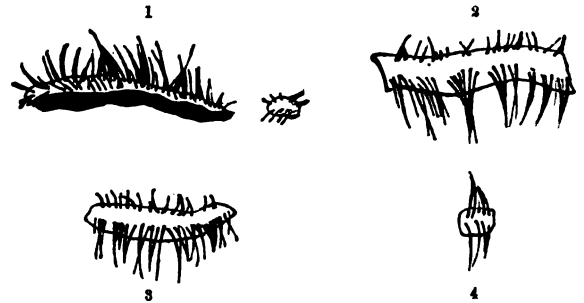


Fig. 1 represents the margin of the right upper lid seen from the inner side, and showing the bulbs of the supplemental row of cilia, which are in front.

Fig. 2 is the margin of the left upper lid from the outside. The true cilia are nearest the spectator.

Fig. 3 is the portion removed from the right lower lid, seen from the outside.

Fig. 4 represents the tuft of five strong hairs from the left lower lid; they were directed full against the cornea. With the exception of the last, the false cilia were much finer than the true. In all the sketches, the free surface of the edge of the lid is placed uppermost.

Careful examination of the parts removed confirmed the opinion formed by me from other cases, that in true distichiasis the pseudo-cilia are not merely true cilia, the bulbs of which have been displaced by disease affecting the border of the eyelid, but that they are independent of them, issuing in regular order from the ocular margin, and being much finer than the true cilia. An essential distinction between distichiasis and trichiasis is, that in the former the growth and situation of the inverted hairs is independent of disease of the lid; while in the latter, some morbid condition has almost certainly existed.

The following is perhaps the commonest mode in which the eyelashes become displaced.

A yellow suppurating spot, involving two, three, or more lashes, will be seen at the margin of the eyelid. On lifting with a cataract needle the little scab covering this, a drop of pus escapes, and an ulcer is laid bare, which has dissected round the cilia, often exposing the very bulbs; the cilia having thus lost their natural channels, easily acquire a false direction, which is confirmed by the contraction of the cicatrix after the healing of the ulcer; thus the hairs are drawn inwards against the eye. I have no doubt that this was the cause of the irregular position of the cilia represented in Fig. 5, which was sketched



Fig. 5.

from a portion of the margin of an upper lid, which portion was removed by me on the 8th September, from a patient who had long been tormented with obstinate trichiasis. A comparison of the figures will show the characteristic difference between trichiasis and distichiasis. In fig. 5, the cilia are irregularly scattered over the free margin of the lid; in three out of the four of the other sketches the pseudo-cilia will be seen extending in order along the inner edge of the lid, whilst the true cilia extend along the outer, a clear space intervening between the rows. The fore-shortening in fig. 1 rather obscures this, but it was strongly marked.

The following are the steps of the operation for distichiasis, which after considerable experience, I have found easiest and most complete.

With a fine camel's hair pencil and lampblack, the limits and line of an incision, which shall include all the pseudo-cilia, are to be marked on the skin about the eighth of an inch from the outer margin of the lid; this is desirable, as the free hæmorrhage and loose texture of the parts render

* The usual certificate for return to Europe.

it difficult to preserve an accurate direction during the dissection. Then, with a sharp pair of scissors, the edge of the lid, supported on an ivory spatula, is to be divided at the extremities of the proposed incision. The skin is thus set free; and by means of a sharp scalpel the skin, fibres of the orbicularis, and bulbs of the cilia, may be dissected from the tarsal cartilage with facility. When this strip has been removed, it is proper to wait until the bleeding has ceased, when any stray black points (hair-bulbs) may be snipped out with curved iris scissors. The edges of the incision are to be carefully drawn together with sutures of fine Chinese twist, and cold water dressings alone are required. At the expiration of about twenty-four hours, the sutures should be removed, or the lid will become puffy: their extraction requires a light hand, in order that the adhesions may not be disturbed.

The removal of the edge of the lower lid is somewhat more difficult than that of the upper, for the spatula which protects the eye, and is a firm point on which to cut, cannot be conveniently used; the lid must be drawn down to avoid the possibility of wounding the eye, and the traction on the integuments throws the tarsal cartilage back, so that it is rendered deeper than natural. Instead, therefore, of cutting down, I find it is best to thrust in the point of the knife at the limits of the intended incisions, and to cut towards the surface. The boundaries having been thus divided, the flap should be dissected off the cartilage, and, with a pair of scissors, snipped through close to the mucous membrane.

The operation is painful; the hæmorrhage always free: and it is best to have two assistants, one to hold the head of the patient firmly, the other to attend to the spatula and to sponge.

19, Berkeley Square, February 1853.

ON THE IDENTITY BETWEEN THE POISON OF ERYSIPELAS AND THAT OF PUERPERAL FEVER.

By ROBINSON ELSDALE, Esq., Surgeon.

My object in publishing the subjoined cases is to afford evidence in confirmation of the doctrine of the similarity, or rather the identity, of the poison of erysipelas and that of puerperal fever. They will show that one of these diseases will, under certain circumstances, induce the other; and that the induced disease, acting on the system of another person in a different state, will manifest itself in its original form.

The cases are related in the order of their occurrence.

CASE I. A man in this neighbourhood, after having recovered from a severe and long attack of typhus fever, imprudently went out and sat for some time upon some damp straw. He went home, and was seized with a shivering fit; and in a few hours erysipelas appeared, which extended over the whole of the head and face. He was quite blind from the swelling, and died in a few days. His death occurred on the 22nd of October. During his illness, he had been nursed by the wife of Joseph Freshney, residing at Moulton, a strong, healthy woman, aged 35, the mother of six children. On the day after his death, this woman, being then between four and five months advanced in pregnancy, had a severe rigor, and complained of sore throat. When I was applied to, on October 24th, erysipelas had commenced in the face; and it spread rapidly over the head and neck. Under the usual treatment, however, the fever and other symptoms abated; and on the 9th of November I considered her convalescent.

On November 10th, I was summoned to her, as labour pains had commenced. Shortly after my arrival, a fetus of between four and five months was expelled. I noticed a preternatural degree of heat in the generative organs, which induced me to interfere as little as possible. The woman recovered. Two women who attended this case,

suffered from fever and sore throat, and two children in the house had the same symptoms.

CASE II. On the same evening, Nov. 10th, I was sent for to Mrs. Buchan, a respectable married woman, aged 21, living at Moulton Chapel, four and a half miles from my house, and in quite a contrary direction from the last-mentioned case. She had a very favourable labour—it being her first. I was not with her more than three hours, before she gave birth to a full-grown female child. She had had slight diarrhœa for a day or two previous to the labour, which had not subsided at the time of her confinement. Two days afterwards, she was seized with violent vomiting and increased purging, which continued with more or less violence for a fortnight. There was no tenderness of the body on pressure; but the vomiting, which amounted to some quarts, was to her the most distressing symptom. The fluid ejected from the stomach was of that dark, coffee-ground appearance, observed in puerperal fever; and of precisely the same character as that which occurred in another case about to be related. She had a dry, hard skin, with a pulse never less than 120. The symptoms yielded to medical treatment. Calomel and opium appeared to have a very beneficial effect; and I used turpentine externally. She remained weak for a very considerable time, but ultimately recovered; and I have since attended her in other confinements.

The nurse who attended this woman had inflammation of the arm, which she attributed to a prick from a thorn in the fore-finger. The inflammation extended along the course of the absorbents to the shoulder. She was obliged to leave, and kept her bed for more than a week. She had considerable febrile symptoms. The woman who supplied her place was seized with pain in the arm, without any assignable cause, attended with the same symptoms; and was also obliged to leave. In both cases, abscesses formed, which were exceedingly tedious and troublesome. Both women attributed their illness to washing the linen of the lying-in woman.

CASE III. On the same night, November 10th, I was summoned at half-past 12 o'clock to Mrs. Garton, of Whaplode, quite in another direction from either of the two last-mentioned cases. I had previously attended her in two confinements, both of which had been very quick, and from which she soon recovered. She had enjoyed good health up to the time, and was thirty-seven years of age. On my arrival, I found the membranes whole, with the head low down, and strong pains. I ruptured the membranes, and, after a very few pains, a live child was expelled. The placenta followed almost immediately, and I left her very comfortable. Upon my calling on her during the next day, she (to use her own words) "never felt better in her life". The same night, she was seized with a rigor and pain in the abdomen: this she attributed to some castor-oil which the nurse had given, and which had not operated. I saw her again early on the morning of November 12th, not more than twenty-eight hours after her confinement. She was then suffering from extreme pain in the region of the uterus; she had a dry, hard skin, and a pulse of 140; her countenance was exceedingly anxious and expressive of pain. I bled her in the arm, and applied a dozen leeches to the abdomen: I also ordered her half a grain of calomel, and half a grain of powdered opium, every three hours; and administered an enema of warm gruel with turpentine. Upon visiting her in the evening, I found all the symptoms aggravated. The bowels had not acted; her eyes were half closed, her breasts exceedingly flaccid, her speech incoherent at times, and her breathing very difficult. She was evidently moribund, and died about six o'clock on the morning of the 13th; not living more than fifty-four hours after her confinement.

The nurse who attended her was seized with erysipelas of the face and head, on the evening of the woman's death, and died within a week. I did not attend her myself, as she came under the hands of Dr. Welch, of Holbeach, who told me that he never saw a more severe case, or one which more resisted all attempts on his part to arrest the progress of the disease: in fact, he assured me that it was one of the worst

forms of erysipelas he had ever seen. A neighbour, who came in during the labour, also had an attack of erysipelas, but in a much milder form (owing, perhaps, to her having much less to do with the patient); and she recovered.

Here, then, we have the poison of erysipelas conveyed, as believe, from the first woman, Freshney, producing in the lying-in woman, Garton, puerperal fever, and again (from the difference of the state of the two women) developing itself in the nurse in its original form.

CASE IV. On Nov. 11th, the day following that on which I attended the above-mentioned case, I was called to see Mrs. Brown, a young, healthy woman, aged 21, in labour with her second child. She lived at Moulton Chapel, under the same roof with the second mentioned patient, Mrs. Buchan. Here there was an unusually unyielding state of the os uteri. I had recourse to bleeding and opiates during labour, which extended over sixteen hours. She gave birth to a child greatly deformed in its lower extremities, and with spina bifida. I left her about one o'clock in the afternoon; and upon visiting her again in the evening, I found that she had had a rigor, and complained of pain in the region of the uterus, greatly increased by pressure. I applied leeches, with turpentine dressing, to the abdomen, and gave calomel and opium every three hours, with castor-oil. Upon again visiting her, as there had been no evacuation from the bowels, I administered an injection of warm gruel, with an ounce of spirit of turpentine. I also applied warm poppy poultices, as she complained of the turpentine increasing the pain. The calomel and opium were continued. Next day she was no better. She had violent and repeated vomiting of dark coffee-ground looking fluid. I gave another enema, and applied more leeches. In spite of treatment, she gradually got worse, and died on November 16th, four days after confinement.

This last case was one of decided puerperal peritonitis, without those marked symptoms of fever which existed in the case of the woman Garton. During life, there was a moisture upon the skin; and there was no dryness of the tongue until the last few hours. The bowels acted of themselves after about four injections had been given; but the pain was never absent, and the pulse sometimes 200 in the minute. I had at one time, from the action of the bowels, and the skin, some hopes of this woman's recovery; but to no remedy did the pain yield. Besides the calomel and opium every three hours, I at times gave full doses of the latter, with a view of allaying the irritability, and, if possible, of relieving the extreme pain. Leeches appeared to afford little or no relief. The vomiting was almost incessant.

After the death of this woman, so convinced was I that I carried about with me the poison which was working such frightful consequences, that I destroyed my clothes, sponged myself all over with a solution of chloride of lime, and rode for miles about the country, exposed to all weathers, hoping that the storm and wind might help to purify me from this fearful scourge. Luckily for myself and my patients, I had no other case of midwifery for more than a week. I took every precaution to interfere as little as possible, and was gratified by the recovery of the woman without one unfavourable symptom.

REMARKS. In the first case, the woman Freshney, having gone through (if I may so express it) the dangerous stage of erysipelas, had a premature labour, unattended by any bad symptoms, from which she speedily recovered.

In the second case, that of Mrs. Buchan, I think it may very fairly be asked, whether she did not in great measure owe her recovery to the inflammation attacking the mucous membrane of the bowels, instead of the peritoneum? the diarrhoea which she had previously to her confinement, as well as at the time, showing an irritable state of that membrane. In this case, both the attendants had inflammation of the absorbents, and abscesses, with considerable febrile derangement; the inflammation being of an erysipelatous character.

In the third case, that of Mrs. Garton, death took place so rapidly, from the extreme violence of the symptoms, as

to leave scarcely any time for medical treatment to be of any avail; and in this case the nurse died of erysipelas.

These facts appear to me to confirm the doctrine, that so-called puerperal fever or peritonitis is a disease of an erysipelatous character; and that it is capable, under certain circumstances, of infecting other persons with erysipelas, which may even prove fatal.

In connexion with this subject, I will quote the following interesting observations from a Report of the Standing Committee for the Western District of New Jersey Medical Society, by Dr. Parrish:—

"The simultaneous occurrence of erysipelas and puerperal peritonitis has often been a subject of useful and interesting inquiry among physicians. As evidence of there being great danger of communicating to parturient females the contagious virus of erysipelas, it may be stated that, while recently visiting a patient with this disease, and engaged in making applications to the inflamed part, the writer was called to wait upon a female in labour. Under the apprehension that there might be some danger of communicating the disease, the examinations *per vaginam* were as few and as rapid as circumstances would justify; but the case being very tedious, and requiring the employment of forceps, the hands were necessarily brought into contact with the mucous membrane of the vagina; and, though they had been thoroughly washed, the patient barely escaped with her life, from an attack of puerperal fever, with an offensive discharge from the uterus, and an acrid secretion from the vaginal walls. The infant, at the age of about two weeks, was seized with a severe attack of erysipelas, invading the head and shoulders, and extending down the back. The integument became extremely indurated; the skin assumed a dark, livid hue; and the little sufferer died on the third day, in a state of coma. A similar case occurred not long since, in the practice of another member of your committee; and the infant died with erysipelas about the nates, between the third and fourth week." (*London Journal of Medicine*, January, 1850, p. 57.)

Moulton, near Spalding, Lincolnshire, February 1853.

CASE OF HEMIPLEGIA FROM EXPOSURE TO SOLAR HEAT.

By WILLIAM HENRY ASHLEY, M.D., Surgeon to the Kensington Dispensary.

THE months of July and August of the past year were remarkable for a temperature unusually high for this climate, ranging in the shade at noon from 80° to 90° Fah., with probably an increase of 15° or 20° in the sun. The effects of this intensity of heat on our labouring out-door population were most baneful; and among the number of those who succumbed to its influence, may be mentioned the following instance.

CASE. James Bond, aged 24, a brickmaker's labourer, came under my care as a dispensary patient on August 3rd, 1852. He was of spare habit, had lived temperately, and enjoyed good health up to the time of the attack. During the sultry weather he had been engaged in conveying unburnt bricks to the kiln. The high solar temperature (blood-heat) to which he had been exposed, was rendered more aggravating by the burning brick-kilns; and under these adverse circumstances he had complained from time to time of much distress, and of headache. I did not see him until some hours after the attack. His statement was then very rambling, and his language incoherent; I gleaned, however, from him, with much difficulty, that he had no recollection of what had transpired from the time he quitted the brick-field, until he found himself in bed (his room was within a short distance of the field in which he had been employed), and he believed that the attack was not instantaneous. No person was present who could give any further account of his illness.

The pulse was small and 52 in the minute; the respiration natural; the complexion neither flushed nor pale.

head unduly hot; the eyes had a wild expression; the pupils contracted imperfectly under the influence of light; the conjunctivæ were not suffused; the tongue was drawn to the left side, and protruded with difficulty; it had a white fur, and was moist. His articulation was very much impaired; so much so that it was scarcely possible to comprehend one word that he attempted to utter; the mind also appeared somewhat imbecile. He had not felt pain in the head since the attack. There was complete deprivation of voluntary power over the right half of the body; the facial muscles were drawn to the left side; sensation was perfect, and the temperature uniform throughout. The functions of the involuntary muscles were unimpaired; there was no retention of urine nor constipation of the bowels. The nurse had not observed any muscular twitching or convulsive movement, nor had there been any delirium.

The following medicine was ordered: *R. Hydrargyri chloridi gr. vj; olei tiglii gr. i*: to be taken immediately, and followed in an hour by a turpentine enema. The head was to be kept raised on a pillow, the hair removed, and iced lotion to be occasionally applied to the scalp. The hot mustard hip-bath was directed to be used as soon as possible. Twelve leeches were applied to the temples. *R. Hydrargyri chloridi gr. ij; pulv. cinnamomi compos. gr. viij. M. Quartis horis sumatur.* The patient was ordered to take barley-water and gruel as nourishment.

August 5th. The pulse had increased in frequency. There was no anæsthesia nor formication; articulation was a little more distinct; he had no pain or throbbing of the head, nor intolerance of light, or excessive sensibility to sound. The bowels were relaxed, and the urine was copious. *Acetum cantharidis* was ordered to be applied to the scalp on the left side, and the blistered surface to be kept open with an ointment, formed of equal parts of the *unguentum hydrargyri*, *unguentum iodinii compositum*, and *unguentum cantharidis*, combined with one third portion of lard. The following powder was ordered to be taken every six hours: *R. Hydrargyri cum cretà gr. ij; pulv. cinnamomi compos. gr. v; and beef-tea*, as sustenance.

August 7th. The pulse was 70 in the minute, with increased power. He pronounced words with less difficulty; voluntary power was returning; the right foot could now be moved, and the facial muscles were but slightly distorted. The *hydrargyrum cum cretà* and *pulv. cinnamomi compos.* prescribed at the date of the last report, was now ordered to be taken three times a day; and the beef-tea and gruel to be continued.

August 13th. He had continued to improve daily. The paralytic condition had left but a trace of weakness on the right side; the voluntary power of the arm was restored, but the leg was still feeble. Articulation was scarcely affected; the muscles of the face had assumed their normal appearance. The following medicine was prescribed: *R. Hydrargyri cum cretà gr. ij; extracti hyoscyami gr. iij. M. Ft. pilula mane nocteque sumenda. R. Potassii iodidi gr. ij; ammoniæ sesquicarbon. gr. v; misturæ gentianæ compos. ʒj. M. Fiat haustus ter quotidie sumendus.*

From this date he might be considered convalescent; and in three weeks the power of locomotion was perfectly restored, and his health reinstated.

REMARKS. The majority of those who fall under the malignant influence of *coup de soleil* never rally; death too frequently ensuing either from apoplexy or shock. In this case, although the patient escaped the more fatal consequences, hemiplegia was the result.

In a remote age, we find the father of medical science thus briefly alluding to this subject:—"And when they pass their fiftieth year, defluxions supervening from the brain render them paralytic when exposed suddenly to strokes of the sun or to cold." Here, however, the paralysis was not a sudden result of the stroke of the sun; nor did it arise from apoplectic seizure, or transient vascular distension; for it did not appear until some hours had elapsed after the exposure, and not until all evidence of determination of blood to the brain had ceased. The pathological

condition will be better explained, by attributing it to serous effusion consequent on congestion of the cerebral vessels.

In the earliest stage, that of local hyperamia with determination of blood to the brain, the cold douche to the head, hot mustard pediluvia, and topical blood-letting, should promptly be had recourse to, together with the remedial measures before mentioned as having been employed in the case described. Should there, however, be any tendency to collapse, much circumspection will be required in order that we may not depress the vital powers; it may, indeed, be necessary to support with ammonia, ether, and other stimulants.

Excepting where apoplexy supervenes, general blood-letting, as a rule, is not admissible. We read that very doubtful benefit, if not positive injury, has resulted from it; the pulse has been observed to fall very rapidly, and the heart's action to become embarrassed, threatening syncope. Another grave objection which may also be advanced against the use of the lancet in these cases is, that by abstracting the more solid constituents of the blood, and thus diluting it and impairing its vitality, the risk of serous effusion is much increased.

In the more advanced period, that of effusion, the ointment before cited is most useful as a counterirritant in promoting the removal of the morbid product. The exhibition of mercury, however, in small and repeated doses, is mainly to be relied on, as it not only arrests the effusion, but conduces to the absorption of serum and coagulable lymph. Moreover, mercury should be administered at the earliest period of the attack as a preventive of inflammation; indeed, this is a most important indication in the treatment, not only of this affection, but in all cases where we have reason to believe that inflammation may be impending. By judiciously introducing into the system this invaluable agent, local inflammatory action may be prevented, or certainly arrested, before the more tangible symptoms reveal themselves to our senses; we thus anticipate the evil, and take measures to prevent its advent.

8, Boyne Terrace, Kensington Park,
February 8th, 1853.

CASE OF STRICTURE OF THE ŒSOPHAGUS.

By GEORGE LOWTHER, M.R.C.S.

THE following case of œsophageal disease, which occurred in my practice several years ago, I have been led to submit to the notice of my professional brethren, mainly from the fact that it resisted all remedial measures, even in the hands of men of eminence and extensive practical experience; and under the hope that this failure may prompt us to renewed exertions, in order to devise, if possible, some method of cure for one of the most formidable and distressing maladies incident to humanity.

CASE. Near the close of the year 1844, Mr. S., a corn merchant, felt, for the first time, an obstruction during deglutition, immediately above the sternum. Three months subsequently, the dysphagia increasing, he grew anxious, and consulted me on his complaint. I put him under a course of antispasmodics, alteratives, and counterirritants, with occasional aperients, and lastly mineral tonics; and at the end of three weeks, the difficulty of deglutition was decidedly relieved. The relief, however, was but temporary. He next took the advice of Dr. A—, then resident in Hull. Early in April, he left home, with the intention of consulting some metropolitan physician.

After an absence of three months in London, having been attended by Dr. C., afterwards by Dr. W., and finally by Mr. A., he returned home, greatly emaciated, and in no way benefited.* Dr. C. prescribed antispasmodics and mineral tonics; Dr. W. administered mercury, to moderate

* Mr. S. had in addition, during his stay in London, the advice and assistance of Mr. V., a surgeon of considerable practical experience.

ptyalism; and Mr. A. excluded medicine altogether, and confined his treatment to the introduction of an elastic gum catheter into the œsophagus two or three times a week.

On June 29th, the day after his return, I saw him. He had shrunk considerably; his step faltered; and his countenance indicated great anxiety. There were cough, dyspnoea, and hoarseness, which he attributed to a cold, caught a few days before, on a foggy day, in the suburbs of London; but which symptoms denoted, in fact, an extension of the disease, by proximity, from the œsophagus to the larynx.

June 30th. I witnessed an attempt to swallow a little milk. The effort caused an immediate distension, or bulging, just above the sternum, approximating in form and size to a small orange. The dysphagia appeared very distressing. After several ineffectual attempts to force the milk through the stricture, it was at length regurgitated, a small portion having passed, apparently *guttatim*. A glass, containing half a pint of milk, stood by him; he took an ounce at once, and regurgitated each successive draught, until the glass was empty. The fluid was then measured, and it was found that from half an ounce to an ounce had passed into the stomach. The introduction of a flexible catheter was arrested just behind the clavicular end of the sternum; by a slight manipulation, however, it passed its full length, eleven inches. The operation was repeated on July 2nd, also on the 4th, 6th, 9th, 12th, 14th, and 16th, with little amelioration in the dysphagia.

July 17th. The dysphagia was increased. Vesication over the trachea was ordered.

July 18th. I introduced the bougie, and ordered a few minims of an antispasmodic tincture to be given in mucilage occasionally; and an anodyne liniment to be applied over the blistered surface.

July 20th. The bougie was now introduced morning and evening. I ordered an antispasmodic and diffusible stimulant, containing half a grain of strychnia. The vesication was repeated; and oil of turpentine was applied over the blistered surface.

July 21st to 28th. The same treatment was continued, with the addition of an expectorant mixture. On the last named days, the patient was ordered to inhale occasionally the steam of half a pint of boiling water, with which two drachms of extractum conii had been mixed.

July 29th. He had slight pyrexia, and was ordered to take a sedative julep every three hours.

July 30th. I introduced the bougie. Ten minims of nitric acid were ordered to be taken three times a day, in a wineglassful of decoction of sarsaparilla, and soap liniment, with equal parts of tincture of iodine and spirits of turpentine, to be applied over the trachea.

August 1st. The plan of treatment hitherto described had had no effect in arresting, scarcely in mitigating, the morbid action in the larynx or œsophagus. His dyspnoea increased, and the larynx was acquiring a croup-like sound during inspiration. Emaciation and debility increased rapidly. The countenance had become anxious and cadaverous. Life had been chiefly supported since his return by beef-tea and other nutritious injections.

August 3rd. He was so much worse this morning, that I declined introducing the bougie. In the afternoon, I was hastily sent for. His breathing had become painful and laboured. Shortly after my arrival, he was seized with spasm of the glottis. He gasped for breath, implored the bystanders to give him air, and anxiously inquired if he was dying. The spasm gradually subsided, but was succeeded, at short intervals, by a second and a third attack, each paroxysm being less severe than the former. Dr. S., who had been a few days in attendance, directed a combination of opium, calomel and tartar emetic, to be administered every four hours. Leeches were applied over the os hyoides; vesication over the trachea; and the nitrate of silver in solution to the pharynx and epiglottis. Preparations were also made for tracheotomy, in the event of a recurrence of spasm.

August 4th. He passed a tranquil night. The antispasmodic powders were continued.

August 5th. It would be superfluous to particularize the remaining treatment. Anodynes, antispasmodics, and counterirritants, appeared to arrest further spasmodic action. The patient, however, gradually grew worse. Having lingered until the 8th, after having been insensible for half an hour, he expired.

Section Cadaveris, twenty hours after death. The œsophagus having been reflected from its vertebral attachments, together with the larynx, the latter was first opened.

The entire mucous membrane, particularly about the rima glottidis, was so much thickened, as to lessen considerably the diameter of the larynx. It was covered with a thick, glutinous, chocolate-coloured coating, but had no perceptible evidences of ulceration. These appearances extended in a less degree to the trachea, and were lost in the bronchi.

The œsophagus was then examined. On tracing it downwards, the canal began gradually to expand, until it had acquired an extraordinary calibre, presenting a pouch-like appearance, which at once accounted for the bulging during deglutition. Immediately opposite the clavicular extremity of the sternum, the canal had become thickened, indurated, and contracted. Here, of course, was the seat of stricture. The diameter of the tube was so diminished, as scarcely to admit the bougie (a tapering one) to be drawn through it. The cellular tissue connecting the larynx and œsophagus was entirely obliterated; and the two tubes were so completely connected, as to render their separation impossible. A full-sized œsophageal bougie, introduced into the canal immediately below the stricture, passed, with a slight sensation of obstruction, into the stomach. The remainder of the canal, however, was quite normal, the obstruction being occasioned by an osseous growth projecting from one of the dorsal vertebrae.

There was nothing remarkable in the thoracic and abdominal viscera, beyond a diminution in size, and a general appearance of exsanguinity. The stomach, as might be anticipated, had shrunk considerably. The head was not opened.

A practical writer has lately said, "Whoever abuses the functions of an organ, accepts a blank bill upon the future. It may run for a longer or a shorter date, but it *must* come due." Alas! bills, wherein Disease is the witness, and Death the acceptor, belong to an old currency of a world-wide circulation. That they are frequently self-drawn, is proved by sad experience; the present case affording a painful illustration. Mr. S., although rarely intoxicated, had been in the daily practice, during several years, of indulging in strong spirituous potations. He was, moreover, a free smoker. That the structural change in the œsophagus had been induced by the artificial habits he had acquired, admits not, I think, of the slightest doubt. The disease was not malignant; and in this view Dr. S. coincided. The case is one of those wherein we discover the futility and utter inefficiency of all remedial agents, in controlling or modifying severe structural changes, or extensive organic lesions.

3, Nelson Street, Hull, February 14th, 1853.

ABSCESS OF THE CÆCUM, CONTAINING SOLID OPIUM, IN AN OPIUM-EATER.

By J. P. BOWLING, H.E.I.C. Bengal Medical Establishment.

CASE. Charles E. May, aged 25, a sergeant in H.M. 51st regiment, was admitted into hospital under my care on the 29th of June 1852. He complained of having been feverish and unwell for some days, with occasional fits of shivering followed by heat of skin and sweating. He had also a dull aching pain, and slight tenderness in the right iliac region, with thirst and foul tongue. The bowels were constipated.

the pulse was 90, and weak. He was ordered to have a dozen leeches applied, followed by warm fomentations to the seat of pain, and to take a mercurial purgative.

June 30th. He stated that the leeches had considerably relieved the pain: but he still felt uneasiness on pressure. The purgative had acted well, and had brought away a large quantity of dark offensive faecal matter. The tongue was clean; the skin cool and moist; the thirst less; pulse 100, and weak; he had had no rigor since admission. He was now ordered bark with sedatives, with generous diet, and a small quantity of wine. Under this plan of treatment, he appeared for a few days to be improving.

July 6th. He had been observed for the last day or two to present a dull heavy look. He appeared quite apathetic and indifferent to all around him, sleeping a great deal, and in fact exhibiting all the appearance of a man under the influence of opium. When questioned on the subject, he strenuously denied ever having taken a grain of that drug beyond what had been prescribed for him.

He continued in the same state of drowsiness and oppression, which masked any symptoms which might otherwise have presented themselves, and making no complaint beyond that of debility and want of appetite,—the pulse becoming weaker and more rapid, till the morning of the 13th, when he expired.

On removing the body, nearly two ounces of opium were found beneath the bedding. His comrades admitted that he had been in the habit of taking large quantities for the last seven years.

Post Mortem Appearances. The body was well formed, but attenuated. The contents of the thorax were healthy. In the abdomen, the cæcum was found distended, and formed the pouch of an abscess, which contained about four ounces of highly offensive pus. Throughout this collection of matter were seen seven or eight pieces of a dark looking substance, which, on being submitted to examination, proved to be opium. Their weights varied from one to three grains each. There were traces of recent peritonitis, but not of an active character. Owing to the absence of proper instruments, the head could not be examined.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

IODIDE OF SODIUM IN THE TREATMENT OF CONSTITUTIONAL SYPHILIS.

DR. UBALDO DAVERI, Chief Physician of the Hospital of Saint Orsola in Bologna, has employed the iodide of sodium instead of the corresponding salt of potassium. The iodide of sodium employed by Dr. Daveri, was prepared by placing three ounces of filings of iron in two and a half pounds of distilled water, and gradually adding, with constant agitation, a pound of iodine; as soon as the mixture had acquired a greenish colour, it was filtered and quickly treated with a solution of carbonate of soda, until all the iron was thrown down. The carbonate of iron thus formed was separated by filtration, the filtered fluid evaporated to dryness, and the residuum again dissolved, filtered, and evaporated, until a pellicle had formed. By this method, fourteen ounces of iodide of sodium were procured in the form of white rhomboidal prisms, deliquescent, and having a saltish taste, less disagreeable than that of iodide of potassium.

The iodide made from iodine and caustic soda is disagreeable to the taste, gives rise to a burning sensation in the fauces, to weight and uneasiness in the stomach, and to gastro-enteric pains.

The dose administered at the commencement of the treatment, was always a scruple of the iodide dissolved in three ounces of distilled water, and given in three equal portions in the course of twenty-four hours. The salt was likewise employed, in the form of ointment, in the proportion of half a drachm or a drachm to the ounce of lard. In the administration of the iodide of sodium, the same rules and precautions are to be observed as apply to the use of the potassium salt. The author divides the 110 cases, on the observation and treatment of which his paper is based, into the three following classes:—

1. Cases of constitutional syphilis, in which so-called secondary and tertiary phenomena co-existed.

2. Cases of so called tertiary lues, in which the use of mercury preceded the treatment by iodide of sodium.

3. Cases of so-called tertiary lues, in which iodide of sodium alone was employed.

Of the first class, twelve cases, in which the symptoms were pains in the bones or periostitis, united with some manifestly constitutional affection of the skin, generally of a papular or pustular form, were treated with iodide of sodium. In eight of these cases, the use of the salt alone effected a cure; in the remaining four, it was necessary to have recourse to mercurial frictions, to remove the cutaneous affection which remained after the tertiary symptom had yielded to the iodide. The minimum quantity which succeeded in curing the disease was three drachms, the maximum three ounces; the quantity which was usually required ranged from two to three ounces. The shortest time in which the symptoms were removed was nine days; the longest, three months; the average was about a month.

The cases of the second class, or those of so-called tertiary lues, in which the use of mercury preceded the treatment by iodide of sodium, were seventeen. In some of these, six or seven ounces of stronger mercurial ointment had been rubbed in; the average quantity was from four to five ounces. The minimum quantity of iodide of sodium administered was three drachms; the maximum, four and a half ounces; the average, from one to two ounces. Those patients who had derived no benefit from a protracted course of mercurial treatment, were cured after the administration of a small quantity of iodide of sodium; while this remedy had to be given to the extent of four and a half ounces, in cases in which only a limited number of mercurial frictions had been used. The patients who resisted the long continued employment of the ointment, laboured under osteocopic pains, which subsequently gave way to a small quantity of the iodide; while those who practised, without benefit, a moderate number of mercurial frictions, suffered either from syphilitic rheumatism, or from a mixture of syphilis and scrofula. This fact of the iodide being required in the inverse ratio of the amount of mercury previously employed, arises, the author thinks, from this,—that in the first case the use of mercury had, in a great measure, overcome the syphilitic element, which was then entirely removed by the administration of the iodide; while in the second the elimination of the constitutional venereal principle, commenced by the mercury, was, for the most part, reserved for the iodide of sodium.

The cases belonging to the third class, comprising those of so-called tertiary lues, in which the iodide of sodium was the only medicine administered, were eighty-five in number; of these, thirty-seven were cases of ostalgia, in the treatment of which vapour baths and iodide of sodium were employed: the minimum quantity of the latter given was from one to seven drachms; the maximum, from eight to twelve ounces; the average, from two to four ounces. Of rheumatism, the cases were seventeen, likewise treated with vapour baths and the iodide; the minimum dose of the latter being from two to four drachms; the maximum, nine ounces; the average, two to four ounces. Of arthralgia, nine cases were similarly treated; the minimum quantity employed having been seven drachms; the maximum, two ounces. Of the other varieties of tertiary disease, the numbers were too limited to require special mention, or to justify the deduction of conclusions from them.

Derangement of the stomach, iodic eructations, pyalism, and affections of the throat, were seldom met with from the time the iodide of sodium was substituted for the potassium salt; consequently, the remedy could be more steadily persevered with, and its dose more rapidly increased: circumstances directly promoting the cure of the diseases for which it was administered. In the few cases in which pyalism occurred, it totally ceased on suspending the medicine for two or three days. In but a single case, did it appear to be obstinate; and in this instance the mouth was, on examination, found to be pale, free from swelling, and very slightly painful. As the patient lay in a ward with many syphilitic patients under mercurial treatment, it was thought the salivation might be owing to mercurial vapour present in the atmosphere—a suspicion which was verified by the result; for on removing the patient to another apartment, free from mercurial contamination, the salivation entirely ceased in two days.

The time required for the cure of nineteen patients treated with the iodide of sodium, was about twenty-eight or twenty-nine days; while with the potassium salt, likewise exhibited in nineteen cases, the average time was from thirty-four to thirty-

five days. Many cases, which had either not got entirely well, or were proceeding but slowly, under the use of the iodide of potassium, were rapidly cured by the substitution of the corresponding salt of sodium.

Several of the cases, however, treated with iodide of sodium, relapsed, and the disease again yielded sometimes to a repetition of the remedy, sometimes to the use of mercurial frictions. But this circumstance cannot be urged against the iodide of sodium alone; for the same is equally true of every other antivenereal remedy,—one of the leading features of lues being its tendency to present periods of lull and of relapse, whatever be the therapeutic means employed.

The author concludes his paper with the following *résumé* :—

1. Soda being a very common ingredient in our organism, the iodide of its base appears best suited to the human system.
2. The taste of the iodide of sodium is much less disagreeable than that of the iodide of potassium.
3. It is less likely to occasion iodism.
4. It is better borne than the potassium salt, and in consequence of this, its dose can be almost daily increased; and it thus becomes a more efficient remedy.
5. It has sometimes succeeded where the iodide of potassium had failed.

6. We may commence by giving daily, in three equal doses, a scruple of the salt dissolved in three ounces of distilled water, increasing the strength of the solution, every two or three days, by six grains. Some patients have, in this way, been able to take more than two drachms a day, without suffering the slightest inconvenience.

7. The iodide of sodium is admirably adapted to cases in which the corresponding salt of potassium is indicated.

8. The iodide of sodium is the best substitute for mercury.

(Abridged from *The Chemist*, December, 1852, as quoted from *Corrispondenza Scientifica di Roma*, No. 32, 1852.)

CASES OF LYMPHORRHAGIA: VARICOSE DILATATION OF THE LYMPHATIC VESSELS.

In the *Mémoires de la Société de Chirurgie de Paris*, tome iii, fascicule 2, M. DEMARQUAY has published two cases of lymphorrhagia, or escape of lymph from the external surface of the body.

CASE I. M. X., aged 17, on the 9th of March, 1852, while playing with some relatives, accidentally found that his shirt and trousers were wet. On examination, he found that the fluid escaped from a part of the thigh; it was at first colourless, but soon became milky. A medical man was called, who arrested the flow by applying a compress dipped in cold water, with a slightly tightened bandage. The next day M. Demarquay found, at the lower and inner part of the left thigh, numerous small depressible elevations, which he at first took for hypertrophy of the follicles. The linen, which had been worn on the previous day, had become stiff, as if it had been dipped in an albuminous fluid. It was evident that much lymph had escaped; but the exact point of its exit could not be determined.

Some days afterwards, M. Demarquay had an opportunity of seeing some lymph escape from the lower and inner part of the right thigh of M. X. It was at first colourless, and of a slightly opaque tint, passing to yellowish white on accumulation in a glass vessel. On examining with a lens, M. Demarquay ascertained that it escaped from a very limited spot: it was thrown out with some force, for it slightly raised the epidermis; indeed, it flowed in the same way as blood from a small arterial twig at the bottom of a wound. Eight *grammes* (a little more than two drachms) were collected in a wine glass: in a few minutes the fluid was entirely coagulated; it adhered to the vessel, and presented a bluish white appearance, inclining to yellow.

Some days afterwards, MM. Denonvilliers, Ricord, and Flourens examined the case with M. Demarquay. Independently of a series of granular elevations at the inner part of the right thigh, at the union of the lower with the middle third, there was a projection three or four *centimètres* (one inch and one-fifth to one inch and a half) in extent, reaching, in a slightly curved form, from the front to the inner part of the thigh. It yielded to pressure like a varicose vein; upon and around it were small granular elevations. The projection increased on motion, and diminished during rest; it was evidently a varicose dilatation of a lymphatic vessel.

From this time till September, M. X. remained free from the lymphorrhagia. At the latter period, when in Montpellier, he was again attacked; the fluid was then examined by M. Bouisson and other physicians. A flow of lymph occurred for a short time on October 31st; and on November 1st it returned, and continued during nine hours, in spite of pressure by means of a handkerchief, which had hitherto been found sufficient to arrest

it. M. Demarquay obtained several ounces of fluid, some of which was furnished to M. Mialhe for chemical examination. The fluid coagulated, like that already described: but a clot was soon formed in the centre, appearing as if composed of a series of reddish filaments in abundant serum. The varix had increased in size, and the granular elevations observed in March had become transparent and vesicular. On pricking one of them, lymph escaped. The right thigh was at this point more than two *centimètres* (four-fifths of an inch) larger than the left.

Pressure above and below the point whence the lymph escaped gave rise to a jet as from a vein of moderate size. When pressure was made below the dilatation, the flow was not arrested.

M. Demarquay observes that there was here not only dilatation of a lymphatic vessel, but also of the superficial network at two points of the thigh; viz., anteriorly and interiorly at the junction of the lower with the middle third, and on the anterior part at the middle third. The escape of lymph during nine hours did not produce inconvenience; and, up to the date of the report, the disease had continued, and the flow of lymph had gradually increased.

CASE II. This case was observed by Dr. Fitzer. A young lady, aged 16, who had not menstruated, had had crural hernia from the age of eight years. In 1847, she found that she had on her abdomen a number of small granular elevations; she was examined by Dr. Fitzer, who found a brownish stripe three finger-breadths in width, commencing an inch below the umbilicus, to the left of the linea alba. It extended to the left and upwards, passing between the false ribs and the ilium, and ended at the dorsal vertebra, becoming smaller and more transparent at this part. The middle part of this streak was prominent, and was formed of about eighteen papillary enlargements; some of these resembled the mammillary papille in men, others those in women; they were not tender to the touch, and disappeared on pressure. In July, the patient felt some pain in the situation of the streak; and on the 31st of that month, after returning from a walk, she found that there was escaping a milky coagulable fluid. She estimated the quantity which escaped at a quarter of a pint. Dr. Fitzer found the appearance of the parts the same as before. The fluid continued to escape during three days. It was milky, of a saline taste, alkaline, and escaped from two of the largest of the elevations which have been described. When one orifice was compressed, more lymph flowed from the other. Dr. Fitzer cut one of the elevations with curved scissors; he was able to pass a probe for an inch right and left: a quantity of lymph escaped from this incision. Pressure, and the application of alum, were insufficient to restrain the flow of lymph; Dr. Fitzer therefore applied nitrate of silver. It was important to arrest the disease, as the girl was losing strength, and the pulse was becoming weak. The lymphorrhagia ceased, but the granular projections remained; new ones were even formed, of the size of a lentil or millet-seed, while the skin over the remaining part of the streak had become pale, like that of the rest of the abdomen.

Microscopical and chemical analysis of the fluid, made by M. Schlossberger, left no doubt that it was lymph.

M. Demarquay has not been able, after diligent search, to find any records of cases of lymphorrhagia from spontaneous rupture of the vessels: cases of lymphorrhagia from wounds have been recorded by Nuck, Van Swieten, and Assalini.

Dilatation of the lymphatic vessels has been observed by Baillie, Mascagni, Amussat, Breschet, Sir A. Cooper, Bichat, Sömmering, Morgagni, Beau, Ricord; also by Bidloo, Meckel, Rokitansky, Albers, Andral, Otto, and Hasse.* But the facts have not as yet been sufficient to enable pathologists to determine the causes, forms, varieties, diagnosis, prognosis, or treatment of the disease. As far as M. Demarquay knows, M. Beau is the only surgeon who has attended to the treatment. In cases of dilatation of the lymphatics of the prepuce, he introduces a small seton into the dilated vessel, and removes it at the end of three or four hours. Obliterative inflammation is thus produced.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

SMALL-POX.

THE epidemic small-pox which visited England in the early part of the year 1852, was at least as severe in its character, as malignant in its contagious tendency, and as fatal to its victims, as any variolous epidemic with which this country has ever been visited. The visitation commenced in the last quarter

* Hasse's *Pathological Anatomy*. Sydenham Society's Translation.

of 1851, advanced rapidly until the termination of the year, and continued its fatal career till the end of July 1852, when it began to decline with steady rapidity till December, during which month there were only 14 deaths; the monthly average during the last twelve years being 74. The following table is constructed from the weekly reports of the Registrar-General as regards the mortality from small-pox in the metropolitan districts:—

DEATHS FROM SMALL-POX.

From 1840 to 1851, the average deaths from small-pox were about	801 per annum.
In the last quarter of 1851 there were 339 deaths; rate,	1356 "
In the first quarter of 1852, 389 deaths; rate,	1556 "
In the second quarter of 1852, 472 deaths; rate,	1888 "
In the third quarter of 1852, 221 deaths; rate,	884 "
In the fourth quarter of 1852, 74 deaths; rate,	296 "

The present average is, therefore, four times less than the average of the preceding eleven years. The disease has, however, broken out with great severity in South Wales, where an epidemic of very fatal character has been raging, particularly in the iron districts, for the last three months. It has likewise been very fatal in the West of England, especially at Bristol, where it has assumed a peculiar and somewhat novel character; the type being malignant and confluent, and the pustules running into putrid masses with unwonted rapidity. Mr. Stansbury is of opinion that the disease is of Irish introduction, as the first case which came under his notice he could trace directly from Ireland.

Small-pox is essentially a pustular affection; and it is remarkable that it should have immediately succeeded the prevalence of the furunculoid epidemic. The deaths from carbuncle attained their greatest number in the first quarter of 1852, in which there were 16 deaths from that disease, or a rate of 64 per annum, the average being 44; and the deaths from small-pox in the second quarter of 1852 were 472, the rate being 1888 per annum; the average being about 792. It becomes a question of interest, therefore, whether a general tendency to pustular formations may not have had some common influence in producing both epidemics. During the year 1852, there were more cases admitted into the small-pox hospital than in any former period since its original establishment; and the fatality has been equally extraordinary. The corymbose and hemorrhagic forms of the disease, both of them at all times almost uniformly fatal, have prominently marked its course. It is also worthy of remark, that, almost immediately preceding its outbreak in Europe, the Indian Presidency of Bengal was visited with one of those awful variolous epidemics which have devastated that "city of palaces" on several occasions during the last half century. The visitation of 1840-50 was so fatal in Calcutta, that, notwithstanding the proverbial apathy of the inhabitants (who have, as a body, rejected the protection of vaccination), yet, on this occasion, a general panic of so unusual an order seized on the inhabitants, that government appointed a special commission to inquire into the nature of the epidemic. The report of these commissioners has been transmitted to the Epidemiological Society; and it appears that, during the years 1840-50, among the native inhabitants, the deaths from small-pox actually amounted to 4,467, the total deaths from all diseases being 9,530: in other words, the deaths from small-pox alone were 46·86 in 100 deaths. In the following year, the disease visited Europe; thus travelling, like the cholera, from east to west.

SCARLATINA.

The more common epidemics have been observed, from time immemorial, to follow hard upon each other's footsteps. It has been shown, that the late variolous epidemic attained its height in the metropolitan districts in the second quarter of 1852; that it declined in the third quarter of that year; and in the fourth quarter diminished to an amount far below its average. Now, by comparing the following tables, it will be seen that, no sooner had small-pox begun to decline, than another epidemic, scarlatina, began to manifest itself; and observed a rapidity in its advance remarkably proportioned to the rapidity of the decline of small-pox.

SMALL-POX. Annual average, 840.	1852.	SCARLATINA. Annual average, 1794.	1852.
1st quarter, deaths	389	1st quarter, deaths	366
2nd quarter, "	472	2nd quarter, "	563
3rd quarter, "	221	3rd quarter, "	668
4th quarter, "	74	4th quarter, "	952
1st six months, .	861	1st six months, .	920
2nd six months, .	295	2nd six months, .	1,620
Total deaths in 1852,	1,156	Total deaths in 1852,	2,549

Thus it appears that, while both of these epidemics exceeded their usual average in the year 1852 by about one-third, the actual excess in small-pox was observable in the first six months only; while the excess in scarlatina occurred in the second six months only; and that the excess of each, in its own epidemic half of the year, was about double the average half-yearly number; the small-pox cases being rather more than double, the scarlatina cases rather less than double, the average of six months.

It can scarcely be doubted that, amidst the general darkness and mystery in which the causes of epidemics are involved, a ray of light might be struck out, if, with the aid of general registration, the future history of different epidemics, especially with regard to their relative rise, progress, and decline, could thus be accurately traced and systematically recorded. We doubt not that the zealous members of the Epidemiological Society will ultimately have their attention drawn to these interesting points. Meanwhile, we earnestly call upon the members of our Association to avail themselves of their local opportunities, each in his own sphere, of noting, recording, and tabulating, corresponding facts.

In the preceding sketch of the epidemics of 1852, as regards the metropolitan districts, we have purposely abstained from all reference to the influence of vaccination in protecting the population against small-pox, because we are looking with eager expectation to the forthcoming report of the Small-pox and Vaccination Committee of the Epidemiological Society, which, we trust, will set most of the vexed questions connected with vaccination at rest. But, lest the late variolous visitation should lead any of our readers to erroneous conclusions as to the general failure of Jenner's discovery, in its protective power over the population at large, we can only entreat them to wait until the whole subject has been brought before them in all its details, and in its momentous bearings upon the prospects of this country and the world at large, in regard to the possibility of being better prepared to meet any future outbreak of this terrible disease.

There is one interesting fact disclosed in the quarterly return just published by the Registrar-General, viz., that, while the metropolitan mortality has been considerably below the average, as likewise the mortality in the provincial towns, the mortality of the provinces generally was above the average. This may be accounted for, if we reflect that a very rainy season, while it will augment the general tendency to disease, will also, by washing out the drains of large cities, tend to diminish the rate of mortality arising at all seasons from this very fruitful source of disease and death. It is also reasonable to attribute the superior salubrity of the town districts to the energy with which, in some localities, the new Sanatory Act has been enforced under the direction of the Board of Health.

MEASLES.

This disease is at present very prevalent in London and some of the suburbs. The epidemic is of a mild character; but from the severity of the season, the children of the poor frequently have a tedious and imperfect convalescence. The eruption is in general very profuse, and the fever slight.

FURUNCULOID EPIDEMIC: APPEARANCE OF ACUTE PEMPHIGUS.

The epidemic of carbuncles is still raging in London, and has been more fatal during the last month than at any previous period, except in the month of September last year, in which were registered 10 deaths. In January 1853, 9 deaths were registered, three of which occurred in the last week of the month. In one of these, the patient, a lady of 39, survived with a succession of carbuncles for five months, during the last five weeks of which they became complicated with whitlows and abscesses, under which she sank. In several instances, the disease has of late commenced with vesications; and it is also remarkable, that two or more deaths have recently occurred from pemphigus, which, in its acute form, is extremely rare in

this country. In its malignant form it is a horrible disease, more dangerous than small-pox, and quite as repulsive and distressing. The type is low, and the serum in the vesicles speedily assumes a putrid condition, and exhibits a dark colour. The pulse is frequent and feeble, and the mucous membranes often participate in the disease, and discharge an offensive muco-purulent fluid.

SURGERY.

RHINOPLASTIC OPERATION: FLAPS FORMED BY SUBCUTANEOUS INCISION.

The following case and remarks, by Dr. MACDONNELL, of Montreal, are abridged from the *Canada Medical Journal*, for November, 1852.

CASE. Mr. —, aged 30, two years ago, in an attempt to save an old man, who was maltreated by two strong young men, was knocked down by these men, and one of them bit out several pieces from about his face and hands, a portion of one ear, and the entire cartilage of the right ala of his nose, leaving but a small portion connected with the upper lip. He recovered soon from the effects of the beating, but the wound of the nose was a long time in healing, and left the nostril exposed on that side. He consulted a surgeon about a year ago, who undertook to remedy the defect by engrafting on the cicatrix a portion of skin removed from the back of the patient's hand. This was accordingly done, and the new substance retained *in situ* by adhesive plaster; as might be expected, no union took place. The patient now despaired of obtaining relief, and selected an occupation that required withdrawal from society. He came to Montreal to consult me. On his removing the adhesive plaster with which he had concealed the deformity, I was struck with the peculiar shape and size of the deficiency in the nostril, which could hardly have been produced in any other way than that already mentioned. I recommended him to take a private ward in St. Patrick's Hospital, and stated my opinion, that an operation would remedy the defect. On October 4th, assisted by Drs. David and Howard, and by Dr. Walter Jones, I performed the operation in the following manner:—A small narrow bladed knife was introduced between the skin and nasal bone, and carried upwards towards the edge of the orbit, care being taken to keep the blade close under the skin. When the point was felt in this situation, the edge was carried towards the mesial line so as to separate the integument from the bridge of the nose, which was rather prominent. The dissection being completed in this situation, the knife was carried downwards, still close under the skin, until it reached a level with the under edge of the nasal bone. The blade was then withdrawn, and entered under the remnant of cartilage before alluded to as being still connected with the cheek, and pushed toward the ear for about two inches, when the edge was turned upwards, and the dissection carried on until it joined that before made. By this plan, the skin was detached off the subjacent parts, from the median line of the nose all over the cheek, and the scalpel passed freely about in all directions. A large flap having thus been made, the edges of the cicatrix were pared and brought together, and the stump of cartilage joining the cheek, being brought into contact with the tip of the nose, was there maintained by a Dieffenbach's pin and twisted suture; two or three points of suture served to bring the remainder of the wound into apposition, and thus, what was before a semilunar cicatrix, appeared an incised wound, whose edges were in one line. To enable me to avail myself more fully of the flap detached from the cheek, an incision to the extent of little more than half an inch was carried from the outer edge of the nostril, by which the tension was taken off the new ala nasi, and a plug of lint being introduced into the nostril, the dressing was completed: the loose integument being pushed from the cheek towards the nose, and there retained by means of compresses and adhesive plaster. The operation was thus performed without making the least disfigurement of the face. Nothing remarkable ensued during the month the patient remained under treatment. He now has a complete nostril; the nose is straight and prominent, and except that, on the side operated upon, the lower edge of the ala nasi, at its junction to the cheek, descends about the twelfth of an inch more than the other, no difference is perceptible, as nothing marks the line of junction but a fine cicatrix.

REMARKS. The plan of operation in the foregoing case is a modification of the French method of autoplasty, or as it is sometimes termed, *la methode par glissement*. It differs from the French method, in the fact of the dissections being subcutaneous, which is a decided improvement, for it is often a question whether the plan adopted to remedy some of these

deformities does not leave a great amount of disfigurement. When a portion only of the nose is lost, then, as in the instance before us, the deformity admits of being remedied. The plan I adopted is preferable to that of taking a flap from the cheek, twisting it round, and adapting it to fill up the chasm; for besides the scar on the cheek, the want of any portion of cartilage prevents a nostril being successfully made. Whenever the surgeon can save a piece, no matter how small, of the original ala, he will find that it can be made to answer better for a margin than any piece taken from the cheek; for, besides rounding off the arch of the nostril and keeping the ala distended, it retains the property of dilatation and compression, owing to the insertion of the levator labii superioris *alæque nasi* being attached to it, as well as the lower fibres of the compressor nasi; and it is acted upon simultaneously with that of the opposite side, both in the acts of respiration, and the different emotional movements of the face. Although I have mentioned that the foregoing operation is a modification of the French method of autoplasty, yet it does not appear that French surgeons have ever availed themselves of the flap made by subcutaneous dissection; and it is evident, that the most recent writer on the subject is *unaware of the possibility of the defect being remedied in this manner*, for Jobert says, "On a réparé également par la méthode indienne le lobule du nez et même, dit-on, les ailes du nez. Pour moi, sans blâmer l'emploi de la méthode indienne pour réparer les difformités partielles du nez, je pense que lorsqu'il s'agit de son extrémité ou de ses ailes, il est préférable de tailler un lambeau aux dépens des joues ou des lèvres." *Traité de Chirurgie Plastique*. Tome premier, p. 256.

MIDWIFERY AND DISEASES OF WOMEN.

PROLAPSUS OF THE ANTERIOR WALL OF THE VAGINA AN OCCASIONAL CAUSE OF FETID, PHOSPHATIC, MUCOUS URINE.

We abridge the following communication by Dr. GOLDING BIRD, from the *Medical Times and Gazette* for Jan. 1st, 1853.

It is not very unfrequent for a physician to be consulted by females (generally about their grand climacteric), on account of their having great irritability of bladder, and the urine, when passed, being very fetid, and containing much ropy mucus. They generally complain of small quantities of the urine escaping on any sudden change of posture, or after violent coughing, and suffer no little distress from the offensive odour which, in spite of every precaution, clings to them. It occurred to me several years ago, that the cause of this state of urine was analogous—in some of the cases, at least—to that which exists in cases of enlarged prostate in the male: I mean a cause preventing the complete emptying of the bladder, and thus inducing the retention of a portion of urine sufficiently long to allow it to undergo decomposition.

Almost the first case in which I recognized this condition, occurred about eight years ago, in the person of a stout, tolerably healthy-looking woman, who had been the mother of several children, and had ceased to menstruate for three or four years. She complained of great sense of distress in the lower part of the abdomen, with weight and bearing down. Walking was painful to her, and she was almost constantly tortured with a desire to empty the bladder. The urine was very offensive, and contained a large quantity of dense ropy mucus, mixed with phosphates. Suspecting the possible presence of a calculus, I introduced a catheter, but little urine escaped, and no concretion could be felt. But, on examining the vagina, a large pink looking sac depended from its anterior wall, and almost separated the labia. She was suffering from prolapsus of the bladder into a pouch formed in the anterior vaginal wall. By keeping the bladder emptied by the daily use of the catheter, the urine soon recovered its healthy appearance, and the mucus decreased considerably. The decomposition of the secretion in this vesical pouch had evolved ammonia, which had irritated the bladder and caused a copious secretion of mucus, loaded with the earthy salts. I sent the patient to my brother, Dr. Frederic Bird, as I believed no permanent cure could be obtained while the prolapsus existed. He applied the actual cautery to the anterior wall of the vagina, and the result was most satisfactory. After the slough came away, sufficient contraction occurred to prevent the formation of the vesical pouch, and the patient remained free from the ailment.

I have met with so many analogous cases, that I am persuaded that a very large proportion of cases of fetid phosphatic mucous urine in the female, may be traced to the imperfect emptying of the bladder from prolapsus of the anterior wall.

wall. Every one is well aware of the frequency of enlarged prostate as a cause of this state of the urine in the male, and the circumstances to which I have now drawn attention will be found to be as frequent a cause of this state in the female. In more than one instance, I have seen complete prolapsus of the uterus produce a similar result, evidently by drawing the bladder out of its position, and thus interfering with its being perfectly emptied.

So far as I have seen, the ailment in question is nearly, although not exclusively, confined to females who are called upon for laborious exertion too soon after their confinements. I have met with but very few cases in the higher ranks.

I have seen many poor women deprived of the means of earning their bread as domestic servants, from the apparent incurability of the ailment. A few months ago, a lady who resides in my neighbourhood, informed me that she was under the necessity of discharging her cook, on account of the urinous and even fetid odour which exhaled from her person. The poor woman had been out of place for a long time before entering this lady's service, on account of this very ailment. I found the urine to be strongly alkaline, exceedingly fetid, and loaded with mucus and phosphates. She never had been married, but had suffered, as she fancied, from prolapsus of the uterus for many years. I found that, after emptying the bladder by the catheter, the urine secreted and removed in half an hour was slightly acid, and scarcely fetid. The following morning, before she passed water, I discovered the labia to be separated by a large soft red body, which proved to be the depending anterior wall of the vagina, filled with her prolapsed bladder. The use of an injection of infusion of galls three times a-day into the vagina, the wearing of an abdominal support with a perineal pad, and the administration of iron and quina, with dilute phosphoric acid, soon restored her to health and comfort, and enabled her mistress to retain her services.

A nearly identical case occurred in the person of a servant of a lady of rank, who had obtained for her the opinion of several of our most distinguished surgeons, as she was supposed to be labouring under calculus. She was completely relieved in a similar manner. But there was a curious fact connected with this case, which I learned from the mistress. After failing to obtain relief from legitimate sources, she had been induced to consult a "wise woman", residing in the village where her lady's country residence was situated. This sibyl told her that she laboured under "sinking of the womb", and that she could cure her. On her next visit, the woman introduced something into the vagina. The operation gave her very considerable pain, but, to her great delight, it certainly diminished the irritability of the bladder and offensive character of the urine. She retained this body for some months, when it fell out; and, on its being shown me, I was rather surprised to find that it was a large smooth black siliceous pebble, common in the beds of brooks and shallow streams. Whatever induced the old woman to make her diagnosis, her clumsy substitute for a pessary had afforded no small relief.

I would, in conclusion, advise that, whenever a female is found to labour under the annoyance and distress, accompanying the excretion of fetid mucous phosphatic urine, the state of the uterus and vagina should be carefully examined when the bladder is distended; and I believe the ailment will be often cured by relieving the prolapsed state of that viscus.

COMMUNICATION OF OVARIAN CYSTS WITH THE FALLOPIAN TUBES.

M. ADOLPHE RICHARD, in the *Mémoires de la Société de Chirurgie de Paris*, tome iii, fascicule 2, directs attention to certain cases of ovarian disease, in which the cyst opens into the Fallopian tube. He has observed five cases of this description.

CASE I. The body of a woman, aged from twenty-five to thirty years, was brought into the dissecting-room. She had died of typhoid fever. When the abdomen was opened, there appeared a large ovarian cyst, with apparently a portion of the small intestines adhering to its front: on removing the parts, however, this was found to be a portion of the Fallopian tube. The entire broad ligament of the left side was distended by a cyst of the size of a child's head, of pretty regularly spherical form, on the anterior face of which was the Fallopian tube, which was easily recognised by its connexion with the uterus. The tube was of normal size at its inner third; it then began to enlarge, and, in the whole of its outer half, was of the size of the small intestines. It formed several flexuosities like those of the intestines, and was lost in the walls of the cyst, at the centre of its external surface. All the enlarged portion of the tube was full of fluid; and on even slightly pressing on the cyst, it was evident that they

communicated. On the inner surface of the tube, the folds of mucous membrane were half obliterated. About three-fourths of an inch before its termination in the cyst, the abdominal orifice of the tube was represented by a sort of transverse valve. From this point to the cyst, the tube was much dilated, and presented longitudinal folds, evidently formed by the fimbriae, connected by membranous deposit.

Cysts in the broad ligament may originate from the peritoneum, the uterus, all parts of the Fallopian tube, the ovarian ligament, and especially from the *débris* of the Wolffian body. Ovarian cysts are recognisable by the presence of the atrophied ovary on the inner wall, as the presence or absence of the testicle on the walls of the cyst indicates the origin of hydrocele.

CASE II. In another woman, much older than the preceding, the ovarian cyst was smaller, but had thicker walls, and was bound round by the tube, much more dilated than in the last case, and opening on the posterior aspect of the cyst. The remains of the ovary were found spread out in the walls of the cyst.

CASE III. In a woman who died of puerperal peritonitis, the ovary and Fallopian tube on the right side were healthy: the former contained a *corpus luteum*. On the left side, there was a multilocular ovarian cyst, not very large: the ovary forming its inner wall, projected instead of being spread out. On the outer side, the communication with the tube was formed by a short, narrow passage, succeeded by a more sudden and spherical enlargement than in the preceding cases.

CASE IV. In a young woman who had died of phthisis, the only appearance which at first presented itself was enlargement of the external part of the Fallopian tube. The ovary appeared to be merely increased in size; but, on pressure, fluctuation was felt in it; and on opening the parts, there was found to be a narrow circular opening into the tube from the ovarian cyst, which was formed in the centre of the gland. This may be considered as representing the first stage of the disease.

How was the fluid retained in the Fallopian tube? M. Richard ascertained by means of a catheter, that nothing separated the dilated from the normal portion; and he attributes the non-passage of the fluid to the narrowness of the uterine portion, and the tonicity of the parts. Sometimes, however, the fluid does escape. In the atlas of Boivin and Dugès, there are two figures, described under the name of dropsy of the tube, which resemble the cases described above. (*Traité Pratique sur les Maladies de l'Uterus, avec Atlas: planche xxxv.*) In one of these, the tube was dilated as far as the uterus. M. Follin presented to the *Société de Biologie* a dilated uterine tube, from which fluid escaped by the uterus. Morgagni, in his second letter, *De Sedibus et Causis Morborum*, refers to a case, related by Sponius, in which a cyst in the abdomen was connected with the Fallopian tube, and communicated with the uterus; so that there was a constant serous flow from the genital organs of the patient. Frank (*De Curandis Hominum Morbis*, lib. vi, pars prima) speaks of a woman in whom a pint of fluid escaped daily from the uterus and vagina. She died of phthisis; and a hundred and thirty pints of glairy fluid were found in the left Fallopian tube.

Of the cases in which ovarian dropsy has been said to be evacuated by an opening through the peritoneal *cul-de-sac* of the vagina, M. Richard believes that some must be referred to escape of the fluid through the Fallopian tube.

M. Richard ascribes the origin of these tubo-ovarian cysts to distension of a Graafian follicle after the discharge of the ovum, instead of forming a *corpus luteum*.

TOXICOLOGY.

DR. COGSWELL'S EXPERIMENTS ON THE LOCAL ACTION OF POISONS.

THE following is an abstract of a paper by Dr. COGSWELL on the Local Action of Poisons, published in the *Lancet* for November 27, 1852.

The object of the author is to show that the number of those agents can be greatly extended, which are capable of producing local impressions on the part to which they are applied. Hitherto, the dynamic agents ascertained to act locally have been five,—monkshood, hydrocyanic acid, opium, tincanas, and the poison of the viper. The evidence always consists in the privation of power, whether of sensation or motion. Dr. Cogswell confines his attention to the question, whether the substance experimented with does or does not affect the phenomenon of motion.

He criticises the conclusions arrived at by Dr. Wilson Philip and Messrs. Morgan and Addison; the former of whom asserted

that the injection of an infusion of opium into the intestine of a rabbit produced almost instant paralysis of the gut; while the latter state that ticusas, applied to the outer coat of the intestine of a guinea-pig, caused instantaneous and complete suspension of the peristaltic movement. In repeating the experiment with opium, he found that "the immediate effect was an energetic contraction of the bowel towards the axis, attended certainly with a suspension of the peristaltic movement; but this, clearly because the effect of the foreign body had been to *stimulate*, so as to throw the circular fibres of the muscular coat into irregular and excessive action, sometimes even temporarily reducing the part to the condition of a mere cord." The same effect is produced by gentle irritation with the point of a knife, by opium in strong infusion, hydrocyanic acid, conia, and nicotine. It is, however, very possible, Dr. Cogswell thinks, that opium and ticusas may have a tendency to paralyse the bowel after an appreciable lapse of time. "Such, at least, appears to be the case with conia and nicotine, which are peculiarly adapted for trying the experiment. Minute portions of these fluid alkaloids being applied to the intestines of newly-killed frogs, the first phenomenon was always a local constriction; but in an hour, more or less, the parts to which they had been respectively applied presented a remarkable bulging outwards, as if they had become flaccid from paralysis. Conia and nicotine, applied in like manner to the voluntary muscles of the frog, produced vivid contractions of the fibres at the points of contact. Hydrocyanic acid, opium (in strong infusion), alcohol, chloroform, and the dilute mineral acids, all had the same effect—that of causing the muscles to contract. With regard to the subsequent effect on the voluntary muscles, I was unable to judge by this method. If there really be any substances which *immediately* paralyse by a local impression on the extremities of the nerves, it would appear that we have as yet no sufficient reason for including opium and ticusas among the number."

The substances used by Dr. Cogswell were the sulphuric, nitric, and muriatic acids, alcohol, ether, chloroform, hydrocyanic acid, opium, muriate of morphia, codeia, narcotine, extract of hyoseyamus, atropia and its sulphate, nicotine, aconita and its sulphate, conia, and theine or caffeine. They were injected in solution beneath the skin of the leg in frogs. Excluding narcotine, which produced no effect, and the mineral acids, as chemical irritants, all the substances produced local paralysis. The following is the account of one of the experiments: we quote it as a general type of the results arrived at by Dr. Cogswell:—

"**MURIATE OF ACONITA.** An eighth of a grain of this alkaloid, nearly dissolved in water by the addition of muriatic acid, was tried. In less than a minute, the animal's control over the leg was impaired; and presently it dragged the whole extremity in moving from place to place, but still, as in the previous instances, it could use the limb by a strong effort of the will. In five minutes it lay relaxed and insensible; in twenty minutes it had a convulsive quivering over the whole system, not, however, including the limb that was operated on; in half an hour it appeared to be dead. The muscles of the right hinder extremity contracted under the galvanic stimulus, but not those of the left. The results were very similar on repeating the experiment, including the convulsive movements."

DR. ALBERS ON THE PHYSIOLOGICAL ACTION OF THEINE AND CAFFEINE.

In the *Deutsche Klinik* for December 18th, 1852, Professor ALBERS, of Bonn, has recorded the results of some experiments with citrate of theine and caffeine, which are interesting in connexion with those of Dr. COGSWELL.

He introduced a grain of citrate of theine under the skin of a frog's leg. In twenty-five minutes, this limb became stiff; the other leg remained moveable, but in a few minutes became stiff like the first. In a very short time, the rigidity extended to the anterior limbs, which, like the others, remained extended, so that the frog could not turn over when laid on the back. The pectoral muscles and the whole body now became rigid; and this state continued during two hours. On opening the body during this time, Dr. Albers found the heart pale, and rigidly contracted to one-half of its normal circumference; and it was only possible, by means of a powerful stream of electricity, to excite some single contractions in a small part of the heart.

A second frog was treated in the same manner with citrate of caffeine. Here the limb operated on became, after fifteen hours (minutes?), stiff; and this was in a few minutes followed by rigidity in the other limbs, and afterwards in the whole body. In three quarters of an hour, on opening the body, the heart was found pale, and contracted to half its proper size.

In both cases, electricity produced muscular contractions in the limbs and body; but they were much more feeble and less frequent in the limbs which had been operated on. In this point, Dr. Albers' experiments closely agree with those of Dr. Cogswell.

In producing spasm of the heart, Dr. Albers says that theine and caffeine differ remarkably from the most energetic narcotics, as nicotine and conia; after the administration of which, in the manner described, and when the limbs and body were paralysed or convulsed, the heart continued to beat in its normal manner. By reference to the action of caffeine and theine on the heart, which is more marked than that of any other known article, Dr. Albers would explain the ready production of palpitation, pain, and distressing feelings, in those who have drunk strong tea.

Dr. Albers finds that the action of caffeine on warm-blooded animals, as rabbits, is less violent than on frogs; in the latter, it acts more powerfully than strychnine. He refers to some experiments by Dr. Cogswell, showing that the same effect is produced when caffeine is introduced into the mouth of a frog, as when it is placed beneath the skin of the thigh.

In practice, citrate of caffeine is given in doses of from three to five grains, in neuralgic headache and other nervous affections. After one or two doses, it brings relief. Dr. Albers finds that it succeeds best in females. The above-mentioned researches show that its use should not be carried too far.

POISONOUS PROPERTIES OF THE CALABAR BEAN

Attention has been directed recently to the Calabar bean (or nut, as it is called), which is used as a poison in its native country. It is the seed of a species of *Erythrophloeum*, belonging to the natural order Leguminosae, and the suborder Mimoseae. Dr. Christison recently made an experiment by swallowing about a quarter of a seed, and it produced in him alarming symptoms, similar to those produced by poisoning with aconite.

EDITOR'S LETTER BOX.

THE VERDICT OF MANSLAUGHTER AGAINST MR. HICKS.

LETTER FROM PATRICK BENSON, ESQ., TO THE EDITOR.

SIR,—My attention has been drawn to an article in your Journal of the 4th instant, headed "a verdict of manslaughter against Mr. Hicks by a coroner's jury", in which you have been pleased to make sundry severe remarks on my conduct in the case.

I must beg to say that I think that, in common fairness, you might have suspended any remarks until the case was ended, and you had both sides fully before you. The statement forwarded to you is evidently *ex parte*; but as the matter has yet to come before another tribunal, I shall at present refrain from entering into any controversy on the subject.

This much I will say, (as I do not conceive that these points can affect the position of Mr. Hicks, as a defendant), with regard to Mr. Hicks not having notice of the *post mortem* examination, that I was requested by the relatives of the deceased to make an examination of the part affected, merely to see whether the bone was broken or not. This I did, in conjunction with Mr. Tomson; and then recommended the child to be buried, without expressing any opinion as to the cause of death. We had not the *least idea* of any ulterior proceedings whatever; nor was it until a month afterwards that an inquest was determined on, of which I was wholly ignorant, and had not the slightest intimation of it until the Saturday evening previous to the Monday on which the inquest was held.

I admit, and much regret, that Mr. Hicks had no legal adviser at the inquest. But it was not my fault that he had not one; for before giving my evidence, (having observed the impression apparently made on the jury by the evidence of the mother), I earnestly pressed on Mr. Hicks, jun., the absolute necessity of procuring legal assistance, and begged of him to apply for an adjournment for that purpose. He, however, refused; and, although he and his father were present, they never cross-examined a witness, nor made any observation whatever; had they done so, they might have elicited answers favourable to his case.

In reference to insinuations contained in your article, attributing base and dishonourable motives to Mr. Tomson and

myself for the evidence we had given,—namely, that Mr. Hicks had been called in to our patients; for myself, I repel such insinuations, as wholly untrue. I have no recollection of Mr. Hicks ever being called in to a patient of mine. Mr. Hicks and I have been on most friendly terms since the commencement of our acquaintance. I have always entertained, and still entertain the most friendly feelings towards him: and no person can regret more than I do the result of the inquest.

Trusting in your impartiality to insert this letter in your next number,

I am, etc.,

PATRICK BENSON.

Luton, Bedfordshire, February 12th, 1853.

THE INCOME TAX.

LETTER FROM DR. THOMAS SMITH, CHAIRMAN OF THE INCOME TAX COMMITTEE OF THE ASSOCIATION, TO THE EDITOR.

SIR,—The Income Tax Committee rejoice to perceive that members of the ASSOCIATION are at last thinking of bestirring themselves to obtain a repeal, or more equitable adjustment, of the Income Tax; and that the pages of our Journal are no longer silent regarding the hurtful nature of that odious and unfairly levied impost. Till lately, the Committee have had their exertions frustrated, and their energies damped, by the want of any support from our Journal, from members of the ASSOCIATION, or from the general body of the profession. About twelve months ago, the Committee made an earnest appeal to their brethren to do that which has recently been mooted: viz., to assemble special meetings of the different Branches of the ASSOCIATION, so as to have the best method of proceeding fully discussed, and energetically acted upon. What was not then listened to, may, perhaps, now meet with a response. If deemed expedient, the Branches might nominate gentlemen to form a deputation to wait upon the Chancellor of the Exchequer, and various other members of Parliament, for the purpose of explaining to them the special grievances to which all grades of the medical profession are now subjected by reason of this tax. Petitions to Parliament might also be agreed upon, and signatures obtained from the profession generally. This would not be difficult, as the subject is one on which scarcely a shade of diversity of opinion exists.

There is one feature of the injustice to which we are subjected, to which I am anxious to call attention, because I think that it has not in any quarter received that amount of consideration and condemnation which it merits. I allude to the monstrous injustice of assessing professional men upon the *last year* of their receipts, which, with young men struggling upwards, is generally their best; whilst merchants and tradesmen are taxed upon the average of the *last three years*. In this way the professional man is obviously placed upon the severest extremity of the rack of extortion; and in many places he is compelled to return an exaggerated report of his yearly receipts, to prevent him from sustaining injury through the injurious gossip of Income Tax Commissioners and their underlings.

But my object in addressing you is not to write against the Income Tax, but to beseech the profession to make known their complaints. Members of Parliament assert that the profession, as a body, are indifferent on the subject; and assuredly the statement derives apparent confirmation from the small number of petitions which have as yet been forwarded to Parliament by medical men. I will only add, that the Income Tax Committee of the ASSOCIATION are anxious to do their duty; but that they feel that all their efforts must prove useless unless they are supported, by the Branches holding simultaneous meetings, petitioning against the tax, and endeavouring to enlist, in support of the prayer of the petitions, a large number of members of the House of Commons. Let the period between this and Easter be employed in getting up influential meetings and numerous signed petitions; and during the recess, when members of Parliament return to the country, let them be waited upon, and urged to help our just cause. I am, etc.,

THOMAS SMITH, M.D.,

Chairman of the Income Tax Committee of the Provincial Medical and Surgical Association.

Cheltenham, February 14th, 1853.

[A requisition to the Council of the Metropolitan Counties Branch, to call a Special General Meeting of the members, to consider the propriety of petitioning against the Income Tax injustice, is now in course of signature; and in other parts of the country a similar movement is on foot. As the time for action is brief, we trust that none of it may be lost.—EDITOR.]

PETITION AGAINST THE INCOME TAX BY THE MEDICAL PRACTITIONERS OF ST. ALBANS.

LETTER FROM J. T. LIPSCOMB, Esq., TO THE EDITOR.

SIR,—You may, perhaps, be glad to hear that the letter of your correspondent, Dr. Nankivell, published in the Journal of January 28th, has had the effect of arousing the medical practitioners of this place to a due sense of the injustice done to the medical profession and others depending alike on precarious incomes, by the present unequal imposition of the Income Tax. They have forwarded a petition on the subject to one of their county members, for presentation to the House of Commons, and also a copy to the Right Honourable the Chancellor of the Exchequer, respectfully requesting his attention to its prayer.

I am, etc., JOHN THOMAS LIPSCOMB.

St. Albans, February 8th, 1853.

DISULPHATE OF QUINA, "HOSPITAL SULPHATE OF QUININE", AND SULPHATE OF QUINIDINA.

LETTER FROM DENHAM SMITH, Esq., TO THE EDITOR.

SIR,—You send me samples of "hospital sulphate of quinine" (Herring's), and of "sulphate of quinidin (Howard's and Kent's)"; the latter "a salt about half the price of quinine"; and ask me to examine them, and tell you what I think about them, in comparison with the disulphate of quina.

Both samples sent differ in aspect from disulphate of quina, being denser, and in larger crystals, than this salt. The "hospital sulphate" is coloured. Solutions in warm water of the three salts were submitted to the following tests:—

Lime water.	Each gave precipitates, soluble in excess of precipitant.
Chlorine-water and ammonia.	Each gave a dark green precipitate.
Chlorine-water and potash.	Each gave a yellow precipitate.
Chlorine-water and saturated solution of ferrocyanide of potassium.	Each gave a full crimson-red precipitate, rendered fuller and denser on the addition of a drop of solution of ammonia.

Each salt dissolved in sulphuric acid without blackening.

The only tests of any practical value, to distinguish disulphate of quina from sulphate of quinidina, which I at present recollect, are the asserted difference of solubility, and the chlorine-ammonia reaction. I have a note, but not the authority, that sulphate of quinidina is soluble in four parts of boiling water: the sample you sent me, thus marked, required upwards of twenty parts to effect its solution. M. Leers, in a paper lately published in the *Annales de Chimie*—elaborate enough, if this be any guarantee of correctness—relies on the chlorine-ammonia test to distinguish quinidina from quina and cinchonia; but with the specimens you sent, this test gave evidence in favour of their identity with the pure quina salt.

The conclusion to be drawn from these experiments is, either that disulphate of quina, the so-called "hospital sulphate of quinine", and the specimen of "sulphate of quinidina", are identical as respects their bases; or that the two latter contain so large an amount of the quina salt as to completely shroud the distinctive character, if such there be, of quinidina.

I offer no opinion as to whether quina and quinidina are identical or distinct substances; or whether they are the same body existing under somewhat different conditions and aspects, like sublimed and precipitated sulphur; nor do I assert that the three salts I have examined are absolutely identical, since a further and more elaborate investigation, which might be appropriately instituted by a qualified officer of the Pharmaceutical Society, would possibly point out some distinctive character: all I say is, that the recognised and best known tests have failed to do so. The practical result to be drawn from this investigation seems to me to be, that, as the "hospital sulphate of quinine" and the "sulphate of quinidina" are sold at about half the price of the disulphate of quina, and the chemical resemblances of the salts are so striking, it is worth while, merely as an economical question, to institute a series of experiments to determine the respective values of these salts as therapeutic agents. I am, etc.,

J. DENHAM SMITH.

Putney, February 16th, 1853.

P.S. Let me restore the capital and characteristic test for quina of chlorine-water and ammonia to its real owner, Mr. Meeson, who, whilst a student at one of the Borough schools, some years since, discovered this reaction, which has been appropriated by a German chemist, named Brandes. Instances of this kind are far too frequent to be always accidental, and deserve exposure when opportunity offers.

NEWS AND TOPICS OF THE DAY.

ESTIMONIAL TO ROBERT E. GRANT, M.D., PROFESSOR OF COMPARATIVE ANATOMY IN UNIVERSITY COLLEGE.

SOME time ago, the friends of Professor Grant, deeply impressed by his great merits as a devoted and successful votary of science, resolved to present him with such a testimonial of their admiration as would, in some degree compensate for the inadequate income which he derives from his professional and other appointments. The result of the subscription has not turned out quite so large as might have been expected, but it has enabled the committee to purchase a microscope of the value of fifty guineas, and a deferred annuity of fifty pounds, which was recently presented to Dr. Grant, at a meeting of the contributors held in the Museum of Materia Medica, University College, and presided over by Dr. Marshall Hall. The deferred annuity of fifty pounds commences at the termination of his tenure of the Swiney Professorship of Geology, which can only be held for five years. We understand, that before the committee resigns its functions, an urgent memorial will be presented to Government for some portion of the £1,200 annually given to eminent scientific discoverers and authors.

The following is the principal part of the speech in which Professor Grant acknowledged the presentation of the testimonial:—

"Gentlemen, there is no form of compliment which you could have proposed to me more congenial to my taste, or which could have been more highly appreciated, or which would be more likely to prove of valuable service to me, than the complete and splendid microscope you have now placed before me. And let me add, that the highly complimentary and gratifying inscription you have caused to be engraved upon it, very greatly enhances the value of this rich gift in my estimation.* For the last forty years of my solitary pursuits in natural history, on the continent and at home, no source of scientific improvement, or of intellectual gratification, or of refined and enduring pleasure, has equalled that derived from the marvellous instrument which has revealed to me so many novelties, and beauties, and wonders, in the part of nature's works to which I have ever been most fondly attached. The numerous and complicated improvements which the advances of science and the arts have of late years added to the microscope, have greatly increased its value as a means of philosophical research, but they necessarily tend to place it beyond the reach of mere naturalists, and to render it less easy to keep pace with the march of improvement in that direction. In earlier years, it has more than once been proposed by my pupils in this College, to confer upon me some mark of their esteem, which I have systematically opposed, upon the obvious ground, that its burden would necessarily fall upon the very few pupils who then attended my classes, and to whom I was already specially obliged. But, on the present occasion, the kind intention of my friends and former pupils, did not appear to me liable to the same objection. As a token of regard from gentlemen so competent to judge, and who so long have had the means of knowing and estimating my career as a teacher and as a man, and with several of whom I have been intimately connected by the ties of friendship, and by many pleasing associations of early life, the worth of your donation will be more highly appreciated; and this instrument will ever claim to be prized by me beyond its high pecuniary value. In regard to the sacrifices to science alluded to by the learned chairman, and to the remunerative character of zootomical and zoological pursuits, I may now, at this late period of my career, presume to form an opinion, as next year I shall have been forty years an author on comparative anatomy, and also exactly thirty years a public teacher of that science; and I must say, for those who may follow, that my whole past experience convinces me, that no avocation to which the human mind could be directed, approaches, in its remunerative character, in the sense of affording the most pure, elevated, and durable happiness, to that to which my past life has been devoted. And had I now life to recommence, and my selection of a pursuit again to make, I could have no hesitation in choosing that which has crowded into my existence the greatest quantity of the highest enjoyment which can fall to the lot of frail humanity. The very kind respect ever

shown me by my fellow-labourers in this rich vineyard of science, at home and over Europe; my habitual contemplation of the most marvellous and beautiful scenes presented by the material or intellectual universe; the proud feeling of acquired superiority in the comprehension and the interpretation of a portion, however small, of the book of nature; the perfect union through life of my private tastes with my agreeable and healthful public duties; the consciousness of having been useful, within my circumscribed sphere, to the progress and the diffusion of a neglected science among my fellow-men; and the great and unceasing pleasure of communicating daily to the uninitiated the knowledge which has been accompanied with so much pleasure in acquiring."

TESTIMONIAL TO DR. SINCLAIR, J.P., WICK, CAITHNESS. On the evening of the last day of 1852, a numerous meeting of the friends of Dr. Sinclair, acting as a committee of management for a testimonial to him, met in the Wellington Hotel, Wick, the Rev. Mr. Whyte, of Canisbay, in the chair.

The Chairman addressed the doctor, expressing his own grateful sense of the honour of presiding at so large and highly respectable meeting, and of expressing, to the best of his humble abilities, sentiments of esteem and admiration for the doctor's rare and varied accomplishments. His refined taste and scientific pursuits had gained him the respect and esteem, not only of his neighbours and acquaintances, but of strangers from all parts of the kingdom and from foreign lands, who had spent many pleasant hours in visiting the large and splendid museum of natural history and antiquities, prepared and collected by his own hand. His high talents and abilities in his profession, combined with prompt and seemingly intuitive decision for every occasion, together with his self-denying readiness at every call from rich or poor, had endeared him in the hearts, and established him in the confidence, of those who have the benefit of his assistance; so that, while his visits, whether professional or social, were cordially welcomed in the mansions of the great, his ready skill and sympathetic tenderness caused his visits to be regarded as those of a pitying and ministering angel in the cottage and the hovel. It was chiefly from the middle and labouring classes that subscriptions had been derived, and the collectors reported that each individual subscription was given with the cordial good-will, and with the earnest wish that thrice the amount could have been bestowed. In presenting the doctor with the purse and its contents, he begged, in the name of the 2,500 subscribers, that he would esteem it less for its intrinsic value, than as a token and pledge of their confidence and esteem.

Dr. Sinclair replied in a suitable address.

DR. MARSHALL HALL and DR. REYNOLDS. It is stated in the *Medical Times* of the 5th current, that Dr. Marshall Hall has introduced Dr. Reynolds to his patients in the following valedictory circular:—

"I now leave you in the care of Dr. Reynolds, in whom you may, as I do, place an unbounded confidence.

"Dr. Reynolds has gone through all my experiments with me, and has been constantly present lately at all my consultations, and knows my views perfectly.

"Dr. Reynolds' grandfather was physician to George the Third. What is more to the purpose, Dr. Reynolds distinguished himself both at University College and the University of London, taking five gold medals and two scholarships, and early took a special interest in the nervous system and its diseases. I published an observation of his so long ago as 1848.

"My intention for the present is to travel. I shall probably return to London yearly, during the months of May, June, and July, joining my friend Dr. Reynolds during those periods.

"During my absence, Dr. Reynolds will correspond with me relative to my patients.

"I fully expect that Dr. Reynolds will pursue with energy, and with advantage to the public, the career of investigation of the diseases of the nervous system which I have begun.

"I am, my dear Sir, yours very truly,

"MARSHALL HALL.

"38, Grosvenor Street, January, 1853."

MIDDLESEX HOSPITAL. At the last meeting of the governors, Sir R. H. Inglis, Bart., in the chair, the Marquis of Salisbury and the Rev. Dean Morell were elected Vice-Presidents, to succeed the late Duke of Wellington and Lord Cottenham. It was then resolved to appoint a second physician. It appeared from the report, that the expenditure exceeded the income last year by £2,100.

* Presented to ROBERT EDMOND GRANT, M.D., F.R.S. L. and E., F.L.S., F.G.S., etc., Professor of Comparative Anatomy and Zoology in University College, London, by his friends and former pupils, as a testimony of their esteem for his private worth, and of their sense of his eminent services in the cause of science, 1853.

WESTMINSTER HOSPITAL. The posts of Surgeon and Assistant-Surgeon to this institution are vacant—the former by the resignation of Mr. B. Phillips. Mr. C. Gardiner Guthrie is a candidate for the appointment of Surgeon, and Mr. W. A. Hillman for that of Assistant-Surgeon.

BETHLEHEM HOSPITAL. Sir Alexander Morison and Mr. Nicholls have resigned their respective offices of Physician and Steward of this establishment.

SMALL-POX HOSPITAL. At the annual meeting of governors, held in the board-room, Highgate, Joshua J. Redford, Esq., in the chair, Mr. Clift read Mr. Marsden's report. Since the removal of the hospital to its present site, a marked improvement in the patients had taken place: erysipelas or gangrene, which prevailed in the former hospital, seldom appeared. During the year, there were admitted 800, being an increase of 88 over any other year since the foundation of the hospital in 1746. Singular to say, the same number (230) of unvaccinated cases were admitted last and the preceding year. During the year, 690 recovered, and 110 died; while 666 were vaccinated, and 555 medical practitioners were supplied with vaccine lymph. The subscriptions amounted to £2352: 6: 11, and the disbursements to £1860: 19: 3. The late Robert Nicholson, Esq., bequeathed £1356, and the executors of Admiral Sir Charles Ogle, Bart., presented £470 to the institution.

DEATH FROM PRUSSIC ACID: INQUEST AT NOTTINGHAM. An inquest was held on Thursday the 10th instant, on view of the body of the Rev. James Flamank, an insane gentleman, residing with Charles Merit Rigg, a person who styles himself physician and surgeon, but who, it appears from the newspapers, has lately settled at Northampton as a homœopathic practitioner. We find his old address still given in the Directory, viz., 20, Devonshire Road, Wandsworth Road, Surrey. It appears that when Mr. Rigg dispensed his medicines in the Wandsworth Road, he had, *inter alia*, bottles of prussic acid; but whether one of them travelled with him to Northampton or not, he was not prepared to declare. However that may be, the unfortunate deceased obtained a bottle of this poison, by taking which he committed suicide. He survived an hour and a half after he was found labouring under the effects of the poison. He was found lying on the floor of a water-closet, vomiting. When seen by a practitioner, who was called in three quarters of an hour after he was found, he was in a state of collapse: his breathing was stertorous; the pupils were insensible to light, but not dilated. His skin was cold and clammy, and the pulse exceedingly feeble and intermittent. In a very few minutes it was not perceptible at the right wrist. The pulse at the carotid artery was 80, and not full.

On *post mortem* examination, the brain was found generally softened, especially the cerebellum. The veins were much congested. The heart was large and fat, but free from valvular disease. The liver, kidneys, spleen, and small intestines were healthy. Prussic acid was detected in the stomach and its contents.

The jury returned a verdict "that the deceased died from the effects of prussic acid: but there is no evidence as to whether he took it accidentally or otherwise." (Abridged from *Northampton Herald*, February 12, 1853.)

DRAINAGE OF EDINBURGH. At a meeting of the Architectural Institute of Scotland, on Thursday night, a communication on the drainage of the city of Edinburgh, by Alfred Lancefield, Esq., C.E., was read. He stated that the drains were wholly unventilated, with almost the single exception of that from the Royal Exchange, which was unique in its construction. Many of the drains ran into each other at right angles, a mode of construction which frequently resulted in their getting choked up. He recommended the egg-shaped drains as the most useful; and in alluding to the noxious gases which were often accumulated from the imperfect ventilation of those at present in use, stated that on one occasion, when a labourer employed by him was entering a drain with a lantern in his hand, an explosion took place by which the man was severely hurt. From the imperfect trapping of many of the drains, he had no doubt that this obnoxious effluvia found its way into the houses of the inhabitants in various quarters of the city. He complained of the general narrowness of the main drains in the city, and contrasted them with those of London and Liverpool, where they were of enormous size. All main drains should be of such a size as to admit of a person going into them; and they should always have side entrances. He hoped that the drains would soon be constructed on more scientific principles, —and that the streams around the town would not always be used for common sewers.

GLASGOW SOCIAL STATISTICS. The annual report of Dr. Strang, city chamberlain, on the mortality bills of the city of Glasgow for 1852, states the real average figure of mortality in that city in proportion to the living, to be as 1 to 34·8. The cost of maintaining the poor in the four parishes of Glasgow, which, in 1848-49, was 105,260*l.*, was only 78,733*l.* in 1850-51—the return for last year not being complete. The bankruptcies connected with Glasgow have decreased by 20, compared with the year 1851. The writer urges the authorities to adopt stringent sanitary measures for the improvement of the city. "Try (he says) by every means in your power to open up densely peopled quarters to more light and air than they now possess, and to preserve open spaces in the suburbs capable of ere long becoming the lungs of a future city. Endeavour also to control, as much as is consistent with the rights of property, the construction of dwelling-houses, school-rooms, and workshops, with a view of affording better ventilation, purer air, and greater comfort to their occupants; to extend the already great improvements made in our sewerage and drainage; and to control still further the cess-pools and other noxious agencies which affect the public health and public comfort; endeavour, in fine, to procure for this growing community that indispensable element of internal and external cleanliness—a constant and an abundant supply of pure water, coupled with every one of the other sanitary improvements which the wise and the philanthropic have of late years advocated."

MEDICAL EXAMINATION OF APPRENTICES TO TRADES. In a letter in the *Northampton Herald* for 12th February, Mr. Henry L. Smith, of Southam, makes the following remarks.

"I must now draw attention to the following social evils, and suggest a remedy. I have found, in nearly fifty years' experience, that there is a great sacrifice of human life by boys being thoughtlessly apprenticed to employments and trades, and even professions, for which they are not physically, morally, or intellectually qualified. I think it would be a great boon to those who desire to provide for their own household, which so many of your industrious artisans of Coventry manifestly do, if the committee of the Provident Dispensary were to issue a notice requesting parents to send their sons to a committee, to be called the "Apprentice Committee," and which might be selected from your honorary subscribers and the medical staff, to meet, say once a fortnight, for the purpose of examining all boys whose parents might desire it, before binding them apprentice to any employment or trade, and to report whether they were fitted for the same. I believe that hitherto there have been yearly more persons destroyed wholly in their lives, or partially in their faculties, by the chance method of entering on employments and trades for which they are not fitted, than people are aware of; and that the military and naval services of the country have not destroyed so many people as has been the case in this particular, for the want of some social arrangement among ourselves.

"If in practice this preliminary examination was found useful, it might easily be made imperative; and on the back of a boy's indenture might be written a certificate something like the following:—

"This is to certify that we, the undersigned, members of the Apprentice Committee, have, this day, with the assistance of A, B, C, surgeons of the Provident Dispensary, and also C, D, men in the same employment the boy is to be apprenticed to, examined E F carefully, and find him able to bear the labour of so-and-so (say a shoemaker), or the necessary confinement in one posture (say of a tailor); or the necessary confinement in a close and crowded atmosphere (say of a weaver); or the vegetable, animal, or poisonous exhalations of so-and-so, or any other special objections that are known to belong to special trades, by those who have suffered by following them; and we have explained to himself, his father, or guardian, the injuries that have been found to follow some special trades more than others (say white lead, needle-grinders, &c.)."

"In this way much good would result. 1st. We should no longer have innocent persons sacrificed, as they now are, by the ignorant cupidity of parents. 2ndly. Those trades that are really injurious would be amended, when the attention of the scientific and benevolent public was directed to them, which must be the case under a system that would bring the great evils of many trades to light. 3rdly. It would also be one means of keeping up an interest in the welfare of boys during the adult age; for it is during the important time of boys leaving school and settling for life, that they most generally fall out of their position in the social fabric."

INCOME-TAX.

From the following report of what took place in the House of Commons on Tuesday, there is evidently some encouragement to petition.

"Mr. HUMÉ said, with reference to the explanation which the noble lord the Secretary for Foreign Affairs gave on Thursday last week, some difference of opinion was entertained as to what were his real intentions on the income-tax. The reports in the papers, from which correct details were generally obtained, differed; and therefore he wished the noble lord would state what really were the intentions of the Government—whether they mean to postpone the income-tax altogether, renewing it now by an act for another year, or, if otherwise it were to be continued, whether any alterations would be made, and what those might be?"

"Lord J. RUSSELL said: I am very glad to have an opportunity of stating what I really did say on the occasion to which my hon. friend alludes. It has been supposed that I stated that the intention of the Government was to propose a renewal of the income-tax, without alterations, for another year. What I said was, that if the Government should have introduced a reform bill in the course of the present year, it would have been necessary to propose a continuance of the income-tax without any alteration for a short period; but, not taking that course, I stated that the Chancellor of the Exchequer would, immediately after Easter, state the intentions of the Government with respect to the income-tax and the budget. I have only further to say, that until that period arrives, and the Chancellor of the Exchequer makes his statement, it is not the intention of the Government to furnish any information on the subject."—*Times*, 16th February.

COURT-MARTIAL ON ASSISTANT-SURGEON JOSEPH EDMUND UMPHELBY. Head-Quarters, Simla, October 28, 1852. At a general court-martial assembled at Fort William, on Saturday, October 2, 1852, Assistant-Surgeon J. E. Umpelby, medical dresser, and attached to H. M. 80th Regiment of Foot, was arraigned on the following charge:—

For conduct disgraceful to the character of an officer and a gentleman, in having, at Calcutta, on July 7th, 1852, subjected himself to the indignity of being publicly kicked by Mr. A. P. Pennefather, a clerk in the office of the Administrator-General, without adopting any sufficient measures, either immediately or for three days, to obtain reparation for such insult.

Finding—Not guilty, and honourably acquitted.

Approved and confirmed,

(Signed) W. M. GOMM,
General Commander-in-Chief, East Indies.

October 18, 1852.

Remarks of His Excellency the Commander-in-Chief. The Commander-in-Chief is glad that he is able fully to approve and confirm the honourable acquittal of Assistant-Surgeon Umpelby of the disgraceful imputation brought against him, and his Excellency trusts that the painful position in which this officer has been placed, will be a lesson to him to be more careful in future in the choice of his associates, and more guarded in his language and behaviour.

HUNTERIAN ORATION. The annual oration in honour of the memory of JOHN HUNTER was delivered in the new theatre of the Royal College of Surgeons, on Monday last, by BRANSHY B. COOPER, Esq. The orator believed it to be his legitimate object, not to express in measured terms the praises of Hunter, which had already been done, but rather to trace the effects of his labours, the real utility of which is becoming more and more apparent. It would seem that the advancement of surgery and the auxiliary sciences since his time had tended to increase his fame. The alleged want of education in Hunter, Mr. Cooper thought, might not be a subject of much regret: for it would perhaps be a question whether, if he had been more highly educated, he would have been able so closely to devote his energies to the prosecution of one great object—the investigation of nature's laws. All his investigations were systematically directed to render anatomy and the kindred sciences subservient to surgery. He was a naturalist in the widest sense of the term; for he saw the necessity of commencing at the lowest link of the chain; hence he investigated in succession the inorganic and organic world, and traced the connexion between minerals, plants, and animals, showing how the three rose one above the other, in regular gradation. The orator then gave a brief outline, illustrated by some of the preparations from the museum, of Hunter's researches and views on the blood, on digestion, on absorption, and on reproduction.

Mr. Cooper then alluded to Messrs. Vincent and Dalrymple, Dr. Pereira, Sir John Webb, Dr. Mantell, and other distinguished members of the profession, who had been removed by death during the past year. In conclusion, he said that the present was a peculiarly fitting occasion for inaugurating the new theatre in which the oration was being delivered; and felicitated the members of the College on the fact, that a large sum of money had been granted by government towards defraying the expenses of completing the building, so as to increase the availability of the Hunterian collection.

THE STATISTICAL SOCIETY. The usual monthly meeting of the members took place on Monday, the 17th January, at the Society's house, St. James's-square, Lord Overstone, the President, in the chair. An excellent and elaborate paper on the Property and Income Tax was read by Mr. Farr, in which it was justly argued, that incomes ought to be taxed according to their nature, and that it was not English love of money, but English love of justice, which had excited so much dissatisfaction with the existing arrangements. Mr. Babbage again stated his well-known views and urged the necessity for an agreement in certain principles before the question could be argued with any prospect of arriving at a satisfactory conclusion. Dr. Guy, Mr. Jellicoe, Mr. Grove, Mr. Venables, Dr. Trueman, Mr. Neison, Mr. Mackenzie, and the Chairman, also took part in the discussion, which was finally adjourned to the next monthly meeting.

FRENCH ACADEMY OF MEDICINE. Dr. Conneau, the first Physician to the Emperor, has declined to occupy the President's Chair of the Academy, which he might *ex officio* lay claim to.

HUGE BOA-CONSTRICTOR AND FAMILY. There lately arrived at Liverpool, in the Arrow, Captain Wyatt, from Para, a huge serpent of the boa genus, respecting which we have received some interesting particulars. The reptile is at least eighteen feet in length, and was caught by some of the natives on the banks of the "mighty Amazon". Before it came into the possession of Captain Wyatt it had satisfied its appetite by swallowing a full-grown goat. On the day the vessel left Para, the captain and crew were surprised to find that the serpent had given birth to thirty-six young ones. The "snakelets" were about two feet each in length, and in six weeks they have only grown about an inch in length. The report of this "birth extraordinary" soon spread at Para, and about one hundred and fifty of the leading gentlemen of the place went on board the Arrow to see the mother and her interesting offspring. In about six days after the birth the mamma devoured twenty-nine pigeons, being the first food she had tasted from the time she had feasted on the goat—a period of about three months. Captain Wyatt has disposed of the boa-constrictor and its progeny to Mr. Edmonds, now the proprietor of one of the travelling menageries of the late Mr. Wombwell, which is at present being exhibited in Manchester. The mother and three of the young ones have been conveyed to that town, but thirty-three of the snakelets have yet to be delivered, dead or alive, to the purchaser. They are at present, in seaman's phrase, adrift in the ship's hold, but will no doubt be recovered as the cargo is discharged. The bite of this snake is not venomous, so that the young wrigglers may easily be captured.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

- *COE, Robert William, Esq., was elected Surgeon to the Bristol General Hospital, on the 10th instant.
- JOHNSON, Henry Charles, Esq., was elected, on the 4th instant, Surgeon to St. George's Hospital, in the room of R. Keate, Esq., resigned.
- NAYLOR, G. F., Esq., has been appointed Assistant-Superintendent of the Wilts County Lunatic Asylum, in the room of Dr. R. F. Foote.
- *POLLOCK, George D., Esq., was elected, on the 4th instant, Assistant-Surgeon to St. George's Hospital.

THE ASSOCIATION MEDICAL JOURNAL is published at its own office every Friday evening.

N.B.—Members of the Association receive the Journal, free by post, as a matter of right. To others, the terms of subscription are—For one year, unstamped, £1:6:0; ditto, stamped, £1:10:4.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. VIII.

LONDON: FRIDAY EVENING, FEBRUARY 25, 1853.

NEW SERIES.

THE UNIVERSITY OF LONDON AND THE PARLIAMENTARY REPRESENTATION OF THE MEDICAL PROFESSION.

In another part of this number will be found a second letter from Dr. SNOW BACK, on the claims of the University of London to elect representatives in Parliament for the Medical Profession. If the question were merely as to the claims of the university itself to be elevated to the rank of a parliamentary constituency, supposing the same privilege to be conceded to elder universities that yet remain unenfranchised, we presume that there could be no dispute about it. On this point, Dr. Beck has fully succeeded in making out a strong case for his *Alma Mater*. He has not indeed shown altogether to our satisfaction that this particular privilege was in the contemplation of those, who advised the granting of a charter to the University of London; or of the legislature, in such acts of Parliaments as have since been passed in ratification of it: but he fairly argues, that a parliamentary representation is a legitimate extension of the principle therein recognised; and he proves by statistics, that the University of London has already attained such a degree of development, and reckons so large a number of graduates, as to place it in a position advantageously to exercise the franchise.

The same statistics, however, go far to show the correctness of Dr. PATERSON's prognostication, that the medical element will not preponderate in this constituency. It appears, from Dr. Beck's own showing, that the graduates in arts of the University of London are to those in medicine, nearly as two to one. Unless there should exist among the former, therefore, a much greater diversity of sentiment than is likely to be the case, we cannot see what chance there is for the medical part of the constituency to turn the election in favour of a candidate pledged to make medical questions and interests his especial study: and even though they should succeed in this, we are very sure that the great body of the profession in England will not stand quietly by, and see their concerns committed to the keeping of a favoured few.

Dr. Beck appears to think that the claims of other universities, which are still unrepresented in Parliament, must be postponed to those of the University of London, because their graduates have no voice in the direction of their affairs: and Mr. Disraeli is quoted, as stating this to be a great obstacle to their obtaining representatives. We cannot see the slightest force in this objection. When a gentleman filling a high official situation suggested, in the House of Commons, that militia-men might be admitted to the exercise of the franchise, it was not thence to be inferred that they were likewise to be privileged to assemble and enact statutes for the government of the regiment, or make grants of money out of the regimental chest. Surely it is very easy to enact that the graduates of a particular university shall have the power of electing members to represent that university in Parliament, without conferring upon them other corporate

rights or privileges. These may be very desirable in themselves, and for the sake of binding more closely together the academic body; but they are obviously not essential to the proper exercise of the franchise.

We have been a good deal surprised to find a gentleman in the position of Dr. Beck, who ought to be well informed on every such point, speaking of the degree of the University of Edinburgh as a mere honorary certificate. This is not correct language to employ of a diploma which entitles its possessor to style himself M.D., which enables him to practise in our most distant possessions, and which constitutes the sole legal qualification of many of our most eminent provincial physicians at home. Whatever privileges, in respect of practice, are enjoyed in England, or elsewhere, by those holding their degrees from the University of London, precisely the same are inherent in the Edinburgh degree, and have been enjoyed, by long prescriptive right, by graduates of that university. In any way to depreciate the one degree, is simply to depreciate the other also; seeing that both enjoy the same legal recognition, and that neither is conferred without satisfactory evidence of the candidate having completed a prescribed course of study at accredited schools of medicine, and a full and rigid examination as to the extent of his medical acquirements.

For the reasons now and formerly (p. 117) stated, we still maintain that the representation of the medical profession in Parliament is urgently demanded; and that the enfranchisement of the University of London, or of any other university, is an entirely different question. In a future number we intend to pursue this subject, commenting at the same time upon the letter of Mr. BEDINGFIELD, printed at p. 178 of this number. In the meantime, we will only remark, that the writer, we fear, greatly overrates the spirit of combination which he assumes to be latent in the medical profession.

THE HISTORY OF MEDICINE AND THE PROGRESS OF MEDICAL DISCOVERY.

THE subject matter of Mr. DAYMAN's excellent letter, published in our last number, has so interested us, that we are led to swerve somewhat from the course we had marked out for ourselves, and to offer a few sentences on the Nature and Progress of Medical Discovery, as it appears by the light of Medical History.

This subject is a wide one, and would have to be discussed in as many leaders as we can afford lines, before its full importance and extent could be recognized.

Two facts, however, in connexion with the subject present themselves before us at this moment; and after stating them separately, we will discuss and prove them together.

First. The history of medicine shows that the progress of medical discovery is slow, and that in every matter connected with the advancement of our art, numbers of minds

have been employed, for long periods of time, in working out that advancement.

Second. Medicine only advances as a part of the great caravan of the universal sciences.

The father of medicine, the great Hippocrates, is not only the first of medical men, but the first and best historical figure to which we can point, while proving the truth of the two statements offered above. In this day it would be simply absurd to say that Hippocrates made, framed, and emitted from his own mind all those medical truths and suggestions, which bear his name and seal.

The contrary, indeed, is well known. For centuries preceding Hippocrates, the vast stores of medical learning which flowed upon the world through him had been accumulating. On the tablets of the Grecian temples, the treatment and signs of diseases had been laid down, line upon line, and precept upon precept. On the lips of the people many a medical proverb hung; and by the gentle hands of friendship, numerous remedial measures were dispensed. Those tablets the father of medicine read, those proverbs he heard, those simple curative measures, which instinct suggested and love applied, he witnessed. Still more, he was surrounded by other philosophic minds, and had been preceded by many such, some of whom had even turned their thoughts to the cure of diseases. He was neither the past, the present, nor the future sage of the wonderful period included in the first two hundred Olympiads. There had been before him, Empedocles, breathing a rude physiology. Alcmaeon had taken to pieces the living machine. Leucippus had dreamt of the atoms of bodies, and had pictured in outline, that theory, the filling up of which in detail, has rendered our own Dalton immortal. This atomic theory was reproclaimed by Democritus, the contemporary and friend of Hippocrates; that laughing philosopher who, before the very eyes of the great physician, opened the bodies of animals, and who is said to have written treatises on plagues, on diet, and on many other medical subjects. Herodotus also was travelling about that time, and was taking much pains to record the manner in which people of foreign lands cured their sick; while Socrates and Plato were not far off, teaching their divine philosophy.

Thus Hippocrates lived in an extraordinary age, amongst wonderful men; and his great merits consist in the fact, that he collected the medical wisdom of his period, wrote it down, and added to it the fruits of his own observations.

Let us take a long stride in the history of the profession, and select another illustration. The name of the immortal Harvey, to whom Mr. Dayman refers, will suit us in every way.

The world is accustomed to speak of Harvey as the discoverer of the circulation of the blood, nor is it altogether incorrect in doing so. But it is the greatest possible mistake to imagine that the whole credit of the discovery is due to this one great man. Harvey, in truth, only completed the discovery; forged the last link in the chain of evidence that was required; and brought a theory to the point of demonstration.

The merest glance at the subject indeed will show that no single mind could have worked out to completion the intricate problem of the circulation of the blood. No; it required a Galen and a Servetus to discover the pulmonic circuit; a Realdus Columbus to throw out the idea of an arterial current; a Fabrizio to show the use of the valves

in the veins, and a Harvey to connect all these discoveries, to grasp all the truths they contained, to make out other truths from nature, and at last to establish the simple beautiful and demonstrable theory with the mention of which his name will be for ever bound.

But more; Harvey was influenced by collateral intellectual agencies. Our colleague Mr. Dayman seizes on this idea with great correctness. In Harvey's days, the spirit of free inquiry had burst into new life. The whole world was vigorously shaking off the fetters which had so oppressed it in body and in soul. The Reformation was established in this country; and the political freedom of the land was being secured by the blood of thousands of noble and generous hearts. Harvey took no part in these struggles, it will be said. He did not: and why did he not? because his whole soul was absorbed in other matters. But there can be no doubt that the stirring events which were going on around him failed not to exert an influence over his mind, and to lend to it not a little of that firm and independent tone which assisted him so importantly in establishing his views, and in fulfilling his great mission. Lastly, Harvey lived in a day when the value of experimental philosophy was being fully recognized and pursued, and when Bacon himself was pouring forth the abundance of his learning and streams of original knowledge.

We will take one more step, and will seize the name of John Hunter, for the purpose of illustrating the views with which we set out. There are many false notions and incorrect estimates in the world, as to the labours of this illustrious man. It is an unfortunate thing, that Hunter despised learning—we had better say *affected* to despise it, for in sober truth no man ever prized it more. It may be that he scoffed at books; but it is well known that he did not under-estimate scientific and learned conversations. It is well known too that his powers of perception and of memory were of the first order, and that he held constant communion with the most competent medical scholars of his day. Thus he was not an ignorant man at all, but a well-informed man, and only differed from other men in the fact, that he obtained his historical knowledge by the ear rather than by the eye. Moreover, the works of Hunter when properly understood, show the extent of his information. No individual could possibly have achieved what he achieved, starting on nothing.

These works also show another important fact, viz., that whenever their author did advance theories which were purely the offspring of his own fertile mind, they were those of his theories least calculated to survive, and to stand against the impartial test of after criticism.

Again, it is quite evident that Hunter, like Harvey and Hippocrates, was influenced much by the spirit of the times in which he moved. The very disregard for learning which he assumed was not peculiar to him, but was possessed by many of that day, not excluding the reigning monarch himself.

Finally, there is every reason to believe that the indomitable energy and independent character of John Hunter were peculiarly intensified by the great mental and physical movements that were going on around him. The music of Handel, the eloquence of Pitt, the labours and military glories of Washington, the discoveries of Black, Priestley, and Franklin, and many other events, all served to fan into fierce flame the energies which started in him.

of the great British surgeon. With so much activity of thought around him, how could his mind sleep? With so much of living action about him, how could his strong hand rest?

But we have gone on already too far, and must with another word conclude.

From the illustrations we have selected, and the remarks made thereupon, we believe we have proved the truth of the statements with which we started. To the selections offered, a hundred others could be added; and if we might pass from our own science into the other sciences, we could demonstrate the truth of our position to an unlimited extent.

It may perhaps be imagined by some readers, that it has been our intention to lessen the fame of the acknowledged leaders of our profession. The reverse is our object. We would not detract in the slightest degree from the glory that is attached to those names to which special reference has been made, or to the names of any other of our illustrious dead. Hippocrates, Harvey, Hunter—to allude to no others—were men first in greatness—were men of true genius; but they were great, they were men of genius, simply because they possessed minds competent to gauge accurately the periods in which they lived; because they personified those periods in themselves, and moved onward with them. Still more, they started where other men had left off, followed out investigations which had been commenced, and did all in their power to complete those things which they took upon themselves to perform. The recognition of these supreme mental qualities is, in our opinion, the highest compliment that can be paid to genius.

In conclusion, what important testimony does this reasoning offer to the value of the study of the history of medical science! Armed with a knowledge of such facts as we have thrown out, the aspirant to true medical fame would know at once the proper means to be pursued in order to reach the goal at which he would arrive; and would not fail to taste eventually the truth of the maxim, "Well begun is half done".

THE SYDENHAM SOCIETY.

WE are well satisfied to see that the last volume issued by the Sydenham Society is a translation from the German of a standard work on Nervous Diseases; for it is one of the most important objects of such a society to supply translations of valuable works, which are not likely to command a remunerating sale under the ordinary circumstances of publication.

The intimate connexion of the mind with the nervous system makes all questions concerning the mental powers of a high practical interest to the scientific physician; and although the physical philosopher may neglect metaphysics (and even pride himself on his ignorance, as people are apt to do, notwithstanding Dr. Johnson's sarcasm), yet no such indifference or contempt can be palliated or excused in a member of our profession who neglects the study of the functions of the brain. For what are metaphysics, but attempts to trace the order and to distinguish the processes of the various functions of the brain? Indeed, all we know of these functions is through metaphysicians, who have laboriously studied the sequences and relations of their own thoughts and feelings, and observed the outward manifestations of mind in others; and who have generalized the results

and reduced them into some sort of system. As the physiology of the lungs is elucidated by the quantitative and the qualitative analysis of the gases inspired and expired, so the physiology of the brain is elucidated by the close analysis of the individual's own thoughts and feelings. To despise the quiet labour of the metaphysician, is as unwise as it would be to laugh at the scales and measures and arithmetical calculations of a Cavendish.

Now, the Germans are, by mental idiosyncrasy, a metaphysical people. One of their newspapers cannot be taken up, without seeing that a considerable amount of metaphysical knowledge is assumed in the general reader. As the only way in which light can be thrown on what is obscure, is by attention, observation, and thought on that subject, so our hopes of the solution of some of the profoundest problems of the brain must naturally be bestowed on an eminently thoughtful nation, who addict themselves especially to that kind of research. Translations, therefore, from the German of works on the subject which Dr. HOLLAND has so well called "mental physiology", are much called for. They will not be remunerative to the general publisher, as readers of such books are comparatively few: but this paucity of readers is no measure of the good which results from the diffusion of knowledge; for all men who are really practical in the true sense, are only so from having appropriated the labours of those who have preceded them; and the truth which has required years of research, may, when embodied in a few words, be used by numbers who know not how they came by it, or who may have regarded the discoverer as merely a scientific man, or as a speculative dreamer.

We trust that the Sydenham Society will continue to supply its annual volumes of *medical classics* for a long series of years. The great support which it has received, and the admirable volumes which it has published, show the excellence of its management, and prove that the scholarship and the medical learning of the present race of physicians are not on the decline. All are interested in the *status* of our profession; and although this must chiefly depend on the character of the mass of its members, yet it is also raised in public estimation by the comparatively few, who laboriously devote those hours to medical science and medical literature, which the majority spend in ease or in amusement. A society such as the Sydenham, which publishes, at a very moderate expense, works of a highly scientific or literary character, must be eminently influential in keeping up the *status* of a learned profession, and therefore richly deserves the countenance of all who wish well to their honourable calling.*

THE INCOME-TAX.

Now that the profession is becoming alive to the importance of uniting in one powerful phalanx against the income-tax injustice, we have good hope of the Chancellor of the Exchequer proposing a more equitable adjustment of this impost, and obtaining the consent of Parliament to such a proposal. Numerous meetings of medical men, we are thankful to learn, have already been held, and others are

* The first volume of Romberg, *On Diseases of the Nervous System*, has already been issued for the subscription of the current year; and a translation of Külliker's *Manual of Microscopic Anatomy* is stated to be in preparation.

announced as about to take place, for the purpose of petitioning both Houses of Parliament.

The Central Council of the Association have determined to assemble the profession residing in the city and county of Worcester, as will be seen by their resolutions published at p. 178; and if any of the Councils of the District Branches have not yet moved in a similar manner, we trust that they will no longer defer following the advice which has been issued from head-quarters. There is absolutely no time left for delay. The voice of the profession, if it is to be effective, must be not only unanimous and earnest, but it must be immediately spoken.

We would repeat the words of Dr. SMITH, published in our last number (p. 157):—"Let the period between this and Easter be employed in getting up influential meetings and numerous signed petitions; and during the recess, when members of Parliament return to the country, let them be waited upon, and urged to help our just cause."

Dr. NANKIVELL's suggestion (p. 178), as to adopting or adapting the form of petition employed by the practitioners of Torquay, may save a good deal of trouble, as that petition is correctly expressed and thoroughly *ad rem*.

NAVAL ASSISTANT-SURGEONS.

In no department of the national service is so much money expended for so little purpose as in the Royal Navy. Ships are built and immediately taken to pieces in the most wanton way, just as if the main object of the dockyard authorities was to use up a certain amount of public money: at all events, so it is, that the value which the country receives in the shape of effective war ships, is very far from proportionate to the treasure absorbed by the shipwrights. Then again, with the proverbial obstinacy of incompetence and adherence to routine, a British admiral rarely enters upon his office till he has become physically and mentally unfitted by old age for his high and responsible command. The common sailors too are so badly treated, that the navy of the United States, and our own mercantile navy, completely absorb the best seamen; and recruiting for the royal navy, in place of being, as it ought to be, very easy, is always extremely difficult; so difficult indeed that we constantly read in the newspapers of ships being detained in harbour for want of men.

The surgical department, which ought to be formed from the very *élite* of the surgical talent of the nation, is systematically insulted, the assistant-surgeons being precluded from all opportunities of study and self-instruction, by being denied cabins and being obliged to spend their time amid the puerilities, tricks, and noise of the midshipmen. As Mr. HUME well remarked on Monday night in the House of Commons, when the navy estimates were under discussion:—"The question was whether the navy ought not to obtain as able and efficient medical assistance as the army. For his own part he could see no reason why both officers and men in the navy should not receive the best medical talent that was to be had, which, however, was impossible so long as the assistant-surgeons were treated as at present." As a question concerning the honour and status of our profession, the ill-treatment of the naval assistant-surgeons is one of vast importance, but as regards the public its bearings are of greater magnitude. How many lives may be saved after action, and how much disease and pestilence avoided in unhealthy climates, by a talented medical staff! but how can

such ever be hoped for in the royal navy till those who enter the service as assistant-surgeons are treated as gentlemen and men of science? It appears to us that the whimsical carpentry of our dockyards, the senility of our admirals, and the way in which talented surgeons are discouraged from accepting commissions in the royal navy, present topics for discussion of far higher moment than any which are involved in mere party disputes; and we feel assured that the day is not far distant when patriot-statesmen of all political parties will cooperate on behalf of the nation, in removing the abuses to which we have now adverted. Here, we may remark, is one of the many mixed questions in which medical members of Parliament might speak with authority, and by so doing serve their profession and their country.*

We must not leave this subject without stating our belief that, among the superior officers of the navy, the feeling is decidedly in favour of a wiser policy being adopted towards the assistant-surgeons. It is with much pleasure that we copy the following from the *Times* of February 16th:—

"*Sheerness, 14th Feb.* The *Espiègle*, 12, Commander, George Hancock. Under the present Admiralty regulations for the accommodation of officers, no provision has been made for the Assistant-Surgeon appointed. Captain Hancock has given up one of his own cabins for the entire use of the Assistant-Surgeon, otherwise he must have been without a cabin for his personal comfort."

The kindness and good sense of Captain Hancock convey a severe censure to the parliamentary partisans of Admiralty routine.

ORIGINAL COMMUNICATIONS.

INFLUENCE OF NOXIOUS EFFLUVIA ON THE ORIGIN AND PROPAGATION OF EPIDEMIC DISEASES.

By R. D. GRAINGER, Esq., Lecturer on Physiology at St. Thomas's Hospital.

(Read before the Epidemiological Society.)

HAVING in the course of my official inquiries received, through the kindness of my professional brethren, a large amount of valuable evidence illustrative of the noxious influence of overcrowding, defective ventilation, etc., I have thought that it might not be unprofitable if some of the facts which have fallen under my observation, both as regards the causation of, and the exemption from epidemic disease, were laid before the profession.

Within the limits of this paper, it will be possible only to make a selection of the conditions affecting the health of large masses of the people; I therefore propose to direct attention to two of the many deleterious agents prevalent in populous localities: namely, to human effluvia, and to the emanations generated by privies and cesspools. But before entering upon the more immediate subject matter here traced out, a few remarks may be offered on the predisposing causes of epidemic disease, and especially on the circumstances which explain the vast influence they exert in its diffusion.† The extended inquiries of late years have abundantly shown, that the same deleterious agents operate as predisposing causes in regard to the whole class of zymotic diseases; that what will develop the exciting or efficient cause of fever, will also develop scarlatina, small-pox, diarrhoea, or cholera. So certain and notorious is this

* At p. 180 will be found an account of what took place on Monday night in the House of Commons with reference to the present treatment of naval assistant-surgeons.

† This subject is ably discussed by Dr. Carpenter, in a valuable paper on the Predisposing Causes of Epidemics.—*British and Foreign Medical Review*, January 1869, p. 160.

to those who practise among the poor, that before the outbreak of any epidemic, knowing where the predisposing causes are rife, they could foretell the precise localities where it would occur; or even name the alley, or point to the exact house which would suffer.

Another circumstance which extends the influence of these causes is that, if concentrated, any one of the number—overcrowding, privy effluvia, foul evaporations—will often suffice to induce any of the principal members of the zymotic class, according as the exciting cause of one or other of the number happens to be present.

The only other point to which I would allude, is that these predisposing causes have not only this wide range in multiplying the number of attacks, but they invariably, as the rule, give intensity to every form of epidemic disease, and thus increase enormously the general mortality.

These and other considerations have long induced me to conclude that, in regard to zymotic affections, the predisposing are infinitely more important than what are called the immediate or exciting causes. In regard to low fevers, for example, it is certain that its efficient cause—the *materia morbi*—is never absent from London and other large towns; and yet it is rarely—many would say never—developed unless there be superadded to it some predisposing cause. So true is this, that we not only daily see in the metropolis and elsewhere, hundreds and thousands of persons living in the front streets exempt, as to the rule, from typhoid fever, whilst the inhabitants of the wretched courts behind are scarcely ever free from it; but if, by chance, a given number of persons are planted in the very centre of an epidemic district, but freed from the recognised predisposing causes of zymotic affection, they also, as the rule, will still escape. At the conclusion of this paper, some marked examples of such exemptions, both in regard to cholera and fever, will be adduced. It is facts like these that hold out so much encouragement for sanitary ameliorations, by which it may be reasonably anticipated that in the ratio in which these predisposing causes are reduced as to number and intensity, epidemic diseases, wanting one of the elements necessary to their development, will be diminished. With these prefatory remarks, I proceed to the subjects selected for consideration.

I. INFLUENCE OF HUMAN EFFLUVIA.

According to my own opportunities of observation, the most injurious of all the causes operating in the diffusion of epidemic diseases, are the effluvia proceeding from the human body, and especially from the lungs and the skin. The special deleterious agent consists of the effete and, as it has been proved experimentally, highly putrescent organic matter, mingled with the expired air. That it is, when reintroduced into the living body, liable to be highly injurious, may be inferred from the fact of the careful provision made by nature for its incessant elimination from the system. That it is small in amount, is no objection to the intensity of its action; for to the physiologist it is well known that a minute quantity of a powerful agent—the putrid matter introduced on the point of a needle in the inspection of a dead body—a single drop of concentrated prussic acid placed in the mouth of an animal—is sufficient to destroy life. It is in overcrowded bed-rooms, in unventilated schools, workhouse dormitories, etc., that this effete matter taints the air, and, entering the blood, poisons the system. That the remarkable diminution in the amount of carbonic acid evolved from the lungs, where persons, as in crowded and unventilated apartments, breathe an impure atmosphere, acts in such cases injuriously, admits of no doubt; but the evil, *quod* the development of fever, scarlatina, cholera, and so forth, depends on the organic, and not on the chemical products of respiration. As one indication of this, it may be explained that it is possible, under certain circumstances, to observe the action of the former when separated from the latter. As soon as the expired air quits the body, the matters of which it consists have a tendency to separate; and as regards the two substances under consideration, the carbonic acid mixes with the at-

mosphere on the principle of diffusion; whilst the animal excretion, no longer held in solution by the colder external air, is deposited, and particularly clings to woollen articles, as bedding and clothes, which last, as it is well known to medical men, clergy, and others, will often retain for hours, or even longer, a foul smell from this cause alone. When this matter, from neglect, is allowed to accumulate, it will affect the health. An instance of this was mentioned to me by the surgeon of a large pauper school, where the health of the boys was decidedly improved by substituting, for the usual dress, clothes capable of being readily washed.

It is, however, familiar to all practitioners, that human effluvia especially exhibit their poisonous influence when either multitudes of human beings are crowded together, or where a smaller number are placed in confined and unventilated sleeping places. Many instances of the influence thus excited on all kinds of epidemic disease have come under my notice; but only a few illustrative examples can here be adduced. In making these selections, it will be my object to present instances which, as far as possible, display the operation of some one individual agent; for when, as usually happens among the poor, a multitude of unfavourable conditions are present, it is extremely difficult to define and demonstrate the deleterious agency of each.

The following case illustrates the effects of overcrowding, in respect to cholera. During the epidemic of 1849, the inmates of a reformatory establishment for young women suffered intensely from the pestilence; 40, out of a total of 96, being attacked, and 15, or rather more than 15 per cent., dying. Now, these poor sufferers were previously in perfect health: they were well fed, well clothed, and, in short, carefully tended; but the dormitories were low, and much crowded; the windows, for the sake of seclusion, were partly blocked up, which greatly interfered with the ventilation. After a careful examination, I could detect no other cause than this for the sudden outbreak, occurring at a period when there was little cholera in the neighbourhood.

As regards the influence of overcrowding on the development of low fever, I may appeal to the experience of every medical practitioner whose duties call him much among the poor. It matters not whether we speak of the closely-packed common lodging-house; of rows of houses built back to back; of the small, unventilated, and often single sleeping apartment of the mechanic; or of the ill-built cottages in rural districts, with their one bed-room, overhanging thatch, and small lattice; wherever, either from numbers or the want of ventilation, we have the foetid, sickening air, generated by human effluvia, there assuredly we shall find fever. Although observed especially among the poor, fever, as it occurs in this country, is not, however, essentially dependent on poverty and destitution: want may, indeed, aggravate the evil, and actual famine (as we unhappily saw a few years ago in Ireland, and in the inhabitants of Ireland who fled to the manufacturing districts of England) may give immense development to typhus; but that persons well fed, living in comfort, and in strong health, may suffer severely from low fever, is shown by a large experience.

One of the best illustrations, perhaps, is furnished by the sailors belonging to the collier vessels frequenting the Thames. These men, as a body, are in the prime of life, robust, and well fed; but, as I found by examining many of these vessels, the place where they sleep, the fore-castle, is excessively small and confined; with this serious additional evil, that, as the hatchway is usually flush with the deck, it becomes necessary, whenever there is much sea, to close it down, when the unfortunate sailors must be without any window, as if shut up in a close box. When, too, the vessels come to London, as only one man is required to keep watch at night, all the sailors are crowded at the same time into their closely packed berths. Some years ago, the attention of Mr. Busk, the distinguished surgeon of the Seamen's Hospital Ship, was attracted to the large number of typhus cases which were admitted, amounting in 1841 to 147, and in 1842 to 167; and to the fact that, of all the vessels in the Thames, the colliers were most subject to

fever. In investigating this question, I could detect no other cause than the polluted air which these men must have breathed in the confined fore-castle. That there is nothing connected with a sailor's mode of life to expose him to typhus, is proved by the experience of well managed vessels; and, as one among the many proofs which might be adduced, I may mention, that Mr. Clark, who made ten voyages to India as surgeon in Messrs. Green's fine vessels, never had a single case of typhus.

To those who are practically acquainted with the poorer parts of populous towns, it would be needless to point out that the common lodging-houses, and especially those occupied by the Irish, inflict an almost incredible amount of evil on the community: they are the common foci of all epidemic diseases; they frequently are the means of introducing small-pox into the locality where they are situated; and they are a never-failing source of expenditure to the parochial authorities. Although other sources of sickness may prevail, filth, neglect, and destitution—this last, however, by no means so often as supposed—the one prevailing evil and special characteristic is enormous overcrowding, carried to an extent which those unacquainted with the subject can scarcely, even in idea, realize. In the valuable recent report of Captain Hay, the Commissioner of Police appointed to superintend the carrying out of the Common Lodging-House Act in the metropolis, and to whom so much credit is due for carrying into operation a difficult and novel measure, some remarkable illustrations are given. In one eight-roomed house, one hundred and three persons, the population of a hamlet, were herded together; in one room, 14 feet 6 inches square, thirty-seven people were found lying huddled together on the floor. In many of these instances, the space for each inmate could not have been more than forty cubic feet; whilst the lowest amount required for health in a sleeping room is 500 cubic feet, or twelve times the amount.

My own experience corroborates these statements of Capt. Hay. On entering some of these deplorable places, I have found every possible space occupied by men, women, and children; and an atmosphere so fetid as to be almost overpowering to a stranger; causing, indeed, in some instances, nausea and actual vomiting.

That persons habitually breathing an air thus polluted by poisonous exhalations, should become the victims of zymotic disease, can excite no surprise. As to low fever, the amount is enormous. I had occasion, two years since, to examine some of the courts in Gray's Inn Lane; and in one of them was an Irish lodging-house, in which alone twenty cases of fever had occurred in two months.* Another and more marked instance was lately mentioned to me at Leeds, in which seventeen cases of typhoid fever were, about two years since, received in one week at the House of Recovery, from two of these lodging houses; the cost to the parish for this week's work being £50.

It is satisfactory to learn that the Act of Parliament for regulating common lodging houses, for which the community is indebted to the Earl of Shaftesbury, has been extensively put into operation in London and the provinces, with the best results, both moral and physical. At Portsmouth, where there are not fewer than five hundred of these dwellings, I was informed by Dr. Slight, the Inspector, and by Mr. Piercy, the medical officer of the district, that in those houses placed under regulation, there had been a general reduction of disease, especially of fever; and it was particularly stated, that no second case of fever had occurred; whereas, in ordinary circumstances, as shown above, where typhus once breaks out, the rule is that it spreads among the inmates, many of whom often fall victims to the pestilence.

[To be continued.]

* Report on the present state of certain parts of the Metropolis, and on the Model Lodging-Houses of London. By R. D. Grainger, Esq. Ordered to be printed by the House of Commons, 1851.

MORTIFICATION EXTENDING FROM THE HEAD OF THE FIBULA TO THE CREST OF THE ILIUM. RECOVERY.

By RICHARD ALFORD, M.R.C.S.

CASE. On the 16th of June, 1852, W. B., a carpenter, aged 61, knelt accidentally on a nail when about to clinch the nails of a door. The puncture was three-fourths of an inch deep, just below the right patella; but gave him very little inconvenience at the time. He continued his work until the 19th; and on this evening walked eleven miles. His wife now fomented and poulticed the knee, which had become inflamed and painful: and on the 21st, medical advice was procured and leeches, etc., applied.

I first saw him on June 25th, and found an abscess over the ligamentum patellæ; and, on lancing it, about half a teacupful of tolerably healthy pus escaped. Outside the knee and thigh gangrene had commenced, and extended upwards to about the length of the hand; and the outside of the thigh was red and swelled up to the hip: the inside of the thigh and the leg below the knee were not affected. My patient's general appearance was by no means good; his powers seemed sinking, and altogether the case was unpromising. I ordered him to have as much port wine as he could take, with light nourishment, beef-tea, eggs, etc.; and a mixture of quina, opium, and dilute sulphuric acid, with an occasional alterative aperient pill. A lotion of chlorinated soda was applied to the gangrenous part, and covered with linseed meal and barm poultice. A poultice was also applied over the abscess; and six leeches to the upper and outside of the thigh. For the next day, a cooling lotion of acetate of lead to this part was prescribed.

July 1st. The mortification was creeping up the thigh, and redness was extending across the loins. The case appeared hopeless; the patient was extremely prostrated, and took a bottle of wine daily, but very little else.

July 12th. To my great surprise, my patient kept up, and threw off the dead parts. Sphacelus had extended to the crest of the ilium; a spot of the size of a crown piece had turned black opposite the sacrum, and redness and swelling extended up to the false ribs. He had a pint of port wine and a quart of porter daily, and continued his mixture.

July 16th. I procured a horse-shoe water cushion* for him, from which he experienced great comfort. The ulcer outside the thigh extended from the head of the fibula to rather beyond the crest of the ilium, and was two feet long and eight inches wide at the top, its widest point, the average width being about six inches. Mortification had penetrated deeply in the fleshy part of the thigh at some points.

Aug. 6th. The poultice was omitted, and the lotion of chlorinated soda was continued, and covered with gutta percha sheeting. The dead parts had all come away; the back was sound, and the general health vastly improved. The abscess over the ligamentum patellæ still discharged, and another had formed and burst over the upper end of the fibula, a little below the ulcer. The leg was somewhat swollen, but the inside of the thigh was quite healthy.

Aug. 17th. Water dressing had been used a few days; the granulations were flabby, large, and disposed to bleed; the discharge was very profuse. Lotion of sulphate of zinc was now used, at first weak, but gradually increased in strength, and nitrate of silver was occasionally applied to the edges of the ulcer. From this time the healing process rapidly went on, and his general health improved.

Sept. 4th. The stimulants had been gradually decreased, and were now altogether omitted. A mild saline was ordered to be taken occasionally to relieve head symptoms, resulting doubtless from the decrease of the discharged blood.

* No. 6 of Mr. Hooper's cushion.

Sept. 25th. On first getting down stairs, he suffered a good deal from swelling of both legs.

Nov. 19th. The ulcer was now reduced to a mere line a few inches long, and half-an-inch wide. He complained of rheumatic pains in his right shoulder from exposure to a draught; and of cough, in common with the other members of his family. The knee-joint admitted of very slight motion. The abscesses were healed. The legs were now swelled very slightly. He was ordered to take compound squill pill three times a day.

Dec. 28th. The sore was quite healed: he still suffered from rheumatism, etc., but was gaining flesh. The motion at the knee was improving, but he could not yet bend it to a right angle with the thigh. The cicatrix seemed healthy, but he occasionally felt a shooting pain in its upper part at the bend of the thigh, where it seemed a little chafed by his flannel, and a truss which he wore for a left inguinal hernia. This part was now covered with cotton wadding, and the whole daily washed with rain water, and slightly anointed with fresh lard.

REMARKS. Amputation was out of the question, from the extent of the inflammation on my first visit. I had therefore to trust to stimulants, and I consider that my patient owed his life to the port wine, on which he almost entirely lived for the first ten days or fortnight of my attendance on him.

He assures me that the nail penetrated fully three-quarters of an inch; and it must have entered the joint; yet the probability is, that if he had rested for a few days at first he would have felt nothing more of it.

There is some thickening and tenderness around the punctured spot; but the patella is freely moveable, and the difficulty of bending the joint lessens; it moves freely up to about an obtuse angle with the thigh. He walked to church, Jan. 31st, with one crutch and a stick, and found from the fit of his breeches, put on for the first time on that day, that the knee was larger than the other. There is no thickening above the patella. The length of the cicatrix is one foot seven inches; its greatest width at the bend of the thigh is four inches, average width about three inches, in some parts scarcely two. It has receded from the crest of the ilium three inches; the ulcer extended rather beyond this point.

Tewkesbury, Gloucestershire, February 1853.

SUGAR IN URINE NOT ALWAYS INDICATIVE OF DIABETES.

By HENRY JOHNSON, M.D., Physician to the Salop Infirmary.

ALTHOUGH a saccharine state of the urine be the pathognomonic sign of diabetes, we are not too hastily to conclude that this very serious disease exists, whenever we find sugar in the urine.

CASE I. A clergyman, aged 60, had common catarrh, for which he took proper remedies, and, on his return from Aberystwith, came to consult me.

In the course of conversation with him, I found that he was in the daily habit of taking at his breakfast large quantities of *sweet-meats*, or preserved fruits, for the purpose of keeping his bowels regular. He also complained of frequent calls to make water, and it was this circumstance alone that induced me to get an opportunity of testing the urine. It was pale, and of the specific gravity of 1040. Treated with liquor potassæ, according to Moore's test, it yielded a deep reddish brown colour, and it fermented freely with yeast.

Here, therefore, there was the characteristic symptom of diabetes, "*saccharine urine*" but, no rational sign of the disease, except frequent calls to pass water. It was *temporary or occasional diabetes*, and, I believe, easily removed by avoiding in future the abuse of sweets. The patient passed from under my own immediate observation, and I had not another opportunity of testing his urine. But I have

reason to believe that it was so examined, and found to be no longer saccharine. He died about a year after, of disease unconnected with diabetes.

CASE II. Mr. A. B., aged 58, a very tall, portly man, of bilious temperament, ample abdomen, and accustomed to very generous living, sent to me on account of a very severe pain in the hypochondriac and epigastric regions, to which he was very subject. There was no febrile excitement, but he had loss of appetite, a furred tongue, and constipated bowels. As he had formerly, (as I was told) passed a gall-stone, it was suspected that he might be again suffering from this cause, but no such concretion made its appearance. I considered it a case of severe flatulent colic. He had certainly not a single symptom of diabetes; however, to my great surprise, on examining the urine, I found it pale, of high specific gravity (1048), and it contained sugar, as evinced by Moore's test, and that of fermentation with yeast.

The colicky pains soon yielded to appropriate treatment, and the patient required no particular regimen on account of the state of the urine.

It is now two years since the above case occurred. The gentleman alluded to is now performing the active duties of life, and is apparently well. But I have lately obtained an opportunity of again testing his urine, and found it still saccharine.

I consider such cases as the foregoing very valuable, as teaching us caution in our diagnosis and prognosis; for without such proofs that a saccharine state of the urine may be temporary, or normal, we might form a more unfavourable opinion than the circumstances justified.

From what I have observed in another case, I suspect that in feeble states of the digestive power of the stomach, cane sugar is converted into grape or diabetic sugar, and that this, if not further changed in the animal economy, passes into the blood, and is voided by the kidneys, even in apparent health.

The preceding observations were written some time since. I have this day been reading with much pleasure M. Dechambre's paper, "*On the Habitual Presence of Sugar in the Urine of Old People*."

We have here, therefore, two independent series of facts, M. Dechambre's experiments, and my cases, materially illustrating and confirming each other. The former make us acquainted with a curious physiological law, the latter teach a useful practical lesson. M. Dechambre thinks that the presence of sugar in the urine of old people, arises from the impeded action of the lungs, incident to old age, according to the theory of M. Alvaro Reynoso. The subjects of my cases were not "*old persons*"; but, perhaps, the function of the lungs in them might be relatively less active than natural from want of active exercise.

Some very curious experiments have been performed by Dr. Claude Bernard upon the sources of sugar in the animal economy. He concludes—1. That sugar is a normal ingredient in the blood and liver of animals. 2. That the formation of sugar takes place in the liver, independent of the ingestion of saccharine or feculent food.

I have repeated some of Dr. Bernard's experiments. He obtained sugar from the liver and blood of dogs and rabbits. I have found it in the liver, blood, and urine of sheep, slaughtered for the market; hence it appears that the urine of sheep, like that of M. Dechambre's "*old people*", normally contains sugar; and that in fact sheep are naturally diabetic!

Although sugar was detected by Mr. McGregor in the healthy stomach,† I am not aware that it has been discovered in the healthy human liver; and in the only instance in which I have had an opportunity of trying the experiment, I failed to find it.

Shrewsbury, February 19th, 1853.

* Gazette Médicale, April 3, 1852.
† Arch. Génér. de Méd., Nov. 1848.
‡ Medical Gazette, 1837.

BIBLIOGRAPHICAL NOTICES.

ON RHEUMATISM, RHEUMATIC GOUT, AND SCIATICA: their Pathology, Symptoms, and Treatment. By HENRY WILLIAM FULLER, M.D. Cantab. Octavo, pp. 403. London: 1853.

IN the preface to this useful book, we find its author remarking that he had proposed to himself, on commencing his labours, to give, in the form of a preliminary chapter, "a faithful record of all that has been ascertained of the history of rheumatism; and by reference to the facts thus proved and established, to show how conflicting opinions may be reconciled, and the pathology and treatment of the disease elucidated". Without stopping to state the somewhat unsatisfactory reasons which induced Dr. FULLER to change his original plans, we at once express our regret that his first excellent intentions have not been carried out: and the more so, because we believe that the chief faults of his volume are a scantiness of historical matter, and an occasional slight degree of inaccuracy in such historical details as have been introduced. Before we proceed further, we have one more fault to find with Dr. Fuller's book, a fault which relates to its literary construction rather than to its matter. We allude to the extraordinary number of foot-notes with which almost every page is encumbered. These notes render the reading of the book absolutely painful in some parts. It matters not how interesting the text may be, or how difficult; for difficult, easy, or interesting, the same obtains; the eye is everlastingly drawn from the leading matter to the contemplation of a significant, but sometimes misplaced foot-note; and the mind is wearied by these constant rockings, as speedily as the body is tired by being drawn through a pleasing tract of country in a carriage without springs.

Taken as a whole, however, we have just reason to admire Dr. Fuller's labours. Each page of the volume shows the author to be an earnest, observant, and accomplished physician. As we proceed with him on his journey, sometimes abreast, and sometimes in his rear, we listen with pleasure to his descriptions, and observe with delight the new lines of thought to which he directs attention.

The volume contains thirteen chapters. The first is "Introductory"; the second "On the Rheumatic Diathesis, and the Causes which influence its Development"; the third, "On the Seat of Rheumatism, and the Classification of its different Varieties"; the fourth, "On Rheumatic Fever"; the fifth, "On the Treatment of Acute Rheumatism, or Rheumatic Fever"; the sixth, "On the Causes of Rheumatic Affection of the Heart"; the seventh, "On Rheumatic Inflammation of the Heart—its Pathological Effects—its Symptoms, Progress, and Terminations"; the eighth, "On the Treatment of Rheumatic Inflammation of the Heart"; the ninth, "On the Statistics of Heart Disease in connexion with Rheumatism"; the tenth, "On Affections of the Brain, Inflammations of the Lungs and Pleura, and Disorganization of the Joints, as Complications and Consequences of Acute Rheumatism"; the eleventh, "On Rheumatic Gout"; the twelfth, "On Chronic Rheumatism"; the thirteenth, "On Sciatica, and other forms of Neuralgic Rheumatism".

Here is subject matter enough certainly; and when we inform our readers, that every topic named above is dealt with in a thoughtful and philosophic manner, they will best form an appreciation of the value of Dr. Fuller's present contribution to medical literature.

We remark, almost incidentally, that our author is always striving to find rational and physiological reasons for all that he advances. It is evident, however, that his mind is more at home at the bedside than in the experiment-room or in the laboratory; and although his physiological reasonings are always creditable, they are invariably the weaker and least original parts of his production, and contrast strikingly with his manner of describing the symptoms

and effects of diseases, and other matters of practical importance.

In continuance of this review, we shall select for observation, the fourth, fifth, tenth, and thirteenth chapters of the volume; strongly advising every one interested in the subject of rheumatism, to make up for our deficiencies of reference by reading the book itself, from its alpha to its omega.

Here, from chapter the fourth, is Dr. Fuller's account of what has been absurdly called the *Metastasis of Rheumatic Inflammation* :—

"A remarkable feature of the articular inflammation, is its migratory nature. In the course of a few days—nay, sometimes within a very few hours, the enemy begins to shift his quarters, and joint after joint undergoes, in turn, the infliction of his terrible visitation. The knee which to-day is red and swollen, may to-morrow present no trace of mischief, while the wrists, the elbows, the ankles, or the knuckles, which have been hitherto free from pain, may, in a few hours, become the seat of inflammation. Moreover, after evacuating its first position, and invading several joints successively, the inflammation not unfrequently commences in its old quarters, and the parts go through the same series of changes to which they had been previously subjected. In some instances, however, the parts first affected remain so throughout the attack; and it will be observed, that the obstinacy and fixidity of the inflammation very generally vary in an inverse proportion to the number of the joints implicated." (P. 6.)

We must find room for Dr. Fuller's observations on the effects of those profuse sweatings which attend rheumatic fever.

Dr. Fuller recognizes two kinds of profuse perspiration in these cases. The one kind of perspiration occurs in acute cases "in the natural course of the disease", and is the means by which enormous acid secretions, especially lactic acid, (the *materies morbi* of our author,) are carried out of the system. These perspirations are highly useful. The second variety obtains, in debilitated cachectic states of the constitution, after the incautious use of the vapour bath, or of depletion carried to an unwarrantable extent, or sometimes towards the close of protracted rheumatic cases.

"Such perspirations are useless, wasting, and enfeebling; though profuse, they emit but little of the characteristic odour. They may be somewhat acid, but not highly so, as before. They are not attended by the same heat of skin, by the same full and bounding pulse, nor by an equally loaded state of urine; but, on the contrary, are accompanied by a soddened state of skin, by a soft, weak, irritable pulse, and not unfrequently by an eruption of sudamina." (P. 64.)

The distinction here given is true to nature, and ought, as a matter of course, to influence treatment in an important degree.

Toward the close of this interesting chapter, the complications of acute rheumatism are ably and pithily introduced. Inflammations of the lungs and pleura, of the sclerotic coat of the eye, of the brain and its membranes, and of the heart and its membranes, are noted down by our author as such complications. He also includes in the same category "active maniacal delirium, *sympathetic* of inflammation of the heart and lungs, or of the vitiated condition of the circulating fluid". We wish he had not made use of the absurd word which we honour with italics, but do not care to repeat.

The fifth chapter refers to the treatment of rheumatic fever, and is more useful in showing the inefficiency of the various modes of medical treatment for the cure of the disease, than in suggesting any decided improvement in practice. Blood-letting is considered objectionable, and an opinion is given that "if a predisposition to cardiac inflammation be not engendered by copious and repeated blood-letting, still convalescence is retarded, the patient weakened, and rendered liable to frequent relapses". A part at least of these ideas was held by the illustrious Cullen, whose remarks, "that profuse bleedings produce a slow recovery, and if not absolutely effectual, are ready to produce chronic rheumatism."

Dr. Fuller next passes on to consider the effects of purgative medicines in acute rheumatism. We observe that he speaks of this form of treatment as of modern introduction into practice; and although we dissent from him altogether on this point, we entirely agree with him as to the injudiciousness of giving continued doses of powerful purgatives in acute rheumatic disease.

On the use of opium in rheumatic fever, the writer thus observes :—

"Therefore, whilst I join issue with those who would treat acute rheumatism by opium alone, I admit most freely the advantages of its employment in conjunction with other remedies." (P. 89.)

Dr. Fuller's remarks on the employment of mercury in acute rheumatism are very decided; and though some what contrary to common opinion, we suspect that they are correct. Speaking of the administration of mercury in combination with opium, so as to produce salivation, he observes :—

"In my opinion, however, this practice is not only unnecessary, but decidedly prejudicial to the well-being and safety of the patient. When given so as to affect the mouth, mercury proves exceedingly depressing, and is sometimes productive of evil consequences, which may be felt for weeks, months, or even years. Moreover, it exerts no perceptible influence over the rheumatic poison, nor does it assist in preventing the access of cardiac inflammation."

In another sentence he says :—

"Moreover, pericarditis and endocarditis supervene as readily whilst the patient is under the influence of mercury, as when that drug has not been administered; and when such is the case, we lose the most valuable property of mercury, namely, that of limiting the effusion of lymph on the inflamed surfaces of the heart." (P. 92.)

After expressing his doubts of the value of tartar emetic in acute rheumatism, our author dwells on the employment of cinchona bark in the treatment of this disease, and speaks most unfavourably of its employment in the early stages of the disorder, as recommended by Fordyce and Haygarth. In the later stages of the disease, however, when the urine has cleared, or has dropped its sediment, the pulse has become soft, and the skin moist, soft, and clean, he employs the bark, or quinine, with advantage. There is not space for us to follow Dr. Fuller in his remarks on the employment of colchicum, guaiacum, nitrate of potash, and lemon-juice, in the treatment of rheumatism. They all fall more or less under his criticism; and one of his remarks on the effects of lemon-juice has been so thoroughly verified in our own practice on numerous occasions, that we give the passage as it stands :—

"I have watched the exhibition of lemon-juice in twenty-two patients, and although in several it produced much depression; in some, gripping pains in the abdomen; and in one gave rise to diarrhoea, accompanied by a copious discharge of blood from the bowels, yet in three patients only did it appear to afford relief, or to hasten recovery." (P. 102.)

The class of cases in which lemon-juice is useful has yet to be pointed out: and it also remains to be determined, whether it has any advantages which other medicines do not possess in rheumatism.

At page 105, we arrive at Dr. Fuller's own line of treatment, which

"Is made up of alkalies and the neutral salts, with colchicum, calomel, and opium. Sometimes a little antimony is added, sometimes the aid of purgatives is had recourse to, and occasionally, though rarely, I deem it expedient to premise a moderate blood-letting. Baths are never employed if the skin is acting freely; but if, instead of being bathed in perspiration, it remains dry and hot, and burning, I then endeavour to stimulate its action by means of the vapour or hot air bath."

Dr. Fuller's great saline remedy is the potassio-tartrate of soda; and he also is fond of applying a warm alkaline and opiate solution to the inflamed joints, by way of fomentation.

From the above remarks, we think that our readers will agree with us in repeating, that the excellence of Dr.

Fuller's treatment of rheumatism does not consist in its being strikingly original. It is simply a careful and judicious mode of practice, and differs only from the practice ordinarily employed in inclining more to the philosophy implied in the adage :

"Our Doctor is a man of skill;
If he does you no good, he does you no ill."

Dr. Fuller concludes this chapter on treatment with the records of six cases, which are reported in accordance with the present mode of making such practical references. The progress of each case is given from day to day, and the medicines prescribed are noted down in the same orderly manner; the most scrupulous attention being paid, also, to the writing of the formulæ employed. We are ourselves no admirers of the system of introducing prescriptions into scientific books, and are particularly annoyed at the mysterious and cabalistic manner in which modern physicians are content to express their directions on paper. If, however, such prescriptions are to be thrust on the reader's notice, it is at least right that they should be done well, and with some degree of deference to the Latin grammar—a deference which Dr. Fuller really pays.

We now pass on to the tenth and best chapter of this instructive book. Our notices must necessarily be very brief.

Speaking of cerebral disturbance as a complication of rheumatism, the author happily omits to make use of many of those meaningless terms which occur in the works of other writers, whenever the manifestations of the mind are referred to. Even the word "sympathy" has now no mention, and we are quite delighted to follow Dr. Fuller, as, gauging with discriminating eye the subject before him, and discerning in the humoral pathology the key to those mental derangements which often accompany acute bodily diseases, he dares to emancipate himself from every fanciful and metaphysical conceit, and thus to write :

"Thus, then, it would appear that in all cases in which cerebral disturbance presents itself during the course of acute rheumatism, the altered condition of the blood is its primary or proximate cause." (P. 286.)

The latter part of this chapter refers to pulmonary disorders as complications of rheumatism, and to disorganization of the joints as a consequence of the same disease. Our readers must, however, remain satisfied with this brief notice of these important subjects.

We conclude with a word or two on the last chapter, which treats of neuralgic rheumatism. In this section of his subject, Dr. Fuller shows a large amount of practical information. He dwells with great ability on the necessity of attending to the digestive organs in neuralgic cases; and is an advocate for the employment of soothing remedies, such as opium, belladonna, henbane, conium, stramonium, aconite, and veratris. He also treats, with some degree of minuteness, on the special value of each of these medicinal substances.

And now, expressing our admiration of the easy, grammatical, and scholarly style in which his book is written, we take our leave of Dr. Fuller, highly gratified with the instructive communion we have held with him, and looking forward with hope to a repetition of that communion.

PRACTICAL OBSERVATIONS ON DISEASES OF THE LUNGS AND HEART. By ARCHIBALD BILLING, M.D., F.R.S. 8vo., pp. 138. London: 1852.

THIS is a vigorous and somewhat dogmatic book, evidently written for the author's satisfaction, but nevertheless well calculated to prove suggestive and refreshing to those who are already tolerably conversant with the subjects of which it treats.

Dr. BILLING is endowed with no ordinary powers as a writer; he possesses a clear and logical intellect, in combination with an irritable, energetic, self-relying temperament. His evident tendency is to escape, as quickly as possible, from detail—to grasp essentials—to illustrate gene-

ral principles—to disentangle and to simplify. As a controversialist, he eagerly and firmly maintains his own conclusions, and rapidly disposes of those of his opponents. For ourselves, we infinitely prefer such a writer to those mere compilers of other men's thoughts, whose weary volumes, surcharged with crude detail, tend rather to stem than to stimulate the development of subjective thinking.

A rapid summary of matured experience, such as is presented in the volume before us, though necessarily incomplete, insufficient for elementary teaching, and open to criticism, is far more serviceable to prepared and reflective minds, than more didactic and methodised treatises; for a book, after all, should be estimated by the amount of thought which it excites, as well as by the quantity of information which it conveys.

There is less than we imagine of what is, strictly speaking, *new*, in this art of ours; and mental sagacity has as much to do with its successful practice, as profundity and variety of acquired knowledge. Hence contact with an original thinker resuscitates our dormant energies, inspiring new interest in, and giving fresh expansion to the knowledge we possess.

The vindication of the author's claims to priority of theory as to the valvular origin of both of the cardiac sounds is the leading, though not the only interesting feature of the work. As no novel views are put forward, and as Dr. Billing's general opinions are already well known to the readers of his *Principles of Medicine*, we deem it unnecessary to offer any analytical exposition; and shall content ourselves with simply recommending the work to the student's attention. We have no doubt, after long practical experience, that the views propounded by Dr. Billing are, in the main, those which are most available for diagnostic purposes.

With the value of percussion he is evidently imperfectly familiar, and the difficulties of auscultation are, we think, understated by him; but notwithstanding these and other imperfections, characteristic of the one-sidedness of an independent mind, the book is a good one, and we can cordially advise its perusal.

SYPHILITIC DISEASES: THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT, including experimental researches on Inoculation as a Differential Agent in testing the Character of these Affections. By JOHN C. EGAN, M.D., M.R.I.A. 8vo., pp. 346. London: 1853.

OBSERVATIONS ON SYPHILIS, AND ON INOCULATION AS A MEANS OF DIAGNOSIS IN ULCERS AND DISCHARGES INVADING THE GENITAL ORGANS: comprising a brief outline of the Ancient and Modern Treatment of Syphilis, and pointing to new views, and to a new Method of Treating that Disease. By JOHN CROWCH CHRISTOPHERS, M.R.C.S. pp. 74. London: 1853.

TRAITÉ PRATIQUE DES MALADIES VÉNÉRIENNES, contenant un Chapitre sur la Syphilisation, et suivi d'un Formulaire Spécial. Par J. G. MAISONNEUVE, Docteur en Médecine, etc., et H. MONTANIER, Docteur en Médecine, etc. pp. 564. Paris.

In all the works on SYPHILIS which have recently appeared, the consideration of the results of *inoculation* has formed a considerable part, and afforded a subject of much interesting inquiry. One most important point, hitherto undetermined, has occupied the consideration of all the above mentioned writers, and demands our best attention. It is now generally acknowledged, that if inoculation be practised during the time that a chancre is in progress, or during the period that it remains stationary, the following succession of effects may be observed. During the first twenty-four hours, some redness appears at the spot where the inoculation has been made. From the second to the third day, there is some swelling, presenting the appearance of a pimple, surrounded by a red areola. From the fourth to the fifth day, the cuticle is raised by a more or less turbid fluid, affording often the appearance of a vesicle,

with a little dark spot in its centre. This spot is the result of the small effusion of blood at the time of the inoculation. About the fourth or fifth day, the secretion becomes increased in quantity, and more or less purulent in appearance. The centre of the pustule now becomes depressed, in this respect resembling the pustules of small-pox; at the same time, the surrounding redness may become fainter. From the fifth day, the subjacent tissue, which before had undergone no change beyond being slightly oedematous, becomes infiltrated by a plastic lymph, which affords to the touch the peculiarly hard and elastic feeling of cartilage. After the sixth day, the pus becomes thicker, the cuticle over it gives way, and scabs form on the surface of the part. When these scabs are detached, a chancre presents itself below, characterised by an indurated base, involving the whole thickness of the skin by a greyish white surface, composed of a lardaceous matter, or of a false membrane; and by its sharp and undermined edges, having generally a circular form. When inoculation, then, has been performed from an indurated chancre, its characteristic features are reproduced, and well marked and distinct evidence is thereby afforded of its nature. But the point to which we wish particularly at present to direct attention, is this:—*Can the matter from a simple chancre, unaccompanied by induration, when inoculated, give rise to an indurated sore, and may it become the source of constitutional symptoms?*

The present doctrine of the French school, represented by MM. RICORD, MAISONNEUVE, MONTANIER, etc., is, that if inoculation be performed from the matter of a simple undurated chancre of a fortnight's duration, and accompanied by a suppurating bubo, a simple chancre alone will be produced. This may assume different forms; it may become phagedenic, serpiginous, or gangrenous; but it will never become indurated, and will never give rise to secondary symptoms. The experiments from which these conclusions are drawn, were all made upon patients who had already had the venereal disease, and the results obtained are accounted for by the theory, that an indurated sore alone can produce constitutional syphilis, and that, under ordinary circumstances, a person can only once have an indurated chancre.

Our space will not allow us at present to inquire into the truth of these propositions; we must confine ourselves to the particular point to which we at first referred. What would happen if the matter from a simple chancre, of the nature above specified, were inoculated upon a healthy person? Would an indurated ulcer be the consequence, and would the patient be liable to secondary symptoms? Upon this point, authors certainly are not agreed; and the question, for very obvious reasons, cannot with propriety be tested by direct experiment. The French authors to whom we have referred, incline to the opinion, that an indurated chancre is always communicated by an indurated chancre; and that a simple chancre, accompanied by a suppurating bubo, is never capable of giving rise to an indurated sore, and consequently is not capable of producing constitutional syphilis.

On the other hand, Mr. EGAN, who is by no means alone in his opinion, observes:—"A numerous class of patients labouring under gonorrhœa afforded me ample scope for testing the accuracy of the results as set forward by eminent continental surgeons. In these cases I was unable, after repeated trials, to obtain any result by inoculation of the gonorrhœal matter, which I inserted by means of a lancet in the upper part of the thigh of the affected patient. But many cases presented themselves, in which the discharge was accompanied by *abrasion or superficial ulceration of the vaginal mucous membrane*, which was followed by a mild form of secondaries (generally a papular eruption over the body) although incapable of inoculation. Whether these abrasions, or simple excoriations of the mucous membrane, which existed in many cases coetaneously with the gonorrhœal discharge, were caused by the latter disease in its inflammatory or virulent stage, or by a specific virus, are questions by no means of easy solution; but certain it is, that not a few of them were succeeded by constitutional

symptoms where no other form of lesion could be discovered on the most minute and careful investigation."

Mr. CHRISTOPHERS takes a different view, and states his opinions much more broadly. He derives his conclusions, as he states, from the constant practice of inoculating every case that presented itself for some years. "I found," he says, "that no one case treated by inoculation, and proved thereby to be syphilitic, whether treated by mercury or otherwise, escaped secondary symptoms, under a more or less severe form; by which I imply (infer?) that secondary symptoms, in some shape, are the inevitable consequence of a genuine chancre, be the treatment what it may. The converse proposition holds good, that in no instance, the inoculation failing, have secondary symptoms supervened; therefore, let the treatment be mercurial, or let it be simple, if the case be one of genuine chancre, secondary symptoms, in some shape, will as surely follow, as that the sore will be reproduced by inoculating with the virus it secretes." (pp. 17-18).

We cannot refrain from expressing our conviction that these latter opinions have been too hastily generalized. The grounds upon which they have been formed, in fact, prove too much; for it is manifestly impossible for any one with any extensive opportunities of observation to trace every case to its termination. Even the most ardent supporters of the doctrines lately promulgated in France, admit that inoculation of the matter derived from a true chancre, like that derived from a small-pox pustule, will occasionally fail to produce any effect; and we believe this to be the first occasion upon which it has been asserted that a chancre is under all circumstances followed by some form of secondary symptoms.

We should have no difficulty, did our limits permit, in adducing cases, in which, on the one hand, inoculation has failed, and yet the patient has had secondary symptoms; and on the other, cases in which inoculation has been followed by a sore exactly resembling the one from which the diseased matter was taken, and yet where no secondary symptoms manifested themselves for months subsequently, if at all.

Before we can acknowledge any theory to be correct, with regard to so subtle a disease as syphilis, we must take care that the conclusions are derived from a sufficient number of well authenticated facts. The induction can, of course, only be correct in as far as every particular case agrees with the general law sought to be established; and the universality of the law must be established before we can allow that the reasoning is correct. A single well authenticated exception to any such general law destroys the truth of the induction.

NATURE AND TREATMENT OF SOME PAINFUL AFFECTIONS OF BONE. By LANGSTON PARKER, Esq. 8vo., pp. 16. London: 1853.

MR. LANGSTON PARKER, of Birmingham, has published a very interesting little memoir on the nature and treatment of some painful affections of bone. From cases which he has recorded, he deduces the fact that the shafts or extremities of the long bones may be opened with success for the purpose of relieving diseased conditions of their interior, besides those that are marked by the formation of matter. These conditions he believes to be marked by fixed and continued pain in a bone with or without enlargement of the shaft, of sufficient violence to threaten the destruction of the health and life of the patient, in cases where other remedies have failed to afford relief.

The cases which Mr. Parker has given are supposed by him to be instances of a congested or inflammatory condition of the medullary membrane of the interior of the long bones. In some cases, instances of such diseases may coexist with affections of the periosteum; in others they may be present alone.

Mr. Parker concludes that the shafts of long bones may be perforated or opened for diseased conditions of their in-

terior, such as he describes, with every probability of success, where all other modes of treatment have failed.

The subject of making artificial openings into the interior of diseased bones was brought under the notice of the profession, in some papers published in the *London Journal of Medicine*, by Mr. Henry Lee, previous to the appearance of Mr. Parker's interesting communication. Mr. Lee suggests the operation of trepanning as a remedy where long continued pain in bone depends, among others, upon the following causes:—"the formation of pus within the bone, the deposition of solid material arising from the poisons of mercury or syphilis, the collection of tubercular matter, or the presence of venereal cancellous structure." Both the above authors appear to have arrived at similar conclusions, although their investigations were evidently undertaken independently of each other; and both attribute to Sir B. Brodie the credit of having suggested the idea upon which their practice is founded. The propriety of making artificial openings into diseased bones where none previously existed, and where the existence of matter was not previously suspected, has not, however, we believe, been before acknowledged.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

CONNEXION OF CHOREA AND RHEUMATISM.

THE occurrence of chorea in connexion with or subsequently to rheumatism, has been noticed by several observers. At a meeting of the Medico-Chirurgical Society of Edinburgh, November 24th, 1852, Dr. J. W. BEEBIE related the case of a little girl, aged 10 years, who was attacked, on June 7th, with rheumatism. She passed through a very severe attack, and was convalescent on the seventeenth day. During her illness, she did not seem to suffer from disease of the heart or pericardium. On July 7th, Dr. Beebie ceased to visit her. On the 20th, he was called to her, and found her suffering from chorea; and, on examination of the heart, there was a distinct blowing murmur taking the place of the first sound, as heard towards the apex, accompanied by greatly increased action of the organ. Purges of jalap were given every three days, and afterwards Fowler's solution of arsenic, in doses of five minims twice daily after meals. This medicine was continued regularly from July 24th to September 20th. On September 23rd, the chorea had almost entirely disappeared; she walked well and steadily, though still complaining of occasional sinking at the knees; there were slight twitches of the muscles of the face. The murmur was distinctly heard over the whole cardiac region; most so towards the apex. On November 17th, the chorea had entirely ceased; there was still at times inordinate palpitation, and the murmur continued.

The author desired to direct attention to the association of disease of the heart, unattended on rheumatism, with the nervous disorder. He thinks that the evidence of some affection of the heart would be found in many cases of chorea. In Dr. Kirkes' analysis of thirty-six cases, three were of this nature. In some cases the cardiac affection would, no doubt, be found to be inorganic—functional derangement merely—attended by a murmur with the heart's first sound, heard most distinctly over the upper sternum, propagated in the cervical vessels, and in all probability associated with the so-called venous murmur in the neck. Further, the general appearance and symptoms of such patients pointed to the probable dependence of both nervous and cardiac affection on a disordered state of the blood.

But apart from these, in another class of cases, the evidence of organic disease of the heart, independent altogether of rheumatism, is quite as marked as its functional derangement is in the former. A boy, of seven years of age, was admitted into the Royal Infirmary, under Dr. Paterson, (now of Tiverton), suffering from a first but very severe attack of chorea. Immediately on his admission, a loud musical murmur was detected accompanying the first sound of the heart, heard most distinctly towards its apex. Neither in this boy's history, nor in that of any of the members of his immediate family, was there any account of rheumatism. Under treatment, the chorea speedily subsided; and after a residence of nearly a month, he left the

hospital, the cardiac murmur remaining as before. Scarcely six weeks afterwards, the little boy died suddenly.

The case now related established the correctness of the theory of Dr. Begbie, Sen., that the morbid condition of the blood, which gives rise to rheumatism, also gives rise to chorea. The child had inherited from two generations the rheumatic diathesis, and only became a sufferer from chorea on the declension of a rheumatic attack. Assuredly, no other theory which has been advanced so simply or correctly explains the now frequently observed facts of one member of a family being affected with chorea, another with rheumatism, and perhaps a third being the subject of both affections. But there still exist several very interesting circumstances, which require more attention and investigation, before the association of these two diseases shall become thoroughly understood.

Dr. SIMPSON mentioned some cases in which he had seen the connexion of rheumatism with chorea. In one case that he attended some time ago along with Dr. W. H. Douglas, the patient, a young lady of seven or eight years of age, after suffering from severe rheumatism in the lower extremities, presented symptoms of chorea, and ultimately, in the course of the disease, was attacked with subacute pericarditis, which proved fatal. The effusion of coagulable lymph on the pericardium, as ascertained by dissection, was extremely great. He saw, some years ago, with Dr. Robertson, another case in an adult, in whom, first, there occurred rheumatic fever, followed by pericarditis; and, secondly, when this pericarditis was at its height, symptoms of chorea supervened. The patient recovered, but with a heart much diseased by the attack. He had seen in one family a set of cases similar to those described a few years ago by Dr. Begbie. Two children, a sister and brother, were attacked with rheumatism. In the boy, the rheumatism was followed by an affection of the heart, which proved permanent, and was probably inflammatory in its origin. In the sister, the rheumatic attack, on the other hand, was followed by severe and prolonged chorea, complicated with a kind of hemiplegia. She recovered at last, under the use of arsenic. The investigations which have been lately published by some French pathologists seem to show that the connexion between chorea and rheumatism is even more frequent than had been previously supposed, particularly among young children. In the *Parisian Hôpital des Enfants*, attention having been particularly directed to this subject, more cases had been found of chorea and rheumatism combined among the young patients than of simple uncomplicated rheumatism: at least, such is the avowal of M. Sée. This pathologist further stated, that in the *post mortem* examination of individuals dying of chorea, between 35 and 40 per cent. of the bodies were found to present inflammatory effusions upon the surfaces of internal serous membranes; and pericarditis was one of the most common of these complications. Dr. S. believed that the old explanation attempted to be given of the connexion of chorea and rheumatism, as to its being a nervous or sympathetic connexion, etc., could not now be sustained; and that the pathological idea of the relation maintained by Dr. Begbie was the correct one, viz., that these two apparently different diseases depended upon some identical or analogous blood-poison. Dr. S. entertained little doubt, that when pathological chemists discovered what the blood-poison in rheumatism really was, that the same blood-poison, or some modification of it, would be found to be also the cause of chorea, however much the two diseases differ symptomologically. The morbid state of the blood existing in rheumatism and chorea predisposed, as late dissections have shown, to produce inflammation of internal serous membranes. The morbid state of the blood in albuminuria had, in a noted degree, the same tendency, as specially shown by Dr. Taylor and others. These two morbid poisons were analogous in another respect. While the poisoned state of the blood accompanying or produced by albuminuria had a tendency in some individuals to produce local serous inflammations, it tended in others, and particularly in pregnant females, to affect the nervous system in the form of convulsions. So the blood-poison in rheumatism, whatever its nature might be, had a tendency, in the same way, to produce internal serous inflammations in some individuals; and in others, particularly in the young, and in the female sex, to affect the nervous system in the form of chorea. Both thus had a tendency to produce, on the one hand, internal serous inflammatory lesions, and on the other, peculiar affections of the nervous system. Perhaps a closer investigation would prove them also to be analogous in other respects.

ON VITILIGOIDEA.

Dr. W. H. RANKING, of Norwich, thus describes and comments upon a case of vitiligoidea in the *Lancet* of 10th February.

The instances of this curious malady hitherto put in record do not amount to more than five.

CASE. Mary B—, a married woman, aged twenty-nine, consulted me, in June 1850, for obstinate and severe jaundice. Inquiry into her history elicited the facts that her health had been good until three years previously, when, after an attack of dyspepsia, jaundice supervened, and had continued till the time of her visit to me, uninfluenced by treatment, including several salivations. At this time she was universally and deeply jaundiced; but the appearance which immediately and more strongly attracted my attention was a peculiar deposit on the skin surrounding the eyes, and which, on further investigation, I found to be abundantly distributed over other portions of the body. She informed me that, about twelvemonths ago, spots of this peculiar deposit first appeared on the shoulders, and had since shown themselves on the face, arms, hands, and lumbar regions. In the face it had assumed a symmetrical disposition, extending along each eyelid, and down the side of the nostrils. On the shoulder the spots were circular, and very distinctly elevated. Along the inside of the elbows, and on the hands, the deposit followed the flexures of the joints, being flat and linear on the palmar aspect, and more tubercular and rounded on the dorsal. The colour of this deposit was of a whitish yellow, resembling more nearly than anything else the atheromatous patches so commonly found in the aorta. On the face, and palms of the hands, it was but little elevated; and, as in atheroma, appeared to be deposited immediately under the epithelium. On the shoulder, and in the dorsal region, the spots were circular and prominent, bearing no inconsiderable resemblance to split peas.

At the time of my seeing this case, the peculiar affection was still on the increase, fresh spots showing themselves almost daily. They were tender to the touch, and were the seat of a burning sensation, which prevented the patient using her hands without acute suffering.

The history of the jaundice pointed to the conclusion that it depended upon permanent occlusion of the common duct. The woman died soon after my seeing her, under the care of another practitioner, (as far as I could learn,) from severe and rapid peritonitis.

The only references to this singular cutaneous disease which I have been able to meet with, are contained in a paper by Dr. Gull, published in *Guy's Hospital Reports*; for although Willan alludes to a rare disease under the term *vitiligo*, which has some points of resemblance, the full comparison of the two is unfavourable to the notion of their identity. The term used by Willan has, however, led Dr. Gull to give to the disease in question the name *vitiligoidea*. The cases narrated by him are four in number.

The first is that of a married woman, aged 42, who had been deeply jaundiced for two years. At the end of fourteen months, this peculiar change in the integument began to show itself on the eyelids, assuming a perfectly symmetrical form, as well as in the palms of the hands, where, as in my case, it followed accurately the flexures of the joints. The disease remained stationary till her death.

A second patient was admitted into Guy's Hospital, labouring under diabetes; but in this instance the eruption was so far different in its aspect, that I cannot think Dr. Gull justified in associating it with the former case.

The third instance is that of a married woman, like the first, the subject of jaundice. The skin disease commenced at the end of fourteen months, appearing first on the hands, and subsequently affecting the eyelids. This case is now, I believe, under treatment, but the disease shows a tendency to increase rather than diminish.

The fourth case described by Dr. Gull is, in every respect, similar, both as to the prior existence of jaundice, and the distribution of the cutaneous deposit.

It is impossible to overlook the important fact of some connexion between the cutaneous deposit and jaundice of aggravated degree and prolonged duration. In every case reported, obstinate and severe jaundice had existed for several months prior to the appearance of the skin malady. Can it be that, like the cretaceous deposits of gout, this was an attempt at elimination of noxious matter necessarily contained in blood, in which was suspended the elements of bile? I regret much that I had no opportunity of instituting a microscopic examination of the deposit; but its *primæ facie* resemblance to atheroma would warrant the idea that, like the latter exudation, the peculiar deposit

in question contained cholesterine, a principle which is well known to enter largely into the composition of the biliary secretion.

If, as I imagine, the affection is but a symptom of prolonged retention of bile, or its elements in the blood, nothing in the way of amendment can be anticipated unless the original malady be removed, when possibly the absorbents might spontaneously remove the deposit. In the cases hitherto recorded, no decided amendment followed any of the means adopted.

EXAMINATION OF THE FÆCES IN DISEASE.

Dr. JONATHAN OSBORNE, of Dublin, has published a valuable paper on this subject in the *Dublin Quarterly Journal of Medical Science* for February 1853. We quote the article nearly entire.

The most complete chemical examination of them is that of Berzelius, which has not yet been superseded by any other:

Water	..	..	73.3
Bile	..	..	0.9
Albumen	..	..	0.9
Extract	..	..	2.7
Salts	..	..	1.2
Insoluble Residue of Food	..	..	7.0
Mucus, Bile, Resin, Fat, etc.,	..	..	14.0
			100.0

A striking fact to be observed in this is the large proportion of water, approximating to that of the urine, which according to the same authority, amounts to 93 per cent. of that secretion.

The quantity of the entire discharge is influenced by diet, but still more by torpidity of secretion from the mucous surface, the epithelial scales at their formation containing water, which is afterwards absorbed when retained. Thus in old persons of sedentary habits, also in several animals, the fæces are hard and dry like those of the dog, and consist chiefly of bony or other indigestible materials, resembling coprolites, or fossil fæces.

The time occupied between taking in articles of diet and their arrival at the rectum, appears to be about fourteen hours. This is ascertained by observations with pips of grapes or raisins, which pass down unaltered.

The number of discharges consistent with healthy digestion is much under the influence of habit, averaging from three times daily, or oftener, to once a week. As a general observation, females have the greatest tendency to retain.

In proceeding to the examination of the fæces we have three characters to guide us, which serve as fixed points from which all our observations commence. These are, 1st, the colour; 2nd, the odour; 3rd, the consistence. The colour is acquired in the duodenum, and derived from the bile; the odour, from the glands at the cæcum; and the figure and consistence, from the colon and the rectum.

1st. COLOUR. When the common duct is obstructed, as in certain cases of jaundice, the fæces are devoid of colour, having only a grey aspect, resembling that of putty. And here it is necessary to make a careful distinction between the colour of the faecal masses, as originally formed in the duodenum, and that of the mucous fluid discharged from the surface of the bowels. In many cases of jaundice we see fæces consisting of those white masses resembling putty, but surrounded by yellow or green liquids. In these the secretions from the surface of the intestines are, in common with the blood and urine, more or less charged with bile, but the faecal masses themselves remain distinct, and continue as they were at first in the duodenum, free from bile, although in health they are the special vehicle for its removal from the body; and this explains a case described by Andral,* in which he found it difficult to reconcile the fact that, along with jaundice and colourless motions, the patient yet had copious bilious vomitings. In such cases the secretions of the stomach, in common with all the other fluids of the body, may be jaundiced, and the fæces may be even partially stained by them, but their interior resists their further entrance, and they continue distinct up to the time of their expulsion. This observation is the more necessary, as such discharges are often described as bilious.

In the more transient cases of jaundice sufficient time may not elapse to affect the blood so as to reach the mucus of the intestines, which usually does not become stained until after the discolouration of the conjunctiva, and the whole discharge thus continues altogether colourless. There is another form of jaundice worthy of particular notice. In this the fæces are well

and thoroughly coloured, although the skin, the blood,* and the urine, continue highly jaundiced. Here as the bile passes freely into the duodenum, the hepatic duct must be free, and if so, then the cause of the jaundice must exist in the *pori biliarii*, or in the substance of the liver itself. And this conclusion is almost uniformly verified by the further history of such cases, revealing, when long protracted, either congestion or cirrhosis of the liver, or schirrous tumours within its substance.

In health the shades of colour vary from a bright yellow, which is that of the freshest secreted bile, to a dark olive-green, which is the colour it acquires when retained in the gall-bladder. The passage of this black bile succeeding to feelings of sadness and depression, has no doubt been the origin of the word *melancholy*. Sometimes these discharges take place during the enjoyment of ordinary health, but the individual always experiences a change in his spirits for the better,—cheerfulness and contentment succeeding at once to dejection and moroseness; and what is worthy of remark is, that this improvement in his spirits comes on, not always after the discharge, but sometimes a few hours previously: showing that it is not to the expulsion of it from the bowels, but to the discharge of it from the hepatic ducts, that this happy effect is to be ascribed.

During their stoppage in the colon, the colour of the fæces changes from yellow to brown, becoming deeper and approaching more and more to that of sepia when long retained; and even the white masses belonging to jaundice, when retained there, undergo the same change, but certainly in a much less degree. From this we are enabled to judge of the relative age of accumulations in the colon, and, after the manner of geologists, to pronounce our decisions between the old formations and the later deposits.

With respect to blood in the fæces, it assumes three distinct forms: first, when effused into the stomach, and the globules, under the chemical agencies of that organ, acquire a black colour, constituting the melenous discharges passed both by vomiting and purging; second, when effused into the smaller intestines, and in smaller quantity, and mixed up with the fæces so as to impart a reddish colour, as from an addition of ochre or brick-dust, which, to the eye prepared to look for it, is very apparent, although commonly overlooked, and evidently different from any colour which can be imparted by bile. This colour is of frequent occurrence in those cases of enteritic inflammation, in which ulcerations of the small intestines are usually found. The third form is when blood is effused so low down in the tube that it is not mixed with the fæces, either solid or fluid. In such cases it is almost always dark, and varies in quantity from those large discharges which have been often attended with fatal consequences, to those cases in which small portions of sanious matter are to be seen scattered through fluid fæces, but not mixed with them, as occurs in ulcerations of the colon; or lastly, to that mere sprinkling of a few tears of blood shed over the faecal mass, from hæmorrhoidal tumours near the rectum.

The green discharges following the use of calomel in children have been too remarkable to be entirely overlooked. By Dr. Graves, and other eminent observers, they have been considered as products of irritation of the mucous surface, and not necessarily to consist of bile, as had hitherto been held; and in 1845 Dr. Golding Bird,† from his experiments, regarded the presence of green stools to be indicative, not of a copious secretion of bile, but of a congested state of the portal system in which blood is exuded very slowly, and in small quantities, so as to allow of the colour to be affected by the gases and secretions present in the intestines,—a state of things which he considered to differ from melaena only in this, that in the latter the effusion of blood is so copious and sudden as not to give time for this change to take place.

It must be admitted that sulphuretted hydrogen is capable of changing the colouring matter of the blood to an olive-green; and that sanguineous exudations may in this way be the source of green evacuations; but that they are not exclusively the cause of them is to be inferred, not only from the dark-green colour which the bile receives when retained in the gall-bladder, but from the experiments of Dr. Michéa,‡ from which, in the cases submitted to his observation, this green discharge was

* In order to obtain the earliest indication of jaundice in the blood, the following method will be found peculiarly convenient and satisfactory. Obtain a few drops of serum from the patient, which, when bleeding is inexpedient, may always be had from a blister, however small. Diffuse it to the size of half a crown on a piece of white porcelain; then drop into the centre one drop of strong nitric acid: a pool is immediately formed, surrounded by a ring of white coagulated albumen, which in a few seconds assumes a beautiful bluish-green colour if bile is present.

† Medical Gazette.

‡ Lancet, January 1849.

* Clinique Médicale, by Spillan, part v, p. 987.

proved to be connected with excess of bile. As those green motions, then, may be produced from either of these causes, and in some from the coexistence of both, they offer an interesting subject of inquiry to those engaged in the treatment of diseases of children, in order to obtain tests to identify and distinguish them.

In Asiatic cholera, as is well known, the fæces cease to have either colour, odour, or consistence, being the *conjee* fluid containing albumen diffused in water, the proportion of which is generally more or less according to the quantity of fluid drank, while the epithelial scales disappear almost entirely, but subsequently re-appear according as recovery approaches.

Although most substances taken into the stomach are decolorized in the process of digestion, yet some are to be noted as remarkable exceptions. These are spinach, logwood, coffee, and porter, which, in this respect, resist the action of the stomach, and impart their own colour to the fæces. The black colour produced by the salts of iron may generally be explained by their action on astringent matters in the bowels; but this fails when the same effect is produced in persons whose diet consists only of potatoes, milk, and animal food.

2. The odour of fæces appears to have been especially intended to deter animals from feeding on their own excrements, — a practice into which some of the more ravenous species would be likely to fall. This odour is not produced by putrefaction, for the fæces have no alkaline re-action, and are rather acid; and to suppose putrid matter to be retained more or less within the system would be contrary to all analogy, which shows such to exercise a poisonous and often fatal influence. That this odour is derived from the secretions of the glands at the cæcum is proved by the fact, that the fæces do not acquire it until they have arrived at this part; that here it is at its greatest intensity; and that it diminishes in the fæces according as they proceed on their passage to the rectum.

This secretion at the cæcum is altered by various circumstances. Sometimes it acquires a pungency almost intolerable, as is observed even in cases of slight diarrhoea, when, after the more solid contents of the colon and rectum have passed, they are succeeded by dark-coloured fluid motions, consisting of fresh arrivals from the cæcum, of such overwhelming potency that even the most experienced and apathetic physicians are compelled to a speedy flight, and content themselves with describing them as "dark, bilious, and highly offensive." The most decided proof of the vital origin of this odour, and of its independence of the food taken, is afforded at the commencement of dentition in infants. The fæces, which, previously to that time, are of a merely sour and sickly odour, suddenly acquire that most abominable and peculiar odour belonging to ulceration of a bony surface, or such as comes from the ear in destructive suppuration of the labyrinth; and from this alone the practitioner may generally predict a fit of teething. On the other hand, in some of the most severe and protracted cases of enteric fever, when once the bowels have been cleared of their old contents, there is no longer any odour in the discharges; and this continues all through the fever until a favourable change takes place, when the natural odour is resumed, according as the natural functions of the parts are restored.

3. The SHAPE and SIZE of the fæces are derived from the large intestines. In the horse, the rabbit, the goat, the sheep, and the pig, they are moulded so as to present us with casts of the cells of the colon. In the human subject their first shape is also derived from the cells of the colon, and they are sometimes indurated so as to resist further compression, forming in such cases fragments of various sizes, known as scybala; but, when retaining their softness, in general they are altered in their passage through the rectum, the action of the sphincters causing both elongation and curvation. Enlargement of the prostate forms a groove in the anterior, and frequently compresses them as if they had passed through a flattening mill; while in the case of internal hæmorrhoidal tumours, they show by their grooves or notches, and streaks of blood or sanies corresponding therewith, both the size and situation, and often may throw important light on the nature, of such tumours.

When the mucous membrane of the rectum is inflamed, as in dysentery, then in the height of the disease the discharges are altogether mucous, sanious or purulent, and an abatement is usually taking place when faecal matters are allowed to pass. But in inflammations of the colon, as long as the rectum remains unaffected, the discharges are feculent but frequent and largely diluted with mucus, so that from an inspection of them alone, the distinction may be made between dysentery and diarrhoea.

In irritation or inflammation of large tracts of the intestines,

the discharges exhibit alterations corresponding with the amount of irritation and in proportion as they are presented either by the whole, or only by a part of the discharge. We are also informed of the extent of surface affected. These alterations may be described under four general characteristics, as follows.

The *first* and slightest degree of irritation is indicated by discharges differing from those of health only in greater fluidity, and absence of shape or consistence. Such occurs, for example, when a healthy individual takes a saline purgative. All our ordinary purgatives act by irritation, and after the solid contents of the large intestines have been evacuated, then follow the loose motions forwarded from the cæcum and small intestines, mixed and accompanied by large quantities of mucus.

The *second* degree of irritation is indicated by discharges of a waxy consistence, of a lesser specific gravity, floating on the urine, and frequently intermixed with air bubbles. Such are rarely seen from the operation of a gentle purgative in a healthy individual, and are almost always preceded or accompanied by symptoms, more or less marked, of irritation in the intestines, such as pain, heat, or tormina.

The *third* degree of irritation is indicated by discharges of a powder without coherence, and either diffused or lying at the bottom of the urine. The colour of it is generally pale, but varies in this respect according to the state of the biliary secretion, or the degree in which blood may have been effused. It appears to consist of minute exudations of fibrine or coagulated albumen, and constitutes most of the discharges seen in the milder cases of enteritis, and is of most common occurrence in all idiopathic fevers accompanied by white dry tongue. In whatever cases these discharges occur, they are a certain evidence not only of the existence of mucous irritation in the bowels, but of a degree of irritation requiring, even under the most favourable circumstances, some days for its removal.

The *fourth* and highest degree of irritation is denoted by discharges consisting of white shreds or tubes of fibrinous exudation. These are the products of the same kind of inflammation seen in croup, or the most violent forms of cynanche, and consist of lymph thrown out in the same way. With respect to purulent discharges from ulcerations in the small intestines, although such must occur, yet I have not been able to distinguish them, nor, according to my observations, can pus be recognised at all, unless it is unmixed, as when it comes from the lowest portions of the intestines.

As connected with the appearances belonging to this fourth degree of irritation, I wish to remind the reader that castor oil occasionally, but by no means uniformly, or even frequently, produces discharges liable to be mistaken for the above. These are white ovoid masses, in colour and consistence resembling boiled macaroni, and about the size of grapes. They have been chemically examined by Dr. Golding Bird,* and he considers them to be a hard soap, formed by the union of the oil with some alkaline matter in the bowels.

Heterogenous motions are of frequent occurrence. In these we see one part of the motion fluid, another solid, or one part pulverulent, another waxy or in shreds, or all the four together. Such different appearances in the one motion are the result of different degrees of irritation in distinct portions of the tube; and it is our duty, by the assistance of these indications, compared with the symptoms of the case, to ascertain the seat of the irritation. For this purpose, we have several well established facts. Thus, in hæmorrhoidal tumours or fissures, pain at or immediately after passing a motion; in inflammation of the rectum, tenesmus; in inflammation of the colon, diarrhoea; in inflammation at the cæcum, tendency to constipation, local pain at that part, and more or less peritoneal inflammation supervening; and in inflammation of the small intestines, sense of fullness around the umbilicus, with sudden bursts of diarrhoea, alternating with constipation. Taking these facts in connexion with the discharges, they will be found to serve as mutual interpreters of each other.

These cases of fecal vomiting on record appear to me to belong merely to regurgitations of matters coloured with bile from the portion of the duodenum below the biliary duct. It has never befallen me to witness any instance in which fæces having the triple character, namely, colour, odour, and consistence, have been vomited; and I have met with only one report of a case in which such an event undoubtedly took place. It is in Dr. Abercrombie's work. In it there was an ulcer of the stomach, corresponding to one of the arch of the colon; and the fully formed fæces from the colon passed directly from it into

* Medical Gazette, November 1834.

the stomach, and were rejected by vomiting. I am aware that many cases of faecal vomiting have been mentioned, but it was recognised as such merely from colour, and in disregard of the other peculiar characters of faeces.

MICROSCOPICAL DISCOVERY.

STRUCTURE OF THE SENSITIVE PAPILLÆ OF THE SKIN.

Several German physiologists are vigorously prosecuting researches on this subject. Rubner's *Medizinische Zeitung* for 1852, part VIII, contains the results of the investigations of NUHN and GERLACH; the latter of whom is so enthusiastic, that he is actually screwing up his courage to cut a bit out of the point of his own finger, that he may have the *cutis vera* in prime condition to examine: "ein allerdings heroischer Entschluss, zu dem ich mich bis jetzt noch nicht verstehen konnte".(!) No wonder: the greater marvel being that he did not ask some surgical friend to let him know when he had the amputation of a finger to perform.

The observations in question confirm in the main those of WAGNER (*ASSOCIATION JOURNAL*, No. I, p. 20), except as to the mode of termination of the nervous filaments in the papillæ, which both Nuhn and Gerlach assure us is by loops. The drawings given by the former especially (one of which we have copied in Fig. 1), are so numerous and distinct, that we can hardly believe him in error on this point, or to have mistaken capillary vessels for nerves. It is, however, plainly a very difficult research; for which no further proof is needed than a comparative inspection of the figures given by Nuhn and Gerlach respectively; the latter describing the nervous tubule as forming a spiral coil round the "corpusculum tactus", and ending by a loop near its apex. (Fig. 2.)

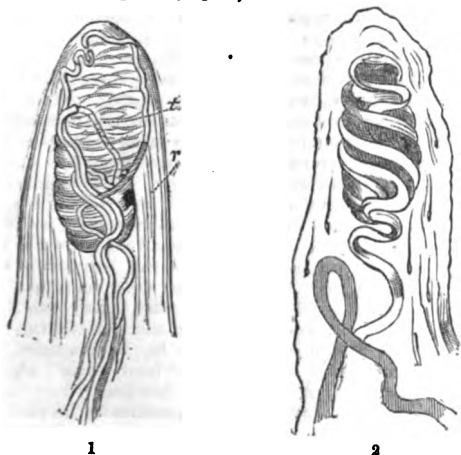


Fig. 1. Corpuscle-bearing papilla, after Nuhn. 300 diam.
Fig. 2. Corpuscle-bearing papilla, with capillary, after Gerlach.

The most interesting fact elicited, however, is the close connexion of the *corpuscula tactus* with the (discriminative) sense of touch. The papillæ of the skin may be divided into two sets, those containing the *corpuscula* and those destitute of them; and even in the skin of the finger tips, where the former are most numerous, they are outnumbered by the latter in the proportion of about five to one. The skin of some of the most sensitive parts of the body—the glans penis, for example—is utterly destitute of corpuscle-bearing papillæ, while it is very rich in ordinary sensitive papillæ and in nerves—a fact which appears to prove that these corpuscles are connected, not with general sensibility, but with the power of *discriminative touch*, which is not exercised by parts such as the glans penis, but which the fingers, the lips, and the point of the tongue, so eminently possess: and, accordingly, it is in these regions that the "tastkörperchen" are found.

On the back of the hand, for example, they are very rare; and in general it appears that their frequency agrees with the capacity of the skin for feeling, as measured in the old experiment with compasses. It would be very interesting to examine the skin of blind men, and find whether the preternatural acuteness of their touch is owing to an unusually plentiful crop of "tastkörperhaltige Papillen".

In our last report, we ventured to think it very improbable that Wagner should be right in supposing the papillæ in ques-

tion to be destitute of vessels; and the researches which we now notice prove that we were right (Fig. 2); and the extreme (ordinary) sensibility of parts where they are not found, makes it, *a priori*, improbable that the papillæ which contain no corpuscles are destitute of nerves. This has also been confirmed by observation—first, of abundant nervous filaments in the skin of such regions subjacent to the papillæ; and, secondly, of nervous tubules actually entering the papillæ, and forming loops within them. (Fig. 3.)

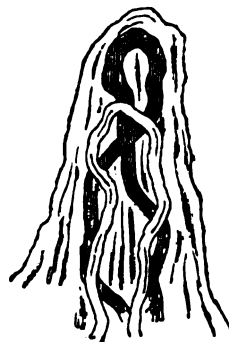


Fig. 3. Papilla without corpuscle, but with nervous tubule and capillary, after Gerlach.

The question is agitated, whether the *corpuscula tactus* are organs, or merely serve—as the nails, for example, do—to place the nervous filaments in a favourable position for receiving impressions, by giving them the requisite support and steadiness. But, after all, this is a foolish question. The sense of touch does not require a labyrinth or an eyeball as its organ; but surely the finger point is as much an organ as either of these: the phalanx is its turbinated bone, the nail is its concha, well suited for the necessities of the sense, and the *corpusculum tactus* is its vitreous humour and lens, giving to the nervous tubule the support necessary to enable it to receive aright the impressions of touch.

THE MINUTE STRUCTURE OF THE SPLEEN.

Since the recent publication of the fourth edition of Dr. Carpenter's *Human Physiology*, which embodies the latest researches on the structure and functions of the Ductless Glands, Mr. WHARTON JONES has reviewed (*British and Foreign Medico-Chirurgical Review* for January 1853, p. 32) some of the opinions held by KÖLLIKER on this subject, and has introduced an account of his own examination of the structure of the spleen, of which the following is an abstract.

The parenchyma of the spleen consists of two different substances; a red pulpy looking matter pervaded by a capillary network, and the whitish Malpighian corpuscles imbedded in it.

Examined microscopically, the pulp is found to consist of nucleated corpuscles and short nucleated fibres, held together by a finely granular intercellular substance, in the latter of which its red colour resides. The Malpighian corpuscles are of a roundish shape, about one-fiftieth of an inch in diameter, and, examined with a low magnifying power, present the appearance of thick walled glandular vesicles, with contents. The walls are not defined and homogeneous, but are, on examination with a high power, found to be composed of nucleated fibres and corpuscles, similar to those of the pulp; between which, indeed, and the exterior surface of the corpuscles, there is no very distinct line of demarcation, other than is produced by the condensation of the wall of the Malpighian corpuscle, and the absence from it of colouring matter.

The contents of the Malpighian bodies are nucleated granular corpuscles and nucleated cells, similar to those of the red substance, cohering together in a mass by means of a diffuent intercellular substance; and interspersed among them are a few somewhat larger nucleated cells.

The author next proceeds to compare the blood of the splenic artery with that of the splenic vein. The former does not differ from that of other arteries; but the latter is peculiar, containing, besides the ordinary blood-corpuscles, a large number of nucleated corpuscles and fibres identical with those above described as composing the red pulp of the spleen, together with free nuclei similar to those of the nucleated corpuscles. These elements were traced as far as the vena porta, but in the vena hepatica they had almost entirely disappeared.

"The anatomical inference which might be drawn from the

facts now related is, that some of the venous radicles of the spleen have a connexion with the red pulp of the organ, similar to that which exists between the radicles of the hepatic duct and the parenchyma of the liver: whilst the *physiological inference* is, that the materials thus derived by the blood from the spleen may concur in fitting it for the secretion of bile."

THE INTERSTITIAL GROWTH OF BONE.

In the *Philosophical Magazine* for 1852, p. 467, there is contained the abstract of a paper presented to the Royal Society by Messrs. TOMES and DE MORGAN, in which they give an account of their researches on the nutrition of bone, interesting not only for its own sake, but as throwing light on the general subject of the interstitial growth of tissues.

The authors oppose the opinion of Dr. Sharpey, that the ultimate structure of bone is fibrous; describing it as being composed of fine granules imbedded in a structureless hyaline matrix, an arrangement of parts which is most distinctly seen in young bone.

Our readers will remember that osseous tissue consists of an aggregation of "Haversian systems", each composed of a central "Haversian canal" (conveying the vessels), surrounded by concentric laminae of bone. When, in consequence of their curvature, these Haversian systems separate from one another, the intervening space is filled up by "interstitial laminae" of bone, having the appearance of broken fragments of former systems. And this in truth they are; for our authors hold that they have proved the Haversian systems to be of various ages, and the older ones to be gradually absorbed, leaving spaces which are filled up by newly formed systems, in the intervals between which the relics of the old may still be seen. In some cases these last are thoroughly removed, so that there are left small triangular vacancies, called by the authors, "Haversian spaces".

The process of this interstitial reproduction is very interesting: as the absorption of the old tissue goes on, it is replaced by granular cells (i. e., cells having the appearances of granules?) imbedded in a hyaline matrix, the whole of which structure gradually ossifies, the cells becoming the granules of bone, and the matrix form the structureless tissue first described.

The cells in question having been from their first appearance arranged in parallel concentric lines, the ossified tissue has of necessity the laminated arrangement observed in the Haversian systems; while certain larger cells which exist among them become converted into the lacunae of bone by the ossification of the cell-wall.

In young bone, as we have said, the granular structure may be most distinctly seen, and the lacunae are large, numerous, and empty; in older bone, the lacunae are gradually filled up with osseous matter, and even the Haversian canals with which their canaliculi communicate may become obliterated by a similar deposit, which, of course, must in the same measure exclude vessels from the bone.

The interesting point in these observations is the demonstration of interstitial absorption which they make. In this hard bony tissue, in which we might have supposed it impossible to trace these minute changes, we find them, on the contrary, marked out and defined as they could not be in the more rapidly changing, but soft and yielding matter of muscle or of nerve.

THE PATHOLOGY OF LEUCORRHOEA.

The practical application of the microscope to medicine could not be better illustrated than in a paper bearing the above title, published by Dr. TYLER SMITH, in the 35th volume of the *Medico-Chirurgical Transactions*. An epitome of this very interesting communication we proceed to lay before our readers.

The parts concerned in leucorrhœa are the mucous membrane of the vagina, that of the os uteri and of the vaginal surface of the cervix, and that which lines the last named canal; these several portions of mucous membrane present important peculiarities of structure.

The *Vaginal Mucous Membrane* is covered with scaly or pavement epithelium, and its secretion is acid; in both respects closely resembling skin, into which, in old cases of prolapsus, it seems to be almost converted.

The *Mucous Membrane covering the external part of the Cervix, and the Os Uteri* is thickly clothed with villi, which contain looped capillaries, and are covered by a thick layer of scaly epithelium. This obscures the villi, and as they appear indistinctly through it, they may be easily mistaken for follicles in the membrane. The relationship to the skin is as strong here as in the vagina.

The *Mucous Membrane of the Cervical Canal of the uterus* differs most materially from either of the above; for a very short distance within the os uteri it appears smooth to the naked eye, but above this it is thrown into complex folds or rugæ, forming the structure described by anatomists as the *arbor vite uterina*. Both these divisions are covered with villi, vascular like those of the outer cervix, but three or four times as large; and the villi are clothed with cylinder epithelium, like that of the small intestine. This epithelium is ciliated over the rugous surface, but destitute of cilia where it covers the narrow smooth slip of mucous membrane close to the os. Donnè long ago pointed out, that mucous surfaces covered by scaly epithelium have an acid secretion, while that of membranes clothed with columnar epithelium is alkaline; and this rule holds good here: the alkaline reaction of the secretion from the cervical canal of the uterus being a most important point in its pathology.

A most complicated arrangement of the mucous membrane provides surface for this secretion. The naked eye discerns on the inner surface of the neck of the uterus a number of transverse rugæ, arranged in four columns, ten or fifteen rugæ in each, while secondary rugæ run crosswise between the primary ones; and the lens enables us to detect a still more complicated arrangement of septa, or mucous folds, uniting the secondary rugæ.

A still higher magnifying power reveals the object of this structure, showing it to be for the purpose of giving a greater surface to the membrane, the whole of which is studded over with myriads of secreting follicles. Of these, Dr. Smith calculates that the neck of the womb contains no fewer than ten thousand. Our readers will now be prepared for the statement, that this cervical mucous membrane performs the function of a gland, and that it is the principal source of the flux in leucorrhœa.

And now for the application of these anatomical facts, to explain the phenomena of the disease just named. On examination with the speculum, the discharge which smears the vagina and the os uteri appears white and creamy, that which is escaping from the os, transparent and viscid; and yet microscopical examination does not reveal differences corresponding to such diverse characters. Dr. Smith finds the explanation of this fact in the different chemical reaction of the secretions from without and from within the os uteri. The alkaline secretion of the cervical canal remains viscid and clear, till it mixes with the acid contained in the vaginal mucus, when its albumen is coagulated, and it assumes the aspect well known as that of the usual leucorrhœal discharge; and this conversion can be imitated out of the body by mixing the clear tenacious mucus drawn from the cervical canal with weak acetic acid. (Our readers are no doubt aware, that a change exactly the reverse of this is produced by mixing pus with liquor ammoniæ.)

We now understand why "vaginal leucorrhœa" should be considered to be so common, and "uterine leucorrhœa" so rare; and why this opinion may be exactly opposite to the fact.

If Dr. Smith's opinion be correct, the mucous lining of the cervix is that which, being organized for secretion, pours forth the flux in question most profusely; but on its entrance into the vagina, its character is changed, and the practitioner traces no identity between the viscid transparent mucus which he rightly supposes to be the characteristic secretion of the cervix, and the creamy "leucorrhœal discharge" which appears at the ostium vaginæ.

The quantity of this discharge undergoes variations, which can be accounted for only on the supposition of its being derived from a fully organized glandular surface; the secretion, which in health ought to form little more than a plug of mucus, is sometimes so suddenly increased on exertion or on mental emotion, as to remind one of the manner in which a flow of tears is produced.

We have already said, that the microscopical differences between the vaginal and cervical secretions are not commensurate with the great diversity of their external character; but some difference may be traced,—the former abounds more in scaly epithelium, the latter in roundish "mucous" (?) corpuscles.

The treatment of leucorrhœa must, of course, vary with its cervical or vaginal nature. When the discharge is from the external passage, astringent injections into the vagina will be most useful; when from the interior of the neck of the womb, stimulating and astringent substances, such as iodine, nitrate of silver, and tannin, may be applied in solution, by means of a camel-hair pencil, directly to the part in fault. On the treatment, however, Dr. Smith does not enlarge in his present communication.

The superficial ulceration of the os uteri he attributes chiefly to the irritation of the mucous surface by the alkaline discharge from a morbidly secreting cervix; and this may go on till it has destroyed the villi of the membrane in irregular patches around the orifice of the womb. "I have very rarely found the os uteri abraded without the existence of disease of the glandular portion of the cervix, unless in cases of eruptive disease. I have also found in treatment, that the best way to restore the os uteri is by restraining the cervical secretion; but that the morbid state of the os uteri may be remedied again and again, with tolerable certainty of the recurrence of the disorder, unless the cervical secretion be brought back to the healthy condition."

If ulceration have taken place, the discharge will, of course, contain pus, and even blood.

Lastly, Dr. Smith warns us against mistaking for an ulcer the partial eversion of the cervix uteri, which brings into view the lower rugæ. These present an appearance which one might easily mistake for a deep erosion.

ANATOMY AND PHYSIOLOGY.

ON THE MUSCLES WHICH OPEN THE EUSTACHIAN TUBE.

The following is an abstract of a paper read before the Royal Society on February 17th, 1853, by Mr. TOYNBEE:—

The author commenced by alluding to the opinion generally held by anatomists, viz., that the guttural orifice of the Eustachian tube is always open, and that the air in the tympanum is constantly continuous with that in the cavity of the fauces. An examination of the guttural orifice of the tube in man and other animals has led the author to conclude that, except during muscular action, this orifice is always closed, and that the tympanum forms a cavity distinct and isolated from the outer air. The muscles which open the Eustachian tube in man, are the tensor and levator palati; and it is by their action during the process of deglutition, that the tubes are ordinarily opened. That the act of swallowing is the means whereby the Eustachian tubes are opened, is shown by some experiments, of which the following may be cited.

If the mouth and nose be closed during the act of swallowing the saliva, a sensation of fulness or distension is produced in the ears; this sensation arises from the air, which is slightly compressed in the fauces, passing into and distending the tympanic cavities. Upon removing the hand from the nose, it will be observed that this feeling of pressure in the ears does not disappear, but it remains until the act of deglutition is again performed while the nose is not closed. In this experiment, the Eustachian tubes were opened during each act of deglutition: during the first act, while they were open, air was forced into the cavity of the tympanum by the contraction of the muscles of the fauces and pharynx, and the guttural orifices of the tubes remained closed until the second act of swallowing, which opened the tubes, and allowed the air to escape. That the act of deglutition opens the Eustachian tubes was inferred, also, from the custom usually adopted of swallowing while the descent in a diving bell is performed. By this act the condensed air is allowed to enter the tympanum, and the sensation of pain and pressure in the ears is removed, or entirely avoided.

The author gives an account of the Eustachian tube and its muscles in mammalia, birds, and reptiles. In some mammalia, the muscles opening the tubes appertain, as in man, to the palate; in others, this function is performed by the superior constrictor muscles of the pharynx. In birds, it is shown that there is a single membranous tube into which the two osseous tubes open. This membranous tube is situated between, and is intimately adherent to, the inner surface of each pterygoid muscle; and by these muscles the tube is opened.

The conclusion at which the author arrives respecting the influence of the closed Eustachian tubes is, that the function of hearing is best carried on while the tympanum is a closed cavity, and that the analogy usually cited as existing between the ordinary musical instrument the drum, and the tympanum, to the effect that in each it is requisite for the air within to communicate freely with the outer air, is not correct. On the contrary, the author shows that no displacement of the air is requisite for the propagation of sonorous undulations, and that were the Eustachian tubes constantly open, these undulations would extend into the cavity of the fauces, there to be absorbed by the thick and soft mucous membrane, instead of being condensed to the tympanic cavity, the walls of which are so peculiarly

well adapted to the production of resonance, in order that they shall be concentrated upon the labyrinth.

In corroboration of the above views, the author states that in cases of deafness, dependent simply upon an aperture in the membrana tympani, whereby the sonorous undulations are permitted to escape into the external meatus, the power of hearing has been greatly improved by the use of an artificial membrana tympani made of very thin vulcanised India rubber or gutta percha, which is so applied as again to render the tympanum a closed cavity.

MUSCULARITY OF THE VALVE WHICH CLOSES THE FORAMEN OVALE.

Dr. PEACOCK exhibited to the Pathological Society of London (19th Oct.) a series of preparations intended to illustrate the valve which closes the foramen ovale—a peculiarity of structure which, he thought, powerfully contributed to the permanent adhesion of this membrane, and the consequent completion of the auricular septum. The muscular character of this valve was first pointed out by Senac; it was, however, expressly denied by Haller, who remarked that the tissue composing it was purely fibro-cellular, and that the presence of muscular fibres was accidental and unusual. The examinations he (Dr. Peacock) had made, enabled him to refute the assertion of Haller, and establish the truth of Senac's doctrine. Heretofore, the explanation afforded of the closure of the foramen ovale was purely mechanical. After birth, it is said, the pressure of the blood in each auricle becomes equal, and no excess of force existing on either side of the foramen ovale, the valve is kept in contact with the edges of that aperture, to which, in process of time, it becomes solidly united. This explanation had always struck him as unsatisfactory; and, believing that muscular action was called into force for the purpose of bringing the valve in contact with the margins of the foramen ovale, he made a series of dissections, which established the truth of this opinion. Without muscular fibre, indeed, it would be difficult to explain the closure of the orifice; for, after birth, the pressure of the blood in both auricles is not so certainly equalized, for there are instances in which the walls of the left auricle are scarcely stronger than those of the right, while the cavity of the right auricle remains larger, and hence superiority of force on the right side of the valve exists, which, but for some counteracting agent, would drive the flapping membrane into the cavity of the left auricle, and prevent the completion of the septum. Indeed, there were instances in which, the muscular fibres of the valve being few and weak, the condition adverted to prevented the establishment of a perfect auricular septum, and the valve, instead of cohering properly to the margins of the foramen ovale, yielded under the pressure, and became converted into a saccular dilatation, which, as one of the specimens on the table demonstrated, projects in the form of a bag into the left auricle. Occasionally, the cellular tissue between the muscular fibres of the valve, yielded, being ruptured either by the pressure of the blood or by the action of the muscular structure; and this occurrence resulted in the formation of a cribriform septum, of which there was also a specimen on the table. This condition of the valve was generally coexistent with contraction of the orifice of the pulmonary artery. The muscularity of the valve was not apparent till after birth, and, as Senac has noticed, the muscular fibres were most marked on its left surface. In the hearts of fishes, and of reptiles, such as the turtle, the valve manifested a muscular structure more plainly than in the human subject.

In answer to an inquiry at what age he supposed perfect closure of the foramen ovale took place, Dr. Peacock stated that he was unable to answer that question; but he felt sure that if the foramen was not closed early in life, it was never closed at all; and he believed the cases were very numerous in which it remained patulous. Preparations, demonstrating the different conditions of the adherent valve and its muscularity, were handed round.

THE PROPOSED LUNACY ACT. Lord St. Leonard's Bill reforming the Law of Lunacy is under three heads:—1. For lessening the expense of the commission *de lunatico inquirendo*; to prevent the unnecessary summoning of juries; to confer upon the Lord Chancellor the right of chamber practice as regards lunatics; to prevent the unnecessary attendance of the next of kin and to do away with the references to the Masters in Chancery. 2. The consolidation of the lunacy laws. 3. The safe guardianship of lunatics.

ASSOCIATION INTELLIGENCE.

THE INCOME TAX: NOTICE BY THE CENTRAL COUNCIL.

At a meeting of the Central Council of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, held on Saturday, February 19th, 1853, Sir Charles Hastings, M.D., in the chair, it was resolved—

That the Central Council do call a meeting of the members of the ASSOCIATION, and of all other practitioners of medicine, residing in the county and city of Worcester, to assemble in the Board Room of the Worcester Infirmary, at one o'clock on Thursday, the 3rd of March, to take into consideration the subject of the Income Tax, and the importance of petitioning both Houses of Parliament, with a view to obtaining an abolition of the tax, or a more just apportionment of it.

It was also resolved—That this Council recommend the various branches of the Association to take the above subject into their consideration at their earliest convenience.

JAMES P. SHEPPARD,
Secretary to the Association.

Worcester, February 21st, 1853.

EDITOR'S LETTER BOX.

CLAIMS OF THE UNIVERSITY OF LONDON TO ELECT REPRESENTATIVES IN PARLIAMENT FOR THE MEDICAL PROFESSION.

LETTER FROM DR. SNOW BECK TO THE EDITOR.

SIR,—As the claims of the University of London to send representatives to Parliament appear, from the letter of Dr. GEORGE PATERSON in your number for the 4th of February, not to be fully understood, you will, perhaps, allow me space for the following short remarks.

As expressed in her Majesty's charter, "The University was designed to hold forth to all classes and denominations of our faithful subjects, without any distinction whatsoever, an encouragement for pursuing a regular and liberal course of education". And at the close of the communications between Lord Melbourne's Government, and the Council of University College, the Chancellor of the Exchequer (Mr. Spring Rice) thus expressed himself as to the common object:—"It should be always kept in mind that what is sought on the present occasion is an equality in all respects with the ancient Universities, freed from those distinctions and religious exclusions which abridge the usefulness of Oxford and Cambridge". And in answer to the question,—"Is it intended by Act of Parliament, or otherwise, to secure to the graduates of the new University all the professional or other privileges (not connected with the clerical profession) which are enjoyed by the graduates of the existing Universities?" he replied—"It cannot but be expedient that Parliament should hereafter, when legislative authority is required, and the intentions of donors do not preclude such a step, extend to these Metropolitan Degrees all the privileges and advantages (not of an ecclesiastical character) which are connected with degrees at Oxford and Cambridge. This, of course, applies to civil rights and professions, and not to private endowments."

The principle here laid down has been applied by the legislature, in different Acts of Parliament passed since the University of London was established. And the claim for the "privileges and advantages" enjoyed by Oxford and Cambridge, and also by Dublin, by sending representatives to Parliament, was only deferred until the constituency of the University of London had acquired that number and influence which would afford just grounds for the claim being pressed. The number of graduates is, at present, nearly 800, of whom one-third are graduates in medicine, nearly two-thirds in arts, and about one-sixteenth in laws; whilst their numbers are increasing at the ratio of nearly one hundred annually. The number of under-graduates is about 1500, to which upwards of 200 are annually added. It is therefore urged that the time has now come for giving to this considerable and increasing constituency the privilege and advantage of returning Members to Parliament, as enjoyed by the other Universities, and as guaranteed to them at the foundation of the University of London. It is also evident that the claims of this University rest upon peculiar and especial grounds.

As regards the medical graduates: many are physicians, some consulting surgeons, and a large proportion are in general practice. At least one half hold posts of responsibility in the London and country hospitals. About one third of the whole number are settled in London, and a large number in the principal towns of Lancashire and the West Riding of Yorkshire. Now it is contended that a constituency of this kind will fairly represent the feeling of the medical profession in England. And, as the members for the University of London will have no local interests to engage their attention, it is considered that the medical graduates, forming more than one-third of their constituency, will have a right to require that they should make themselves fully acquainted with medical questions, and thus represent the interests of the medical profession in Parliament more efficiently than has hitherto been the case. Should the present movement succeed, it is more than probable that the members of the University of London will be men of experience, of liberal views, and of high standing in Parliament; for the choice is not restricted to the metropolitan graduates, nor, it is hoped, will it be fettered by the qualification of property.

With pardonable partiality for his *Alma Mater*, Dr. Paterson says: "There is only one university in the United Kingdom, that of Edinburgh, in which its medical graduates would have a preponderating voice in the election of a member of Parliament, were one to be conceded to them." As stated by Mr. Disraeli in the House of Commons, in May last, there is, in the constitution of the University of Edinburgh, a great obstacle to their obtaining representatives in Parliament. This obstacle is, that the graduates are not members of the university; they have no standing in it; nor have they any voice in the direction of its affairs. The University of Edinburgh consists solely of the professors, who are appointed and controlled by the Town Council; the degree is simply an honorary certificate, which confers no corporate rights or privileges on the possessor. Hence, before the University of Edinburgh would have any claim to be erected into a parliamentary constituency, it would require to be remodelled, and its graduates incorporated as members of the university. And in the meantime, I doubt not that the present support which the movement of the University of London has received from the medical profession, will continue, based on the broad principle, that whatever tends to elevate a part of the profession tends also to elevate the whole body; and also that, through the members of this university, the medical interests will be more fully attended to in Parliament than they have yet been.

I am, etc.,

T. SNOW BECK, M.D.

February 1853.

PARLIAMENTARY REPRESENTATION OF THE MEDICAL PROFESSION.

LETTER FROM JAMES BEDINGFIELD, ESQ. TO THE EDITOR.

SIR,—It affords me great pleasure to see that you have taken up the question of "medical men in Parliament", upon an enlarged and liberal basis. For myself, I am decidedly of opinion that Dame Partington, with her mop, would as effectually check the encroachments of the ocean, as one or two members, returned by the London University, would put a stop to, or correct the existing abuses in our profession.

In the year 1834, in an address delivered in the Town Hall, Ipswich, I expressed an opinion, that until we were fully and fairly represented in Parliament, we should endeavour in vain to effect any substantial medical reform. In my address to the profession (see *Lancet*, 1841, vol. xli, p. 153), I again adverted to the subject in the following terms:—"Every sincere well wisher to medical reform must now be satisfied that there is not the slightest probability of a redress of our grievances, until we can acquire some power and influence in that House, from whence our measures have been so contumaciously ejected. It is to endeavour to persuade you to take steps for the advancement of this grand, this all-important object, that I once more address you. We may be assured, that without our own representatives in the Commons House of Parliament, no substantial good will be effected. Would it not be well for us to follow the example set us by the other professions? The interests of the church, and of the army, and of the navy, are fully represented. Even the mercantile and trading interests have their advocates and supporters; and what but our own supineness prevents us from having ours? I repeat, gentlemen, that if you desire to maintain that rank and station to which you are entitled, physicians, surgeons, and general practitioners, throughout the Kingdom, must unite, for the purpose of returning a certain number of members to the House of Commons, pledged to maintain

watch over, and protect our interests. Had we been thus supported, the late administration would not have dared to disregard our petitions for the redress of our manifold grievances, and our endeavours to procure a wise and efficient measure of medical reform."

Again, in the *Dublin Medical Press*, vol. v, p. 11, 1841, I wrote:—"But some may inquire, how is this vast power to be achieved? Again, I say, by union; by an union of the whole profession. Let it be borne in mind, that upon a very moderate computation, we are 20,000 strong; and that under the present Reform Bill, there are but few of us who do not possess a vote, which, by a little management, may be doubled, or even quadrupled; and our interest with our friends and connexions must be very small indeed, if we cannot each of us influence three or four votes more. Thus, were we but once fairly and duly organized, we might command at least 160,000 votes. Let this power be concentrated, and it will be irresistible. We have hitherto allowed ourselves to be driven like horses, and beaten like asses, because, like them, we have been ignorant of our united strength."

But I hear some exclaim, 'Funds, funds! what are we to do for funds?' Let every medical man throw his receipts of one odd day, or upon emergency, of the five odd days of every year, into one common treasury, and an ample provision will be made for every political purpose. With such a revenue as this would produce, we might return ten or a dozen members of our own—good men and true, staunch to our interests; and have also ample means left to oppose all enemies of our profession.

If we would succeed in securing such a representation in the House of Commons, as would really be useful to us, we must adopt some bold and broad measure, such as I have now recommended; in other words, instead of calling upon Hercules to help us, we must put our own shoulders to the wheel, and help ourselves.

I am, etc.,

J. BEDINGFIELD.

Longville House, Needham Market, Suffolk, Feb. 1853.

PLEURO-PNEUMONIA.

LETTER FROM F. F. GIRAUD, Esq., TO THE EDITOR.

SIR,—Since reading Dr. R. BENNETT's very interesting remarks on Pleuro-pneumonia, in the first number of the new series of the *ASSOCIATION JOURNAL*, I have been led to reflect upon my own experience of inflammatory affections of the chest, and especially upon a form of pleuro-pneumonia which has generally proved fatal in my practice.

If the following observations should lead to remarks being made, through the medium of our *Journal*, confirmatory of my own conviction of the difficulty of bringing such cases to a happy termination, I should feel some consolation; on the other hand, if any improvement in the mode of treatment should be described or suggested, it shall have my earnest attention.

In my own locality I have not perceived any marked difference in the general type of pneumonia during the last twenty-eight years: and the lessons which were taught by Laennec in his clinical lectures, on the use of tartar emetic (which I attended at La Charité, in 1823, and which are published in his work on *mediate auscultation*), I find as safe and efficient as when I first entered upon practice in this town. Heroic doses of antimony, when tolerated, are followed by speedy resolution: when they are rejected by the stomach, and unattended by any mitigation of symptoms, a low form of the disease may be suspected, and if recovery take place, it may be under the slower treatment by mercurials.

The peculiar form of pleuro-pneumonia, which I have found to be very unmanageable, and usually fatal, sets in with slight rigors, uneasiness in the limbs, and a dull pain in the right side, very low down, and as near as can be conceived to the convex surface of the liver. There is no indication of pneumonia on auscultation; a short cough, with common bronchial expectoration, constitute the chest symptoms: and these, in about twelve hours, are followed by increased pain and difficulty, rather than by shortness of breathing. The pulse becomes a little accelerated, and the tongue is usually milky white; the commencement of pneumonia is now indicated by the crepitating râle being heard over a small extent of the lower part of the right lung, the expectoration also assuming the characteristic appearance. The first bleeding usually displays a slightly buffy condition of the blood; but, as the disease advances, a second abstraction of blood shews a coriaceous surface easily broken down, and great prostration of strength attends both the commencement and the progress of the attack.

Antimony is seldom tolerated, and when it is, only temporary relief is afforded, a sudden increase of pain often coming on in the side, with corresponding depression of the vital powers. I have found the same uncertainty in the effect of mercurial treatment, both inunction and doses of calomel with opium failing to affect the mouth, or mitigate the symptoms.

From five days to a week has been the usual duration of fatal cases. The *post mortem* appearances, in the few instances where an examination has been permitted, have shewn effusion of sero-purulent matter between the base of the right lung and the diaphragm, with patches of lymph covering the pleura reaching only to a small extent, also consolidation of the lowest parts of the right lung; the remaining portions of the lungs being unaffected.

The peritoneal covering of the diaphragm, as well as that of the liver immediately below the affected parts of the pleura, have displayed a highly vascular appearance, but without any carpeting of lymph.

The peculiarities in these cases are, the limited extent of pleuro-pneumonia, and its insidious mode of attack, the great prostration of vital power, and also the previously healthy condition of the patient, not weakened by age or infirmities.

I am, etc.,

FREDERICK FRANCIS GIRAUD.

Faversham, Kent, February 1853.

THE INCOME-TAX.

LETTER FROM DR. NANKIVELL TO THE EDITOR.

SIR,—I trust that the importance of the subject at the present juncture, and the necessity for prompt and collective efforts on the part of the profession, will excuse my again urging my professional brethren to lose no time in sending petitions against the existing form of income-tax, from every town throughout the country.

Nothing can be more easy than such a course. Now that Parliament has met, there is no object in making direct application to the Chancellor of the Exchequer. It is only necessary for the medical men, in each town or district, to adopt or modify the petition published in the *ASSOCIATION JOURNAL* of Jan. 18th; to obtain as many signatures to their petition as can be obtained *speedily*; and to forward it, without delay, to the members of their town or county, with a request that it be immediately presented to the House of Commons.

The effect of such a course will be the immediate and timely presentation of a large number of petitions to the House, and the enlisting of almost every English representative in presenting these petitions.

The desirableness of this course is obvious, from the well-known fact, that the legislature is much influenced by the number of petitions, and the number of members presenting petitions, on any one question. Now is the time for the profession to make one united, prompt, and strenuous effort, to rid themselves of this great injustice. After Easter, the income-tax will be either altered, or made permanent in its present obnoxious form.

It is surely also desirable that the Central Council, and the Councils of the various Branches of the Association, should petition against this impost, so unjust and oppressive to its members.

I am, etc.,

C. B. NANKIVELL, M.D.

ERRATUM. In our last number, Dr. SMITH was, by an error of the press, called "CHAIRMAN", in place of "SECRETARY", of the Income-Tax Committee of the Association. Dr. MALDEN, of Worcester, is the Chairman of the Committee.

NEWS AND TOPICS OF THE DAY.

ROYAL COLLEGE OF PHYSICIANS. At a Comitia Majora Extraordinaria, held on Thursday, the 17th instant, Dr. Ramskill, of St. Helen's Place, Bishopsgate, having undergone the necessary examinations, was admitted a Licentiate of the College.

MEDICAL SOCIETY OF LONDON. The Annual Anniversary Oration of this Society will be delivered by Dr. Snow, on March 8th.

HOSPITAL FOR DISEASES OF CHILDREN. At the annual meeting, Sir H. Dukenfield in the chair, it was stated that the number of out-patients numbered 1250, and all the beds were generally full. The subscriptions figured £293; the donations, £4221, including £100 from Her Majesty.

NAVAL ASSISTANT-SURGEONS.

(House of Commons: Committee of Supply, February 21.)

Colonel BOLDERO reminded the committee that in 1850 he advocated the cause of the assistant-surgeons, and carried a resolution which declared that the accommodation provided for them was inadequate and insufficient for securing the full benefit of their professional services. He was anxious to know what were the views of the present Board of Admiralty? The Lords of the Admiralty issued a memorandum on the 17th of July, 1850, which was not calculated to give effect to the resolution of the House. The memorandum was, indeed, extremely offensive to that class of officers, and was considered an insult to the whole medical profession. According to that memorandum they were to be allowed cabins only when the space on board would admit of it. This last exception would leave the whole matter to the Board of Admiralty, and defeat the resolution which the House had passed in 1850. He had received returns from the Mediterranean station, and out of twelve assistant-surgeons who had passed through all the ranks of their profession only five had received cabins; and only two had those little advantages which were enjoyed by the other officers in the ward-room. The result of this was that the *élite* of the candidates at the London, Edinburgh, Glasgow, and other colleges shunned the navy. In the event of a sudden war, where would the Government obtain assistant-surgeons when such was their treatment? How could Government expect candidates for medical situations in the navy when for three years they must remain in the cockpit, where study was next to impossible? What was the effect of such a system? Mr. Guthrie, in his lectures, said that medical officers could not be found qualified for the navy, and that the system adopted by the Admiralty, instead of raising the value of the service, deteriorated it by employing persons of an inferior description. Was it desirable that they should continue a system which disgusted young men, and deterred them from entering into the naval service? It was even more necessary that there should be well qualified surgeons in the navy than in the army. The sailors depended entirely upon the assistance of medical men, and, if those men were such surgeons as were employed in 1809, what confidence could the service have in them?

Admiral BERKELEY would ask the hon. and gallant officer how he would like, as the colonel of a regiment, to have the discipline of his regiment and the internal arrangements of his regiment regulated by a naval officer? That was really the question. Admiral Berkeley affirmed that very great improvements had taken place on board ship, and that great additional accommodation had been afforded to the medical officers attached to the naval service. The Board of Admiralty had done all that was possible to carry into effect the resolution of April, 1850, and he expressed his regret to find the hon. and gallant officer doing so much to create dissatisfaction in the navy by his efforts to place the assistant-surgeons above their superior officers—the mates. The fact was, that the assistant-surgeons were, on the whole, very well off; and, so far from there being any want of candidates, no fewer than fifty-four had entered within the last few months.

Mr. HUME said, that the question was whether the navy ought not to obtain as able and efficient medical assistance as the army. He could see no reason why both officers and men in the navy should not receive the best medical talent that was to be had; which, however, was impossible so long as the assistant-surgeons were treated as at present.

Mr. OSBORNE said that the resolution of April, 1850, to which the hon. and gallant officer had referred, was carried by surprise in a thin house of eighty-eight members. He contended that for many years past there had been no class of men whose comforts had been more attended to than those of the assistant-surgeons. In 1840 a commission, composed of the Duke of Wellington, the Duke of Richmond, Sir George Cockburn, etc., reported that there were practical difficulties in the way of allowing the assistant-surgeons in all cases to mess in the ward-room; but that this was less essential, as they had ascertained that the accommodation afforded them of late years was so improved as to render it unnecessary for them to make any recommendation in that respect. The hon. and gallant officer had characterized the memorandum of July, 1850, as an insult to the medical profession. The recommendation of that memorandum was, that the assistant-surgeons should be allowed cabins where space would admit of them. He (Mr. Osborne) could not see where there was any insult in that. (Hear.) He found, from a return furnished in May, 1851, that the recommendation of the Board had been carried out in all cases, except where it

had been found utterly impossible; and what more would the the hon. and gallant officer have? (Hear.)

Colonel BOLDERO assured the hon. and gallant admiral (Berkeley) that nothing was further from his intention than to create dissatisfaction in the navy, and that he had taken up the question solely as a matter of public duty. (Hear, hear.)

Captain SCOBELL was astonished how the Admiralty had found it practicable to find cabins for so many. Cabins were impediments to clearing for action. There were other classes—such as the mates, who would be our future admirals—struggling upwards, who had claims for cabins as well as the assistant-surgeons, who were, no doubt, a very respectable class of men; but it must be considered that a ship was like that house—if all were to have seats, there would be no room for them.

ADVERTISEMENT.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. IX.

LONDON: FRIDAY EVENING, MARCH 4, 1853.

NEW SERIES.

THE LAWS AND ETHICS OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

In the Royal Charter of Incorporation granted to the Medical and Chirurgical Society of London, by his late Majesty William IV, we find the following clause:—

“Our further will and pleasure is, that the Fellows of the said Society shall, and may, on the first day of March one thousand eight hundred and thirty-five, and also on the first day of March in every succeeding year, or as near the same as conveniently may be, assemble together at the then last or other usual place of meeting of the said Society, and proceed by method of ballot to nominate and appoint a President of the said Society, and such Officers and other Members of the Council as may with the President form the number of twenty-one, of whom we have willed that the Council shall consist.”

The plain meaning of this clause is, we apprehend, that the nomination and election of the President, Office-bearers, and other members of the Council shall be made by the Fellows of the Society, annually, on the first of March. Unfortunately for the Society, this excellent provision of the Charter is systematically violated every year, and the choice of the President and other Office-bearers is usurped by the Council, and entirely taken out of the hands of the general body of Fellows, who have no alternative left but to absent themselves in displeasure, (as many do), from the scene of the mock elections, or to attend as mere spectators, or listlessly deposit in the ballot-box the printed lists prepared by the Council. Remonstrance has proved vain; and even the discussion of the grievance has been stifled or eluded at the annual meetings, the only occasions upon which such questions can be mooted, as they are the only occasions upon which the Council comes before the Society with an account of its stewardship. In these circumstances, we offer no apology for at once carrying the subject beyond the walls of Berners Street into the freer arena of public professional discussion.

We may possibly be told by a few persons of peculiar mental idiosyncrasy that we are labouring under a complete mistake, and that the annual elections on the first of March are real elections to office by the Fellows, of those colleagues whom they wish to honour. To such a statement we have no hesitation in offering a direct and emphatic negative, and supporting it by facts, in any place and at any time that our opponents may select. However objectionable or unpopular a nominee of the Council may be—and occasionally very objectionable persons have been nominated to office—it has been found practically impossible for a majority to give effect to their objections. A dissentient majority are powerless, unless they combine in favour of *one selected person*, in room of him whom they wish to erase from the printed list. This would necessitate meetings, correspondence, and canvassings, involving an amount of annoyance and loss of time, more than sufficient to compel submission on the part of busy and peace-loving professional men.

The following is a copy of the Bye-law, by which the provision, in favour of the elections being made by the whole body of Fellows, has been *de facto* nullified.

“Balloting lists recommended by the Council, and having blank spaces for such alterations as any Fellow may wish to make in them, shall be laid on the Society’s table, for the use of the Fellows, and sent to each resident Fellow with the circular summons.”

The excellent reform in the method of balloting for Fellows which was suggested on Tuesday by Mr. CHARLES HAWKINS, viz., that in future they should be balloted for individually, and not collectively, as at present, would, if applied to the Council nomination list, be a step in the right direction. It would at least give to the Fellows the power of a *veto*; though it certainly would not put them in possession of the prerogatives of nomination and election, to which they are as clearly entitled by the Society’s Royal Charter, as is any parliamentary constituency to the unchallenged right of nominating candidates, and then electing the most acceptable from those who have been nominated. It appears to us, in fact, that the Bye-law is so directly opposed to the letter and spirit of the Charter, as to be positively illegal, and to require the interposition of a court of law, if it cannot otherwise be got rid of. We are glad to know that it is the intention of some Fellows to obtain the opinion of eminent counsel upon this point.

The practical evils which flow from the elective franchise having been wrested from the Fellows by the Council, was well illustrated by the disclosures elicited on Tuesday by the question proposed. It ought surely to have been possible for the Fellows to have expressed, by the ballot, an opinion as to the validity of the unwritten Bye-law, by which it appears the Council are regulated in compiling their list of nominees. The responsibility should not have been allowed to remain with a virtually self-elected Council of declaring that, although Dr. MURPHY, and others unconnected with a London College, may be allowed to contribute as Fellows to the funds, they cannot, however high their private character and scientific station, be permitted to rise to posts of honour in the Society. The profession would, we imagine, be glad to know if a doctrine so ungenerous is received, or is repudiated by the Fellows at large; and many gentlemen who are now thinking of joining the Society may wish to have information on this important point, before they voluntarily enter a community which is governed in opposition to the spirit of the times, in opposition to the provisions of its Charter, and actually in ignorance of its own mind upon the most vital questions.

It is very clear that matters cannot long continue as at present. The tension of feeling is so great as to require relief; and either a reform or a revolution must soon solve the difficulty. Till the voice of the Fellows be heard in the elections, and in pressing questions of internal discipline, distrust must continue to endanger harmony; and what might, under more generous auspices, become the freest field in the world for scientific emulation among the pro-

fessors of legitimate medicine, must continue to be a circumscribed club, labouring under the heavy scandal of permitting the homœopathy of Dr. Henriques and Dr. Gully to remain uncensured, while the want of a London title has been found sufficient to deprive Dr. Murphy of that preferment to which he is so richly entitled by his seniority on the list of Fellows, by his upright character, and by the excellence of his professional position.

On leaving the meeting on Tuesday, we could not help feeling that it would have been a more hopeful omen for the weal of the profession, and for the future prosperity of the Royal Medical and Chirurgical Society, than the disclosures with which the proceedings opened, had the President been able to add to his interesting sketches of deceased Fellows, a passage similar to that which we subjoin, spoken on a similar occasion by Dr. BEGBIE, a Member of our ASSOCIATION, from the chair of the sister Society of Edinburgh.

"I would willingly," said Dr. Begbie, "have been spared the occasion of referring, even for a moment, to other losses than those we have sustained by the hand of death. Our own act—justified by a stern necessity, and imposed upon us by a due regard to the interests of science, and the honour of our profession—has severed from us some who were our late associates in the business of the Society, all of whom we would have gladly retained, and none of whom we can afford to lose; but they were not of us. They had abjured the faith in which they were educated, and in virtue of which they had obtained status, and honour, and emolument; they vilified the doctrines which they once taught, the teachers whom they delighted to honour, and the brethren with whom they took counsel together; they absented themselves from the colleges, and societies, and convivial meetings, in which they once took delight; they waged war against their quondam friends, and against their former selves; and all this without a vindication, or, at best, with but a feeble and abortive attempt so palliate their conduct. The patience and forbearance which we long manifested, were exhausted and overcome; and, by an almost unanimous voice, we declared them no longer members of the Medico-Chirurgical Society. We commiserate their position; we lament the injury done through them to a noble profession; but we rejoice in the hope that the age which has seen the rise of this fatal apostasy, may, long ere its close, witness its decline and downfall, when, after years of penitence, our alienated brethren may be received again into the fellowship and the privileges which they have so recklessly sacrificed."

THE MEDICAL DIRECTORIES FOR 1853.

We have this year two Medical Directories, rival claimants for the support of the profession. In reference to this rivalry it is possible that there may be some truth in the following sentences of the preface to the elder of the two publications:—

"Divide the interest and you spoil the work. Each man must make his return annually to ensure correctness; and if some return to one, and some return to the other, both must be failures."

When we come to have an official register of the qualified medical practitioners in all parts of the kingdom, we shall not require such publications as these; or if they should still appear, their rivalry will no longer be injurious, for each will have an authentic list to proceed upon, by reference to which accuracy and trustworthiness may be tested. But in the absence of any such official list, and of the power of compelling medical practitioners to send in

returns, we cannot but regret to see efforts and energies which should have been brought to bear upon a common object, wasted to the injury of both publications, in what, from the language used on both sides, there is too much reason for regarding as a mere personal competition.*

The ostensible reason for bringing out another Medical Directory, in opposition to that which has now reached its eighth annual issue, is, that quack advertisements and the names and titles of persons, who have sullied their legal qualifications by engaging in the practice of the homœopathic and hydropathic quackeries, were permitted to appear in the latter. We can, to some extent, admit the sufficiency of this reason. The omission of the quack advertisements from the elder Directory was loudly called for; but we can only see evil in retaining the names of homœopathic practitioners, and omitting their titles and qualifications; which were beacons by which legitimate practitioners could avoid these degraded men. To omit the descriptive titles, and yet retain the names of homœopathic practitioners, is, in our opinion, a false step which cannot too soon be rectified.

The proprietor of the elder Directory at one time intended to distinguish homœopathic practitioners by an asterisk prefixed to the name. We regret that this intention has not been fulfilled. If the public wish to indulge in quackery, they are never at a loss to find out the quacks, and do not require to have recourse to a Medical Directory for their addresses. But medical men are not always aware with what sort of persons they may be suddenly brought into communication and correspondence in the course of their practice; or into what hands their patients leaving home for a time may inadvertently fall. So far, therefore, from being a guide to homœopaths, the distinguishing asterisk might have proved a beacon to insure their being avoided by respectable practitioners.

But we have more serious fault than this to find, especially with the elder Directory. In their preface it is said, that—

"In obedience to a loud and general outcry against homœopaths, their publications and their appointments, we have deemed it our duty to suppress all mention or allusion to such obnoxious matter: and it will be found that the names, addresses, and qualifications of such practitioners are alone given."

On reference to particular names, however, in the elder Directory, this does not prove to be strictly the case. Homœopathic appointments and publications are indeed generally suppressed; but whatever may have been written, and whatever public distinctions may have been attained by homœopaths before they fell from the ranks of legitimate practice, are still given. Thus all trace of their offence is obliterated, and whatever testimonials of character they may have been able to possess themselves of before its commission, are allowed to appear and mislead the public and the profession. One gentleman, we observe, from his share in the translation of Jahr's notorious handbook, is actually designated "co-editor of a new materia medica", as if the work had been a legitimate publication. These blunders must be carefully guarded against in future, if the work complained of is to retain any place in the confidence of the profession.

And this leads us to observe, that it would be a great im-

* Vide the respective prefaces, and the weekly Journals of the rival proprietors for the last six or eight months.

provement, and enable the book to be sold at a lower price, if the practice of soliciting medical men to furnish a list of their publications were discontinued. The case may indeed occur between individuals of the same name, where it is desirable to distinguish the author of a particular work of high and acknowledged merit. But what does the profession care to know that Mr. A. has published a case of tetanus; that Mr. B. is a "contributor to the Medical Journals", the extent of his contributions being left to be inferred from the very vagueness of the terms in which they are stated; or that C. does not confine his lucubrations to medical subjects, but dabbles in theology or poetry? We might cull some very choice instances of this kind of information from the work before us; but we refrain, as we do not wish to wound the feelings of individuals, although, in point of fact, the individuals sending in such silly returns are as much to blame as the editors.

We would also recommend that the lists of appointments should be confined to such as are strictly public and of a purely professional nature. In both these particulars the contributors and editors of the Medical Directories have grievously offended. We have the names given us of insurance companies to which gentlemen happen to be medical referees; of clubs and friendly societies to which they are surgeons; and appointments, not even connected with the medical profession, are mentioned, such as that of deputy-lieutenant. Can any of our readers inform us what it is to be "surgeon to the Ancient Order of Shepherds", or to the "Loyal Society of Ancient Britons"? Sometimes, too, titles and appointments which do not indicate any high professional standing are given in a slightly altered form, so as easily to be mistaken by the uninitiated for something higher. Thus one gentleman, and he a homœopath, appears as "Fell. Roy. Phys. Soc. Edin.". This does not refer, as many might suppose, to the Royal College of Physicians, but to the Royal Physical Society of Edinburgh, a society consisting chiefly of students; and which, moreover, does not confer the title of Fellow. Another calls himself "late Assist. Phys. to the Royal Infirmary, Edin.", when, in reality, he was, in the language of the institution, "physician's clerk". These are but specimens of many similar returns, in which we do not think that sufficient care has been taken to prevent the public from being misled, as the faults to which we now refer have, in former years, often been made subjects of remark in the medical journals.

The Royal College of Surgeons of England has lately been found fault with, and very justly, for proposing to license in midwifery parties who have no legal qualification to practise. But according to the Medical Directories the number of licensing boards in midwifery far exceeds any conception we could have formed on the subject. We have "Accred. Accouch. Schol. Art. Obstet. Edin." "Lic. in Midwif., Edin." "Lic. Accouch., Glasgow Lying-in Hospital". But Dublin is peculiarly prolific of such bastard titles. The Incorporated Lying-in Hospital—the Coombe Street Lying-in Hospital—the Anglesey Lying-in Hospital—all have their licentiates, accoucheurs, and certified practitioners in midwifery! Now it ought to have been known to persons editing works of this sort, that there are no such legal titles; that they are merely certificates of diligence, or of attendance on a few cases; and that to represent them in any other light is to confound the distinction between certificates of merit or mere attendance, and legal qualifications to practise.

It will thus be seen that there is much room for improvement in the principles and plan, in accordance with which Medical Directories are at present compiled.

Difference of opinion will doubtless exist as to whether the elder or the younger Directory is the best. The latter is the most convenient, as all the names of British practitioners are arranged in one alphabetical index in place of being, as in the other Directory, classified in three departments, viz., Metropolitan, English Provincial, and Scottish. As to "the defilement of quackery", from which the younger Directory professes to be free, we will only remark that we can see no well marked difference between the treatment of quacks by the rival editors. Both mingle their names and addresses in undistinguishable confusion with those of honourable men.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES' BRANCH: NOTICE OF GENERAL MEETING ON THE SUBJECT OF THE INCOME-TAX.

REQUISITION. To the President, Secretary, and Council of the METROPOLITAN COUNTIES' BRANCH of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

We, the undersigned Members of the Metropolitan Counties, Branch of the Provincial Medical and Surgical Association, deeply impressed with the injustice to members of the medical profession of the Income-Tax, do hereby request you to call a Special General Meeting of the Members of this Branch, to consider the propriety of petitioning both Houses of Parliament against the Income-Tax as at present levied, and of appointing a Committee to co-operate with the Income-Tax Committee of the parent Association, nominated at Brighton, and re-appointed at Oxford:—

T. SNOW BECK, M.D., Langham Place.
J. RISDON BENNETT, M.D., Finsbury Square.
JAMES BIRD, M.D., Hyde Park Square.
C. COGSWELL, M.D., Bernard Street, Russell Square.
WHITE COOPER, F.R.C.S., Berkeley Square.
JOHN ROSE CORMACK, M.D., Putney.
RICHARD PAYNE COTTON, M.D., Clarges Street, Piccadilly.
JOHN DAVIDSON, M.D., Wilton Place, Belgrave Square.
ALEXANDER HENRY, M.D., Alfred Street, Bedford Square.
HENRY LEE, F.R.C.S., Dover Street, Piccadilly.
WILLIAM O'CONNOR, M.D., George Street, Portman Square.
J. J. PAUL, M.D., Putney.
R. HUTCHINSON POWELL, M.D., Edwards Street, Portman Square.
WILLIAM RICHARDSON, M.D., 17, Radnor Place.
BENJAMIN RIDGE, M.D., Putney.
C. H. F. ROUTH, M.D., Montague Square.
R. H. SEMPLE, M.D., Torrington Square.
CHARLES SHILLITO, M.R.C.S., Putney.
FRANCIS SIBSON, M.D., Lower Brook Street.
THEOPHILUS THOMPSON, M.D., Bedford Square.
H. HAYNES WALTON, F.R.C.S., Brook Street.
R. HARLAND WHITEMAN, L.S.A., Putney.

At a Meeting of the Council, held this day, it was resolved, in compliance with the above requisition, that a General Meeting of the Members of the Branch shall be held on Tuesday, the 15th inst., at 37, Great Queen Street, Lincoln's Inn Fields, at 4 P.M. precisely, for the above mentioned purpose; and also to recommend to the Branch to petition both Houses of Parliament in favour of granting the parliamentary franchise to the University of London.

T. OGIER WARD, M.D., *Hon. Secretary.*

March 2nd, 1853.

ORIGINAL COMMUNICATIONS.

INFLUENCE OF NOXIOUS EFFLUVIA ON THE ORIGIN AND PROPAGATION OF EPIDEMIC DISEASES.

By R. D. GRAINGER, Esq., Lecturer on Physiology at St. Thomas's Hospital.

(Concluded from p. 166 of last number.)

II. INFLUENCE OF EFFLUVIA ARISING FROM PRIVIES AND CESSPOOLS.

It is the remark of an acute observer, that one of the best tests of the progress which a people have made in civilization, is furnished by the manner in which they dispose of their excreta. That this observation has a foundation in truth, is amply shown, independently of what we see going on around us, by the accounts received from India and other semi-civilized countries. Often as the evils arising from the cesspool system have been forced on the public attention, I feel assured that they are still but most imperfectly apprehended. Some glimmerings of the truth have indeed broken into the darkness: we do not now-a-days hear many of the ancient eulogiums on cow-stalls, horse-dung, and similar remedies, once popular, and not, as I know, yet extinct. The painful experience of the present winter has likewise convinced the higher classes in many parts of the provinces, that they are not exempt from the dangers of the poisonous effluvia which daily decimate the poor in their neglected abodes. Owing to the increased attention now paid to sanitary inquiries, and the warnings of our own profession, the public are beginning to comprehend that much of the ailing and sickness and diarrhoea, to which children, especially in large towns, are subject, and which are often attributed to "bilious attacks", are in reality dependent on the malaria arising from cesspools and foul drains. Another and more widely diffused error is, that because no odour or stench can be perceived, no injurious effluvia can be present; but it is important to point out that poisonous gases may be present in quantities quite sufficient to injure the health, and yet without affecting the senses. I had a curious proof of this a few years ago, when inquiring into the disinfecting properties of the nitrate of lead. On visiting the Fever Hospital, the wards were found to be, as they always are, scrupulously clean, and perfectly devoid of smell. The day of the month was written on one of the walls with the colourless liquid; and, on examining the writing next day, the letters had become evident by their dark colour, owing to the presence in the air of sulphuretted hydrogen, and the consequent formation of sulphuret of lead.

The effluvia from cesspools, when concentrated, afford a marked illustration of the principle already noticed, that any one of the predisposing causes of epidemic disease is capable, according to circumstances, of developing all the principal members of the class: but the extended inquiries of late years have shown, that affections of the abdominal organs are specially liable to be thus induced. Gastric fever, of a low character, and often of the remittent type, vomiting, diarrhoea, dysentery, and cholera, are the constant results of what may be termed the *privy atmosphere*. There is no point on which there is a more unanimous agreement among the practitioners in populous districts, than on this; or on which I have received more full and precise evidence. Among other indications, I may mention that, in various parts of the kingdom, it has been noticed that the families in courts and alleys who live immediately opposite to or over privies, suffer much more from the epidemics just specified, than those more remotely located. Houses in this position often become so notorious as the habitation of fever, diarrhoea, cholera, etc., that the people avoid them; and from this cause alone, I have frequently seen such dwellings tenanted. That the same cause operates, and in the same manner, wherever it is present, was abundantly proved during the cholera epidemic.

On these points I have lately obtained a large body of exact information. In the city of Norwich, it is a common custom, even in the most respectable houses, to have large cesspools in the cellar or basement, frequently of enormous size, some of them being 60, 80, and 100 feet deep. The effluvia were often most overpowering; and in every instance in which an inquiry was made, I found that the inmates, and especially the children, who always suffer more than adults, had laboured under vomiting, diarrhoea, low remitting fever, etc., which were attributed by the medical attendants to the malaria thus arising. The correctness of this opinion has been lately confirmed in a most satisfactory manner. The local authorities, acting under the Public Health Act, have, in a large number of instances, removed the cesspool, and substituted a cleanly water-closet for the filthy privy; and in all the cases where I instituted inquiries, it was found that the health of the inmates had improved in a marked degree, and especially that the gastric and febrile disturbance had ceased.

A similar instance of the evil and the remedy, but on a smaller scale, was mentioned to me by my friend Mr. Collett, of Worthing, to whom I am indebted for the following details, the like of which might be adduced in a multitude of other examples. Mr. Collett says:—"From 1838 to 1842, I was in constant attendance on the families of the Coast Guard station, who occupied ten houses, each containing four rooms; the inmates averaging six in each dwelling. These people were in very comfortable circumstances, the men earning from 18s. to 24s. per week. These details are given to show that destitution could not have existed. These families were attacked with remittent and typhus fever; and it is important to remark, that the women and children, who were more or less at home during the day, and of course at night, were the principal sufferers, and to such an extent, that, in almost every house, one or more of the inmates were frequently under medical treatment: the men, who were much from home, for the most part escaped." On seeking for the cause of this obstinate and localised attack, Mr. Collett satisfied himself that this proceeded from an open ditch without any outlet, into which the privies emptied their contents, situate at the rear of the houses, and emitting, of course, offensive effluvia. After great difficulty, he succeeded in having the ditch properly drained, covered over, and provided with an outlet. Some low, marshy ground, between the houses and the sea, was also drained. A period of nine years has elapsed; and, although epidemics, principally attributable to similar local causes, have occasionally prevailed, the buildings in question have altogether escaped, and no persons can be more healthy than their inhabitants.

The escape of the men in this case, owing to their absence from home, reminds me of a similar exemption, but on a much larger scale, which occurred at Berlin, during the cholera of 1848. A body of 6,000 men, artisans and labourers of all classes, and residing in different parts of the city, were employed in the open country in some public works: they were absent from home fifteen or sixteen hours daily, only returning to sleep at night. These men were so remarkably exempt from cholera, only eight of the whole number being attacked, as to attract general attention; and the only explanation that could be given was, that they were for nearly two-thirds of the twenty-four hours withdrawn from their crowded homes; while their families, remaining, suffered in the same degree as the inhabitants in general.

During the late unprecedented season, several towns, as well as rural districts, have been attacked most severely with low fever, which, in all the cases I have inquired into, has been more or less of the gastric type, and attended with diarrhoea. That the effluvia from cesspools and drains have been, in addition to the excessive moisture and high temperature, the more immediate predisposing cause of this epidemic, is the decided opinion of all the practitioners in those towns which I have officially visited. One peculiarity which has attracted very general attention, is, that the higher classes and tradespeople have suffered almost entirely

on the whole, however, more than the poor, although that has been asserted.

With the view of illustrating the subject under consideration, I propose to describe the attack which occurred in the months of November and December, among the higher ranks at a bathing-place on the south-western coast; and this selection is made, because, so far as could be ascertained, there was but one predominating cause to which the outbreak could be attributed. It must be premised, that in the above town, there is no system whatever of sewerage; the water-closets and privies having nothing but cesspools to receive their contents. Many of the first families were attacked, two or more of the inmates sometimes suffering; and several deaths occurred in some of the principal terraces and streets, where the rent and taxes of unfurnished houses were often as high as £60, £80, and £100 a year. Owing to the excessive rain, and the absence of deep drainage, many of the houses, villas, etc., had become flooded in the basement floor, the consequences of which may be gathered from the description of a newly erected terrace, where I was taken by a physician in large practice. In the basement, which was entirely undrained, were placed the kitchens, and at the back, and on the same level, was the servants' privy, and the cesspool of the water closet. All this was flooded; the water had risen as high as the seat of the privy; the cesspool had overflowed; the soil had consequently been washed into the kitchens, causing a horrible effluvia. This had taken place very generally elsewhere; and the nuisance thus caused was so great, that the medical attendants could distinguish by the smell, on first entering, when the house was flooded. In one of the first-rate houses which I examined, and where the gentleman had suffered from fever, the stench from the drains leading to the cesspools was so overpowering, that the whole house was filled with it whenever the plug, which had been applied to pen in the poisonous gases, was withdrawn. In the course of the inquiry, I visited several houses of this class, where there had been fever; and in every case the privy effluvia was intense, and was assigned as the cause of the attack. The same marked influence of these emanations was noticed among the principal families at a town in South Wales, the whole subsoil of which is so soaked with cesspool matter, that in the best parts of the town, foul percolation has taken place into the wells, to such an extent, that maggots have been found in the water. Whenever there is much rain, regurgitation occurs; the drains and cesspools overflow, filling the houses with effluvia, to which both the sufferers themselves and their medical attendants attributed the gastric fever which prevailed at the time of my visit.

The instances now adduced plainly show, that wherever human beings, whether poor or rich, are exposed to the privy atmosphere for a sufficient time, and in sufficient intensity, their health inevitably suffers, from a degree which may amount only to what is called "ailing"; to nausea, dyspepsia, and diarrhoea; or to low fever, usually of the gastric type, often remittent; to obstinate and fatal diarrhoea and dysentery; or, when present, to cholera.

But it would be taking a very imperfect view of the influence of this deleterious agent, to suppose it only induces gastric derangement and fever: the whole system suffers, and pre-eminently in children, those delicate tests of preventible disease. As one of the more elucidative instances of such affections, and indeed of the whole subject, I may perhaps be permitted to quote the case of Christ Church Workhouse, belonging to the Whitechapel Union, although it is already recorded in my report on cholera.* In this establishment, 400 children were lodged; and, separated from it by a narrow lane, was a manufactory of artificial manure, where night-soil and putrid blood were desiccated, causing a horrible effluvia in the workhouse, and inducing a large amount of diarrhoea. During the cholera, two outbreaks of diarrhoea were directly traced to these effluvia, each following the renewal of the manufactory, which had

for a time been checked by legal proceedings. But, besides this, Mr. Byles, to whom I am indebted for these particulars, states that, whenever the wind blew from the works, fever of an intractable and typhoid form prevailed; and that measles, small-pox, and other infantile diseases, assumed a typhoid tendency. He also states—and to this point I would call special attention—that a most unmanageable and fatal form of aphthæ of the mouth and genitals, running rapidly into gangrene, was so prevalent, that, in one quarter of the year, twelve infants died from it. These attacks were referred by Mr. Byles to the poisonous effluvia; and that he was correct in his opinion, was proved by the fact, that when, after repeated attempts to remove this monster nuisance, and after many lives had been sacrificed, the manufactory was finally closed, the health of the whole establishment was so greatly improved that, up to the date of the report, not a single death occurred among the children, except from chronic disease. I have recently been informed by the medical officer of the town in Wales to which I have alluded, that he has found the same gangrenous disease in infants, in filthy and overcrowded houses.

III. SANITARY IMPROVEMENTS.

After the consideration of so many painful topics, the question suggests itself—Is all this evil, this misery, this degradation, necessary? Is it a condition of our existence that these desolating fevers—these exhausting diseases, which sicken and destroy the infant just entering upon life, and sap and undermine the vigour of manhood,—should arise, and persist, notwithstanding all efforts for their removal? The answer to this all-important query is to be found in the definition of the predisposing causes of epidemic disease. Poisonous effluvia, polluted water, putrid food, are without: they exist accidentally, and form no necessary part of man's nature. We now know precisely how they are generated, and how they act, and we perceive how they may be removed. It is indeed remarkable, that any doubt ever should have existed in intelligent minds on the subject; for it is obvious that the inquiry is infinitely more simple than many of the problems presented by morbid affections, arising from internal causes. The phenomena are palpable—gross, they might be termed—both physically and metaphysically; their causes are patent, and force themselves on the most ordinary entrance to knowledge—the senses; the consequences are more constant, direct, and definite than usually present themselves in any recondite investigation. Causes, conditions, and results are known; what else is requisite for a scientific and successful research? It has, in fine, become evident to all who are familiar with the process of inductive knowledge, that the whole question is ripe for solution. In this communication, allusion has been made to the ignorance, and consequent incertitude, that have prevailed in regard to this subject; but in the interests of humanity, and in vindication of that exalted science which it is our happiness and privilege to profess, it must be declared that among the physicians and surgeons personally acquainted with the diseases of the poor, not as they are studied in the wards of a hospital, but as they are revealed in fetid courts and stinking houses, there never has been any doubt. Dr. Ferrier, when, on entering a close and crowded room, he, to bring relief to the victim of fever, thrust his cane through the window, has typified the whole category of sanitary evils and sanitary remedies. I have myself seen, within the last three months, two instances essentially the same, where the medical attendants had actually had holes cut in the walls of houses with no outlet at the back, in order to admit fresh air to typhus patients. Let the public, then, know that medical science, even from the remotest ages, has pronounced its decision.

As we are speaking of opinions, reference may be made to one which indicates some strange obliquity, and which has always suggested to my mind the painful truth that, in our fallen estate, we love darkness rather than light. Medical men, when they advocate measures calculated to promote the public health are often suspected, and have in

* Report of the General Board of Health on Epidemic Cholera, 1849. vol. II, p. 88.

a thousand instances been directly charged with sinister motives. It much concerns the common weal, that the public should comprehend that this is their question, not ours; nay, it is the very reverse; for, in promoting efficient sanitary reforms, the medical practitioner labours to secure that which, if attained, must, as no one foresees so clearly as himself, involve a sacrifice of his pecuniary interest. To the worldly minded, such a disinterested spring to action is not only incredible, but incomprehensible; and, therefore, they reject it as a thing impossible. True it is that such lofty motives are not natural to men: they have their origin in purer sources—in the liberal studies that refine and elevate the mind—in the communion held with God, through the observation of His works—and above all, in the spiritualising influences of the Gospel of peace, which, while it declares it to be more blessed to give than to receive, commands us to look on the things of others rather than on our own.

Having been led to touch upon this topic, I would offer some homage, demanded by truth, to this elevated spirit of self-sacrifice. From the office which I have had the honour to hold, constant opportunities have been presented to me of witnessing the generous and uncalculating zeal with which, in the midst of every kind of discouragement, often coming from the most powerful and influential quarters, the members of our common profession, in all parts of the kingdom, have initiated and supported the legislative measure designed to secure the public health. Well and nobly have they fulfilled their mission! But it may be objected, that I am myself a medical man. Such undoubtedly is my high privilege. Let, then, other and, as it may be called, more disinterested witnesses speak. In the course of the preliminary inquiries prescribed by the Public Health Act, more than two hundred towns have been examined by the engineering inspectors of the General Board of Health. Those gentlemen have been brought into immediate contact with all classes and all callings; and knowing well their sentiments, I may, without entering into invidious personalities, say that the disinterested spirit displayed, and the all-important support rendered, by the whole body of our profession, has inspired them with esteem and admiration.

But let us return to the more immediate object before us—the question of sanitary improvement. In the course of this paper, several marked instances have been incidentally noticed, in which the removal of the assigned cause of sickness was followed by improved health; and equally striking evidence will be found in the excellent reports of my valued friend and colleague, Dr. Sutherland. If time permitted, I could adduce example upon example, proving equally on the largest and the smallest scale, that every really effectual improvement has been followed by a diminution or eradication of zymotic, and even of other diseases; for it could be abundantly shown, that the benefit is never restricted to the former class, though it is there more marked. A work-house has been drained, flagged, and ventilated; the health of the inmates has immediately improved, and they, though previously suffering from fever, diarrhoea, and so on, have thenceforward been greatly or entirely exempt from these diseases. A new and lofty ward, well ventilated, has been substituted for an old and close one, as at St. Thomas's and other hospitals. What has followed? The diminution of erysipelas—the hospital test of a foul atmosphere—so marked, as to have attracted the notice of the medical officers. A foul labyrinth of unpaved, wet, and filthy courts has been flagged, dried, and cleansed, as in a part of Newcastle-on-Tyne, called Sandgate; and there ensues so great and permanent a reduction, that it is capable of being reduced to figures, and expressed *per centum*, as in the case of St. Olave's, Southwark, and elsewhere. A large ship, ventilated by the skill of an Arnott, transports to the antipodes 1000 convicts, soldiers, and sailors, and only one old man dies on the passage; whilst an emigrant ship, unventilated and neglected, is decimated in crossing the Atlantic. Again, a lunatic asylum or a prison is properly and efficiently provided with sanitary arrangements, and in

the midst of a great and sweeping epidemic, like that of cholera in 1849, their inmates escape, one and all.

In some instances of this kind, it has lately been said that the new system has failed; and even that epidemics, from which the old establishment was free, have, as the consequence, sprung up in the new. I have had occasion to inquire officially into some of these alleged cases of failure, and it has been shown to the satisfaction of important public bodies, who had entertained the above opinion, that the occurrence of the sickness was traceable, not to the principles of sanitary improvement, but to defects in construction, or mistaken plans; nay, in some cases the very efficiency of one part of the arrangements has, owing to fundamental errors, exasperated the mischief. No one, for example, would deny that it is a great amelioration to substitute in a crowded court, or in the cellar of a house, a cleanly water-closet for a foul privy; but it does not therefore follow, that it would be equally desirable, if at all, to place a water-closet in the cell of a jail, within six feet of the head of the bed, and where the prisoner spends twenty-two out of the twenty-four hours. An efficient ventilating apparatus for public establishments, such as I have seen, is of vast importance if in right relation to all parts of the buildings; but if it is misplaced in regard to water-closets or drains, it may, as I have found, by the very force of suction which is its merit, poison the atmosphere, by drawing the foul air out of the soil-pipe or of the common sewer; and this notwithstanding the supposed defence of syphon or other water-traps. But besides these more obvious sources of failure, there are others more subtle and general, and, therefore, more important, which altogether escape the notice of those engaged professionally in sanitary works; for instance, every plumber and engineer ought to know thoroughly the great principle of the diffusion of gases, as it is immediately concerned with the efficient action of all water-traps.

In glancing at the results of sanitary improvements, it is interesting and important to consider the results that have followed the introduction of the *model lodging-houses*. These institutions afford a kind of evidence which is of special value, inasmuch as the great object of their philanthropic founders was to test the value of sanitary improvement; and further, because the information derived from them is exact, numerical, and trustworthy. It is probably known to the majority of this audience, that these houses are situated in all parts of the metropolis, and several of them in the centre of the most unhealthy districts, as St. Giles and Drury Lane, where every form of zymotic disease prevails, and from which fever is never absent. They are occupied by the labouring classes; and although, in some of those for families, the tenants belong to a superior class of artisans, in others, especially those for single men, persons following the humblest occupations, as itinerant sellers of articles in the streets, are lodged by the week.

The following details are taken from the official reports which I have had occasion to make on the subject:—

"In May 1851, I personally examined seven out of the eight existing establishments. The inhabitants (concerning whose health I instituted a searching inquiry) then amounted to 1,507, of whom 726 were children—a class most susceptible of zymotic disease. There had been only one case of typhus from the commencement; and yet one of the institutions, with 550 inmates, had been opened three years and a half. At the time of the cholera, the population of these houses amounted to 795; and yet there was only one case of cholera, whilst among the population of London generally, including all classes, one person in every 151 died, and about one in every 75 was attacked.

"The statistics of the Metropolitan Buildings, Old Pancras Road, are peculiarly instructive, inasmuch as they have been now open nearly five years, and contain a fixed population, of whom many are labourers and mechanics. Up to May 31, 1851, the yearly mortality had been less than more than two per cent. of the inmates, which is a

same as the average mortality of England.* I have lately again visited this establishment; and the results are even more remarkable; for during nineteen months, up to October 1852, with an average population of 640, there have been only thirteen deaths, being 1·2 per cent. per annum, or at the rate of only 12 in the thousand. In another establishment for families, in Albert Street, Spitalfields, with about 300 inhabitants, the mortality during the last eighteen months has been much lower than even that in the Pancras Road institution. The rate of mortality in England and Wales at present is 2·2 per cent., or 22 in the thousand; in the metropolis it is 2·39, or nearly 24 in the thousand; in Liverpool it is 3·43, or upwards of 34 in the thousand; while in the part of Surrey not included in the metropolis, it is 1·72, or 17 in the thousand.

"But properly to estimate these facts, it must be stated that the number of children, which, if considerable, always raises the mortality, in the Metropolitan Buildings considerably exceeds the proportion in London generally; in 1851, for example, they formed 62·3 per cent. of the total inmates; and yet the mortality among them was only 2·5 per cent.; whilst in the metropolis, in 1841, the number of children under ten years of age was 21·7 per cent. of the whole population, and the mortality was 5·2 per cent., or nearly double that of these model houses. The experience of the last nineteen months still shows the same exemption from fever as in the earlier years, not one death having occurred from that cause; nor was there any death from small-pox or scarlet fever. Two cases of small-pox occurred among the adults, both of which recovered; and it is interesting to observe that the disease did not spread, not a single child having been attacked. Whenever, on the contrary, a case of small-pox occurs in the crowded habitations of the poor, and especially in the common lodging-houses, it is notorious to medical officers that it spreads rapidly among the sickly and predisposed population around. I recently had occasion to inspect a court at Gloucester, containing twenty-two families, and about 110 individuals, and where in two months there had been thirteen cases and three deaths from small-pox."

This paper will, it is hoped, assist in placing in a clearer point of view two of the most general and influential agents which concur in lowering the health of the swarming population of our suburban districts. The proofs, too, derived from so many sources, demonstrating the possibility of destroying one of the two conditions on which the development of epidemic disease depends, will not, I trust, be unacceptable to those who are interested in that which, in regard to the physical well-being of the people, is the great question of the present times. And if we, who form a part of the more favoured classes of society, escape the miseries and sorrows of our humbler brethren, let us never forget that it is due rather to the fortuitous march of events than to any inherent superiority which we are entitled to claim as our own. The foul abode, the unwashed body, the reeking excrements by which thousands of our industrious countrymen are surrounded, inflicting a penalty from which the brute, in virtue of its instinct, is mercifully protected—these, and an untold number of the like afflictions, might, but for the goodness of God, have been our own lot; nay, worse, the fate of our wives and of our children. It might, but for the accident of birth, have been ours to see those nearest and dearest to us pining, sickening, and dying, before our eyes, the victims of a pestilential atmosphere, from which, though recognised, there was no escape; thus adding to the bitterness of death the consciousness that it was thus caused, and was no necessary part of the primeval curse. It might have been our fate to feel the very springs of life and energy giving way in the midst of manhood, and when a young and helpless family depended on the vigour and capacity for labour which constitute the poor man's only fortune. To those who are ignorant of the scenes daily en-

acted in the crowded and foul abodes of the populous districts of England, and even in the very centre of the metropolis, this language may bear the semblance of exaggerated sentimentality; but I have, by a long and painful experience, been taught that no words can express, no picture can realize, the misery to which large masses of the labouring population of this country are at the present moment subject, owing to the existence of evils which are doubtless in the main attributable to the unprecedented increase of our manufacturing towns, but which must in no inconsiderable degree be referred to that neglect, out of which, after a lapse of centuries, we are now beginning to awake.

Highgate, February 1853.

ON PYÆMIA.

By JOSEPH SAMPSON GAMGEE, Esq., House-Surgeon to University College Hospital.

(Read before the Medical Society of University College, Nov. 25th, 1852.)

A CONSCIOUSNESS of the vastness and intricacy of the subject on which I have undertaken to submit to you a few reflections, and a feeling of my own inability to do it justice, constrains me to appeal to your indulgence; an appeal, the special need of which will at once be perceived, when I confess that I do not intend this communication to be a mere compilation of the ideas of authors on the subject of Pyæmia. The great discrepancies between them render it obvious that they are not all right; and my own clinical observations in thirteen cases force me strongly to suspect, that in many very important points the great majority of them are far from the truth. Thus believing, I should deem it most just to myself, and most consistent with my duty, to relate the histories of my cases, to analyse them, and then to point out in what respects my own observations agree with, or differ from the teaching of the day. But to carry this plan into execution, copious as my notes of cases are, a series of addresses, and not a single one, would be required; and hence I am forced to abandon it for another more expedient, though to me less congenial, and I fear to others less efficient scheme. Under existing circumstances, I must confine myself to presenting a sketch of the present state of knowledge among surgeons, especially among English surgeons, on the subject of my thesis, and to giving a succinct account of the disease. In so doing, it shall be my special study to adduce from my note-book of cases as much evidence in support of my statements and of my criticism on accepted opinions, as time will permit.

Anxious as I am to be brief, I cannot abstain from making a few preliminary remarks.

Such is the present state and rate of progress of pathological science in general, but especially of surgical pathology, that even in the humblest of inquiring minds, a zealous desire to do somewhat to contribute to its advancement cannot but be awakened. If this be true in general, how true is it in this particular instance. Let any one look on a poor creature first seized with the pyæmic shiver: the violent shake of the whole body, the drawn and haggard features, the dim and sunken eye, the earthy look, the mental depression, the succeeding intense heat and profuse sweating, will at once indicate to him that something serious has happened. A succession of these attacks, the supervention of diarrhoea, and mental aberration, not unfrequently in a few hours hurl a previously stout and healthy man into eternity. Let the witness of this scene bear in mind that, but a very few years since, this disease was unknown; that there are very strong grounds for believing that it is among the most frequent of surgical diseases, and yields to none of them, if it do not exceed them all, in its fatality; that at the present day, to my certain knowledge, surgeons of eminence have shewn themselves ignorant of typical cases of this disease brought under their observation; that in the most recent systems of surgery, strong presumptive evidence

* Report on the present state of certain parts of the Metropolis, and on the Model Lodging Houses of London. By R. D. Grainger, Esq., p. 29.

is afforded in favour of the belief that their authors have exceedingly indefinite notions on the subject; that writers of monographs are not only remarkably at variance on some of the most important, nay, of the fundamental questions involved in the subject, but have for the most part studied it in a manner which, if pursued for ever, will fail to lay bare the naked truth; let these facts, I say, be borne in mind, and then I may hope to be judged fairly, when I state my intention to make this paper the commencement of a critical inquiry into the present state of knowledge of this disease, with the ulterior view of contributing something to its elucidation. In the criticisms which I have to make on the labours of others, it shall be my earnest endeavour to express myself in unobjectionable terms; but should I, in the opinion of any one, fail in doing so, I trust that my intentions will not be misconstrued, however much I may fail in their fulfilment.

By pyæmia, I mean an affection almost invariably fatal, characterised by the rapid formation of purulent collections in different parts of the body, usually occurring as a sequel of suppurating wounds, but sometimes of spontaneous origin. While making use of the term pyæmia, which signifies an admixture of blood and pus, I do not intend giving in my adhesion to any particular doctrine as to the nature of the disease: its synonyms "purulent diathesis", "purulent infection", "purulent resorption", "purulent metastasis", are, like it, liable to the objection of being the expressions of theoretical opinions, rather than names signifying the correct nature of the disease.

As already stated in the definition, the great characteristic of pyæmia is the formation of purulent collections in different parts of the body. As peculiar features of these collections, I would call attention, firstly, to the great rapidity with which they frequently form, three or four days alone sometimes sufficing for the development of numerous abscesses in the lungs, and the collection of immense quantities of puriform fluid in the muscles and in the serous and synovial cavities. Secondly, to the asthenic character of the accompanying inflammation. In exemplification of this character, I may state, that I have met with considerable purulent collections in the pleura, and in some joints, without having been led to suspect their existence by any complaint of the patient. Thirdly, to the very general distribution of purulent deposits over the body. Though no tissue is, I believe, exempt from them, doubtless it is that they are more frequent in some parts than in others. The lungs are their seat of predilection; next in order I should place the serous and synovial cavities; then the muscles, the liver, and other organs. I have in three cases met with metastatic abscesses in the prostate, a part in which no mention of their occurrence is made by the best writers. The fact that I have found them there so frequently, comparatively to the small extent of my experience, taken in conjunction with the fact that the prostate often escapes unexamined at autopsies, induces me to think it probable that abscesses of the prostate in pyæmia may be more frequent than authors have hitherto supposed.

As it is in the lungs that these purulent deposits are most frequently formed, it is necessary for me to dwell a little more at length on the characters which they present in these organs. They usually occur posteriorly and towards the lower part of the lung; but I have met with a metastatic abscess at the anterior edge and at the extreme apex, though the remainder of the upper lobe was perfectly healthy. Another very general character is, that the surface, rather than the deep part of the organ, is their seat of preference. On the surfaces corresponding to the interlobular fissures, and on the diaphragmatic surface, they are about as frequent as on the exterior.

They vary in size from a pin's head to a walnut, and present themselves under two different aspects: (a) As circumscribed collections of apparently laudable pus. (b) As solid yellowish masses due to infiltration of the lung substance with pus, as proved in many cases by this fluid exuding from them on pressure. Frequently the lung substance for

about half an inch around is of deep red colour, non-crepitant and sinks in water: in many cases again, it is only at a small part of the confines of the abscess that the red hepatization exists; and the lung tissue is not unfrequently found crepitant and otherwise healthy in the immediate neighbourhood of one of these puriform deposits.

As to abscesses in the muscles, it has been stated by Nélaton* that they are comparatively rare; and that, when they exist, the muscular fibres are sharply cut around the pus-containing cavity, which appears to be the result of the softening down into pus of the fibres amid which it exists. With reference to the first part of this paragraph, I am disposed to doubt its accuracy, and to regard the muscles as a rather favourite seat of these deposits; but possibly the frequency with which I have found them there is the result of accident in my brief experience: certain it is, however, that the pus is not always collected in circumscribed cavities, for it is sometimes diffused pretty uniformly between the interfascicular cellular tissue, without the least tendency to circumscription, much less to the formation of a cavity.

It may have been observed, that I have frequently made use of the term puriform fluid, instead of pus; and as my doing so has not been the result of caprice, it is necessary that I should state my reason. It was in the summer of 1851, that I first heard of the purulent depositions in pyæmia being destitute of true pus-corpuscles, and abounding in granular corpuscles, in which no such thing as the characteristic nucleus of the pus-cell was to be seen. This was made known to me by my friend Mr. Joseph Lister, as the result of his observations in one of the cases on which he wrote for the Fellows' Clinical Prize, in the summer of last year. I have since discovered that similar observations had been made by others; and I have observed the same fact myself. To convince you of its importance, I need only tell you, that on the character and size of the pus-corpuscles, a theory as to the mode of formation of the abscesses in pyæmia has been formed, and it will at once be perceived that the discovery of cases of this disease with corpuscles, other than those of pus, is a serious invalidation of the basis of such theoretical teaching.

In stating that the great anatomical character of pyæmia is the formation of purulent collections in different parts of the body, it may appear that I have given but a partial statement of the anatomical essence of this disease, in having omitted mention of the state of the blood. I have done so, because it appears to me that the consideration of this point may for the moment be profitably deferred.

SYMPTOMS. Though necessarily incomplete, this pathological sketch will serve as a preparation for the more ready appreciation of the value of the symptoms.

A patient with a suppurating surface, doing well in every respect, is seized with a fit of shivering, which passes off in about a quarter of an hour, and is succeeded by more or less intense heat. Gradually the bodily temperature falls to its normal standard, and the patient is perhaps left in as good a condition as he was in prior to the rigor. But a few hours, rarely two or three days, elapse before a similar rigor and succeeding heat are manifested; and then, if not at the first, is the patient's appearance markedly changed—the eyes are sunken, and the features drawn.

Quite suddenly, notable emaciation appears to have occurred; and ere long, the skin and conjunctivæ acquire a more or less icteric tinge. In rarer cases, the face becomes of leaden hue, the respiratory and cardiac movements are much accelerated, the breath has a peculiar odour, the wound presents an unhealthy appearance, the tongue dries, sordes accumulate on the teeth, symptoms of pleurisy and of articular affections may supervene, and abscesses form in different parts of the body. As the bodily weakness increases, the mental faculties become impaired, and life ends.

This narrative of symptoms may be quite applicable to a particular case, though I have compounded it from a

* *Eléments de Pathologie Chirurgicale*, t. Ier, p. 382.

number of histories, and intended it as a general outline, rather than as a detailed account. It is now time to examine more particularly into the diagnostic value of some of the most prominent semeiological characters to which I have called attention.

I. *The Shivers.* Occurring, as this sign does, in a variety of affections, it might *a priori* be regarded as of little aid in diagnosis. The reverse is the case; yet its importance must not be exaggerated. It is usually severe, and associated with remarkable depression of spirits and alteration of countenance. It rarely exceeds a quarter of an hour in duration, and usually occurs at periods varying from twelve to thirty-six hours. In two cases, the patients have informed me that the violent shaking of the body has been unassociated with a feeling of cold. In some cases, the shiver is a symptom of very little value. I have seen a case of compound fracture of the leg, in which, on cadaveric inspection, metastatic abscesses were found in the lung. During its whole progress, the patient only shivered once, and then but slightly. Again, the shivers may merely be the forerunners of an attack of erysipelas; and it is only by the coexistence or absence of other signs that the diagnosis can be established.

II. *Odour of Breath.* The merit is usually attributed to Bérard of having first called attention to a peculiar odour as emanating from pyæmic subjects. The best idea I can give of this smell of the breath, is by comparing it to the smell of sweetish liver; so peculiar is it, that its value in diagnosis is very considerable. In one well marked case of the disease, which recently came under my notice, the breath had not, at any stage, the peculiar odour in question. On the other hand, it existed markedly in a man affected with prostatic abscess; and in another who died from extravasation of urine, after the operation of lithotomy: in both of whom I failed to discover, after death, the signs of purulent infection. These facts, it must be admitted, notably decrease the value of the breath's peculiar odour in diagnosis; still it is certainly of much worth in many cases. Its precise import will only be susceptible of determination when pyæmia shall have been clinically studied as it ought to be.

III. *Appearance of the Wound.* As a rule, the appearance of the constitutional symptoms of the purulent affection is attended with a marked deterioration in the appearance of the wound. If partial union have occurred, the bond breaks down, and the previously pink, compact, and pus-secreting granulations become pale and flabby, and pour out a thin, scanty, and offensive discharge. At other times the wound looks pale, and does not pour out any secretion; at others, again, it acquires a black colour as it dries. The neighbouring integument may be of perfectly healthy colour, or the seat of a faint blush; and when suppurative phlebitis is the cause of the affection, its signs are manifest in the neighbouring veins. Sometimes, however, the appearance of the wound very sensibly improves after pyæmia has set in; but the improvement is not durable. I have seen two cases of this kind.

IV. *Pulse and Respiration Ratio.* The number of the heart's beats, and of the respiratory movements, is, we have observed, much increased in this affection. How far the ratio is altered, known facts do not enable us to state; though their scantiness, conjoined with the fact that stethoscopic examination is, as a rule, difficult in these cases (the cause of this difficulty being the extreme restlessness of the patients), suggests the importance of further inquiry, as a means of determining the occurrence of chest mischief.

V. *Colour of the Skin.* In the greater number of cases, the skin at an early stage acquires an icteric tinge, which is also noted in the conjunctivæ. That this peculiarity of colour is not owing to organic disease of the liver, is proved by the fact that, in all the cases which I have seen, this organ happens to have been healthy. Of the leaden hue which sometimes occurs in this disease, one well marked instance has fallen under my notice. It occurs at an advanced stage, and is doubtless due to imperfect arte-

rialization of the blood, in consequence of extensive chest mischief. This existed in my case.

CAUSES. I have stated in the definition, that pyæmia is a disease usually occurring as the result of wounds, but sometimes of spontaneous origin. In stating that the disease may sometimes originate spontaneously, I am advocating a doctrine which has few supporters, but which, nevertheless, I believe to be correct. I have seen two cases of the kind; and as perhaps this is one of the most important questions which we shall have to discuss, I shall read the history of one of them, and state the reasons for my regarding it as an instance of purulent infection occurring independently of a wound.

CASE. Thomas Harley, of lymphatic temperament, aged 20, single, a French polisher, native of London, was admitted into University College Hospital, 30th October, 1852. He had never heard of consumption, cancer, or gout in any of his family, but his father was subject to rheumatism for several years before death, the cause of which was unknown. He had been a very healthy person, and had never laid up for illness. He was of very temperate habits; slept in an airy and dry back room; his working-place was warm and dry; he had never had rheumatism, scarlet or typhoid fever.

History of present Illness. About four months ago, the glands in the left submaxillary space enlarged, and continued so ever since. He continued in good health up to Sunday, 24th October, when the left side of the face began to swell, and he felt difficulty in swallowing. The swelling was painful, and increased in size up to Tuesday, 26th October, since when it had diminished, and been painless. The difficulty of swallowing disappeared on the 29th. On the evening of the first day of attack, he had a severe shivering fit for a quarter of an hour, after which he became very hot. He shivered every evening afterwards. He had been very thirsty. The bowels were open five times on October 29th, after medicine. On the day before admission, for the first time, he felt pain in the muscles of the calves and thighs, which continued in these parts ever since. He had also pain in the muscles of the body generally, and in the left knee and ankle-joints. For several days, even when lying still, he had had severe pain in the back of the head.

Present State. Three o'clock, p.m., 30th October. The pulse was 112, of pretty good size, but weak and soft; the respirations 36; the skin hot and dry. He had very severe pain at the back of the head when he moved it, not otherwise, and a good deal of pain in the eyelids; none in the eyeballs. The face was pale, except over the swelling on the left side, where the skin was red. There were slight sordes, both on the upper and lower teeth; the tongue was moist all over, vividly red at the edges and tip, and covered with pasty brown fur over the remainder of its surface; the papillæ at the tip were very prominent; the lips were dry, the lower one brownish. The breath was not peculiar. He had no cough, nor pain in breathing. There was a good deal of tenderness at the epigastrium (he vomited on the previous morning), not in other part of abdomen. There was no gurgling in the right iliac fossa; nor spots on anterior surface of abdomen or chest.

Limbs. There was pain in the left biceps muscle, but none in any other part of the left arm; also in the muscles of the right arm and forearm, increased by pressure; there was no pain in the joints of these limbs, nor in the muscles of the back, but the spine was tender from the middle of the dorsal region downwards. Great tenderness was manifested on grasping the muscles of the thighs, especially the right one; there was still greater pain in the calf, and some, but less, in the muscles in the front of the leg and on the insteps; but none in the joints of the lower limbs. Some tenderness was however felt on pressing over the inner malleolus. No redness or swelling was noticed in any of these painful parts. There was not, nor had there been, any wound in any part of the body.

Swelling of Face and Neck. On the left side of the face and upper part of the neck, was a considerable swelling, over which the skin was red and hot. The limits of this swelling were

not defined; it extended upwards to the cheek, backwards to the anterior border of the sterno-mastoid muscle, forwards almost to the chin, and downwards to the level of the upper border of the thyroid cartilage. Nothing was seen of this swelling inside the mouth. The lower jaw felt healthy, and the mouth was opened without pain, though with a little mechanical impediment, owing to the size of the swelling, which felt hard everywhere, except at the anterior and lower part, where very distinct fluctuation was felt. On making an incision in this situation, exit was given to about a drachm of pus mixed with blood. A little lint was introduced into the lips of the wound, and hot linseed poultice applied all over the swelling, to be renewed every six hours.

11, P.M. He had had two copious stools, after a dose of castor oil. On removing the poultice and lint from the aperture, and on pressing in the neighbourhood, a good deal of laudable pus escaped. The swelling, heat, redness, and pain were much diminished.

October 31st, 10 P.M. Pulse 120, full, and rather bounding. Respirations 28. The skin was hot and dry; the tongue brown in the centre, but less so than yesterday: the tip and edges were vividly red. He had no motion this day. He felt very weak, and complained of great pains in the loins, and also in the joints and muscles of the limbs. The abscesses discharged perfectly laudable pus, in small quantity. The left biceps was much swollen, and the skin covering it was hot and red. The muscles on the back of the right forearm were in precisely the same condition. At the under part, and almost at the middle of the right thigh, was a diffused swelling, about the size of a fist. It was hot and very tender, and the skin over it was reddish. In front of the left ankle, the skin was red; and the redness extended about half way up the front of the leg; without, however, any swelling. There was no pain in the course of the large veins; he had great thirst; no peculiar odour of breath; no cough. Hot fomentations were ordered to be applied to the swollen parts.

November 1st, 10, A.M. The swelling in the parts of the limbs mentioned in last report, was on the increase. Pulse 128, tolerably full, soft. Respirations 36. The respiratory murmur was perfectly healthy all over the front of the chest. The patient was in such pain, that the back could not be examined.

Midnight. The skin was hot and moist; but the patient said that he felt cold. He was evidently somewhat light-headed. The nurse informed me that, for the last two days, he had talked incoherently in his sleep. He had no peculiar odour of breath: the tongue was moist, dirty white furred, but much less so than at admission: the pupils were much dilated, and fixed.

November 2nd, 11 A.M. The pulse was 150, of medium fulness, soft; the skin hot, and bedewed with perspiration; the pupils extremely dilated, and slightly, but very slightly moveable, when a lighted candle was approached to the eyes; the face much drawn; the expression wild and haggard. He was extremely restless, and constantly chattered incoherently and somewhat indistinctly, about a great variety of matters. The bowels had not been opened since yesterday. There was no discharge from the abscess on the left side of the face. The redness in front of the left ankle was not so great as it had been; but the redness in front of left leg was greater than yesterday, and was now associated with heat and swelling. The signs of phlegmon under the right thigh had diminished; those in the right forearm and left biceps remained the same. There were now also redness, heat, and swelling, on the back of the left forearm. About the centre of the wrist of the right forearm, I this morning had felt apparently distinct fluctuation; but no matter escaped on a puncture, half an inch deep, being made with a narrow bistoury. There was no peculiarity in the odour of the breath.

A drop of blood taken from the back of the right hand and tip of the right index finger (both parts apparently healthy), showed a very large excess of white corpuscles on the addition of acetic acid. I asked Dr. Jenner to examine this blood,

before I told him of the case. He kindly did so, and said that there was a large excess of white corpuscles; and, in answer to my question as to whether there were any pus-corpuscles, replied in the negative. I had already made up my mind to the same effect. The white corpuscles in no way differed in character from those of healthy persons: the great majority of their nuclei were of a horse-shoe shape; others were centrally grouped, but their divisions were separated from each other, and not aggregated into a central mass, as the nuclei of pus-corpuscles.

4, P.M. There was no sensible change since the last report, except that a good deal of perfectly white foam escaped from the mouth, and that the powers of speech had become much impaired.

7½, P.M. The nurse informed me, a few minutes before this time, that the man had just died. Her account agreed with that of several gentlemen who witnessed the case, to the effect that the face had acquired a decidedly purplish or bluish tint shortly before death.

Examination of the body, at 9, A.M., Nov. 4th. Cadaveric rigidity was generally well marked, as was also the livid discolouration of the posterior surface of the body. This livid discolouration did not advance uniformly on the sides of the trunk; but those parts, as well as the neck, clavicular regions, and arms, were mottled livid. The left arm was less mottled than the right; and whereas the skin was perfect on the latter, the cuticle was readily detached in large shreds from the inner aspect of the former, which, moreover, was somewhat, but not much, larger than its fellow. The right forearm was somewhat larger than the left: both were evidently rather larger than natural. They pitted slightly on pressure. Their palmar aspect was livid (both had been in a prone position). The dorsal aspect of the right arm was of a yellowish white colour; that of the left was slightly mottled. The external surface of the left leg was decidedly somewhat larger and paler than the right. On looking at, and manipulating the posterior aspect of the thighs, no perceptible difference was found. Nothing peculiar was noticed on looking at and manipulating the joints.

Thorax. On removing the sternum, the parts appeared perfectly healthy at the first view. There was no fluid in either pleura; no adhesions on the left side; but some firm old ones on the right. Some blood, very carefully collected from a puncture made in the superior vena cava, which had been previously dissected out, showed, when acted on by acetic acid, the white corpuscles in excess, but by no means so much so as they appeared in the blood examined during life. Among the white corpuscles, I saw some with nuclei which I could not distinguish from the nuclei of pus, and which were certainly different from those which I saw in this man's blood during life. Dr. Jenner also acknowledged the similarity, but did not believe that the suspicious looking nuclei were those of pus-globules. My friend Mr. Lister happened to call on me while I had this blood in the field of the microscope. Without giving him any reason to suspect the nature of the case I was inquiring into, I asked him to give me his opinion as to what was in the field. He at once exclaimed, "Oh, you have pus here!" When I pressed him for his reasons, he said some of the nuclei were characteristically pus-like; but he did not feel much confidence in the stated distinctions between pus and white blood-corpuscles. He added, however, that he had never before seen blood with corpuscles like those under the microscope.

Left Lung. There was no sign whatever of metastatic abscess in any stage. It was everywhere crepitant. On section, some blood-aerated liquid exuded. The infiltration of this fluid affected all the lower part of the lung, from the base to the apex. There were no tubercles, nor emphysema. Portions of this lung floated, even after extreme pressure. The congested portion readily broke down on pressure.

Right Lung. The preceding description applies strictly to it. On the diaphragmatic surfaces of both lungs, especially of the right one, were numerous little dusky spots; others, of slate colour, being deeper seated.

spots simulated those met with in scarlet fever, and other blood-diseases. The lung-tissue immediately beneath these spots did not materially differ from the lung in any other part.

The heart, liver, kidneys, and prostate gland, were healthy.

The spleen measured six by three and a half inches. It readily broke down on pressure, but otherwise appeared healthy.

Brain. On removing the dura mater, the brain appeared generally pinkish; very notably more so than in health. On examination, the pink colour was found to be due to a large number of minute capillaries, which were quite as numerous on the anterior as on the posterior part of the brain. The superficial veins were not preternaturally congested. On section, the brain-substance appeared remarkably healthy. The *puncta vasculosa* were, however, more marked than natural; drops of blood, of considerable size, exuded from many of them. There was no excess of serum in the lateral ventricles; nor congestion at the base of the brain, which, in this particular, differed remarkably from the upper surface. The cerebellum presented nothing remarkable.

Abscess of Neck. On removing the integuments and platysma from over the seat of the first abscess, on the left side of the upper part of the neck, its cavity was found irregular, extending backwards under the parotid, forward under the submaxillary gland, and downwards for a little distance, and beneath the sterno-mastoid. The neighbouring muscles were healthy on section. The cavity contained about 3ss. of apparently good pus, which, on microscopic examination, showed (with the aid of acetic acid) numerous pus-corpuscles with the characteristic nuclei.

Limbs. On removing the integument from the back of the right forearm, the subcutaneous cellular tissue was found infiltrated with liquid not unlike melted butter. On dissecting the part, the intermuscular cellular tissue, especially in the superficial and deep layers, was loaded with the same liquid, which, in parts, was opaque, and similar to pus, to the naked eye. Under the microscope, a small number only of pus-corpuscles, but granular corpuscles in very great numbers, were seen. A vein, coursing amidst the cellular tissue thus infiltrated, had transparent coats, and in every respect appeared healthy. On removing the skin from the left arm, an appearance exactly similar to the other was presented; but, on dissection, a notable difference between these two parts was discovered; for, whereas the muscles of the right forearm appeared healthy, the left biceps was infiltrated throughout its whole substance with purulent looking fluid, which was not collected in masses, but disposed in longitudinal strata, evidently in the interfascicular cellular tissue. This condition affected the whole arm, but did not reach into the axilla. On cutting into the left ankle-joint, it was found perfectly healthy.

As the dissection of the body had already proceeded to a considerable extent, the other joints could not be consistently opened; but, as already observed, there was no external sign of disease in any of them.

My reasons for regarding this as a case of pyæmia, after my first examination of the patient, were, that though some of the symptoms might be mistaken for an attack of typhoid fever or rheumatism, yet all their signs were not present, while others (those connected with the abscess) pointed to a different diagnosis. Admitting that all the signs of pyæmia were not present, and especially that it could be traced to no cause, yet the symptoms simulated it more closely than any other affection. The formation of the abscess contemporaneously with the commencement and progress of the constitutional affection, the subsequent manifestation of articular and muscular pains, and the aggravation of the general symptoms, while the signs attendant upon the formation of the abscess decreased, decided me in the diagnosis, in the correctness of which, cadaveric inspection confirmed me. True it is, that no abscesses were found in the parenchymatous organs; but they are not constant even in cases of traumatic pyæmia. I have, however, seen an instance of the idiopathic affection,

in origin, symptoms, and progress, precisely like Harley's; in which, however, the lungs were the seat of metastatic abscesses. If it be admitted that Thomas Harley was the subject of pyæmia, there can be no doubt that the affection was independent of injury.

Certain it is, however, that in by far the majority of cases, pyæmia occurs as the result of injury. It is met with after slight, as well as after severe, wounds; after injuries to the soft parts, as well as to the bones. It is said to be especially liable to occur as the result of wounds of veins. In reflecting on this point of my subject, an important question has presented itself to me for solution. Continental writers dwell incomparably at greater length in their descriptions of this disease, than do our own. In visiting English and foreign schools, I have been struck with the fact that, whereas little mention was made of pyæmia in the former, it was regarded as a frequent complication of surgical practice in the latter. These facts suggest the question, Is the disease more frequent on the continent than in England? The momentous import of this question can scarcely be exaggerated.

The mode of dressing wounds, and the low dietary scale, prevailing in continental hospitals, tending as they do to deteriorate the quality of the secretion of pus, to favour its accumulation, and to lower the powers of the system, might be regarded as fruitful causes of the purulent infection; and so they have been by Professor Sédillot.* Of nine cases of this disease which I carefully studied in the Florence Hospital, one occurred as a sequel of venesection; two after compound fracture of the leg; one after punctured fracture of the skull; two after amputation of the thigh; one after necrosis of the jaw; one after extirpation of a tumour in the breast; and a ninth as a sequel of opening a small abscess in the groin.

As a whole, these are not cases in which continental differs most widely from English practice; and hence my own observation would not be favourable to the doctrine, that such difference leads to a greater frequency of the purulent infection in the hospitals of continental Europe, than in our own. To the fact that much less space is devoted to the consideration of this disease in the works of our own, than in those of foreign surgeons, I am disposed to attribute little value, as an evidence of the comparative rarity of this disease amongst us. On the contrary, the very great scantiness and ambiguous tone of the writings of English surgeons on pyæmia, taken in connexion with the errors of diagnosis which I have witnessed, and with the confession made to me by a candid and eminent teacher in this metropolis, that, to his certain knowledge, no definite value was attached to the symptoms of the disease a few years since,—forces me to suspect that the greater frequency of this affection on the continent is less real than apparent.

The settlement of this question by extensive observation is much to be desired; for, if the reply be in the affirmative, the question will arise, What is the cause of the greater frequency? The solution of this problem may reasonably be expected to give a clue to the real cause of the disease, and consequently to the means of preventing it. On the contrary, if it shall appear, that in our own, as well as in continental practice, pyæmia rages with equal virulence, the theoretical notions now entertained as to the influence of peculiar dressings, etc., will be swept away, and the propriety will be apparent of diverting the channel of research for the discovery of the etiology of pyæmia.

It may already have been gleaned from remarks incidentally made, that, when once pyæmia has been diagnosed, the prognosis must be unfavourable. Nélaton† states that the disease is invariably fatal; but I am inclined to believe that such is not strictly the case. The grounds of my belief are histories of cases related by Sédillot‡ and Vidal§, and of others contained in my own note-books. Nevertheless, the great fatality is an undeniable fact.

* De l'Infection Purulente ou Pyémie. Paris, 1849, pp. 431-434.

† Op. cit., p. 167.

‡ Op. cit., Observations Cliniques, 20, 21, 22, 24, 26, 27, 28.

§ Traité de Pathologie Ext., etc., 3me. Edit. Tome deuxième, p. 27.

Briefly as I have been obliged to treat my subject, I would gladly make amends for the defect by dwelling at greater length on the all-important question of *treatment*. If, by so doing, I had it in my power to contribute facts worthy of knowledge, I might be disposed to transgress the duty I have been obliged to impose on myself, of being brief; but, since entering into a discussion of the numerous modes of treatment proposed would demand time out of proportion to the instruction it would afford, I deem it advisable to proceed to analyse the opinions held by authors as to the nature of the disease.

These opinions may be arranged under two heads: firstly, those which hold pyæmia to be an aggravated form of inflammation of the veins; secondly, those which hold it to be a distinct disease.

The discovery of the symptoms, anatomical characters, and consequences of phlebitis, was one of the many fruits of the labours of John Hunter. He saw cases of death with the formation of metastatic abscesses after suppurative phlebitis, of which he regarded them as an aggravated form. In 1828, a paper, under the title of a "Pathological Inquiry into the Secondary Effects of Inflammation of the Veins", was read before the Medico-Chirurgical Society, by Mr. James Arnott, who has ever since been regarded by English surgeons as the prover of the doctrine, that the occurrence of purulent deposits and death, after surgical operations and injuries, is due to inflammation of the veins. This doctrine is taught, with but slight modifications, in the writings of Samuel Cooper, Liston, Syme, Hyde Salter, Bransby Cooper, and Vidal.

It is but just to say that, of this number, Vidal is the one who has given by far the most complete account of the disease. I have said that these writers have reproduced the teaching of Mr. Arnott, with but slight modifications: to one of the most notable of these I wish to call attention.

In his "Elements of Surgery", Mr. Liston remarks, that "when, from any cause, the extremity of a large vein in a wound is not closed, when it is not plugged up by plastic matter, pus seems to enter it readily, and, by mixing with the circulating fluid, causes dreadful mischief. Great constitutional disturbance accompanies the purulent deposits which follow in the solid viscera, and in the joints. Inflammation of a vein is also occasionally followed by the sudden appearance of a purulent deposit in some part of the body, external or internal, at a distance from the inflamed part."

Thus, though Mr. Liston shewed his leaning to the doctrine of Hunter and of Arnott, by alluding to the disease in his chapter on Inflammation of the Veins, he partly dissented from it, by acknowledging the possibility of a disease, similar to the alarming constitutional complication of suppurative phlebitis, arising from the entrance of pus into the circulation through an opening in a vein.

While there can be no doubt that suppurative phlebitis is about the most frequent cause of pyæmia, it is equally true that it is not the only cause; and that to regard pyæmia as suppurative phlebitis, is to mistake the effect for the cause. Even without taking into account those undoubted cases of spontaneous pyæmia, which are unassociated with disease of veins, certain it is that, in not a few cases of the disease following injuries, no trace of venous inflammation has been discovered. I have failed in discovering it in cases in which I have most accurately dissected the venous system; and even Bérard admits the existence of such cases; though he, a strong believer in the phlebotic doctrine, keenly perceiving what formidable obstacles to the safety of his theory such cases would be, endeavours to explain them away, by saying that the inflammation may have affected some venous radicles which have escaped detection.

But such a mode of argumentation, vicious as it is as a *petitio quæstionis*, cannot be assented to. If there are cases, as there undoubtedly are, even according to the admission of Bérard himself, in which the most careful dissection, purposely conducted, fails to discover the slightest trace of inflammation of the veins, the only legitimate deduction

is, that pyæmia may occur independently of, and, *ergo*, is not identical with, suppurative phlebitis.

We now come to the consideration of the doctrines according to which pyæmia is held to be a distinct disease. As the very antithesis of the doctrine propounded by Hunter and Arnott, Bérard and Vidal, I must first call attention to the opinion promulgated by Tessier in 1838, to the effect that not only is pyæmia a distinct affection, depending upon a blood-disease, but that it is always independent of venous suppurative inflammation. He grounded his opinion on a dogma which he thus expounded: "At all stages of venous inflammation, the pus is enclosed in the cavity of the vein by clots or false membranes, and at no period of the anatomico-pathological existence of phlebitis is its entrance into the blood possible."

Tessier, in thus expressing himself, erred, though in a different direction, yet for a similar reason, to that which led his opponents into error. On both sides, partial observation, and too sweeping generalization, were the screens which hid the truth. Certain it is, as has been long known, that cases of suppurative phlebitis do occur, in which neither clot, nor any other obstruction, exists between the pus accumulated in the inflamed veins and the heart; and in which, consequently, there is nothing to impede the admixture of pus with the circulating vital fluid.

Opinions differing from all those I have hitherto recorded have been published by Nélaton, Fergusson, Miller, Chelius, Lee, and Sédillot; and it is on these that I must now make a few remarks.

Nélaton recognises phlebitis as a powerful cause of this disease, though he avows himself ignorant of its mode of operation, and expresses a belief that pyæmia probably occurs spontaneously in some cases. In thus holding an opinion intermediate between that of Hunter and his followers on the one hand, and of Tessier's school on the other, Nélaton has, I believe, approached nearer the truth than any other writer.

Fergusson, Miller, and Chelius, have briefly alluded to the disease in question, as one due to purulent absorption; but so brief and indefinite are their statements, that their writings must rather be held as proofs of the comparatively little importance which they attach to the subject, than as evidence of their adhesion to any particular doctrine.

Mr. Lee's opinion may, to some extent, be gleaned from the following passage at page 45 of his very elaborate monograph *On the Origin of Inflammation of the Veins, and on the Causes, Consequences, and Treatment of Purulent Deposits*:—"The introduction of pus into the system through an injured or inflamed vein, can rarely be the first step towards purulent infection of the system. Some change must previously have passed in the blood, by which its coagulating power is impaired, or some unusual mechanical means must have been employed, before the pus can find its way in the course of the circulation."

The main ground of Mr. Lee's opinion is experiment; and we must test its validity, as well as that of his mode of arguing thereon, in order to ascertain the purport of his teaching.

In the preface to his thesis, the following passage occurs:—"The simple experiment of mixing some pus with healthy recently drawn blood, will at once show that such a combination cannot circulate in the living body. It will be found that the blood coagulates round the globules of pus, and forms a solid mass, which will adhere to the first surface with which it comes in contact; and it will be evident that it is not till the coagulum formed is broken up or dissolved, that its elements can circulate with the blood."

To argue, as Mr. Lee does, from the fact that, out of the body, blood coagulates round pus, therefore such a combination cannot circulate in the living body, is about as warrantable as it would be to predicate, from the observation that pure blood coagulates in a basin, it therefore cannot remain fluid in the ventricles of the heart. The fact is, that the circumstances are so materially different—blood in an earthen vessel on the one hand, blood in the living body on the other.

the other—that no inference deduced in the one case is applicable to the other.*

Mr. Lee's experiments on living animals, according to his own statement, tend to show that pus, by its tendency to coagulate the blood when introduced into the vessels, is arrested in its progress in some parts of the circulating system, and thus to afford valid evidence in support of his opinion. But the soundness of Mr. Lee's observations may fairly be questioned. Moreover, Sédillot never found any difficulty in injecting pus into the circulation, and he thereby repeatedly produced a disease identical in symptoms and anatomical characters with the pyæmia met with in surgical wards; and I have been informed by a friend—a very trustworthy experimenter—that in trials which he conducted, Mr. Lee's opinion as to the pus being incapable of circulating with the blood in the living body on account of producing its coagulation, proved to be erroneous.

In cases, says Mr. Lee, where, from long-continued disease, and the repeated introduction of vitiated fluids into the circulation, the blood has lost its power, there appears no reason to doubt the correctness of Dr. Sédillot's observations, that it is probable that pus-globules may then circulate with those of the blood. Now, Sédillot's observations, to which Mr. Lee here makes allusion, are observations of fact; and the only mode in which they can be refuted, is by other experimental observations which shall, if not point out the truth, at least lay bare the fallacy, if any, of the French surgeon's observations. On a matter of such vital importance to the existence of his doctrine, it would have been well if Mr. Lee, instead of satisfying himself with saying that, under such and such circumstances, *there appears no reason to doubt* that pus-globules may circulate with those of the blood, had had recourse to experience, examined specimens of blood, and then analysed the conditions of the patients from which they were obtained. To say, apart from such experience, in support of a doctrine, that the circulation of pus in the blood is prevented by the power of the former to induce coagulation; to say, I repeat, apart from such experience, in support of such a doctrine, that there appears no reason to doubt the possibility of pus circulating with the blood when it has lost this power, is begging the whole question.

If this criticism on the fundamental propositions of Mr. Lee's essay be just (and I believe it is), it must be admitted that the very foundations of his doctrine are assumed, and consequently, that it cannot be accepted as the theoretical explanation of the phenomena of the disease. The importance of refuting it will be at once evident, when it is borne in mind how baneful an influence incorrect theories always exert on the progressive study of the natural history of a disease, and, *a fortiori*, in the discovery of the best mode of treating it; a discovery which is almost hopelessly distant in pyæmia, and which will certainly only be arrived at by a just appreciation of the causes, signs, and anatomical characters of the disease, and by therapeutic experiments, conducted independently of any fallacious theoretical bias.

The only author to whose opinion it is left for me to allude, is Sédillot: whose work on the subject, published in 1849, must ever be regarded as one of the most valuable contributions to surgical pathology. He believes that the introduction of pus into the blood is the true cause of the phenomenon described under the name purulent infection, and the grounds of his belief are threefold.

First. A suppuration developed on some part of the economy always precedes the appearance of pyæmia.

Second. A manifest relation exists between suppuration of the veins and pyæmia. In this paragraph he merely states what cannot be denied, that pyæmia does sometimes follow suppurative phlebitis.

Third. The introduction of pus into the blood, and its presence there, admit of positive demonstration.

To the first proof I cannot give assent. The case of

Harley, which I have related, appears to give satisfactory evidence that pyæmia may occur without wound, but a still more exemplary case to prove the occurrence of idiopathic pyæmia has fallen under my notice; more exemplary, I say, because in addition to the disease occurring without that apparent cause, cadaveric inspection proved the existence of metastatic abscesses in the lungs. Such cases as these likewise invalidate Sédillot's statement, that the introduction of the pus into the blood admits of positive demonstration. But this statement is even opposed to experience. Cases of traumatic pyæmia do occur, in which all the veins capable of dissection are found to be closed at the surface of the suppurating wound, which has given rise to the disease. Even Sédillot admits the existence of such cases; and as they threaten the subversion of his doctrine, he endeavours to explain them away, by remarking that very probably venous erosions have occurred, too small to be seen, but large enough to admit the introduction of pus: but these erosions, he adds, could not occur without phlebitis, and then the pyæmia would have for double source the pus of the pyogenic surfaces, and that of the eroded venules. But what shall we say of this mode of argumentation on the part of one, who has made use of the fact that phlebitis is not always discovered after death in pyæmic subjects, to prove that suppurative phlebitis is not the sole cause of pyæmia; and who has condemned, as inadmissible, Bérard's explanation of the cases in which no phlebitis is found, that the inflammation may have been seated in the venous radicles, which, from their smallness, escaped detection?

As I have argued that, if by careful dissection no inflammation can be discovered, the only warrantable conclusion is, that none exists; so I must argue that if all the veins capable of dissection are found closed, it is not warrantable to assume the existence of openings apart from empirical observation. The presumptive evidence is in favour of the belief that cases of pyæmia occur without any solution of continuity, or other diseased condition of the veins.

The fact is, that if Bérard's mode of arguing be objectionable, Sédillot's is doubly so; for, whereas the former only assumes the possibility of phlebitis existing without being capable of detection, the latter assumes the existence of phlebitis, and openings in veins, without the means of proving either.

There is yet one opinion of Sédillot's to which I have to call attention. He states that the presence of pus in blood admits of positive demonstration by the aid of the microscope. The distinction between the corpuscles of pus, and the white ones of the blood, has always been held to be matter of serious difficulty: and a majority of respectable authorities have held it to be impossible to discover the existence of pus in the blood of animals into whose vessels it has been injected just prior to death. Sédillot, on the contrary, speaks of the discovery of pus in the blood of pyæmic subjects as an easy microscopic observation, without in reality giving any character as absolutely diagnostic between the corpuscles of pus, and the white ones of the blood. The fact that he treats so lightly, on a matter acknowledgedly so difficult, is strong presumptive evidence, warranting a right of questioning the validity of his statement.

In two cases which recently came under my notice, the blood carefully examined microscopically by myself, exhibited a large excess of white blood-corpuscles. But it is no use going further into the question, considering the paucity of evidence at hand.

The question of the condition of the blood in pyæmic subjects, must, in the present state of science at least, be regarded as a question *sub judice*, greatly requiring careful research for its solution, and promising a rich harvest to whosoever shall carry it out.

In concluding this critical analysis of opinions,* I cannot

* While these pages have been in the press, I have perused Professor Hughes Bennett's article on Leucocythæmia, in the first volume of the *Monthly Journal of Medical Science* for 1852, p. 331. It gives me pleasure to find that my criticism on Mr. Lee is precisely in accordance with that of Professor Bennett.

* Since writing the above, I have become acquainted with the important observations of M. Velpeau (*Léçons orales de Clinique Chirurgicale*, Bruxelles, 1841). If this essay had any pretensions to completeness, I should feel it incumbent on me to append a digest of the professor's teaching; under existing circumstances, this may for the moment be deferred.

forbear directing attention to the great desideratum for further investigation to which it points. The fact must be evident that the knowledge of this disease is comparatively recent, and that no sooner has attention been directed to it, than writers have been eager in theorizing on its nature without first studying the whole history of its phenomena. Let us inquire accurately into the causes, symptoms, and anatomical characters of pyæmia, and then, but then alone, will be the time to inquire into the *wherefore*. Obvious it is that the prosecution of any other plan than this must expose its followers to the danger, inseparable from being satisfied with a perception of partial truths, and forgetting that a discovery of the whole truth may prove any opinions deduced from prejudice and limited experience to be absolutely fallacious.

A task so incompletely achieved as this of mine is, stands in need of more excuse than I can plead for it. I feel that it is of no use to point in detail to the deficiencies of this paper, because so doing would be equivalent to writing a thesis on pyæmia—to doing, in fact, that which lack of time has prevented me accomplishing, and for not doing which I am constrained to plead indulgence. If, however, I have succeeded in drawing attention to the high import of the subject, and aroused to energetic action in its study, I have accomplished my greatest aim. I have spoken of a terrible and fatal disease, frequent yet almost unknown; and if I have not succeeded in imparting much information, I may at any rate say, that on this part I have not fallen below my aim. I am sufficiently repaid by the reflection that the few truths I have propounded, and the errors I have denounced, may incite some among you to endeavour to add to the former and lessen the number of the latter.

University College Hospital, November 1852.

ILLUSTRATIONS OF THE CAPRICES OF THE NERVOUS SYSTEM.

By M. BROKE GALLWEY, Surgeon, Royal Artillery.

In the Opening Address of the first number of the ASSOCIATION MEDICAL JOURNAL, it was stated that "short and pithy papers on practice and pathology are what are chiefly required". I therefore make no apology for the following *curt* communication, reserving the privilege of commenting hereafter upon the materials of which it is composed.

I. INTERMITTENT HYSTERICAL CHOREA.

A married lady, without children, eminently hysterical, and now and then affording in her own person strange and anomalous illustrations of that mysterious temperament, was attacked at midnight while in bed, and without warning, with sudden twitching of both upper and lower extremities, the muscles of respiration participating so much in the irregular action as to occasion considerable distress to that function. The tongue, however, could be protruded and withdrawn at pleasure, and evinced none of that peculiarity of jerk so characteristic of choreic phenomena in general. Although the muscular movements were limited to what might be strictly called *twitches*, and never rose to the importance of true choreic spasms, they were, nevertheless, exceedingly violent in character, and occasioned so much suffering to the subject of them, as to leave her exhausted, and bathed in perspiration. The attack lasted for three quarters of an hour. Throughout, the mind was clear, and consciousness unclouded. I administered stimulants, and the lady was quite well in the morning. Several weeks afterwards, she had a milder recurrence of the attack while in bed at night.

II. CURIOUS REFLEX PHENOMENA.

A lady, under my care for common cold, which had been accompanied by severe cough, the latter, however, having left her, had retired to her room for the night. She sat for some time by the fire undressed, before betaking herself to bed. Scarcely had she drawn the clothes around her when she was seized with a *sudden* and suffocating cough,

which no change of posture influenced or controlled. After enduring this for half an hour, she rushed out of bed for relief, and *immediately* found it at the fire-side. After a while she went to bed again, when precisely the same thing occurred to her a second time, with the like instantaneous cessation of the cough on again removing to the fire.

As I happened to be in the house at the time, I was summoned to this lady, who, in a casual remark which she dropped on the occasion, enunciated a physiological truth which cleared up the obscurity of the case at once; and this was, that she was certain it was the *coldness of her sheets*, which she felt to be excessive on the occasion, that had given rise to and kept up the cough. I had previously examined the state of the uvula, but found nothing whatever in the condition of that body to warrant my suspicion that the exciting cause of the cough resided there. At length, my patient enveloped her head and mouth in flannel, and returned a third time to bed, without the least recurrence of the cough. Although this last circumstance at first sight might favour the notion that it was to the inhalation of cold air, and consequent irritation of the air-passages, that the cough was in reality due, I have little doubt that the phenomena were true reflex ones, induced by the sudden contact of excessively cold sheets; because, had the air of that part of the room in which the bed stood been sufficiently irritating to originate the cough, it is reasonable to suppose it would not have delayed its operation until my patient had got into bed. At least, I think my physiology as much entitled to respect as that of those who explain the cry of the infant on its first arrival upon "this teeming stage of strife", to be dependent on the play of atmospheric air upon its surface; or of Ambrose Paré's physiology in relation to the cause of the variety of shape in the human nose divine; to wit, that its length and goodness simply depend upon the *softness and flaccidity of the nurse's breast*, and that the flatness and shortness of other noses result from the firmness and elastic repulsion of the same organ of nutrition in the hale and robust!

Devonport, February 17th, 1853.

BIBLIOGRAPHICAL NOTICES.

PRACTICAL SKETCH OF LOW INFLAMMATIONS. By S. F. STATHAM, Assistant-Surgeon to University College Hospital, London. pp. 31. London: 1852.

FEW subjects are more important than that which Mr. STATHAM has chosen to sketch in the present pamphlet; and especially in surgery, his peculiar department; it is absolutely necessary that the practitioner should understand low, or asthenic inflammation, and know how to treat it. The integrity of an organ, or the life of the patient, is often compromised by the injudicious use of lowering treatment, where an opposite system would have secured a happy issue. Mr. Statham has evidently studied this subject with great zeal and care, and his *brochure* contains many interesting observations, especially on the asthenic forms of surgical disease: but had he studied it in the works of others, as well as in the wards of his hospital, we think he would have less lightly appreciated the state of our present knowledge of a subject which has been much more closely attended to than he supposes. "I would claim, therefore," he says in his Preface, "that whenever inflammation is described, a sthenic (or ordinary) and a low type should be given, *which low type has hitherto been insufficiently recognized*." This assertion we refuse to admit; but we do not by any means on that account undervalue Mr. Statham's present contribution. We gladly thank him for much that is interesting in his description of various forms of unhealthy inflammation.

We are not certain that we understand all his *pathological* descriptions; as, for example, those contained in the following sentence:

"Similar pus-corpuscles to those first described occur in the inflammation of inflammatory mortification, and scattered in the serous fluid, ushering the same in its extension. The local signs of inflammation are those of flighty action, or dull, livid, *unimportant-looking* injection; an appearance of imperfect power, as it were, by too great diffusion or by actual want of circulation for the production of—what may justly be called in comparison—a healthy inflammation." (p. 10.)

To some of the opinions contained in his pages, we must demur; as, for instance, that acute rheumatism is one of the few diseases in which venesection is admissible (p. 9); or that the jaundice, so well known to accompany asthenic suppuration of the joints, is connected with hepatitis (p. 23).

The proof of the following doctrine would have been worth the whole pamphlet:

"It does not seem to be preposterous to consider *Asiatic cholera* as an erysipelatous inflammation of the intestinal mucous membrane. Such a supposition explains most satisfactorily all the symptoms and morbid appearances of this fatal disease. This is not a preconceived or *à posteriori* notion, but the best deduction I could make, four years ago, from the results of several months' independent labour." (p. 26.)

We think that diagnostic marks and indications for treatment, more precise than those with which Mr. Statham has furnished us, might be obtained by a closer analysis of the various species of unhealthy inflammation, of which we would suggest the following outline.

Unhealthy inflammation may be asthenic, typhoid, or specific.

ASTHENIC inflammation may be acute or chronic. It has two characteristics: *debility* (always present), which requires invigorating and tonic means, as good food, quina, and iron, even while local depletion may be needed; and (often) *irritability*, demanding narcotics and anodynes, as opium, camphor, and belladonna. The irritability is often the chief feature of the disease. But besides this, another most important division depends on the presence or absence of "*plasticity*" in the blood. Where that exists, as in strumous *iritis*, mercury may be useful, even in the face of great weakness; where it is not present, as in "diffuse inflammation", mercury is a poison.

TYPHOID inflammation is always acute, and always asthenic; but its great peculiarity is its connexion with poisoning of the blood, and the *tendency to coma*, which accompanies it. On these two points depend the utility of "antiseptics", as chlorine, and the frequent inadmissibility of opium.

SPECIFIC inflammation may be sthenic, asthenic, or typhoid, and may depend either on diseases of *malassimilation*, as scrofula; or of *poisoning*, as syphilis. In both, the so-called specific remedies are carefully to be kept in subordination to rational treatment.

Such is the *practical sketch* which we would propose. How difficult to diagnose, and how hard to treat these diseases are, those know best who have most anxiously studied them.

HOMŒOPATHY: ITS GLOBULES [Bubbles?] ANALYZED. By W. J. Cox. pp. 38. London: 1852.

THIS is a brief but very complete exposure of the chief absurdities and knaveries popularly embraced in the term homœopathy. The author proposes, in cheap pamphlets, to give "brief outlines of the most remarkable delusions of the day"; and the sixpenny tract before us is the first of the proposed series. The project deserves the support of the members of the medical profession, who might, at a trivial outlay, do much good by circulating works of this description. Some dupes have not the time or inclination to read, and many have not the power to understand such elaborate exposures of homœopathy as have been so ably furnished by Dr. Alex. Wood, of Edinburgh, and Dr. Routh, of London; but the most volatile, and the most indolent of the victims of modern charlatanism, might be tempted to glean instruction from the short and popular analysis of Mr. Cox.

PERISCOPIC REVIEW.

PSYCHOLOGY IN ITS RELATIONS TO PATHOLOGY, THERAPEUTICS, AND JURISPRUDENCE.

GUISLAIN'S LECTURES ON MENTAL PATHOLOGY.

[*Leçons Orales sur les Phrénopathies*. 1852. Vols. ii, & iii.]

WE continue our analysis of Dr. GUISLAIN'S work from p. 42 of the number for January 14th.

In considering the development of mental diseases, Dr. Guislain has adopted the opinion that barbarous nations present no other form than idiocy; that the proportion of the insane to the healthy population has greatly increased in modern times; and that, upon the principle that all mental conditions must be modified by the manners, laws, and social state of each community, this augmentation is to be traced to the absence of moral tranquillity, to the predominance of the emotions, and to the incessant succession of innovations and organic reforms. The man of the present day never conceives that his mission has terminated; he has a craving for new and powerful impressions; he worships the gold which he covets; and he finds that opulence creates and nourishes the passions. Dr. Guislain attributes still greater importance to the influence of the agglomeration of vast multitudes in cities upon the nervous system; and cites in illustration of his doctrine, that while the town of Ghent is burdened with one lunatic in every 302 inhabitants, the surrounding country presents not more than one in 1,474. In commenting upon the evils of wealth and luxury, he affirms that beggars—professional, hereditary beggars—never become insane. He does not, however, deny that poverty, deficient nourishment, and its other consequences, are abundant sources of alienation. In opposition to the views of Parent-Duchatelet, he holds that prostitution, and the course of life with which it is associated, constitute another fertile cause. But he protests against the dogma of Heinroth, that it depends upon man himself, upon his virtue or his vice, whether he is or is not to become deranged. He endeavours to show that there is no constant relation between crime and insanity; that mental infirmity falls generally upon the pure and the impure; and that it does not especially originate in minds of vicious and degrading tendencies, but also in individuals distinguished for the amenities and dignity of private and public life. He insists much on the prematurity of the present generation; the insubordination to discipline; the impressionability of sentiment; the superficial training and the frivolity of object of our educational systems, as playing an important part among the predisposing causes of alienation, and especially of feebleness and imbecility of intellect. It would appear that, although not obnoxious to this condemnation, the clergy and religious orders in Belgium furnish a larger proportion of insane than the general population. In the Great Beguinage, or nunnery, at Ghent, containing 650 females, twelve are insane, whereas the same number of unprofessed inhabitants of the town would produce only two. Dr. Guislain, in treating of the want of sleep as a cause of mental disorder, attaches greater weight to the anxiety, the fear, and other painful emotions, by which it is accompanied.

Contrary to what might have been expected from the convivial habits of the Flemings, madness arising from intoxication is found to be comparatively of rare occurrence in Belgium. The use of lead, and the abuse of tobacco, and especially of cigars, have, in Dr. Guislain's experience, been productive of insanity. While irregularities of menstruation almost invariably attend the incursion of alienation in the female, amenorrhœa should be regarded rather as a consequence than a cause of the constitutional disturbance. It is worthy of remark, that the non-criminal or involuntary desire to steal is most frequently found in individuals who are pregnant, or where the uterus is in an unhealthy condition. That insanity frequently follows intermittent fevers is conceded; but Dr. Guislain is disposed to controvert the German view, that where malaria exists mania assumes a regular intermittent type. As Dr. Guislain is an acute observer, residing in a marshy district, his evidence is worthy of attention. It is singular that while the connexion of pellagra and skin diseases with insanity is fully investigated, the influence of scrofula and syphilis is dismissed in four lines. The long continued use of iodide of potassium is conceived to have produced the general paralysis of the insane. We are somewhat astonished to meet, in this ample etiology, our antiquated friend *lunar influence*, and upon the authority of Engelken. Those who desire more satisfactory information upon this sub-

ject, we refer to a series of tables in the Annual Reports of the Lancaster Asylum.

Dr. Guislain conceives that the overthrow of reason cannot legitimately be traced to one cause, or to the last of a series, but to external circumstances, or internal changes of varied nature and long in operation. His pathology of this class of diseases may be summed up in the phrase—the painful impression of our moral sense. We do not become insane in the exercise of intellect, in the cultivation of the arts or sciences, or in the most unbridled indulgence of imagination, provided the excitement does not engender hatred, jealousy, or disappointment, and does not affect the means of existence. "Our emotions are at the bottom of the greater number of causes." "Alienation, rightly viewed, is a pain, a phrenalgia." This suffering, in the same way as corporeal pain, induces reaction, which is observed in the loquacity, restlessness, and vituperations of the patient. Dr. Guislain is convinced that the mere expressions of the ideas—the vociferations—act as a moral sedative. Mania may be regarded as a healthy crisis; and confessedly tends more frequently to health than other forms of alienation. He is opposed to the theory which explains mental diseases as the result of visceral irritation; to that which regards them as inflammatory; to that which traces them to poisoned fluids, or to a special condition of the immortal spirit; and he endeavours to elude the necessity of enunciating a theory by identifying them with the neuroses. To whatever explanation we are driven, he conceives that the element of debility must enter into the consideration.

The curability of insanity is inferred to be forty-five per cent. upon the admissions, including among these all cases of relapse; and it is supposed to reach its maximum in mania, and its minimum in delirium, dementia, and affections of the will. In mania, melancholia, and ecstasy, he has been accustomed to regard profuse perspiration, eruptive diseases, hæmorrhages, pulmonary affections, and even the secretion of tears, as critical.

In the treatment of these maladies, our author insists upon rest and tranquillity as the first and even the most effective agent. He does not confine this recommendation to the removal of all sources of moral perturbation and disquietude, to the establishment of moral calm and composure; but enjoins physical immobility, and prescribes the horizontal position and repose in bed: he condemns exercise to the extent allowed in British asylums, and justifies restraint upon the same grounds. To promote this object, prolonged baths are found to be useful in recent cases; in those depending upon suppression of the catamenia; in simple melancholia; in mania-melancholia; and in these forms when associated with diseases of the skin. Dr. Guislain condemns recourse to general blood-letting in every species of mental alienation. Rigid in his exclusion of relatives and friends during the acute or early stage of derangement, as their presence is eminently calculated to agitate and excite, he speaks most favourably of such intercourse towards the decline of the malady, or when it has become chronic, as calming and restorative. He speaks of liberation as a means of cure; and finds that of 336 individuals who were discharged from the asylum uncured, 33 maniacs appeared to have been restored to reason by the act of reunion with their family.

Of the efficacy of religion and worship in leading the mind to healthy views, and in tranquillising those who cannot so be led, he entertains the opinion which is now predominant; but he introduces two specialities, in sanctioning confession and the substitution of religious orders for lay attendants. He "does not hesitate to state, that he recognises in the cenobite hospital-servant such a superiority as excludes all idea of comparison." After quoting the testimony of various superintendents of the insane to the same effect; after discriminating between the influence of monks and nuns who usurp the functions of the physician, and those who prove his willing fellow-labourers and instruments; after contrasting strongly the class from which such recluses spring, the motives by which they are actuated, and the moral training to which their vows have subjected them, with the antecedents and qualifications of ordinary keepers,—he concludes, "the action of such a medicine is superior to that of all other medicines". In establishments directed by religious corporations, it has been observed, we are told, that the insane do not swear, and are infinitely less noisy and insubordinate than where the nurses are mercenaries.

Dr. Guislain comments upon the solitude during night, the cries and turbulence of other patients, and the indifference and inattention of servants, as valid objections to isolation; but he nevertheless attributes 80 out of 100 cures principally to the influence of this agent, or, in more unvarnished phrase, of cap-

tivity. He further broadly claims intimidation as an adjuvant; devotes a chapter to the curative effects of menaces and fear; cites cases in which he had carried out these principles successfully, by threatening patients with destruction, and even by producing the sensation of suffocation; and concludes by enumerating the authority and discipline of the medical governor, seclusion, the douche, immersion, and physical restraint, as the modes in which they should be carried into execution.

It will astonish the psychologists of this country to find that a physician, distinguished by his vast experience, and by his enlightened humanity, should advocate restraint, not as an unavoidable but painful alternative, not merely as the means of facilitating the application of other remedies, but as expedient, justifiable, and curative. He is not ignorant of the practice adopted in England: he boldly enters into the controversy upon the subject, now fortunately terminated; and, in the face of the supposed triumph of his opponents, adduces a number of plausible, if not new arguments and illustrations in favour of mechanical means of economising the strength of the restless, of compelling recourse to the horizontal posture in night-watchers and walkers; in protecting suicides and mutilators from their own designs; in correcting tendencies to nudity, to masturbate, to destroy, and to burrow; and in producing moral impressions.

We find Dr. Guislain equally opposed to the general introduction of amusement as a remedial agent. He admits the utility of the tuition of music, but shrinks from a concert as a heresy, and regards dramatic representation as an absurdity. He looks with jealousy on labour, except in the treatment of mania; and reproaches all violent and even active exertion, in other forms of alienation, as tending to accelerate the circulation, and as inconsistent with that calm which it is his object to establish: yet he admits that indolence and immobility predispose to paralysis, especially in the fatuous; to obesity and constipation in all; and we may add, to local congestion, as well as to mental hebetude and enfeeblement.

Dr. Guislain's principles of classification are founded upon the external condition, rather than the mental state of the patient. He divides the insane into—1, the convalescent, comprehending those approaching sanity; those temporarily lucid, the infirm, and the bed-ridden; 2, the quiet, such as melancholics, ecstasies, tranquil maniacs, the hallucinated, and imbeciles; 3, the agitated, with whom are arranged despairing melancholics, suicides, gesticulators, singers, the loquacious, the restless, etc.; 4, the turbulent and destructive; 5, the fatuous; and 6, the dirty. He signals a great diminution of the latter class on the continent, although, in the establishment under his own care, they have increased. In Britain, it appears, on the authority of the Commissioners in Lunacy, the proportion is 27 per cent.; while in France, 10 per cent. of males, and 12 per cent. of females, is the proportion observed where a suitable diet, ventilation, and judicious supervision, are carefully provided. This class may, like congenital imbeciles, be educated, and restrained to habits of cleanliness and propriety. Where inattention to the calls of nature is the consequence of relaxation or paralysis of the sphincters, great benefit has been derived from the exhibition of the sulphate of strychnia. In Dr. Guislain's hands, this remedy appears to have succeeded in one case only of forty three in which it was tried; and the effect produced is referred, in part, to the other agents employed simultaneously; and was, in all probability, due rather to mental training than to physical invigoration. He most justly regards bed-sores in the fatuous, and in all classes of the insane, as indicating exhaustion of the nervous centres, and peripheral death. In cases of dementia, supposed to depend upon serous infiltration of the nervous tissues, he has found iodide of potassium a most powerful remedy; and even conceives that it has availed in arresting the progress of the congestive stage of softening. He speaks in the same eulogistic terms of the efficacy of vesication, and especially of the application of the antimonial ointment in chronic mania which has continued for some months, and resisted the influence of tepid bathing and other measures. In monomania, he enumerates various modifications of moralisation, of exposing and thereby expelling erroneous ideas, by argument, by repeated demonstration of the truth, by stratagem, and by the introduction of new trains of thought through the instrumentality of occupation, of amusement, and of the cannabis Indica; but he evidently places greater reliance upon the potency of depressing or painful impressions; such as the water-cure of M. Leuret, where the fear of drowning, and the hunger-cure of Hoffmann, where the fear of starvation extorted confessions of error and extravagance, and imparted, it is affirmed, sound and rational views.

This leaning towards heroic treatment, and the preference

mechanical to moral agents, is perhaps explicable on consulting the results of Dr. Guislain's long experience, which have been reduced to a tabular form. Of 100 cures, he believes that 2 might be fairly attributed to douches, depletions, and the use of irritants; 3 to the restoration to liberty; 4 to seclusion; 6 to narcotics; 7 to diet; 10 to hot and cold bathing; 40 to labour and other means of distraction; and 80 to the mere influence of isolation and its attendant circumstances.

MOREL'S ESSAY ON MENTAL DISEASES.

[*Etudes Cliniques. Traité Théorique et Pratique des Maladies Mentales.* 1852.]

THIS is a systematic work which has grown out of a course of clinical lectures delivered by M. MOREL, chief physician to the Mareville Asylum, an institution of large size at Nancy, in France. The author has followed the example of Esquirol and Morison, in giving engravings of many of the patients to whose cases his observations are directed. There are plates of imbeciles with destructive, homicidal, and erotic tendencies: of idiots, maniacs, monomaniacs, and ecstasies. These, however, must be accepted rather as individual portraits, than as pathognomical representations.

In treating of congenital idiots, M. Morel adds to the more familiar features the presence of strabismus; the prominence and irregular shape of the external ear; the absence of the beard; and the prevalence of a bronze or copper colour of the skin. He has found that, in idiots and persons of imperfectly developed mind, as well as in cretins, there is a tendency to hypertrophy of the mammary and thyroid glands. He further records oedema of the inferior extremities, and the exhalation of a disagreeable odour, which no attention to cleanliness can remove, as pathological conditions frequently met with in idiots and imbeciles. Epilepsy is noticed as a frequent aggravation of the misfortunes of these rudimentary beings. M. Morel has observed that, in regions where goitre and cretinism prevail, there is likewise a greater number of idiots and imbeciles than in healthy districts. He likewise regards it as demonstrated, that in those countries where there is the largest number of illegitimate births and of offences proceeding from misery and drunkenness, there will be found the largest amount of mental and physical degeneration. Imitation he regards as the most characteristic power of the limited capacity which partial imbeciles possess, and as that upon which all attempts to educate or to cure must be founded: but he is persuaded that, in conjunction with those feeble rays of intelligence which are observed amid the general darkness, many complicated and rational acts are performed *instinctively*. Among infants affected with epilepsy and partial feebleness of intellect, may be detected those germs, those tendencies, which, if unchecked, are developed into great crimes as well as great virtues.

In considering the etiology of the different phases of mental weakness, and detailing the influence of difficult parturition, the use of instruments, insufficient nourishment, and insalubrious dwellings, he attaches great importance to the pre-existence of deafness. He further states, that deaf-mutes abound wherever imbecility prevails. In an adjoining commune containing twelve hundred inhabitants, fifty families contain members affected with one or more of the congeneric maladies,—imbecility, idiocy, goitre, cretinism, and dumbness. When speaking of fatuity as the consequence of other descriptions of insanity, M. Morel expresses great confidence in the effects of the sulphate of strychnia in cases of incontinence of urine and feces: the other means being cold affusion to the spine and nates; and the internal administration of iron and cod-liver oil. These observations are valuable; because it is believed that at Mareville the class of dirty patients has been reduced to its minimum. M. Morel recounts the restoration of a fatuous patient to reason after the duration of disease for fifty-two years: and of another who, mute and degraded and apparently unconscious for five years, summoned the priest to his bedside, a few hours previous to death, and arranged his affairs in a rational and judicious manner.

In considering the influence of age in the production of derangement, various authors are quoted as supplying instances of the disease in individuals under eleven years. Greding has recorded a case of destructive mania, in an infant of eighteen months. Homicidal mania is described as occurring at eight years of age; pyromania as occurring chiefly between fifteen and eighteen, and in females; and suicidal mania as having been observed at twelve. Thirty-one children are reported to have committed suicide in Berlin, between 1812 and 1821.

At this point is detailed an epidemic theomania, which affected

children and youths in the thirteenth century. It is called in history the children's crusade. The apostle was a shepherd boy. His delusions, that he was the inspired messenger of God, and that his mission to preach a crusade was recognised and revered by the genuflexions of the sheep intrusted to his care, found a response in the fervid piety of the age. He received the *oriflamme* from St. Denis; and thirty thousand children of both sexes, of various ages from eight to twelve years and upwards, of princely as well as peasant nurture, rushed to his standard, with an unanimity of impulse and disregard of ordinary and prudential and intelligible considerations and motives, only seen on such occasions. The voices of home were drowned in the cry of "Jerusalem"; parental authority was defied in the wild instinct of imitation and of vague superstition: the mirth and games of childhood disappeared in the shadow of the Holy Sepulchre; and enthusiasm gave a sudden but morbid maturity of purpose and fortitude, and of physical strength, to the plastic but undeveloped powers of infancy. Want, disease, and death, decimated these bands of schoolboys during a march of many hundred miles; but, on arriving at the Mediterranean, they still cherished the delusion that the sea would recede, and its bottom be to their footsteps as dry land. Visions, prodigies, and imaginary miracles abounded among the delirious host; and the excitement was accompanied by chorea, convulsions, and other nervous affections, which have been observed in similar religious epidemics. This romance of disease is more fully described in the last number of the *Journal of Psychological Medicine*, p. 118, in a translation, it is presumed, from Ideler; and in Vol. III., p. 441, of Robson's translation of Michaud's *History of the Crusades*.

REPORTS OF SOCIETIES.

ANNIVERSARY MEETING OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY,

TUESDAY, MARCH 1st, 1853.

A few minutes after four o'clock, Mr. HODGSON, the President, took the chair, and announced that the ballot was open. Amidst some confusion from members going forward to deposit their printed lists in the balloting-box,

Dr. O'CONNOR said that, before the ballot proceeded, he wished to ask a question, viz., whether a current rumour were correct, that a gentleman, occupying a distinguished position in the profession in London, was solicited by the Council to be announced as their nominee for the new Council; and that, although he consented, the nomination list, to his astonishment had appeared without his name. Dr. O'Connor wished to know if the report were correct; and if so, upon what ground exclusion had been resolved upon at the eleventh hour?

Mr. CHARLES HAWKINS protested against the time of the Society being occupied with what he thought was an irrelevant discussion. It would be a most inconvenient and a most improper course, to allow the qualifications of candidates, and the motives of the Council, to be made subjects of discussion.

Dr. CORMACK, without the slightest reference to motives or persons, wished to repeat the question of Dr. O'Connor, in such a way as would enable him to know whether gentlemen could be eligible as Fellows of the Society, and yet be ineligible as Members of the Council. He therefore respectfully asked, whether any Fellow was ineligible as a Member of Council? He did not wish to ask the question with reference to the comparative merits of individuals, but simply as one regarding the constitution of the Society, and the privileges of Fellows.

The PRESIDENT said that, without any disparagement to the eminent individual referred to, he had no objection to state, as his opinion, that there were some Fellows in the Society who ought not, from various causes, to be placed upon the Council.

Dr. BASHAM (one of the Secretaries) read a passage from the charter, relating to the election of Members of the Council.

Dr. O'CONNOR observed that, from what the Secretary had read, the exclusion of the gentleman to whom he had referred—a gentleman highly esteemed and respected by all who knew him—was undoubtedly a vote of censure upon him. His (Dr. O'Connor's) object in referring to the matter at all, was to expose the improper manner in which the Council of the Society was nominated. The objection which was made to Professor Murphy—his not having a London title—held good against a nominee of the Council, Dr. Balfour.

The PRESIDENT believed that Dr. Balfour was a Fellow of the College of Surgeons of England, and was therefore in a different position from Dr. Murphy, who did not belong to a London College.

Mr. QUAIN thought that he had a statement to make, which might smooth the troubled waters. He had taken part in the discussions on this subject at the Council Board; but with what he had there said, it was not his intention to trouble the Society. He wished, however, to state, that he had had some communication with the individual first referred to by Dr. O'Connor, and that gentleman had said that, if the rules of the Society excluded those who did not possess an English qualification, the decision of the Council was a correct one.

The PRESIDENT asked Dr. O'Connor if he intended to propose a resolution on the subject.

Dr. O'CONNOR replied that it was not his intention to do so. The object he had in view was gained; viz., to expose the highly improper and unwarrantable acts of the Council in the nomination of officers.

After some remarks from the PRESIDENT and Mr. CHARLES HAWKINS, the subject was allowed to drop; and Members were requested to deposit the lists in the ballot-box; the balloting being allowed to go on till five o'clock. In the meantime, the other business proceeded.

TREASURER'S REPORT. The following is an abstract:—

RECEIPTS.—*Ordinary Income.*

	£	s.	d.
300 Annual Subscriptions	945	0	0
27 Admission Fees	170	2	0
3 Composition Fees for Transactions	18	18	0
2 Ditto, in lieu of further Annual Payment	10	10	0
Fines	4	1	0
Longman and Co., for Transactions sold	86	9	2
Interest on Stock	61	5	11
Rent of Stable, and Rent from Society of Widows, etc., of Medical Men (half-year)	56	2	6
	£1,352	8	7

Extraordinary Income.

Stock sold by order of the Society	246	17	6
Sale of back Volumes of Transactions	27	13	0
	274	10	6
	£1,626	19	1

Payments	1,627	2	6
Receipts	1,626	19	1

PAYMENTS.—*Ordinary Expenditure.*

House—Rent, Rates, and Taxes	207	3	2
Lighting and Coals	37	10	5
Repairs	16	14	4
Stationery and Accountant	34	8	3
Petty Cash	73	6	0
Sub-Librarian's Salary	140	0	0
Page—Wages and Clothes	45	10	6
Library	217	17	11
Transactions—Vol. xxxv.	256	5	10
Investment of Composition Fees	10	10	0
	£1,039	6	5

Extraordinary Expenditure.

Debt to Treasurer from last Year	283	11	1
Furniture—Bookcase, etc.	59	15	0
Purchase of Stock, in addition to 10l. 10s. above stated	244	10	0
	587	16	1
	£1,627	2	6

REPORT OF THE COUNCIL. The Secretary then read the Report of the Council, which represented the affairs of the Society as in a highly prosperous condition. Fewer members than usual had entered; but this circumstance was explained by supposing that the new method of electing Fellows had not become generally known.

Mr. CHARLES HAWKINS thought that this was a proper occasion for calling attention to the method of admitting Fellows to the Society. According to the present plan, practically it was necessary to vote for all or none. After some observations upon this subject, he concluded by moving a recommendation to the Council to consider the propriety of balloting for candidates individually, and not collectively.

After some discussion, the terms of Mr. Charles Hawkins's recommendation were modified in this way: that the Council should be requested to take the whole subject of the election of Fellows into consideration.

PRESIDENT'S ADDRESS. After congratulating the Society on its present prosperous condition, he gave biographical sketches of the Fellows who had died during the year: viz., Mr. Vincent, Mr. Dalrymple, Dr. H. Mayo, Dr. George Gregory, Dr. Pereira, Dr. John Taylor (of Huddersfield), and Dr. Merriman.

After the President's address, the result of the ballot was declared:—

PRESIDENT: *James Copland, M.D., F.R.S. VICE-PRESIDENTS: James Alderson, M.D., F.R.S.; *Thomas Alfred Barker, M.D.; *Martin Ware; *Benjamin Phillips, F.R.S. TREASURERS: Robert Nairne, M.D.; Richard Quain, F.R.S. SECRETARIES: William R. Basham, M.D.; *Holmes Coote. LIBRARIANS: Henry Pitman, M.D.; James Dixon. OTHER MEMBERS OF COUNCIL: *Thomas Addison, M.D.; Thomas Graham Balfour, M.D.; *George Chaplin Child, M.D.; *William Dingle Chowne, M.D.; *Mervyn A. N. Crawford, M.D.; William Bowman, F.R.S.; John George French; *James Randal Martin, F.R.S.; Edward Stanley, F.R.S.; Thomas Tatum.

NEWS AND TOPICS OF THE DAY.

MUNIFICENT GIFTS TO MEDICAL INSTITUTIONS. M. ORFILA has read the following letter before the Academy of Medicine of Paris:—"I do not wait, as is generally the rule, till death has removed me from among you, to assign the sum of £4,800 to different public establishments. I have two reasons for acting thus: first, because it is of some importance that the institutions to which I refer should as soon as possible reap the benefit of the donations which I am offering; and secondly, because I thought that my presence would be of some use to overcome any difficulties which might arise during the carrying out of my plan; or perhaps in order to modify the latter, if the necessity of doing so were clearly demonstrated. I shall not attempt to enter into the reasons which have induced me to give the preference to certain institutions over others; it will be sufficient for me to state, that by giving £2,400 to government for the completion of the museum which bears my name, it is my intention to endow France with a scientific collection which will be unparalleled; and also to afford students in medicine a new proof of the sympathy and good-will with which I have always regarded them. I am also anxious to show them how grateful I feel for the very flattering attention they invariably have given to my lectures for the last thirty-four years. I am anxious, for this reason, that no misapprehension should exist regarding my motives; and have directed the following inscription to be placed over the principal entrance to the museum:—

"To Students in Medicine. I founded this Museum, in 1845, for promoting medical studies, and solely to be useful to yourselves." ORFILA.

"I have thought it right to found a small annuity in favour of the keeper, who has always rigidly attended to his duties. I also institute two prizes, one to be given by the Academy of Medicine (£80), the other by the School of Pharmacy (£40), on subjects which have fixed my attention all through life. I have thus no other ambition but that of serving a science to which I have always remained faithful, without allowing myself to be led astray by politics. I give to the Preparatory Schools of Bordeaux and Angiers, £40 to the former, and £88 to the latter, to show how I approve of this kind of schools, which were organised upon a proposal of mine. To the Benevolent Medical Association of the Department of Seine, I give £16 a year, in proof of the high estimation in which I hold this society, which I am proud of having founded in 1833."

M. Orfila mentioned various other acts of kindness and benevolence, of smaller importance, and received at the end of his discourse the hearty and unanimous applause of the members present. The Academy decided that thanks should be tendered to M. Orfila by a deputation.

* Those gentlemen to whose names an asterisk is affixed, were not at the Council last year, but most of them have been on it in former years, and very frequently.

NORTH PANCRAZ PROVIDENT DISPENSARY FOR THE INDUSTRIAL CLASSES. The third annual meeting of this institution was held on the 28th January last, at the Dispensary in Hawley Crescent, Camden Town; the Rev. David Laing, M.A., F.R.S., Treasurer, in the chair. From the report presented by the Secretary, it appeared that the institution has been making satisfactory progress. 251 members' cards have been issued during the past year, and the present number of members amounts to 960. The donations and subscriptions of the public in aid of the society, amounted, during the year, to £94:3:3; the members' payments to £258:11:5; total, £352:14:8. The expenditure has been as follows:—General working expenses, £119:15:2; medical department, £231:4:1; total, £350:19:3. During the year, there were 1891 medical cases, and 69 midwifery cases: the deaths were 18. A special general meeting was directed to be called, for electing an additional medical officer, and an honorary consulting physician, in room of Dr. George Gregory, deceased.

NEW EQUITABLE LIFE ASSURANCE COMPANY.

The following is the published Report of the Directors, read at the Second Annual General Meeting of policy and shareholders, on Thursday, February 17th, 1853; Sir Charles Hastings, M.D., D.C.L., in the Chair.

The Directors of the New Equitable Life Assurance Company, in presenting their Second Annual Report to the policy and shareholders, feel that they have only to describe the extent of business actually transacted by the company, to demonstrate most conclusively its triumphant and unparalleled success.

The New Equitable Life Assurance Company, having been completely registered, commenced operations on the 1st of February, 1851. Between that time and the 31st December, a period of eleven months, the directors issued 308 policies for the sum of £98,500. The annual premiums on these policies amounted to £3,483.

During the whole of that period not a death occurred amongst the assured.

From the 1st of January, 1852, to the 31st of December, 1852, the directors received 420 proposals to assure £202,845. Out of this number of proposals, 369 policies were issued, assuring the sum of £180,355. The remaining proposals, for assuring £22,490, were either declined by the directors, or were not completed at the end of the year. The annual premiums payable upon the 369 policies issued in 1852, amounted to £7,169.

The only claim made upon the company during the year 1852, was one for £300 in December. Thus, no claim occurred until one year and eleven months from the date of the establishment of the company.

The entire number of proposals received from the date of the first policy in February 1851, to the 31st of December, 1852, was 834, for assuring £349,122. The number of policies actually issued in the above period, was 677, for assuring the sum of £278,855; and the income derivable from these policies in premiums amounts in the whole to £10,652:12:2 per annum, the average amount of each policy being £411.

The directors may be allowed to add, that in no like period of time since the establishment of the company, has the number of proposals been greater than from the 1st of January, 1852, to the present date. The number of lapsed policies has been few, and of inconsiderable amount, during the past year; and, indeed, from the commencement of the company, the same remark applies.

The directors may point to the number of proposals either declined by them during the year, or still remaining under consideration, to show that every care has been taken in the selection of lives. This is further proved by the fact, that the single death which occurred amongst the large body of policy-holders, during a period of nearly two years, has been greatly below the average even of selected lives.

The distinguishing principle of the New Equitable, since its original foundation, has been the recognition of medical testimony as the most substantial and certain basis for all life assurance transactions. The directors have found the best proofs of the soundness and wisdom of this principle; on the one hand, in the daily increased importance attached to medical opinions by life offices which had hitherto refused all remuneration to medical practitioners for their reports; and on the other, in the zealous and powerful support the New Equitable has received from the medical profession. They may also observe, that additional experience has but confirmed the value which, from the first, they attached to their system of medical evidence.

After reflecting most patiently and deliberately on the nature of medical testimony, and the influence it must ever exercise in conducting life assurance proceedings to safe and successful results, the directors determined on consulting the medical attendant of the party proposing the assurance, if a legally qualified practitioner, as the medical adviser of the board, and on awarding an adequate consultation fee for every medical report. An ample experience now enables the directors to refer, with feelings of peculiar satisfaction and pleasure, to the highly important precedent thus established by the New Equitable Life Assurance Company.

In the progress of this company to its present unquestionably high position, the directors have necessarily encountered the difficulties and obstacles which a field crowded with able and active competitors was sure to furnish. But, experiencing daily the confidence of the public, and, above all, of the great body of the medical profession, the directors felt every encouragement to advance, and they now refer to the detailed history of the transactions of the company for the best proofs of the success of their labours.

In the month of November last, the period having expired for which the late chairman of the board had undertaken to occupy his office, the directors being anxious to elect a president whose position, character, and attainments commanded the respect of the profession, addressed the following requisition to Sir Charles Hastings:—

449, Strand, Charing Cross, London, Nov. 4, 1852.

To SIR CHARLES HASTINGS, M.D., D.C.L., &c. &c. The chairman of the New Equitable Life Assurance Company, much regretting that his professional avocations, coupled with an engagement at another life office, where he was recently elected to succeed the late Sir Charles Forbes, as physician, made it incumbent upon him to resign his present office, had the pleasure of proposing at the board on Thursday last, the 28th day of October, the following resolution:—

Moved by the chairman, Robert Lee, M.D., F.R.S., seconded by Thomas Wakley, Esq.—That Sir Charles Hastings, M.D., D.C.L., be requested to favour the directors by accepting the office of Chairman of the Board of Directors of the New Equitable Life Assurance Company, an office about to become vacant by the resignation of the present chairman; and that a requisition, signed by the chairman and every other director, be presented to Sir Charles Hastings, expressed in such terms as the board may think proper.—Carried unanimously.—Entered on the minutes.

In conformity with the spirit and terms of this resolution, we, the undersigned, consisting of the entire Board of Directors, now request that you will confer upon the New Equitable Life Assurance Company, the honour and advantage which must arise from your becoming the chairman of the board. It is proper that we should state, that, although the company has been established for only the short period of twenty months, its income exceeds £9,400 per annum; and, from the promises of support and encouragement which the directors are continually receiving, they believe that few life assurance offices will issue a greater number of policies than the New Equitable in future years. It is right also that you should be informed, that when this company was established, the directors resolved to act upon the principle of regarding medical testimony as the safest guide in forming a judgment relative to the conditions on which policies should be granted. They, therefore, unhesitatingly recognised the practitioners named by the proposers for assurance as the medical advisers of the directors, who have considered it to be a conscientious duty, to award the medical gentlemen thus consulted, an adequate fee for every official medical report.

An experience of twenty months' duration, has been sufficient to convince the directors that the course of policy which they determined to adopt, was founded on correct premises, the results having been in the highest degree gratifying.

You, Sir Charles, by accepting the office of trustee, sanctioned the principles which were adopted for regulating the proceedings of the company; we, therefore, hope that you will readily consent to become more closely connected with its management and successful operations, by occupying the highest appointment that the directors can confer.

Being fully aware of your high personal character, unsullied reputation, and intimate professional connexion with a vast number of the most respectable members of the medical profession practising in this country, we believe that your acceptance of the presidential chair, at our board, would be of signal advantage to the interests of the company, and would also have

the effect of facilitating, in a very great degree, the recognition, by other and long-established life assurance companies, of the just claims of the members of the medical profession.

As we are strongly impressed with these views and opinions, we conclude by emphatically and respectfully requesting that you will honour the company by accepting the office of Chairman of the Board of Directors.

(Signed) ROBERT LEE, M.D., *Chairman*.
GEORGE BEAMAN, *Deputy Chairman*.
And all the other Directors.

The directors heartily congratulate the policy and shareholders on the success of this application. Sir Charles Hastings is now the Chairman of the Board; and since his election a local board has been established, under his auspices, at Worcester, under the title of the "Worcester City and County Board of the New Equitable Life Assurance Company."

The directors have much pleasure in placing before this meeting the testimony of F. G. P. Neison, Esq., the justly distinguished actuary; a testimony given after a careful inquiry into the affairs of the New Equitable:—

25, Pall Mall, London, 31st January, 1853.

I have carefully examined the balance sheet of the New Equitable Life Assurance Company, containing a statement of the receipts and disbursements for the year 1852; and having regard to the unusually large amount of business transacted by the company in its second year, the current working expenditure appears to me to be very moderate; and, in fact, I do not see how, consistent with the effective management and extension of the company's business, the general expenses could be safely lessened.

I have also attentively examined the other documents submitted to me by the secretary, showing the nature and extent of the assurances effected; and from these I consider the progress of the society most satisfactory and encouraging.

(Signed) F. G. P. NEISON, *Actuary*.

The directors cannot conclude the present report without most sincerely congratulating the medical profession, and the policy and shareholders, on the prosperous condition of the New Equitable Life Assurance Company.

(Signed) CHARLES HASTINGS, M.D., *Chairman*.

17th February, 1853.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were members of the Association.]

BRYANT, Edward, Esq., surgeon, at 44, Acacia Road, St. John's Wood, aged 70, on February 27th. He had been fifty-two years a member of the Royal College of Surgeons.

DALTON, William, M.D., at Lowther Street, Carlisle, aged 35, on January 11th.

FARISH, James, M.B., at Lancaster Place, London, on February 19th. He was the eldest son of the late Professor Farish, of Cambridge, whose mathematical ability, and intimate acquaintance with the laws of physics and their practical application, were possessed by his son. After graduating in arts at Cambridge, he completed his surgical education at St. Bartholomew's Hospital, acting as dresser to Mr. Lawrence, and subsequently as his house-surgeon. He afterwards obtained a highly respectable practice in London. He was one of those who paid as much attention and care to the poorest as to the highest. Mr. Farish was an exact classical scholar, and a deep mathematical one. He was well read, and of large general information; his mind was clear, discriminating, and argumentative. He was the intimate friend of many distinguished scholars and men of note. But the highest parts of his character were his delicate conscientiousness, his *incorrupta fides*, his *nuda veritas*; and a warm heart tempered the natural sternness and self-reliance of his character. His last illness was long, and some of its symptoms very distressing; but he bore it with fortitude, and looked forward to its termination with a serenity founded on Christian faith. He was a close and critical student of the Bible; and his religion was not merely speculative, but was firmly founded on the careful study and constant practice of its duties.

*SIBBALD, William, M.D., at Maidstone, aged 63, on February 15th. Dr. Sibbald graduated at Edinburgh in 1809, and in August 1810, entered the medical department of the army. During the campaigns of 1813 and 1814, he served in the Peninsula, being present at the battles of Orthes and Tou-

louse. In June 1814, he accompanied the expedition to New Orleans; and on his return in 1815, joined the army at Brussels, soon after the battle of Waterloo. In this year he became Staff-Surgeon. In 1817, he went to the Mauritius; and, after a few years, he proceeded on promotion as Deputy Assistant-Inspector to Ceylon. On retiring, in July 1833, with the rank of Physician to the Forces, he settled at Maidstone; and was soon afterwards appointed Physician to the West Kent Infirmary, the duties of which office he discharged till a week before his death. He was also Visiting Physician to the Kent County Lunatic Asylum, and Consulting Physician to the Kent Ophthalmic Hospital at Maidstone. He had received the war medal with three clasps.

SMITH, Francis, M.D., lately, in London, aged 48.

*WINTLE, Frederick Thomas, M.D., Resident Physician to the Warneford Asylum, Oxford, at Cheltenham, aged 50, on February 14th.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. X.

LONDON: FRIDAY EVENING, MARCH 11, 1853.

NEW SERIES.

THE GROWING ABUSES OF HOSPITALS AND DISPENSARIES.

IN a recent number (Jan. 28), we directed attention to the manifest and growing evils of the present hospital and dispensary system, more particularly to those which arise from abuses in the administration of the out-patient department. We have reason to know that, in various localities, our remarks have produced the desired impression, and are beginning to be productive of good. We are, therefore, encouraged to return to the subject. The abuses connected with hospitals and dispensaries cannot, however, be remedied by the pen of an editor: they must be *practically dealt with, in every part of the metropolis and of the provinces, by those who are sufferers from the present system.* A number of judicious efforts, made simultaneously, will avail much; and the exertions of a well-conducted and energetic society might ere long be crowned with success.

If the present system of indiscriminate medical relief is to go on increasing as it now does, the profession will no longer retain its present high position. The only competent practitioners in our larger towns will soon be the fortunate few, who are attached as physicians and surgeons to the charitable institutions; while the younger professional aspirant will find that he is utterly excluded from the field, as those patients to whom he very naturally would have looked as the founders of his success, have become the recipients of the gratuitous advice and medicines of a public charity. The fault lies not in the medical officers, but in the system; for how is it possible, in a large town or city, the centre perhaps of a populous manufacturing or agricultural district, for the medical officer to detect persons who are able to pay? The task would be impossible; and the attempt would be most invidious. It is the system itself which is in fault. The out-patients' rooms require a vigilant supervision; and no person should be admitted to the benefit of a medical charity, either as an in-patient or out-patient, who does not bring a certificate from a known subscriber, a clergyman, or a specially authorised inspector, of inability to pay for medical attendance. The system adopted by the "Destitute Sick Society of Edinburgh", is well deserving of imitation. The town is divided into districts, and each district has its own inspector, whose duty it is to make an inquiry into the circumstances of every case; and, after some experience, this duty is not found to be so difficult as at first it may appear.

The number of those who resort to hospitals and dispensaries is incredible, when we consider the population of the places in which they are situated. Let us take an example. In our number for February 11th, we gave a short report of the proceedings at the annual meeting of the "Bath United Hospital", from which it appeared that 13,976 patients had been under treatment during the year 1852. Now, Bath itself contains a population of 54,240, to which if we add 10,000 for the population of the villages in its immediate neighbourhood, we shall find that one person in every four was supplied with gratuitous advice and medicine at one

only of its medical charities! But there are no fewer than seven other general and special dispensaries in Bath, enumerated in the medical directories.* Bath only affords a specimen of that which is going on in every town and city. If our fellow-associates will assist us by collecting the materials, we shall be glad to publish well digested returns from the principal towns of England and Scotland—more ample, if possible, but upon the same plan as that which we have now selected as an illustration.

The medical profession is at this moment, we aver, victimised and cheated by a "charitable public". Charity begins at home; and we are but defending the rights of our own body, and protecting the public against themselves, by lifting up our voices against a system which, if it be not suppressed, must in a very few years destroy the profession, by limiting the recipients of its emoluments to a lucky minority. Let us then maintain the just rights of our profession, let us pursue a straightforward, fearless, and honest course, and, in every locality where the evil is spreading, let the whole of the resident practitioners remonstrate with the governors of hospitals and dispensaries against the heavy evils which they are inflicting under the guise of philanthropy;—*first*, upon mechanics and minor tradesmen, by destroying in the bud the growth of providence, and inducing habits of extravagance in place of cherishing frugality; and *secondly*, upon the profession, by despoiling the many, without enriching the few. And let us diligently keep the subject before the public by means of the London and provincial press.

If hospital managers persist, in spite of all remonstrances, in the present indiscriminate system of relief, let them remunerate their medical officers; and let every hospital and dispensary staff claim this remuneration. The eager canvassing for honorary medical appointments tends to lower the proper value of our services to the public: and let it never be forgotten that the physician or surgeon who cringes to the governors of an hospital, not only demeans himself, but at the same time robs and dishonours his profession.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY, AND ITS NON-REPUDIATION OF HOMŒOPATHY.

WE find by numerous letters which we have received from the country, that the provincial physicians and surgeons were not generally prepared for an announcement incidentally made by us last week—to the effect, that certain homœopathic gentlemen, avowed seceders from the ranks of legitimate medicine, were still allowed to remain on the list of Fellows of the Royal Medical and Chirurgical Society. We are anxious therefore to state, on behalf of the profession in the metropolis, that the Society has never yet had an opportunity of deliberating upon this most anomalous

* Vide p. 650 of the *London and Provincial Medical Directory* for 1853; and p. 516 of the *British Medical Directory* for 1855.

lous and painful fact; and that the whole responsibility lies with the Council of allowing the institution which they govern, to stand alone among the other medical societies of the kingdom, in not protesting against the puerilities of homœopathy; and in neither ejecting nor censuring colleagues for openly engaging in this and other forms of practice, which are alike opposed to all medical experience and sound professional ethics. There is every reason to believe, that were the Royal Medical and Chirurgical Society to be allowed by the Council to discuss the subject, an opinion would be declared similar to that which was adopted almost unanimously by the sister society of Edinburgh, and which the Provincial Medical and Surgical Association adopted at the Brighton meeting without one dissenting voice, as absolutely essential to the maintenance of its honour and respectability. Whenever a Council shall be freely chosen by the Fellows, then, we venture to affirm, will the Society take rank with kindred institutions, as a repudiator of homœopathy. The Society is under the influence of general professional opinion; but the Council, from its exclusive, and we may say, self-elective character, cannot easily be benefited by this healthful agency; and hence (to repeat the burden of the remarks which we made last week), it is essential for the peace, prosperity, and internal discipline of the Society, that in accordance with the letter and spirit of the charter, the nomination and election of the executive shall be made by the Fellows; and farther, that the majority of the Fellows shall be able, without the intervention of an obstructive barrier, to deliberate upon any subject which concerns its reputation. This, however, can never be brought about, so long as it continues to be painfully felt by many gentlemen when admitted to the Fellowship, that integrity, professional honour, and the highest amount of scientific labours are not in themselves sufficient passports to promotion; and that a preference is given at the Council Board to those who belong to certain colleges and even to certain hospitals. This distressing statement is not a new one; and we regret to add that it admits of ample historical proof.

Nothing can more forcibly illustrate the impropriety of allowing a fractional body, deliberating with closed doors, and regulated by arbitrary unwritten rules, to exclude from nomination those who, from seniority on the list of Fellows, and blameless character, are entitled to be presented for election, than a circumstance which has transpired since the date of our last publication. It appears that the President spoke from erroneous information, when he stated his belief "that Dr. Balfour was a Fellow of the College of Surgeons of England, and was in a different position from Dr. Murphy, who did not belong to a London College". Dr. Balfour is not a Fellow of any Royal College of Surgeons or of Physicians, so far as we can discover; and that he is not a Fellow of the College of Surgeons of England, is satisfactorily established by the following official letter from Mr. Balfour, the Secretary of that College, which has been forwarded to us for publication.

" College of Surgeons, March 2nd, 1853.

" Sir,—In reply to your inquiry, I have to acquaint you that Mr. Thomas Graham Balfour, of the Royal Military Asylum, Chelsea, is not a Member or Fellow of this College.

" I am, Sir, your most obedient servant,

" EDM. BELFOUR."

The remark of the President, taken in connexion with this proof of its inaccuracy, indicates that the undoubted claims of Dr. Balfour would have been ignored by the

Council, had it been known to them that he had no English title; and it is thus made to appear to the profession, that a Fellow worthy of honour has only been honoured by accident!

CHEMISTRY, AND THE CLAIMS WHICH IT HAS UPON OUR ATTENTION.

In the summaries of the progress of Chemical Science, which from time to time we shall lay before our readers, our objects will be; firstly, to notice, and where desirable, to criticize whatever discoveries are made, or theories are broached in this branch of Natural Philosophy when bearing upon the ordinary pursuits of the medical practitioner; secondly, to sketch in rough outline the more recondite researches of those students of nature who have devoted themselves to the investigation of the difficult problems involved in the study of physiological and pathological chemistry, with animal electricity and its cognate subjects; and also, whenever the subject is of more than ordinary interest, to notice the discoveries made in those departments of chemical and electrical science not directly connected with medicine.

We have deemed it advisable to classify, and bring together under distinct heads whatever has been discovered or propounded in medical chemistry during the last few months of sufficient importance to merit attention; and we have studied to set forth a systematized account of the discoveries and observations lately made by many experimenters on special and individual subjects, somewhat in the manner of a report on each subject, and to treat of these in orderly rotation, as our space will allow, rather than to seize upon and notice forthwith the latest discoveries merely because they happen to be the latest. Our purpose is, not only to bring under the notice of our fellow-associates the discoveries made in a given subject in connexion with each other; but also to furnish them with a condensed collection of facts on each subject which may hereafter be useful to them for reference, and save them the annoyance of hunting through many numbers to discover the sought-for object.

In our notices involving theoretical disquisitions, we shall strive to avoid, whenever possible, the employment of very novel chemical terms: and when the employment of any well known word will not convey the desired idea, we shall add whatever explanation may appear desirable for the information of readers unversed in modern chemistry, even at the risk of laying ourselves open to the charge of tediousness from those whose acquirements have kept pace with the progress of the science.

NO TRUE BILL AGAINST MR. HICKS FOR MANSLAUGHTER.

WHILE we rejoice that Mr. Hicks has at last obtained justice, we regret that no punishment can be inflicted upon his relentless accusers. The proceedings at the Bedford Lent Assizes are reported in another page, where enough appears to exhibit the malignancy of the prosecution; but we are sorry that the case did not go forward to the proof, as we learn from a correspondent that there was no evidence to show that the diagnosis made by Mr. Hicks during the life of the patient, was more inaccurate than that which

was formed after death by the surgeons who made the *post mortem* examination. From the great demands upon our space, we regret that at present we cannot print the letter to which we refer.

After some very appropriate remarks by the Lord Chief Baron (Sir F. Pollock), the Grand Jury returned—"No TRUE BILL AGAINST MR. HICKS FOR MANSLAUGHTER".

UNIVERSITY REPRESENTATION IN PARLIAMENT.

THE Parliamentary Representation of Universities is a question entirely distinct from that of the parliamentary representation of the medical profession; and we are inclined to think that the commingling of the two in public discussions is likely very materially to injure both causes. The representation of universities ought to be advocated with a view to secure the equal representation of everything that is in them—of literature and science in general, and not of medicine in particular; and, on the other hand, the representation of the medical profession ought, if it be agitated for at all, to be candidly espoused upon its own special merits. The chance of medicine, or even of London medicine being represented in Parliament by the University of London, is visionary in the extreme; and if indeed such an idea had any plausibility, we might ere now have heard it urged as a valid objection to the enfranchisement of that institution. The just claim to representation set forth by the University of London is very much weakened, in place of being in any degree strengthened, by an exaggeration of the probable influence in elections of its medical element: and to aim at medical representation, by swallowing up university representation, is only to obstruct the march of the cause of the universities, without in the least advancing our own.

We regret very much that an agitation for the parliamentary representation of the Scottish universities does not proceed *pari passu* with that which is at present so vigorously carried on by the graduates of the University of London on behalf of their Alma Mater. The universities of Scotland educate upwards of three thousand five hundred men for the higher walks of literature and science, and for the literary and scientific professions; and it is very clear, that if the Metropolitan University has a right to be represented in Parliament, the Scottish universities have a stronger claim. As the claims of both, however, though of a similar character, are in no degree antagonistic, we advise cooperation, feeling convinced that in any parliamentary reform which involves an appreciable change in the constitution of the House of Commons, the united efforts of the unrepresented graduates could not fail to obtain two members for London and more than two for Scotland, while we are equally sure that nothing will be given to the one which is withheld from the other.

The objection, that Scottish graduates have nothing to say in the government of their universities, appears to us to be wholly irrelevant. It was all very well, and very natural, for Mr. Disraeli to make a handle of such a crotchet, because a minister of the crown requires to be constantly looking out for objections wherewith to stem the pressure of parties clamouring for favours; but it is a very odd thing for an unfettered friend of university representation to attach the slightest value to the objection.

The following appears to be the true state of the question.

Is it desirable that great Universities should have their interests represented in Parliament, in common with those of other important bodies in the state? Is it desirable that the science, the literature, and the education of a civilized country should be represented? If both of these questions be answered in the affirmative—and an affirmative answer will undoubtedly be given by the great mass of the educated classes in the British dominions—then, in what better way can these objects be secured, than by means of representatives, chosen by individuals who have been so long and so thoroughly educated at the Universities, as to have carried off literary or scientific honours? And what does it signify to the interests of the country, or of the Universities, or of literature and science, whether such a constituency—provided it be large enough—have or have not a word or two to say in University Government? It might, as Dr. SNOW BECK suggests, be a very proper thing to incorporate the graduates of the Scottish Universities, and the graduates of the University of London, with their respective universities, bestowing upon them at the same time certain rights and privileges; but we cannot see the slightest reason why the want of this incorporation should either prevent or delay the enfranchising of the graduates of the unrepresented universities.

ORIGINAL COMMUNICATIONS.

ILLUSTRATIONS OF DISEASES OF THE HEART AND AORTA.

By R. HUTCHINSON POWELL, M.D.

THE following cases, hitherto mostly unpublished, of cardiac and aneurismal diseases, will serve as types of those affections, and afford an opportunity of glancing at recent views regarding their physiological and pathological relations and their treatment. The narratives are, for the most part, condensed from the minutes of statements made by the relators, with a view to discussion; and, therefore, are not so full as they might have been if designed for publication. With the responsibility attached to the commentaries I am alone chargeable.

I. ILLUSTRATIONS OF CARDIAC DISEASE.

CASE I. HYPERTROPHY OF THE LEFT VENTRICLE WITH DISEASED AORTIC VALVES. (Related by Dr. Theophilus Thompson.) The subject, a man aged 50 years, had been a pedestrian, and his disease was attributable to violent exertion. He had a well marked cardiac murmur. After death, the left ventricle was found to be very much enlarged, as were also the aortic valves, which were opaque and rigid, their borders being relaxed and admitting of retroversion. The aorta at its origin was enlarged and ossified. An aneurismal tumour, of the size of a lemon, was found in the coeliac axis.

This case is a very simple instance of the injurious effect upon the cardiac apparatus, consequent on over-exertion and mental excitement. All the conditions for the production of *bruit* were present; the stream of blood was thrown into eddies by the rigid valves interfering with its free exit from the ventricles; irregular and comparatively slow vibrations were then set up in the vascular wall, thus producing the sonorous phenomenon termed *bruit*. This morbid sound becomes a thrill when perceived through the sense of touch, and requires the great vessels or heart to be in contact with the thoracic parietes for its detection. Death results in such cases as the above, from the heart being overtasked. The valves normally support the column of blood after ventricular contraction, and so give the heart rest; but in these cases, the ventricles being compelled to

sustain the pressure of regurgitant blood, distension and enlargement ensue. The arteries become tortuous from loss of elasticity, and the relation shown by Volkmann to exist in health between the lateral and longitudinal distensibility no longer obtains. The cardiac bruit is propagated along the larger arteries, and becomes so modified and even intensified, as to suggest a local or independent origin. Professor Kiwisch, however, gives very convincing data under this head, which go to prove that, in order to effect the requisite tension for producing sound in an arterial tube, the fluid pressure must be very great, such as never exists in patency of the aorta. The principles of treatment involve the maintenance of the compensatory enlargement and power of the heart. Digitalis and other sedatives are either non-admissible, or but sparingly to be resorted to, as more blood recoils into the ventricles during their slow contraction, than during their rapid action. An issue should be inserted; and if plethora arise, small venesections are to be employed. The indications being to keep the blood diminished in quantity but rich in quality, the muscular system being thus duly supported, no slops or malt liquor should be taken. Exacerbations of slow inflammatory action leading to atheromatous deposit in the aorta, and marked by paroxysms of anginous symptoms (dyspnoea, cardiac pain, palpitation, and sense of impending death), should be met by local bleeding, counterirritation, and a mild mercurial course.

CASE II. DILATATION OF THE HEART, IN CONNEXION WITH NARROWING OF THE AORTA. (Dr. T. Thompson.) The case was that of a young woman, of slender conformation, suffering from palpitation of long date, which latterly had been sufficient to raise the bed-clothes, but with almost imperceptible pulse at the wrist. The apex of the heart beat between the sixth and seventh ribs, about an inch to the left of the line of the nipple, its position rarely changing with change of posture. She had occasionally suffered from rheumatism. Loud and extensive systolic bellows-murmur was audible in the situation of the apex, and in the dorsal region. The case was treated with aperients, calomel, opium and digitalis. The apex of the heart returned to its normal site, and the pulse fell to 80, and became nearly regular, contemporaneously with the production of slight ptyalism; the bruit, however, still persisted. Narcotics were prescribed, but the case terminated fatally six weeks after coming under notice.

A *post mortem* examination showed the left auricle to be distended to the bulk of a cricket-ball; the mitral valve, though slightly thickened, was not contracted, and was partly competent to its function. The left ventricle exceeded its average proportion, from valves to apex, by one inch; its walls were but slightly thickened. The normal measurements (Bisot's) being three inches in length, and six lines in thickness, the right ventricle deviated but little from the usual size: it was three inches two lines, instead of three inches, in length, and two and a-half lines in thickness. The calibre of the arch of the aorta was less by one inch and some lines than the average (two inches seven lines); the aortic valves and the lungs were healthy. Slight regurgitant mitral disease, from relative insufficiency of the mitral valve, probably existed in this case. The situation of the apex was accounted for by the turgescence of the ventricle arising from endocarditis. The left auricle being thus intermediate between two blood-currents of abnormal amount, became dilated; the left ventricle escaping in great part from the effects of the aortic contraction—the most prominent feature in the case—by transferring the *onus* of the circulation to the auricle, with its relatively inadequate valvular protection.

This case well contrasts with the preceding; the indications of treatment being nearly reversed in obstructive ventriculo-arterial disease. The objects in view in such cases are to arrest and remove the effects of inflammation of the internal cardiac coat, and by sedatives, as digitalis, to cause the heart to act slowly; so prolonging the intervals of contraction, as to allow of the arrival and trans-

mission of a sufficient amount of blood. The rate of the circulation should be approximated to that of reptiles, who possess but small valvular apertures, and have but from twenty-five to thirty beats of the heart per minute. In this case, the left auricle compensated for the insufficiency of its valves; and the special effects of obstruction were in part shared with the corresponding ventricle. The physical signs, symptoms, and related structural changes at the aortic opening, characterizing such disease in the walls of each compartment, were unequally distributed, and consequently not clearly referrible exclusively to either chamber of the left side of the heart. The consecutive symptoms occurring in mitral disease were here anticipated by early dissolution, probably hastened by the feeble constitutional resistance of the patient.

CASE III. HYPERTROPHY OF THE HEART, ASSOCIATED WITH GRANULAR DISEASE OF THE KIDNEYS: DEATH FROM APOPLEXY. The subject was a female, aged 25, a laundress. She had had bronchitis with hæmoptysis, for two months previous to coming under notice. Her symptoms were then chiefly pectoral; and five days after admission, she was sleepless from cough. On the sixth day, one eye became amaurotic, and on the eleventh day she had an attack of apoplexy; on the fourteenth day she sank without convulsion or febrile disturbance. Before death, the woman passed her urine frequently, and in small quantity; œdema of the extremities was also present. The treatment embraced cupping, mercurials, tartar emetic, digitalis, camphor, henbane, etc.

A *post mortem* examination showed the convolutions of the brain to be flattened, the cerebral substance being normal in all respects, except in its weight, which was three pounds and a half avoirdupois. The cerebral ventricles were small and as if compressed. The air-tubes were injected, the right lung being congested; there was no tubercular or pleuritic deposit. The heart weighed twenty-one ounces; the left ventricle being the chief seat of hypertrophy. The mitral valve was free from disease; the pericardium exhibited slight traces of incipient inflammation. The liver weighed three pounds and a half, the spleen seven ounces and a half, and the stomach six ounces and three-quarters. The right kidney weighed five ounces, and was less diseased than the left, which was atrophied, and much disorganized, weighing only two ounces and a quarter.

In this case, the renal disease probably existed prior to the cardiac enlargement, which, together with hypertrophy of the brain and of other organs, was a consequence of imperfect depuration of the blood, and interrupted circulation in the blood-vessels and capillaries. Secondary inflammatory disease in the serous membranes is, moreover, peculiarly liable to occur in such cases. The woman's occupation rendered her very liable to defective or checked cutaneous exhalation, and consequent congestive disease of internal organs. The kidneys were manifestly exposed to strain and irritation, from the posture which such occupation requires. The remote cause, however, was most likely a constitutional vice of distant origin, and of slow progress.

CASE IV. ANGINA PECTORIS, WITH OBLITERATION OF THE CORONARY ARTERY, ETC. (Mr. A. Anderson.) A female, aged 32, in good condition and otherwise healthy, had been for seven years subject to violent fits of palpitation, neither preceded by nor attended with rheumatism. Latterly she had suffered repeated attacks of angina pectoris, and eventually died in a paroxysm.

On *post mortem* inspection, a reddened spot an inch and a half square was observed over the pericardial coat of the sinus of the aorta; fibrinous flakes extended across to the opposite wall of the pericardial sac. The aorta was somewhat dilated, and its internal coat for many inches was covered with atheromatous deposit, which also quite filled up the right coronary artery, the left being obliterated in like manner at the origin. The aortic valves were enlarged, and thickened at their free edge, but were apparently competent to their function. The left ventricle was much enlarged, and red. The right ventricle and auricle were greatly

diminished in size, and attenuated. The coats of the coronary vessels were normal, but the right coronary artery was contracted, and contained a coagulum. Obstruction had existed probably for a lengthened period, and induced the atrophied state of the right cardiac chambers, in conjunction with the adaptation ensuing on enlargement of the left cavities.

This case indicates the close causative connexion existing between aortitis and its sequents, atheromatous or fibrinous deposits, the progressive stages of disease being shadowed forth. The primary aberration probably arose from deranged nutrition, which further resulted in slow inflammatory action in the subserous tissue of the vessel, leading to effusion. Angina pectoris is also frequently associated with diseased cardiac valves or orifices, ossification of the coronary arteries, structural alteration in the muscular walls, or other change in the heart; this disease, however, is not necessarily connected with organic change, but is rather the result of disorder of the nerves concerned in cardiac innervation, from mechanical compression or other agency interfering with this function.

CASE V. SLIGHT HYPERTROPHY OF THE HEART, ASSOCIATED WITH FIBROUS TRANSFORMATION OF ITS TISSUE, AND WITH GRANULAR DEPOSIT IN THE LIVER AND SPLEEN, ARISING FROM MALARIA AND CHANGE TO A COLD CLIMATE. (Dr. James Bird.) The subject, a military gentleman, aged 50, long resident in a malarious district of India, returned to England six months before coming under notice. He had been occasionally troubled with diarrhoea, ague, and loss of flesh. He was of spare conformation and nervous temperament, taking much exercise, and enjoying tolerable health while abroad, with the above-mentioned exceptions. He had latterly resided in Lincolnshire; and, on his return to town shortly after, was attacked with muscular pain in various parts of the body, which was neuralgic in character in the inferior extremities. The pulse was 110, irritable, and jerking; the urine was scanty and high coloured; the tongue white; the skin cool; the bowels were moved by laxatives. The symptoms at first increased in severity, and were accompanied with a harsh systolic endocardial murmur, with feeble cardiac impulse. The præcordial dulness was natural. There were slight crepitation and cough, and tenderness along the cervical and dorsal vertebræ, with pain extending to the arms. The urine was acid, of sp. grav. 1034, with lithic deposit on cooling. The patient suffered from attacks of ague, and his pulse in a few days became feeble and intermittent, with anxiety, œdematous præcordia, and coarse respiration. The muscular pains increased in severity, the urine becoming nearly solid from crystals of nitrate of urea, on the addition of nitric acid after boiling. The patient subsequently got relief from some of his symptoms, the endocardial murmur still persisting; but he was troubled with oppression of the chest almost amounting to angina pectoris, with intercostal pain extending to the lumbar region. Three weeks after first coming under notice, he suddenly died in a syncopal fit.

On *post mortem* examination, the pericardium was found vascular, with partial fibrinous exudation. The heart was small, its apex extending to the lower edge of the sixth left rib. The left ventricle was much dilated, its section exhibiting interspersed fawn-coloured deposit, extending to the chordæ tendinæ. Under the microscope, fatty degeneration was shown. The mitral valve was affected with slight marginal thickening. The lungs were emphysematous and congested; the left adhered to the costal pleura from old adhesions; some serum was contained in the left pleural cavity. The liver was finely granulated, and nutmeg-coloured; its left lobe was softened. The spleen was of twice its normal size, and broken up, with buff-coloured patches interspersed. The kidneys were congested, but not otherwise altered. In this case, a blood-lesion probably existed, which became localised from hyperæmia, the effect of cold, and thus led to fibrinous deposition (determined under the microscope), terminating in death.

REMARKS. The preceding cases, as well as those which will

follow, serve to illustrate the paramount importance of taking into account the relation which the contained fluid bears to the circulatory and other apparatus of the organism, in striving to estimate the part played by each in the evolution of disease. That the *fons et origo mali* was the presence of abnormal elements in the blood, together with disturbed nutritive equilibrium, cannot be reasonably questioned. Whence, then, arose this deterioration, or aberration from the normal standard? I shall here quote some remarks made by myself some years ago (*Provincial Medical and Surgical Journal*, vol. for 1846, p. 464), which, I think, are apposite to the solution of this point:—"It may be questioned if our increased attention to physical diagnosis at the present day be not, in some measure, pursued with a too exclusive bias, to the neglect or inadequate appreciation of those subtle elements of disease, collected from a more comprehensive view of the animal economy. Reaction ever leads to erroneous conclusions, if carried beyond its legitimate boundary. . . . If any physical constituent of the organism deserve to be considered *alive*, the blood may well be deemed so; whether viewed in relation with the logical or chronological order of its appearance; pervading all structures, making disease palpable, and eliciting nervous power in support of the nervous functions. The relation which the iron of the red blood-disks holds to the inspired air, places it second in importance only to the oxygen with which it is connected in the circulating fluid, and at once suggests one obvious mode of restoring the blood to its normal standard; thereby again contributing to place the organs severally in that harmonious relation through which health is maintained. . . . When the blood has become impoverished, the heart's texture attenuated, with manifest general debility, my observation would decidedly lead to the administration of chalybeates: viz., in cardiac palpitation, in conjunction with atonic dyspepsia, uterine derangements, hysterical or other nervous maladies; and when manifested in spasmodic individuals of lymphatic or nervous temperament, and relaxed habit; in disposition to syncope, with much præcordial anxiety, attributable to deficient nervous energy, from a depressed condition of the nervous system, in which the heart participates in common with other parts, or referrible to impoverished blood, etc.; in angina pectoris, when apparently unconnected with structural alteration, or, if thus associated, partaking of a passive character. Chalybeates are also indicated in structural disease of the heart, in passive dilatation, with normal or attenuated parietes, or with predominance of dilatation over hypertrophy, if this exist (more immediately indicated by quick and clear sounds); consecutive dropsical affections, with leaden, pallid, or tumid countenance; paroxysms of orthopnoea or syncope, and copious expectoration. . . . Of two evils, I am disposed to consider mechanical (valvular or other) lesion, of less moment than direct loss of power in the muscular walls of the heart, whence more immediately proceeds prostration of the system generally. Indeed, it is peculiarly significant to observe how individuals cling to life, whose heart may have undergone extensive and irreparable injury, provided the impoverished blood admit of reconstruction, and the general powers be duly maintained. In no department of therapeutics is there greater occasion for sound physiological views of the animal economy, as a whole, than in cardiac affections, in which, moreover, the nicest discrimination may be requisite to decide where the lowering system must be abandoned, and tonic treatment had recourse to. I believe the former plan has not seldom been productive of fatal consequences, especially in cachectic habits. . . . The intimate relation obtaining between the circulating and nervous systems, at once serves to denote the mode of production of neuralgic affections of the heart, and to indicate the suitable treatment, when disorder co-exists in either or both. . . . The influence of malaria in producing neuralgic disorders, rheumatism, and associated cardiac disease, by originating a deteriorated condition of the blood, and a depraved habit, offers a wide and most interesting field for investigation."

With reference to the condition of the blood giving rise

to, or accompanying, certain cardiac or aneurismal diseases, it may be considered as originating in an imperfect elaboration of the blood-plasma, or other reparative constituent; the constitutional vice in the organs engaged being related to defective assimilation and renovation, rather than to change connected with the process of decay, the result of decomposition and rearrangement of the elementary constituents, independent of any further addition *ab extra*. The term "degeneration" as now used, appears to imply but one purely chemical source of textural change, but may with equal (if not greater) probability be referred to inadequate renewal or reproduction of tissue, arising out of abnormal conditions of cell-growth, and defective formative power in the in-coming nutritive pabulum. Chemical authorities are at issue as to whether or not azotised and non-azotised blood-constituents are respectively convertible; the animal organism being, however, pre-eminently a reducing apparatus. Now, although the myoline of muscular fibre becomes replaced by oily particles, in fatty metamorphosis, we have hereby no positive (only analogical or presumptive) proof of a conversion of the former into the latter having taken place. An excess of adipose material, favourable to fatty deposition, may obtain from its *decreased consumption*, through inaction of the liver, lungs, skin, and kidneys. Again, excess of oily constituents may result from *conversion* of the more animalised components of the tissues, in their removal from the system by the agency of the liver, as stated by M. Bernard. This, however, is effected by glandular activity, and bears little analogy to that change, which ensues in organic matter removed out of the sphere of action of the living organism. In the latter case, the play of chemical affinities, operative in the conversion of fibre into fat or adipocere, would seem to require the presence and co-operation of air and moisture. This conversion does not ensue when, as in the process of preserving meat, oxygenation is prevented by the exclusion of atmospheric air; the changed condition of the fibrous and other tissues by the cooking process not of itself precluding, though retarding decomposition. Fatty transformation may be said to take place, for the most part, under very different conditions, too numerous to specify here, but sufficiently obvious in the body during life. Blood-fibrin differs from the fibrinous basis of muscle, according to Strecker, in being more highly azotised; in its behaviour with a dilute acidulous solution, in which it gelatinises, but does not dissolve; and in not being dissolved by an excess of alkaline precipitant; the reverse holding with reference to the fibrin of muscle, which approximates to albumen in composition and chemical relations. The fibrin of blood would appear to be the nutritive constituent of the simple fibrous membranes, such as the elastic arterial tissue, pericardium, etc.; its amount in the blood being adequate to this, but not sufficient for the growth and repair of the muscular system; while the large proportion which the albuminous constituent of the blood bears to the other ingredients, seems to denote it to be the agent for the fulfilment of the latter office. Now, if we consider the blood to be defective in the amount or elaboration of the albuminous constituent, the other ingredients said by Heller to be required in the process of healthy cellular nutrition—the calcareous salts and oily pabulum—being either normal or aberrant, we may account for the falling away in the cardiac and vascular tissues, simply as the result of mal-assimilation—to employ a term long in use, and conveniently expressive of a recondit operation.*

* Professor Schultze has lately determined some points of interest in connexion with this subject.

1. Fatty matter is conveyed into the system as fat, *ab extra*, in drops or fine divisions.

2. It is produced by conversion of non-azotised or non-fatty food.

3. It is produced from nitrogenous food, as in diabetes.

4. It is produced from the tissues only in disease.

Fat in excess leads to disease. It is increased during the resolution of pneumonic exudation. It may be present in considerable amount in the blood, or is detectable by the microscope.

In opposition to Virchow and Reinhardt, who assert that every kind of cell can undergo fatty metamorphosis, Schultze affirms that this is connected with the quantity of material, and is only an index of a previously commenced change, depending upon some peculiarity in the nature and time of origin of

It would be interesting to determine whether the salts of lime and the organic acids are defective in, or absent from the urine of those in whom deposits of cholesterine and calcareous matter take place in the valves, on the surface, or in the walls of the heart, as well as throughout the circulatory apparatus. We want precise information on these most important points. In the meantime, we can trace to some extent the disjointed and remote links in this morbid chain: witness the association and interdependence between malaria, rheumatism, abnormal deposits in the tissues, and defective nutrition, secretion, and excretion, through biliary, splenic, and renal *remora*, as evinced in some of the preceding illustrations. The centre of the circulatory apparatus of course bears, in many cases, the greatest strain on its function; and, in consequence of its primary importance to the organism, its disease more immediately leads to a fatal issue. The tendency to this result may be often masked till death take place; and it may be doubted whether we possess any certain or even probable indication of the imminence of this event, those premonitory symptoms assigned as diagnostic being often absent up to the last moment of life, and the *post mortem* examination giving the first demonstration of the existence of disease. The cases of the late Dr. Chalmers and of other eminent men are memorable instances in point.

With respect to fibrinous or albuminoid deposits in the parietes of the heart or blood-vessels, or on their lining membrane, there are many facts, derivable from humoral pathology, which would indicate such deposits to be of not-unfrequent occurrence, and not unlikely to materially interfere with the circulatory function. It may be recollected, that the fibrinous constituent of the blood is far from being uniform in its chemical composition, under various morbid phases; and to this deviation, as well as to its varying proportions in the circulating fluid, is referrible occasional structural regression in the tissues. The muscular fibres of the heart and blood-vessels approach blood-fibrin in composition, though not identical with it; and the heart, in common with other involuntary muscles, has little cellular tissue entering into its structure. Those diseases, such as rheumatism, scorbutus, certain forms of chlorosis, etc., in which the amount of fibrin in the blood varies, are not-unfrequently associated with cardiac, aneurismal, or hæmorrhagic affections; these latter diseases being no doubt closely connected with structural deviations in the tissues or lining membrane of the vascular apparatus.

[To be continued.]

ON DISTICHIASIS.

By WHITE COOPER, Esq., F.R.C.S., Senior Surgeon to the North London Eye Infirmary, and Ophthalmic Surgeon to St. Mary's Hospital.

SINCE the publication of my communication on Distichiasis, in the ASSOCIATION JOURNAL of February 18th, my attention has been called to a very able paper by Mr. Wilde, of Dublin, on "the Causes and Treatment of Entropium and Trichiasis",* and I regret that, when writing on the subject, I should have overlooked the following remarks, as they are the result of extensive experience; for, in Ireland, affections of the eyelids appear to be very common among the lower orders. Mr. Wilde says: "The fact of an additional growth of hairs has been denied; and it is asserted that, 'although they issue from the wrong place, and grow

the nucleus. Fat may pre-exist in the cells, as well as arise from the transformation of protein constituents. The evolution of cells into granular (fat-containing) cells is not a retrograde metamorphosis. The vitality of a cell, as of the containing organ, is increased; the fat being plastic.

Ingested fat serves especially for respiration, and occasionally for the nutrition of organs, assisting in cell-formation. Fatty degeneration of organs and adipose metamorphosis of their special tissues cannot be dissociated.

Several of these deductions are irreconcilable with, or militate against, the prevalent doctrine respecting "fatty degeneration", and serve to affirm the views above taken, as regards the mode of production of this abnormal condition.

* Contributions to Ophthalmic Surgery. Part II. Dublin, 1844.

in a wrong direction, they are not new productions, but merely natural cilia, the bulbs of which have been displaced by disease affecting the border of the eyelid; and had I not several preparations in my possession, which show an undoubted additional growth of these hairs, I should be very slow in differing from this, one of the highest living authorities upon ophthalmic surgery. In these cases, however, I not only examined the tarsal margins minutely after their removal, but counted the cilia, and they invariably amounted to more than what occurs in health; although it must be acknowledged that the number varies even in a healthy or natural condition.

"In psorophthalmia, and particularly in tinea palpebrarum, when inflammation attacks the whole margin of the eyelid (especially the upper), and the cutis swells considerably, while small abscesses form round the roots of the individual hairs, and the entire surface in some cases presents a condylomatous appearance, the interspaces between the cilia enlarge from the unhealthy deposit in the part; so that the natural position of these hairs is reversed, being then more divergent where they pierce the skin than at the roots; and they likewise exhibit a bushy, very irregular and distorted appearance, in a well marked triple or quadruple row. Now, although the original disease that produced this state may be speedily removed, still the fibrous deposit along the margin of the lid which altered the relation of these hairs, remains to a certain extent, and keeps up their deformity, or unnatural or distorted position, in whole or in part, so as subsequently to produce the disease called trichiasis, the apex of the line of hairs being then at their roots along the cartilage, and the base at their fine extremities."

The following mode of treating single hairs when inverted, is well worthy of attention:—

"In such cases, placing the horn spatula within the lid, I make an incision with a small knife down to the root of the inverted lash; and, having waited till the hæmorrhage has ceased, I apply a point of nitrate of silver by means of a *porte-caustique* down to the bottom of the wound, and then remove the lash; it seldom fails, but frequently it destroys two or three of the neighbouring cilia."

I avail myself of this opportunity of stating, with reference to Captain T., whose case I described, that the lids close with facility, and the corneæ have become clear; he is able to read with comfort in any amount of light, and much improvement has taken place in his appearance.

19, Berkeley Square, March 5th, 1853.

DISLOCATION BACKWARDS OF THE HEAD OF THE HUMERUS.

By EDWARD JACKSON, M.B.

SIR A. COOPER and Mr. LESTON allude to dislocation backwards of the head of the humerus as an exceedingly rare accident.

Having lately met with a very well marked example, I have thought that it may be useful to the profession to give an account of the peculiarities of the case, and of the manner in which reduction was accomplished.

CASE. The subject was a strong muscular man, aged about 35 years, who had for some years suffered from epilepsy. During one of these attacks, falling suddenly, he sustained a dislocation of his left shoulder.

The following condition of the limb was presented. The arm was removed from the side, but the patient could with considerable effort raise it to a horizontal position. On comparing the two shoulders, there was a greater prominence observable posteriorly on the left side, but not so much so as one would have expected to find in an accident of this kind. There was little, if any, falling down of the head of the humerus, as in dislocation downwards; nor was there so great a projection of the acromion process; yet this was tolerably conspicuous anteriorly at the point of its junction with the clavicle. The head of the bone could

not be felt in the axilla. The tendon of the biceps, arising from the coracoid process of the scapula, together with that of the coraco-brachialis, were felt anteriorly like tense cords stretching from above downwards. But the most remarkable diagnostic sign of this dislocation was a circular depression on the anterior aspect of the joint; and when the fingers were somewhat forcibly pressed into the centre of this depression, the whole circle of the glenoid cavity could be distinctly felt. This at once identified the accident as dislocation backwards.

Reduction was attempted by extension from the upper and lower arm, whilst an effort to replace the bone by rotation outwards was made; but after persisting for a considerable time, and using great force, no movement resulted. Having given up the attempt to reduce by this method, we had recourse to a different plan. The forearm was flexed, whilst slight extension was made at the same time, and the bone simultaneously rotated outwards; and thus, with little effort, the reduction was effected.

It appears that the chief obstacles to reduction in this peculiar dislocation consisted in the violent tension of the tendons of the biceps, coraco-brachialis, and pectoralis major muscles.

Ecclesfield, near Sheffield, Feb. 1853.

BIBLIOGRAPHICAL NOTICES.

SIX LECTURES ON MATERIA MEDICA, and its Relation to the Animal Economy. Delivered before the Royal College of Physicians in 1852. By JOHN SPURGIN, M.D. 8vo., pp. 204. London: 1852.

SOME years ago, an annual course of "*Six Lectures on Materia Medica*" was established by the Royal College of Physicians, for the purpose not only of explaining the sources, preparations, and properties of medicines, but also of unfolding the principles which should be observed in their administration. These principles, of course, are founded upon a much broader basis than mere pharmacy, and indeed can only be deduced from a study of the science of medicine in all its relations, including anatomy and physiology. Dr. SPURGIN proposes, in this course of lectures, "to examine certain principles and laws which the animal economy presents to our observation, and by the operation of which it is constantly preserved and perpetuated". These laws and principles he deduces chiefly from an examination of the nature and constitution of the blood, and the part which it performs in the economy of animal life. The subject of these lectures, therefore, is not (as the title would lead the reader to expect), what is commonly understood by the term *materia medica*; but it is, in fact, the *physiology of the blood, and its connexion with pathology and therapeutics*.

A disquisition on such a subject, from the pen of so accomplished a physician as Dr. Spurgin, cannot but be interesting to the profession; and, as the author's views are in some important points perfectly original, differing essentially indeed from the commonly received opinions, we feel it incumbent upon us to give a short analysis of the contents of the volume.

Dr. Spurgin's theory of the animal economy is based upon the hypothesis, that "the blood, by its universal presence in the system, and in virtue of its being the very origin and source of every part, and thence of the whole bodily fabric, constitutes the very corporeal life and vital principle to which they all refer and are subordinate". By boldly assuming this theory, and investing with a material, though fluid attribute, the vital principle, the author has at once cut the Gordian knot, and banished from the vocabulary of medicine all the vague terms with which former physiologists have endeavoured to express a something which they could not comprehend, nor believe to have a material existence. If Dr. Spurgin's hypothesis be received, the terms *vital principle, vis nervosa, vis medicatrix nature, materies*

vite diffusa, morbid irritability, nervous irritation, and many others, will become obsolete, and the word "blood", with the addition of a suitable adjective when required, will express them all.

The volume contains six lectures. Lecture I is introductory, and describes generally the component parts of the blood, chemical, mechanical, and microscopic. The errors and confusion resulting from an examination of the blood after it has quitted its appropriate vessels, and assumed new properties, are well expounded. The fibrin and albumen, which contain the same elements in the same proportions, the author points out as differing from each other only in this respect, that the latter requires a high temperature for its coagulation, whilst the former will at a low temperature coagulate spontaneously. He then proceeds to show that, in the words of Liebig, "everywhere throughout organised nature, we find the phenomena of life depending upon the presence of albumen; the continuance of life is indissolubly connected with its presence in the blood, that is, in the nutrient fluid"; and that, with regard to the crassamentum, as was remarked by Dr. Bostock, its coagulation is inexplicable upon any common principle of philosophy. After referring to the circumstances which retard or prevent the coagulation of the blood, Dr. Spurgin adds:

"I see no satisfactory reason for following the hitherto beaten track, in order to investigate the properties of the wonderful fluid which performs the most essential part in the animal economy; for, the more I examine its bearings, the more fully I am convinced that this track will lead those who pursue it, in a direction the very opposite to that which can terminate in the satisfaction of the sincere and honest lover of truth." (p. 30.)

Lecture II is devoted to the minute investigation of the globular portion of the blood; and the author shows that a very imperfect knowledge of the subject is to be obtained from chemical analysis only, and that the observations and conclusions of different microscopic observers are very discordant. He traces these contradictions to the examination of the red globules by physiologists after their removal from the circulation; whereas Leeuwenhoek described them as seen by means of the microscope whilst circulating in the living body, and consequently in a more true and natural condition, as well as under more favourable circumstances. Hence, besides other sources of uncertainty incident to microscopical examinations (which the author gives in detail), a new and more important source of fallacy arises from one observer examining *living*, the other *dead* globules. It appears, by the observations of a German author, Dr. Wedemeyer, that "*the streamlets of blood, which consist of a single string of globules, are not red, or even materially coloured, before the microscope, because the globules singly appear yellow, and acquire a red colour only when collected into masses*". And this is confirmed by Haller, Spallanzani, Mascagni, Oesterreicher, and other authors, who all affirm that the apparently colourless vessels which contain the globules, are strictly capillaries, of a yellow rather than a red colour; and that these capillaries, admitting only a single row of globules, appear yellow in consequence of the small amount of colouring matter they contain. It appears, however, doubtful whether the term "colouring matter", however convenient for description, is strictly applicable to the constitution of the blood, seeing that every object owes all its colour to the power which it possesses of modifying the rays of light which fall upon it; and this power in the blood appears to consist in the aggregation of the globules.

In Lecture III, the same subject is continued in detail; and, in the conclusion, some allusion is made to the fluidity of the blood, as one of its leading and most essential properties.

Lecture IV is chiefly occupied in developing this important principle of fluidity. The property is described as existing antecedently to any solid bodily atom, whether denominated cytoblast, germ-cell, fibre, or even capillary vessel.

In Lecture V, another step is taken, and the author adopts the opinion of Boerhaave and other eminent

men, as to the existence of a nervous fluid; and this fluid Dr. Spurgin does not hesitate to identify with the blood itself. He traces its course through the internal carotid and vertebral arteries "to their terminations in and about the cortical, cineritious, or vesicular substance of the brain." We quote his words:—

"Arriving at this region, a condition of vitality, or of animating property, is entered upon; the fluid and the organ are then co-ordinate and co-operative; the activity of the former, and the re-activity of the latter, are to each other exactly as the active pressure of the blood is to the heart, and as the reaction of the heart is to the blood, the effect of which is the circulation of the blood through every part of the body. In like manner, the cortical spherules, or vesicles of the cineritious substance, may be considered as so many little hearts, expanding on the entrance of the blood from the arteries; and when so expanded, they are in a condition to contract, and by this means to forward their animating contents to every point to which the nerves proceed." (p. 148.)

From this physiological theory (for which the author claims no originality, although, with its relative dogma of the humoral pathology, it has been long exploded), Dr. Spurgin proceeds to deduce his pathology of fever and other diseases produced by pestilential vapours, which he believes to gain access to the brain through the medium of the blood alone, and thus to derange its functions, and disorder the whole nervous system. Thus he describes the poison of lead, for instance, as "advancing through the nerves rather than through the capillary vessels, to the muscles affected" by paralysis. He thence derives certain therapeutical conclusions, and in this way brings the subject to bear upon *materia medica*. In the conclusion of his lecture, he thus illustrates the value of his arguments, by a practical application of his views.

"If, then, there is a nervous fluid, we may naturally conclude, that it must be subject to various derangements, which would, in a corresponding degree, affect the brain. And surely these derangements ought to be regarded as capable of cure upon still more philosophic and enlarged principles of treatment than have been yet adopted; upon such, for instance, as would make chemistry minister to the production of gaseous remedies, more likely than either solid or liquid matter to reach the very root of the maladies in question." (pp. 172-3.)

In Lecture VI, the author traces the process of formation of an animal being from, first, a fluid; next, the "manifest initiations, so to speak, of a nervous system; then the beginnings of a vascular system, which follows the composition of a colourless fluid, and precedes the composition of red blood". This order he considers as continued through all the subsequent stages of formation, up to the very completion of the animal being. He next proceeds to examine the anatomy of the heart, as the instrument of the circulation of red blood. He challenges the generally received opinion, that the parietes of the heart are supplied with blood from the coronary arteries. He regards these vessels rather as safety-valves, adapting themselves, by their dilatable structure, and the numerous rugæ or folds on their internal surface, to the fluctuations in quantity to which the blood in the heart is subject: receiving more blood at some times than at others from the cavities of the heart, and returning a quantity adequate, in case of need, to ensure a due provision for its muscular fibres. Thus he believes them to perform, in a limited sense, the double office of arteries and veins, their primary office and anatomical structure being venous; and the fleshy ducts which lead from the crypts of the auricles and ventricles into the muscular substance of the heart, he describes as the *arteries of these veins*. These views are illustrated by anatomical and physiological experiments of a highly interesting nature, and well worthy of study.

It will be perceived by the above very imperfect sketch, that Dr. Spurgin traverses that very extensive ground which has afforded matter of laborious research to Haller, Hunter, and other minds of the highest order; and his object has been, not so much to add new materials, as to give a new form and shape to those already gathered by his illustrious

predecessors. This, to be done satisfactorily, requires a master-mind; and it is not necessary for us to pronounce any opinion as to the degree of success which has attended the effort.

There are, however, one or two points to which we would direct special attention. We will begin with Dr. Spurgin's theory of life. The term life has been applied to an aggregate of phenomena manifesting themselves in succession, for a limited time, in organized bodies. It has been viewed as a principle superadded to organization. Dr. Spurgin maintains, however, that although organization cannot exist without life, life may exist without organization: and further, that *the blood itself is the vital principle, the corporeal life which animates and sustains the whole organism.* Now, by thus identifying the blood with the life, the author lays himself open to the charge of confounding the living thing with the principle of life which animates it; and he admits that his views may, at first sight, appear incongruous and unsatisfactory. But a little reflection will show, that we do not know that life is a principle, we only assume it; and we know not what we mean by the term. We know what the author means by blood, but we cannot form any definite idea of the principle of vitality. It is a mere attempt to express in words a something which we do not understand. There is, however, a difficulty in Dr. Spurgin's language more palpable than this, and, as we think, not so easily disposed of. If blood is life, then blood ceases to be blood when and where life ceases to exist. But Dr. Spurgin himself calls it "blood" after it has escaped from the blood-vessels, and contrasts it, in this condition, with "living blood". We believe, however, that this objection does not militate so much against the author's views, as against certain hyperbolical forms of expression with which he has unhappily encumbered an otherwise lucid, and, indeed, elegant disquisition. If he had simply described the blood as that which first receives and then transmits and sustains life, he would, we think, have conveyed his own idea in less questionable language. Indeed, in the third lecture, his views are expressed in very different terms:—"By virtue of the blood the body lives, and by living acts; in other words, the blood imparts to the body the ability to feel and to act." He regards the blood as that which is principal and essential in the animal economy; the structure as that which is instrumental and efficient.

Then, again, he differs from, we believe, all modern physiologists, in claiming for the fluid blood a vitality independent of organization. He says—

"Although the organization without the blood is powerless, we shall find, on the other hand, that without the organization it is not so; for the impregnating fluid, which may be virtually and pre-eminently regarded as blood, has within it an inherent power, forming, as it were, the starting-point of a new creature."

This fluid, however, like the blood itself, cannot be said to be wholly without organization. Its cellular structure is essentially organic, and, in many animal tissues, is permanent throughout the whole life of the individual.

Notwithstanding these slight inaccuracies, the style is, on the whole, clear and simple; the arguments are well sustained, and the conclusions sound and philosophical; and we cannot but congratulate the profession upon the timely appearance of a treatise on a difficult subject, well calculated to direct to some useful purpose the spirit of sceptical inquiry which pervades the minds of many of our younger brethren. The unexampled audacity of modern quackery, the flippancy with which established truths have been challenged, and modern errors exaggerated, however mischievously they may have acted on the popular mind, may have had their influence on the profession in awakening a more searching scrutiny into first principles, and a more diligent examination of the foundations of our medical faith. These lectures are the produce of a sober and well-furnished mind; and while they are quite up to the mark of modern science, they betray none of that restless intolerance of established doctrines, which has unsettled the minds of so many transcendental thinkers and would-be

philosophers. We commend them to the attention of all who are interested in the investigation of the subject of which they treat.

TREATISE ON CORNS, BUNIONS, AND THE INGROWING OF THE TOE-NAIL. By T. J. ASHTON. London: 1853.

THE author divides his work into three parts. The first treats of Corns, the second of Bunions, and the third of Ingrowing of the Toe-nails.

CORNS. Mr. ASHTON says that there are two kinds of corns: the *hard* and the *soft*. The former arises from condensed and thickened cuticle; the latter "is an excessively painful fungous growth from the cutis vera, and occurs between the toes."

The *hard corn* he treats by applying to it the nitrate of silver, or nitric acid, or by paring it off with a scalpel; the latter method he prefers. Chiropodists, he states, have recourse to the practice of applying pieces of thick soft leather spread with adhesive plaster, and having a hole cut in them over the corn. This mode of treatment Mr. Ashton at first objects to, probably from the illegitimate source whence it comes; for he subsequently recommends the same expedient. His plasters, however, are spread on amadou, or a soft felt, like that used for the hammers of pianofortes. Previously to applying the pad, the corn requires to be covered with a piece of thin plaster to prevent the bulging of the integuments through it. This procedure, we believe, is adopted by most chiropodists; and indeed by the majority of those who suffer from, or have to treat corns. When the integument beneath a corn is irritable and painful, Mr. Ashton recommends a plaster composed of alcoholic extract of aconite, and lead plaster; but in what proportions we are left to conjecture.

The *soft corn* is treated by Mr. Ashton by applying to it nitric acid, and removing in a day or two the shrivelled and hardened part with a cataract knife. "Plasters," the author says, "applied over the surface of a soft corn, have not the beneficial effect in retarding their (its) growth, and affording ease, they have in the hard variety; but a small quantity of astringent ointment, applied every morning, will be of great service." The composition of this ointment, however, he does not divulge.

BUNIONS. "It is the popular opinion," the author states, "and I believe the same is also entertained by many of the profession who have not made dissections of the parts concerned, that a bunion consists of an enlargement of the bones, forming what is called the ball of the great toe." Except in complicated cases, we were not aware that this opinion is held by the profession: however, as Mr. Ashton states, the opinion is incorrect.

Mr. Ashton quotes largely from a valuable paper published by Mr. Aston Key, nearly twenty years ago, in Guy's Hospital Reports, to show how bunions arise, and how they are to be treated. In one respect, however, he differs from his author. Mr. Key deprecates the formation of an abscess in a bunion. When it does take place, however, he says "it is better to let nature carry on the operation without interfering with the knife: the abscess is slow in coming to the surface; but the joint beneath is secured; and we often have the satisfaction of finding that, the suppurative process being at an end, the sore heals, and the part loses its former extreme sensibility. I have known gangrene of the foot and death ensue from opening an inflamed and suppurating bunion; and in three cases, exfoliation of the bones, with a most tedious and painful suppuration of the surrounding structures". Not having these fears before his eyes, Mr. Ashton directs "as soon as suppuration in the bunion is fully established, that a free incision be made, so that the suppurating cavity may be thoroughly exposed". The following day he fills the cavity with lint or charpie, "in order to induce destruction of the bursa, and sometimes to accomplish this end it will be necessary to use the nitrate of silver or concentrated nitric acid".

INGROWING OF THE TOE-NAIL. The author prefaces his chapter on this subject, which concludes the work, with a

very meagre account of the structure and growth of the nails, referring his readers "to the various excellent works on anatomy and physiology for further information". He then copies verbatim from other writers (principally Wardrop and Colles,) the description of the causes, and mode of treatment: but we are not presented with any addition to, or improvement upon the practice of these two eminent surgeons. The only original criticism which we have noticed, is an objection to the term "ingrowing of the nail". We are told that, "from the improper nomenclature of the disease, and from want of due reflection on the mode of growth and formation of the nails, many eminent surgeons in their treatment have been induced to practice evulsion of the nail." This severe and painful operation Mr. Ashton does not recommend, and we believe it is seldom necessary; but we can scarcely imagine that such surgeons as Sir Astley Cooper, Liston, and Dupuytren, would have had recourse to it, either from being misled by the misnomer of the disease, or from their ignorance of the growth and formation of the nails.

We are sorry that we cannot speak more favourably of this work. It is the result of a species of book-making which ought to be discouraged. The whole of its practical and useful matter might be comprised in a page of one of the weekly medical journals, and in this form it might have been an acceptable summary of the practice of the best surgeons, in the treatment of these common and troublesome affections. In a work aspiring to be considered as a monograph on any disease or class of diseases, we have a right to expect to find either the elaborated results of the matured experience of the author, or a luminous and critical digest of all that has been written by others on the subject: and, as we have discovered neither in Mr. Ashton's work, we have been disappointed with the result of his labours.

PERISCOPIC REVIEW.

CHEMISTRY.

RECENT PUBLICATIONS.

OF works on Chemistry published in England during the past year, the most important to medical science is the *History of Physiological Chemistry*, by Professor G. H. LEHMANN, issued under the auspices of the Cavendish Society, in the form of a translation by Dr. DAY, the second volume of which is on the point of appearing. The great merit of this book is, that it is an attempt, and in many instances a successful one, to systematize, and reduce into something like order, the heap of materials on zoochemistry accumulated in the numerous scientific journals of Europe, and thus to acquaint the reader with whatever has been effected of a trustworthy character in this department of chemistry up to the end of the year 1849. The subjects are classified in a manner which renders them easy of reference, and so constructed as to separate fact from hypothesis, and hypothesis from fiction. The translator has done his work well. It is of course, as in the study of any science, here requisite to master the exact meaning of the terms employed; when this is done, the rest is easy of comprehension to any man tolerably versed in physiology and chemistry.

On animal electricity, the abstract of DU BOIS REYMOND'S work, by Dr. BENICE JONES, has appeared; but this book has been noticed in a previous number (No. III.), so that it is unnecessary for us to say more of this instructive little work.

THE BLOOD AND ITS DERIVATIVES.

THE observations which have been lately published on this subject have been numerous, and in some cases well deserving of attention. Thus, M. VIRCHOW, in a paper on *Hæmatoidin* and *Bilifulvin*, recalls to our memory the observation of Reichert on the existence of an albuminous body in a crystalline form, which he found in a substance resembling dried blood, probably derived from some extravasated blood which covered the surface of the placenta and the membranes of the nearly mature fetus of a guinea-pig, as well as the adjacent mucous membranes of the uterus; these crystals being tetrahedrons, of a blood-red colour, and seemingly consisting of a protein substance, impregnated with hæmatin. In Reichert's view, the power of cry-

stallization is inherent in the protein substance, whilst the colouring matter is regarded merely as an accidental mechanical mixture. The great similarity of these crystals to hæmatoidin, formerly termed xanthose, attracted M. Virchow's attention to this subject, with which he is familiar, having formerly shown that crystals of hæmatoidin (which, he states, crystallizes both in oblique rhombic prisms and perfect rhombohedrons), may be formed, first, in cells; secondly, in amorphous protein matter; and thirdly, from aggregations of the blood-corpuscles, fusing together without diffusion of the hæmatin, and undergoing change simultaneously; and he concludes that wherever hæmatoidin is being formed, both hæmatin and a protein substance are present; and, consequently, that hæmatoidin is a compound of these two substances. This observer combats Henle's supposition that hæmatoidin is of a fatty nature, but admits that fat has a peculiar attraction for this substance, appearing to favour its formation, by aiding the metamorphosis of the hæmatin. Its crystallographic relations differ from those of both cholesterolin and stearin; it occurs frequently with the former, as in cysts of the thyroid gland, whilst pure stearin has not yet been found in the human body. We shall return to this paper hereafter, in order to describe the researches on the bile-pigment.

Professor LEHMANN also has directed his attention to the crystallization of the albuminous substances, pursuing the track opened by the observation of Dr. Funke, that when the blood of the splenic vein of the horse was gently dried between the object glasses of a microscope, it became converted into a mass of prismatic crystals; a property also possessed by the blood of many fresh-water fish. The vena portæ of the horse yielded similar crystals when examined by M. Lehmann, whilst other observers have procured these crystals from the blood of dogs, both in health and disease, and from the whole of the blood in a case of leucæmia, accompanied with great enlargement of the spleen. When the blood of the guinea-pig, the rat, and the mouse, were subjected to examination, tetrahedral crystals, similar to those observed by Reichert, were obtained; and from that of the squirrel Kunde has procured large six-sided crystals. The blood of birds, of man, of the horse, excepting that derived from the spleen and the vena portæ of the ox, etc., could not be made to yield crystals, in spite of numerous experiments by this observer.

The bursting, or at any rate endosmosis, of the blood-corpuscles being an essential element in the production of these crystals which are formed from their contents, the serum itself never crystallizing, some reagent must be employed to promote this action; for this purpose, water with ether acts most readily. Blood, mixed with this liquid, is placed in a tube, closed at one end with pig's bladder, and at the other with a thin sheet of caoutchouc, and through this latter weak spirit is passed into the blood by endosmosis, until the mixture in the tube begins to grow turbid; the water must now be allowed to evaporate through the membrane, at a temperature a little below 70°, whilst the spirit passes off through the India-rubber, when beautiful crystals will be formed. Sometimes, as when the blood of the guinea-pig is used, these will measure as much as three-quarters of a line in diameter. Blood-clot, or the sediment obtained by washing blood-corpuscles with water, yields the best crystals. When purified by repeated agitation with cold water, to remove adherent envelopes of the corpuscles and other foreign matter, and subsequent solution in water of 104° to 122°, filtration and crystallization, these crystals are found to effloresce rapidly in the air, from loss of combined water, after which they split into horn-like conchoidal fragments. They are acted on by the reagents which affect albuminous matters, coagulate at a temperature from 140° to 160°, and consist, according to Professor Lehmann, of an albuminous substance combined with an inorganic salt, analogous to the compound formed by diabetic sugar with chloride of sodium.

Since the publication of the papers of which the above remarks are an abstract, Dr. MECKEL, at a meeting of the *Geellschaft für Wissenschaftliche Medicin* of Berlin, on September 6th, 1852, made the following communication, which is inserted in the *Deutsche Klinik* of 9th Oct. 1852.

The colouring matter of the blood, or hæmatoglobulin (the true colouring matter, hæmatin, has not yet been procured free from the globulin of the blood-corpuscles), exists in the interior of the corpuscles, between the nucleus and the wall. Under the influence of various gases, it assumes a yellow-red or bluish, an arterial or a venous tint; and this change of colour certainly is not dependent on a change in the form of the corpuscles, as has been assumed by Scherer and Harless.

The red arterial hæmatoglobulin is not crystallizable.

feebly arterialised blood, the hæmatoglobulin crystallises only sufficiently to denote the admixture of venous blood. By the further action of oxygen, there appears to be produced a green colouring matter (hæmatochlorin), which produces the green aspect of carcasses, but which has not yet been separated by art in these cases; but it is found in abundance in the placenta of carnivora. The green matter already examined by Barruel is allied to the green colouring matter of the bile and of leaves: it is soluble in alcohol and ether, but insoluble in water. The mineral acids produce a play of colours; and it is amorphous and uncrystallisable.

The blue venous hæmatoglobulin can be obtained in drops from the blood-corpuscles of frogs and fishes, and be received into a concentrated solution of albumen, like drops of fat, without being dissolved; but it is soluble in water. In the human subject, the venous hæmatoglobulin saturates all the tissues, but is likewise concentrated by living elementary cells in the form of drops, in the same way as deposits of fat, nervous matter, chondrin, or calcareous matter, are found in other cells. Hæmatoglobulin cells of this kind form a part of the so-called blood-corpuscle-containing cells of authors. True blood-corpuscles are never found in true cells; the corpuscles are neither at first enclosed, in cells, nor do they pass into cells already formed, as Virchow assumes. These drops of colouring matter are distinguished from the blood-corpuscles by being of a globular, not discoid form, and by their variable size. In these cells, the hæmatoglobulin becomes changed, at a later period, into hæmatoidin or melanin.

The venous hæmatoglobulin of all vertebrate animals, and of man, whether in health or disease, is crystallisable, as has been pointed out by Budge, Remak, Lehmann, Kunde, etc. (an assertion opposed to Lehmann's remark, as above). Under certain circumstances, the contents of each individual blood-corpuscle in fish, in swine, and in man, form themselves into a crystal, loosely enclosed in a colourless membrane. Numerous needle-shaped crystals are generally seen in blood-corpuscles; and on these frequently depend their indented and shrivelled appearance. After removal of the wall of the blood-corpuscles, large crystals are formed. Blood obtained, for example, by opening an artery, crystallises in the mass, when defibrinated, evaporated to the consistence of a thick syrup, and rendered venous by having a stream of carbonic acid gas directed on it for a day. This mass has the peculiarity of becoming fluid at the temperature of the hand; a fact which reminds one of the yearly exhibition of the blood of St. Januarius in Naples. The form of the crystals varies from that of needles, to rhombic and rectangular tables and prisms. From further changes in the venous hæmatoglobulin, appear to arise the crystals of hæmatoidin, described by Virchow as existing in all extravasations in the human subject. After four months' careful experiments, Dr. Meckel was unable to find the hæmatoidin crystals of Virchow.

As a direct product from hæmatoglobulin, or indirectly from hæmatoidin, black pigment (hæmatomelanin) is formed in such situations as the lungs and bronchial glands.

Iron and carbon appear to play an important part in these colouring matters; and Melsens asserts that melanin consists of pure carbon, which is most improbable.

The discrepant evidence brought before us by these different observers admits of reconciliation; for it is but rational to suppose that, if the contents of the blood-corpuscles obtained from any organ are susceptible of crystallization, the contents of the corpuscles of the whole of the blood of that animal will yield crystals under proper treatment; so that Lehmann and his fellow-labourers have probably assumed too much in denying the power of crystallization to the blood of many vertebrate animals; whilst the inability of Meckel to obtain the hæmatoidin of Virchow, which has been so minutely described, is no proof whatever of its non-existence. These very discrepancies are evidence of the careful observation and good faith of these investigators; and a comparison of the results arrived at by each shows us on what we may rely as proved by their concurrent testimony, and what we must but provisionally accept until established or disproved hereafter.

Before quitting this subject, we may mention that Dr. FUNKE has succeeded in obtaining crystals from the blood of kittens and swine; that Dr. Parkes has described (*Medical Times and Gazette*, July 31, 1852) some acicular crystals observed by him in some putrefying human blood, which seem identical with the blood-crystals of Reichert, Lehmann, and others, although the details given are insufficient to decide the question of identity. This remark is also applicable to a notice in the *London Journal of Medicine* for Oct. 1852, by Dr. Handfield Jones, on

this subject, where some octohedral crystals, a form very similar on the facets to the tetrahedron, were obtained from hæmiplegic blood. The observer, so far as we can judge, regards them as oxalate of lime; but they were far more probably tetrahedral blood-crystals, soluble, like some protein compounds under given circumstances, in hydrochloric acid.

URINE.

In the *Archiv. der Pharm.*, lix, p. 298, M. NEUBAUER has detailed the results of an analysis of the urine of a dropsical and scrofulous man, aged 20, labouring under tubercles in the lungs and intestines. The urine was brown, of sp. gr. 1.011, and contained

Water	. . . . .	973.50
Earthy Phosphates	. . . . .	.75
Sulphates	. . . . .
Albumen	. . . . .	7.50
Uric Acid and Urea (traces)	. . . . .
Mucus, Salts of Ammonia, etc.	. . . . .	18.25

1000.

According to Berzelius's analysis, healthy urine contains 67 parts of solid matter in 1000, of which about 90 parts are urea, albumen not being noticed as a constituent. The Swedish chemist also has observed that, at the commencement of anasarca, the albumen occurs in such small quantity, that it can only then be recognised by corrosive sublimate. During the progress of the disease, the serous fluids are poured through the urinary passages, and the kidneys also secrete an albuminous liquid, when the albumen may be detected by less delicate tests, such as nitric acid, alum, etc.; and at length it occurs in such quantity as to coagulate by heat. As the amount of albumen increases, that of the urea and uric acid diminishes, until at length they wholly disappear. In the present instance, the albumen readily coagulated on boiling, whilst mere traces of urea and uric acid could be detected; so that the nitrogen thrown off by the body was eliminated by the kidneys as albumen, instead of, as in health, being excreted in the forms of urea and uric acid.

Dr. W. MARCET has investigated the composition of healthy urine, with the object of determining the precise form and state of combination of the proximate organic constituents, as they exist in this secretion; he employs only alcohol and ether as reagents instead of the strong acids and chemicals, which might possibly either decompose these combinations, or effect the transformation of the constituents. The result of these researches clearly establishes the existence of urea in a free and uncombined state; and shows the presence of an acid crystallising in oblique rhombohedra, soluble in boiling water, alcohol, and ether; and which, although resembling hippuric acid in these qualities, differs from it in others, pointing to either a modification of this acid, or it may be a new constituent, hitherto unrecognised, of the urine. A rose-coloured, resinous-like substance was also obtained, which appears to be present in an uncombined state, and susceptible of crystallisation. Further details on these substances are promised.

The colouring matter of urine, which imparts to this liquid its yellow and reddish tint, has occupied the attention of Dr. G. HARLEY, who regards it as a modification of hæmatin, and, like it, in every case containing iron, be its source man or the lower animals. He believes the substance which he has isolated, to be the urine-pigment in a pure state—a conclusion which must be demurred to when the process is considered: but it must be admitted that the substance procured is, at any rate, derived from this colouring matter. As described, it possesses no very specially marked properties; its most conspicuous being solubility in alcohol and ether, and insolubility in water and the strong acids. Dr. Harley observes, that biliary colouring matter, melanin, hæmatin, and this urine-pigment, are closely allied. Whether the first and the last are modifications of hæmatin, is a question worth determining, especially as many circumstances point to this conclusion. We may properly here return to Virchow's researches on a crystalline substance met with in the bile, the *bilifulvin* of Berzelius, which Virchow believes to be a modification of hæmatin. This substance, occurring as reddish-yellow crystals, this observer has met with frequently in the liver and bile of cases involving retention of the bile and chronic catarrh of the gall-bladder, when the bile sometimes appears as a somewhat pasty, clotty mass, of a dark brown colour, and in which some small dark points may be remarked. At these points, under the microscope, acicular yellowish-red crystals of bilifulvin are frequently to be noticed. Virchow finds that this substance possesses characters distinct from those belonging to

hæmatoidin: the feeble action of the strong acids on it is a property common to it and the dark urine-pigment of Dr. Harley. From the action of bilifulvin with various reagents, it seems to occupy a place intermediate to hæmatoidin and melanin in this interesting group of the hæmatin derivatives.

The ground broken in this direction plainly points to the derivation of all these bodies from the blood-pigment or hæmatin, which, after undergoing various changes in the animal economy, is either excreted in a modified state, or is met with in some organ or secretion, giving rise to, or, at any rate, accompanying disease. To trace out these changes, and to explain the alterations which the blood-pigment undergoes in these important transformations, is an achievement which would shed fresh lustre on even the highest scientific reputation.

Liebig's test for urea deserves notice here, even at the risk of its being already known to some of the readers of this Journal; since it is one specially devised by that chemist for the use of the medical man, as being a simple and ready test for the presence of this substance in a liquid, and even as likely to afford an easy means of estimating its quantity. Dr. Hofmann recommends the following modification of Liebig's process:—To add to the urine or liquid under examination, a little solution of red oxide of mercury in nitric acid, and the addition of barytes-water, to neutralise the excess of acid and that liberated by the combination of the urea with the oxide of mercury after each addition of the nitrate of mercury, until the whole of the urea is precipitated. This precipitate is a snow-white and almost insoluble compound, one-five-hundredth of urea being detected by it with certainty. It consists of one equivalent of urea, combined with four equivalents of red oxide of mercury, and one equivalent of nitric acid. The presence of common salt somewhat interferes with the employment of this test in estimating the quantity of urea contained in a liquid.

MM. MICHA and ALVARO REYNOSO, noticing the recognised fact of the existence of sugar in the urine of epileptic patients, remark, that the usual tests will not detect its presence in these cases: thus, neither potash nor the saccharometer are of avail in testing epileptic urine. They are adverse to the employment of Barreswill's liquid, and rightly regard fermentation in the light of the most decisive test with which we are acquainted. It is much to be desired that the assertion of Bernard, that, after wounding a certain portion of the fourth ventricle of a rabbit (somewhat above the origin of the eighth pair of nerves), the urine becomes, after an hour or two, clear and saccharine, and that sugar may be detected in the blood, should be either refuted or confirmed.

M. SOCOLOFF states that he has obtained kreatinin from the urine of the horse, having previously separated the hippuric acid in the usual manner.

URINARY CALCULI.

There are two forms of the triple or ammonio-phosphate of magnesia found in the animal economy, viz., stellated crystals, which may be artificially obtained by adding excess of ammonia to healthy urine, which kind is usually termed the *basic phosphate*; and prismatic crystals, generally trilateral, almost always to be found in putrid urine, and in somewhat modified crystals, at times, even in acid urine. These two forms of this salt have been submitted to analysis by Dr. GRIFFITH, who found that their composition was identical, consisting of 1 equiv. of ammonia, 2 eqs. magnesia, 1 eq. phosphoric acid, and 13 eqs. water, or NH_3 , 2 MgO , PO_5 , 13 HO . The difference of crystalline figure is to be attributed to the different condition under which they are formed; for, as the triple phosphate is less soluble in an ammoniacal solution than in water or urine, when ammonia is added to a solution containing phosphate of magnesia the formation of the crystals is hurried, and the stellate, feathery crystals result; but when only just enough ammonia is present to form the salt, as during the putrefaction of urine where ammonia is gradually evolved, the deposition of the crystals is slow and regular, forming the more perfect prismatic crystals. That this obvious explanation is the true one, is borne out by the occurrence, in some descriptions of guano, of crystals of ammonio-phosphate of magnesia, frequently of nearly an inch in length, the primary form of which is a right rhombic prism. These crystals, described and analysed by Teschemacher, and named by him *guanite*, contain far more ammonia than Dr. Griffith's phosphate; their constitution, according to the discoverer, being represented by the formula PO_5 , 2 NH_3 , 2 MgO , 10 HO .

Similar crystals have since been found in a church-yard in Hamburgh, below a dung-pit which had existed in that spot for centuries. These crystals M. ULEX regards as precisely similar

in composition to the triple phosphate described by Dr. Griffith. The difference of composition assigned to this salt by these chemists is far from satisfactory. The identity of the Hamburgh phosphate with guanite seems to us certain; whilst it is highly probable that the urine phosphate possesses precisely the same composition.

I. MÜLLER describes two cystic oxide calculi, one from the bladder of a man 73 years old, the other from a boy 6½ years of age. The former was about the size of a green walnut, hollow within, but containing in the hollow space a loose nucleus of pure cystin, as large as a broad bean. The shell was of unequal thickness, and exhibited four distinct deposits, one of which was crystallized cystin. The stone taken from the boy was oval in shape, and weighed about 270 grs. It exhibited a confused crystalline structure, enclosed in a thin white shell. The inner portion yielded 55½ per cent. of cystin, the residue being chiefly urate of ammonia, with a little free uric acid, some earthy phosphates and water. Cystin continued to be formed in the urine of this child for eight weeks after the operation.

Dr. BENCE JONES has communicated to the Royal Society some interesting experiments which he instituted upon the solubility of urinary calculi in saline solutions at the temperature of the body in conjunction with electricity. He states that his first essay to produce this result was made in 1848, when he placed uric acid calculi between the electrodes, or poles, of a galvanic battery in a dilute solution of nitre without any very marked result, although some action took place at the negative pole. During the past year these experiments were resumed, and the results with uric acid calculi may be tabulated as follows; the most marked action taking place at the *negative electrode*. Column A represents the number of the experiment; B, its duration; C, the temperature of the solution of nitrate of potash, consisting in every instance of one part of nitre to three of water; D, the power of the galvanic battery; E, the result in grains of uric acid dissolved.

A.	B. Hrs. Min.	C.	D.	E.
1	4 0	212°	10 pairs.	8½ gra.
2	6 5	109	10 "	11 "
3	6 10	101	5 "	14 "
4	6 20	100	10 "	16 "
5	6 45	106	10 "	12 "
6	3 17	98	20 "	27½ "

Oxalate of lime mulberry calculi were then tried in the same way, but various saline solutions were employed as stated below; otherwise the letters in the following table convey the same meaning as in the preceding one.

A.	B. Hrs. Min.	C.	D.	E.
1	7 0	One part nitre, three of water	90°	5 .. ½
2	7 0	Ditto ditto	104	10 .. 2
3	6 15	Sulphate of soda: strength not stated	101	10 .. 2
4	5 45	Common salt: ditto	102	10 .. 1
5	6 10	One part nitre, three of water	108	20 .. 6
6	3 19	One part nitre, with phosphate of soda: strength not stated	110	20 .. 1
7	3 15	Ditto, with bichromate of potash: strength not stated	111	20 .. 2
8	3 17	Half nitre	110	20 .. 2½
9	2 50	Quarter nitre	92	20 .. 2½
10	8 0	Ditto	100	40 .. 5

These experiments prove that a solution of nitrate of potash, in conjunction with the galvanic current, acts energetically on uric acid calculi, at the temperature of the body; but that their mutual action on oxalate of lime calculi is very slow and comparatively insignificant. Dr. Bence Jones states that composite calculi, as mixed urates and oxalates, or oxalates and phosphates, are far more rapidly acted on than oxalate of lime alone.

Some experiments were also made with phosphatic calculi, and solution of one nitre and three water.

A.	B. Hrs. Min.	C.	D.	E.
1	Hard phosphate of lime	7 15	102°	10 pairs. 18 gra.
2	Fusible calculus	1 13	96	20 " 31 gra.

In these instances the chief action was at the *positive electrode*. The author of the memoir concludes from these experiments, that, from two to nine grains of an uric acid calculus can be dissolved in an hour in a solution of nitre at the temperature of the body.

and that from two to twenty-five grains of phosphatic calculus can be dissolved in the same period of time; whilst the mulberry calculus from half a grain to two grains only can be taken up under the same circumstances. If the stone be composed of a mixture of urate and oxalate, from one to two grains may be dissolved in an hour, whilst four and a half to five and a half grains are lost in the same time from a mixed oxalate and phosphatic calculus. These experiments were made with calculi which had long been removed, and which had been dried at 212°. Dr. Bence Jones closes this interesting account by noticing the labours of Prevost and Dumas in this department.

We should rejoice to see the results of some further experiments on this most important subject. This physician has established the fact that some strong saline solutions, in conjunction with the galvanic battery, at the temperature of the body, exert a marked, almost, we may say, an energetic action on the more usual kinds of calculi: but as a means of dissolving a calculus *in situ*, such solutions would be useless, as they would not be borne by the bladder. We trust that these investigations may be pursued, employing *very dilute* saline solutions, such as even an irritable bladder might endure, in conjunction with a constant and gentle current of the solution through the bladder, such as might be kept up by means of a syphon-catheter; and we would venture to suggest that experiments with the organic salts of the alkalis and of ammonia, and the more unstable inorganic salts, might yield results most encouraging to our hopes of the possible adaptation of these means as a perfectly safe and manageable remedial agency in calculous disease.

MIDWIFERY AND DISEASES OF WOMEN.

STOMATITIS MATERNA: ITS SYMPTOMS, ANATOMICAL LESIONS, AND TREATMENT.

INFLAMMATION of the mouth, during the latter stage of pregnancy and lactation, is an affection which is well known in some parts of the United States; and has been made the subject of several essays by our American brethren during the last thirteen years. It is generally described as a disease peculiar to nursing women, which is always troublesome and sometimes fatal. It was first, we believe, described in 1830, by Dr. E. Hale, junr., in a paper published in the *Medical Communications of the Massachusetts Medical Society*, and reprinted in 1842, in the *American Journal of the Medical Sciences*. The disease is more prevalent in some places than in others, as we find Dr. Shanks, of Memphis, Tennessee, stating that "few nursing women of that town escaped it;" whereas Dr. B. W. Taylor, of Monticello, Florida, remarks that "the cases which he has met with in Florida, though perfectly well marked, have been so few and scattered that he thinks it is a comparatively rare disease." Great Britain is by no means exempt from the disease, though we do not remember seeing it noticed by any authors in this country as a recognised complaint. Accidentally, however, some writers have described symptoms which lead us to believe that they had unawares encountered the Stomatitis Materna, or Sore Mouth of Nursing Women, familiar to the profession on the other side of the Atlantic. As we have several times met with profuse salivation, with a clean tongue, and prominent papillæ in nursing women, we are inclined to believe that Members of the Association of larger experience might be able to furnish instructive reminiscences of similar cases, so that their relationship to the American disease may be determined. It is with this view that we now call attention to this subject, which has apparently received very little consideration.

The most circumstantial account of an affection in any way resembling stomatitis materna which we have been able to find in the works of our own countrymen is given by Dr. Blundell, at p. 112, in his account of the diseases of pregnancy, appended to his *Principles and Practice of Obstetric Medicine*, London: 1840. From the tenor of his remarks, and from one case only being referred to, and that being described with some care, we may presume that he considered the affection as one by no means commonly met with. We quote his observations. "Very copious salivation will sometimes occur during gestation, and where the patient has not taken one grain of mercury. I saw a case of this sort, which strongly resembled mercurial ptyalism; but the fœtor was wanting, and the gums were not ulcerated. There was merely the high action of the salivary apparatus. If the quantity of saliva is not very great, the patient may swallow it; and in that manner perhaps she may somewhat moderate the exhaustion which would otherwise occur. My patient, however, secreted the saliva so plentifully,

that when she swallowed it, the stomach was offended, and vomiting ensued. Should the saliva be formed in very large quantities, and should the system suffer considerably in consequence, I should recommend the induction of delivery; which, in all probability, would cure the disease; but where the secretion is smaller, a remedy of this kind would not be justifiable. Meddlesome midwifery is bad. The patient to whom I have just alluded did well without interference."

THE SYMPTOMS of stomatitis materna are thus described by Dr. TAYLOR (*American Jour. of the Med. Sciences*, January 1843):—

"The first symptom is a sensation of soreness and heat of the tongue and lining membrane of the mouth, accompanied by a free discharge of a thin watery fluid, mixed with an increased secretion of saliva, which, in a few days, as the soreness increases, becomes very profuse. The patient compares the pain and heat of the mouth to the sensation produced by scalding. After the disease has progressed for a few days, the lining membrane of the mouth and the tongue exhibits a peculiar red or deep pink colour (as is truly stated by Dr. Barkus), and appears to be much inflamed: the edges and tip of the tongue become slightly ulcerated, being covered with small white pustules closely connected together; and, in some instances, the ulcerations appear upon the lining membrane of the mouth and fauces; and occasionally, if not properly managed, the inflammation and ulceration will extend through the stomach and bowels:—these are the cases which terminate fatally. In the cases I have seen, the ulceration of the edges and tip of the tongue did not exhibit such a tendency to extend deep in the substance of the tongue, as the cases which Dr. E. Hale, junr., describes; but, on the contrary, the ulcers were superficial. The tongue is uniformly free from fur, and singularly clean, having a smooth and polished appearance. This condition of the tongue, its red or deep pink colour, and the thin copious and watery discharge, constitute the chief peculiarities of the disease. The bowels are more or less constive, except in those cases in which the inflammation extends from the mouth and fauces to the bowels, giving rise to diarrhoea. There is usually good appetite; but in consequence of the soreness and pain of the mouth, the patient is obliged to use thin fluid nourishment of the most soothing character, and the blandest mucilaginous drinks; otherwise the pain would be most excruciating. The patient is always clear of fever, but the irritation attendant upon the disease, loss of rest from the pain, and constant drivelling of the saliva, and the inability to take much nourishment in consequence of the soreness of the mouth, all combine in producing great emaciation in many instances. During the whole course of the disease, the secretion of milk is abundant, and the child keeps vigorous and healthy."

ANATOMICAL LESIONS. The following remarks of Dr. J. C. HUBBARD, of Ashtabula, which are of ten years later date than the above account of the symptoms, supply a gap in previous histories of the disease. In the *American Journal of the Med. Sciences*, January 1853, he says:—

"The want of success in the treatment of stomatitis materna results, I conceive, from overlooking certain anatomical lesions which exist in all marked cases. These lesions are ulcerations of the mucous follicles of the intestines. We have seen five ulcers at a *post mortem* examination of a well marked case of the disease, without any other morbid appearances to account for the fatal result. The buccal aphthæ preceded several months the diarrhoea, of which the patient died. The ulcers were circular, about three lines in diameter, indurated and very deep. Three of them were situated in the colon, and two in the ileum. The surrounding surfaces were healthy, or nearly so. A lady, aged 35, had borne three children before coming under my observation, and had severe buccal ulceration during the latter part of each pregnancy, and during lactation; and could get no relief, though she obtained able advice, except by premature weaning, and suffered intolerably with intestinal symptoms, presently to be described. She was first seen by me ten days prior to her fourth lying-in. She had several large aphthæ on the sides of the tongue and cheeks, which were exquisitely painful. She complained of heat in the stomach, and colicky pains. The fecal discharges were solid, but more or less coated by a jelly-like substance, and that often spotted with dots of blood, to use the patient's language. After delivery, she flowed too much. She had irritative fever, darting pain through the colon, and pain, with an urgent sensation of heat, with tenderness about the sigmoid flexure, with fecal discharges, the same as before delivery. The aphthous ulcerations increased in severity and number. She got up slowly; she exchanged her bed for the rocking-chair. An appropriate diet, and the common

medical means, proved of no avail, and the patient anxiously awaited my consent to wean her child. It occurred to me that we should treat her for ulceration of the colon, and it was done."

TREATMENT. Before making any general remarks on this part of the subject, we will continue the quotation from Dr. Hubbard's paper:—

"She was ordered one of the following pills two hours after each regular meal.

"Rx. Sulph. zinci, et
Pulv. ipecac. aa. ʒi.
Resinæ flavæ ʒss.
Pulv. mastich. ʒij.
Tereb. Canad. q. s. F. massa, in pil. lx div.

"To empty the lower intestines just before retiring for the night, with injections of cold water, to be administered slowly, and retained till the water is partially charged with heat.

"At first view, the reader may be tempted to pronounce the recipe a farrago; but when he reflects, that in order to change the character of the unhealthy ulcerations in the colon by medicinal substances, they must be applied directly to the diseased surface, and in sufficient quantities, he will see the propriety of the partially or slowly soluble bases of the pill. The zinc is doubtless the most efficacious drug in the compound; still the ipecacuanha, mastich, and turpentine, are not without value. Three weeks after recourse was had to the above means, the case was decidedly improved, and satisfactory convalescence was soon after established. Six months after, exposure to inclement weather and fatigue brought on a relapse; but a very prompt cure was effected by a resort to the original treatment, and she went through the usual period of lactation without difficulty for the first time.

"I could give an account of seven similar and successive cases, all recovering promptly under like treatment. They all suffered with colicky pains, had mucous discharges, and in several of them a little blood was occasionally present in the stools. Nearly all complained of a sense of heat in the region of the colon.

"I have often noticed that, when the bowels are more painful, and when there is diarrhoea, the ulceration of the mouth is less troublesome, and sometimes suspended for a short time. We would not venture a speculation as to the remote causes of the aphthous diathesis; but the first appreciable warning of its approach is often announced during pregnancy by dyspeptic symptoms, acidity, heat, etc., at first; and finally, colicky pains, and shreddy mucous discharges from the bowels. Irritated by the acrid excretions, I believe that the intestinal follicles first fall into the aphthous condition; and by impairing the digestive function, prolong the period of buccal ulceration, if not directly productive of it. It is needless to add, that many cases will prove fatal under the best directed medication; but when speaking of my own limited experience, I can say that when treatment has been directed to the intestinal lesions, the cures have been surprisingly prompt."

All writers concur in stating that weaning is either sufficient in itself to accomplish a cure, or that it greatly assists in promoting recovery. As weaning has hitherto been considered imperatively necessary in cases of any severity, and as severe cases have often proved fatal, the new principles and plan of treatment promulgated by Dr. Hubbard, if sanctioned by the future experience of himself and others, will entitle him to the thanks of his fellow practitioners.

The treatment recommended in 1843 by Dr. Taylor (from whose paper we have already made an extract), is worthy of attention. It evidently contains some important suggestions, some of which might be combined with the plan of Dr. Hubbard. Dr. Taylor writes as follows:—

"After having tried various tonics, vegetable and mineral, and laxatives, with only partial success, I have found that equal parts of the *flowers of sulphur* and *cream of tartar*, administered in broken doses (two or three times a day), so as to keep the bowels in a soluble state, constitute the best treatment as regards internal remedies. The combination of sulphur and cream of tartar appears to have almost a specific influence over this disease. The best external application, I think, is *borax*, either in the form of solution, sweetened with honey or loaf sugar, or finely pulverized with an equal quantity of loaf sugar, and applied in the same manner as advised by Dr. Dewees in cases of aphthæ in children, only in larger quantity. I have also derived great benefit from a weak solution of nitrate of silver, as a wash. In cases attended with considerable exhaustion of the system, the sulphur and cream of tartar should be only

used to the extent of obviating costiveness, if it exists; and tonics, such as the precipitated carbonate of iron, and the compound tincture or infusion of cinchona, combined with elixir of vitriol, should be given in well regulated doses. Porter is also a good and useful tonic in such cases. Should the case be complicated by diarrhoea, the diet should be bland and farinaceous, as arrow-root, gruel, rice gruel, etc., and the drinks mucilaginous; and an anodyne, as a dose of the solution of the acetate of morphia, or of laudanum, should be given, and repeated *pro re nata*. In refractory cases, it will be necessary to wean the child; and then a speedy cure will be enjoyed."

In the *North-Western Medical and Surgical Journal*, as quoted in the *New York Journ. of Medicine* for November 1851, and *London Journ. of Med.* for March 1852, Professor J. C. EVANS recommends cod-liver oil in this disease. He was led to this by observing its influence in preventing the wasting of the body in phthisis and tabes mesenterica; the diarrhoea and ulceration of the mucous surfaces in stomatitis materna being in many cases similar to those produced by the marasmus in these affections. He has accordingly been in the habit of prescribing it, taken in French brandy or malt liquor, as might be found best suited to the taste or most convenient, and generally with the happiest results. Where the patient would continue its free use, it has proved uniformly beneficial, and in most cases has effected a cure. If this treatment fail to relieve the disease, Dr. Evans observes that weaning should never be deferred until the patient loses her strength, so that she cannot maintain the erect position. Dr. D. L. MCGUIR (in the *Western Medico-Chirurgical Journal*, Oct. 1851) advocates the internal employment of hydriodate of potash, in doses of five grains, three times daily, and a weak solution of the salt as a gargle. A solution of nitrate of silver, in the proportion of five grains to the ounce, applied with a camel's hair pencil to the ulcers, is also, he states, useful. He recommends that, at the same time, tonic medicines and nourishing diet should be given.

CASES OF REAL AND SUPPOSED EXTRA-UTERINE PREGNANCY.

THE following cases have been published during the last and the present year. Their perusal cannot fail to convey important practical lessons.

CASE I. NATURAL DELIVERY IN A CASE IN WHICH THE CESAREAN OPERATION WAS TALKED OF IN CONSEQUENCE OF SUPPOSED EXTRA-UTERINE PREGNANCY. On the 18th of April 1852, a woman, aged 29, was admitted under the care of M. HUGUIER into the Hôpital Beaujon, at Paris, supposed to have hydatid disease of the liver. Being a widow, she at first denied pregnancy, but at last admitted its possibility. The abdominal tumour was situated exactly under the hepatic region, more prominent towards the umbilicus than in the vicinity of the groin, and so high up that the hand, pressing upon the abdomen, easily reached the promontory of the sacrum. The body of the uterus could not be made out by the finger passed into the vagina; but the os tincæ could be felt on the left side far above the pubes. On the right side, and posteriorly to the vagina, an angular body was protruding, which felt like an elbow or a heel, and this was still more palpable through the rectum. The foetus seemed to be lying in the right hypochondrium, where the fetal heart was distinctly heard.

M. Huguier referred the propriety of operative interference to the Surgical Society of Paris, by whom a committee was appointed. The committee were unanimous as to the existence of extra-uterine pregnancy; and agreed that no operation should be attempted till labour had commenced. Subsequently, doubts arose in the mind of M. Danyau, and he again examined the patient with M. Dubois. The latter thought that the pregnancy was not extra-uterine, but that probably the body of the child had lodged in the posterior portion of the uterus, as has been known to happen with the anterior part; so that a limb of the child might be tilted forwards, and there retained in a kind of *cul-de-sac*.

Labour commenced on the 1st of July; and M. Huguier sent for his colleagues M. Roux, and M. Danyau. Preparations were actually made for the operation; when M. Roux made a vaginal examination, and declared that he felt something very like a fetal head. The other surgeons soon ascertained that there was a head presenting; and, after an hour of strong pains, the patient produced a child which lived two hours. On the following day, a vaginal examination was made; but (as before delivery) the body of the uterus could not be felt; and the cervix was found to be as high as it had been on former occasions. From these circumstances, M. Huguier concludes that the uterus of this woman is of a very unusual shape.

The case is chiefly valuable to practitioners, from the caution which it inculcates, in the first place, as to diagnosis in cases of this description; and in the second place, as to the impropriety of resorting to the Cesarean section, so long as there is any doubt of its being possible for the fetus to obtain an exit by the natural passages. This remark is applicable not only to cases of supposed extra-uterine pregnancy, but also to cases of narrow pelvis.

CASE II. EXTRA-UTERINE (PROBABLY OVARIAN) PREGNANCY: DEATH ABOUT THE SIXTH OR SEVENTH WEEK: AUTOPSY. The following is abridged from "Obstetrical Cases", by Dr. J. G. PORTER, of New London, in the *American Journal of the Med. Sciences*, for January 1853.

A married lady, twenty-eight years of age, the mother of three children—the youngest being two years of age—was, on the 15th July 1852, while stooping, suddenly attacked with excruciating pain in the left pelvic region, extending as high as the kidney. Within half-an hour, the pain in a great measure subsided; and under the influence of two grains of opium, entirely ceased. On the following day, tenderness remained where pain had been, but she was able to go about the house. On the 21st she had another attack of pain, which, though similar in character, was more severe. On the 25th, she was similarly attacked for the third time. The pain was excessive; and the prostration was so great, that stimulants in large quantities became necessary to prolong life. There was retention of urine, and (as had been the case for two days previous), a slight sanguineous discharge from the vagina. About twelve hours from the attack a powerful reaction occurred; but afterwards the faintness gradually became more profound, and she died from anæmia, about thirty hours from the commencement of the last attack.

Until three or four weeks before death, the catamenia had been regular, and their cessation at that time was considered to betoken pregnancy. About the time of their non-appearance, being half a mile from home with a child two years old, she was overtaken by a thunder-storm, and ran the whole distance with her child upon her left hip. From this time she never had felt quite well.

Autopsy. The abdomen was prominent and slightly tympanitic. On making the first incision, bloody water gushed out; and on continuing the dissection, the left side of the pelvis was found full of clots and blood, probably in all forty ounces. The left ovary was enlarged to the size of a very small hen's egg, of a dark reddish hue, and adhering to its right side were clots of blood. On removing these and making a slight incision, a small quantity of water escaped, followed by a fetus of perhaps the sixth or seventh week, its size being about that of a honey-bee. The Fallopian tube was found floating freely in the cavity of the abdomen; it was pervious to the probe, and the sanguineous vaginal discharge probably passed through the tube to the uterus.

CASE III. GASTROTOMY IN TUBAL PREGNANCY: RECOVERY. Dr. W. H. BOLING relates, in the *New Orleans Med. and Surg. Journal*, July 1851, a case of extra-uterine pregnancy in a negress, twenty-two years of age, in which gastrotomy was successfully performed by Drs. Bradley and Rogers, of Alabama. The fetus was found in the left Fallopian tube: it was fully formed, about the size of a seventh month child, and would have weighed about five pounds. Four weeks after operation the patient had entirely recovered.

CASE IV. ABDOMINAL PREGNANCY; ACCUMULATION OF FLUID IN ABDOMEN; PARACENTESIS; REACCUMULATION OF FLUID; DEATH. This case is recorded by Dr. F. H. RAMSBOTHAM, in the *Medical Times and Gazette*, for 13th November, 1852.

On February 24th, 1851, Dr. Ramsbotham was called by Mr. Kennedy of Stratford, to see a woman who had borne two or three children, and whose abdomen contained a solid substance of doubtful character. At the end of May, 1850, she had had profuse menorrhagia, which continued till August 4th. Some time before the latter date, she had felt fetal movements, which gradually increased in strength, until, in the beginning of January 1851, she was suddenly seized with spasmodic pains in the abdomen, resembling labour-pains. These lasted about twenty-four hours, and then disappeared; at the same time, the fetal movement ceased. Her general health remained good.

Dr. Ramsbotham found the abdomen as large as that of a woman at the end of pregnancy. It contained a moveable solid body, resembling a doubled fetus; the limbs could be easily traced, floating in a quantity of fluid. The uterus was of natural size, but empty; it was thrown forwards, and the os uteri was canted up behind the pubes by a solid substance be-

tween it and the rectum. He recommended palliative treatment, and that the case should be watched for the present.

She soon began to increase in size, and was again seen by Dr. Ramsbotham on May 24th. A greater accumulation of fluid had taken place. On June 9th, a consultation was held with Mr. Adams, of the London Hospital, who had before seen the patient, and paracentesis was performed; about sixteen ounces of dark matter were evacuated. She was considerably relieved, and continued to perform her domestic duties for above seven months.

In January 1852, her health, which had throughout been good, began to fail. An operation for the removal of the fetus was proposed, but was objected to by herself and her husband. She suddenly got worse, and died on April 24th, worn out with diarrhoea and low fever.

On examination after death, a full-grown well developed fetus, quite putrid, was found lying across the cavity of the abdomen, with the head towards the right side; it was completely shut out from the peritoneum by a cyst of false membrane, which had also become putrid. No placenta could be found, nor any cord, amnion, nor chorion.

CASE V. ABDOMINAL PREGNANCY; PARACENTESIS; EVACUATION OF PORTIONS OF THE FETUS THROUGH THE APERTURE; REMOVAL BY GASTROTOMY; ULCERATED OPENING INTO BOWELS; RECOVERY. This case is related by Dr. RAMSBOTHAM, along with that last quoted.

Mrs. J., aged 28, who had been ten years married, but never pregnant, became so towards the end of July 1834. She evinced all the symptoms of early pregnancy; and at the end of September had considerably increased in size, but observed that she was larger on the left than on the right side. She now became subject to spasmodic pains in the back and epigastrium, so violent as to produce syncope. She felt the child about the end of November, and at the end of April periodical uterine pains came on, with considerable bloody discharge, and evacuation of "stringy matters". These continued, more or less, for nearly a fortnight; they then ceased, and with them the fetal movements, which had become very troublesome. At the end of May, her breasts and limbs had become emaciated: but the abdomen continued getting larger, and the feet swelled.

On July 9th, she was seen by the late Dr. Ramsbotham, sen., and Dr. F. H. Ramsbotham. They "found her greatly emaciated, pulse at 115, tongue furred and dry, respiration laborious, amounting almost to suffocation when she was lying. There was frequent vomiting of white froth, pain in the back, obstinate constipation, constant desire to micturate, while very little urine passed, and with no relief. There were incessant forcing, and cramps in the legs; and she got no sleep. In the abdomen, towards the left side, there was a hard mass, moveable from side to side, and a considerable quantity of fluid, by which it seemed to be surrounded. *Per vaginam*, could be felt a solid substance between the vagina and the rectum; and the os uteri was forced upwards and forwards, evidently unimpregnated."

Dr. Ramsbotham regarded the case as one of ovarian enlargement, complicated with ascites. Tapping was accordingly performed on July 15th, and six pints of thick, sizy, chocolate-coloured fluid were removed. A fortnight after, a small lock of fetal hair passed through the puncture; and subsequently more hair, with globules of oil, small pieces of putrid skin, and membranous strings, which were portions of the amnion and chorion. On September 22nd, she was so much worse, that it was determined to remove the child by incision through the abdominal parietes. This was accordingly done by an incision, five inches in length, parallel with the linea alba; and the child was removed. The placenta was removed on the third day. The patient bore the operation well, and improved steadily for ten days. On the sixteenth day, bile was observed to be passing through the wound, and also intestinal gas, and some curdants which she had eaten in a pudding. An opening by ulceration had evidently been made into the small bowels. Nevertheless, the patient improved, and, in thirty-four days, was walking about her room; and in four months she menstruated. She has not since had a child; but was obliged to leave her husband, through ill usage.

CASE VI. EXTRA-UTERINE FETATION IN A HERNIAL SAC; REMOVAL BY OPERATION; RECOVERY. The following case, related by Dr. SKIRVAN, in the *Wiener Zeitschrift*, is repeated in the *Dublin Quarterly Journal of Medical Science* for February 1853. We have not been able to see the original account of this case; but we have reason to suspect that its exact nature has not been appreciated; and the title prefixed to it is not our's but that given in the *Dublin Journal*.

An otherwise healthy woman, aged 38, had, from childhood, an imperfectly developed inguinal hernia on the left side. She had been delivered eight times without the occurrence of anything abnormal, except that she once gave birth to twins. In consequence of her labours being difficult, the hernia had gradually increased until it attained half the size of a child's head. The patient suffered no other inconvenience from it than that occasioned by its bulk. In October 1850, she experienced, while stooping, a sensation as of a round body falling suddenly into the hernial sac. From that time, the tumour increased in size, and became the seat of pains similar to those caused by a burn, which were relieved by cold applications. Two months later, the patient perceived movements in the tumour, and Dr. Skirvan diagnosed extra-uterine pregnancy, but deferred operating. On April 24th, 1851, pains set in, extending from the sacrum to the hernia; and rapidly increased both in frequency and intensity. The patient having been put under the influence of ether, an incision five inches long was made in the fundus of the tumour, which now reached to the knee; the placenta was then observed, covered with a sero-fibrous envelope, three lines in thickness, the structure of which roughly resembled that of the uterus. The child was extracted living, with the membranes, but died an hour after the operation. The wound soon closed, and the patient recovered completely: the hernia, however, continued as large as it had been before its occupation by the fetus.

CASE VII. OVARIO-TUBAL PREGNANCY: DEATH FROM HÆMORRAGE INTO THE ABDOMEN. The following case is related by Dr. W. L. LANGLEY, in the *Medical Times and Gazette* for February 19th. Mrs. Jane Eliza O'Brien, aged 22, married five months, residing in the town of Athlone, was seized with severe pains, similar to labour pains, early on the morning of the 21st Dec., 1852. I was requested to see her at one o'clock p.m. on that day. She lay in a semiflexed position in bed, with her thighs somewhat bent upon the abdomen, and the legs on the thighs. She looked very pale, anxious, and depressed, and at first indisposed to answer my questions. The pulse was tolerably full and firm, about seventy. She stated that she was five months gone with child, and had strained herself on the previous day whilst spreading clothes to dry on a line; that she suffered from most distressing pain in the small of her back, extending to the abdomen and thighs, the pain as referred to the abdomen being especially distressing. No flooding or discharge of any kind was apparent, nor could the os uteri be felt in the least dilated. She was very desponding, and said she was sure she would die. I ordered an anodyne and slightly stimulating draught, which composed her for some hours; she was again seen at nine o'clock, when the same train of symptoms were observed as in the morning, and the same remedies had recourse to. At ten o'clock she got up to take a drink, became suddenly faint, fell back in the bed, and died almost instantaneously.

Sectio Cadaveris, forty-eight hours after death. On laying the abdomen open, an immense quantity of fluid blood was found, filling up the whole of the pelvic and hypogastric regions, and a fetus of about the fifth month was seen floating in the umbilical region through the transparent membranes, which were whole and perfect, but broke as soon as they were taken in the hand. The umbilical cord was traced to a large rent in a hollow membranous sac, in the right ovarian region, somewhat similar in shape to the womb, to the inside of which the placenta was seen to be adherent, but on further examination the unimpregnated womb was also discovered and laid open for the purpose of tracing its connexion with the other body, which had evidently been the resting place of the fetus, and an imperfect deciduous membrane was found lining the inside of the womb, but the Fallopian tube was impervious, and prevented its transmission to its natural abode. The dilated bag of the ovary was connected with the true uterus by means of the right Fallopian tube, the fimbriated extremity of which covered and was adherent to it. This woman had suffered from pain, and a variety of anomalous sensations in the right groin and lower part of abdomen for several months, at least three or four, but would not submit to an examination.

RECENT EPIDEMIC OF PUERPERAL GANGRENOUS VULVITIS.

The following account is derived from a paper by M. CHAVANNE, in the *Gazette Médicale de Paris* for 1852. The epidemic occurred during January 1850, in the Charité of Lyons.

Several of the puerperal women were attacked, three or four days after delivery, with vomiting and diarrhœa, or with febrile paroxysms and abdominal pains, or slight hæmorrhage. These

symptoms were followed, in twenty-six cases, by lassitude or prostration, and lowness of spirits, and by the development of oedematous redness of the vulva. In a few cases, the disease did not extend beyond this stage, active febrile symptoms becoming, however, developed; but in the great majority, pultaceous plates, resembling Delpech's pulpous form of hospital gangrene, formed on the interior of the vulva and vagina, closely adhering to the mucous membrane. Although their extension became limited in a day or two, they were not separated by the inflammatory process until the end of the first week, or during the second; small, superficial, suppurating wounds being left at the points they occupied, which usually soon healed up, though occasionally degenerating, and becoming covered with the same pultaceous mass. In four of the twenty-six cases, the disease extended to the uterus, and the patients died, having presented all the symptoms of intense puerperal fever, the gangrenous condition of the uterus becoming complicated with peritonitis. No cause could be assigned for the development of the epidemic; both the general sanitary conditions of the establishment, and the prior state of health of the patients, having been satisfactory. In twenty of the cases, the labour was natural, the forceps, however, having been applied eight times; and while the affection seized some of the patients who had very easy labours, others of the inmates, whose cases required active interference, entirely escaped. Besides the four cases above-mentioned as having proved fatal, three others of the twenty-six died from metro-peritonitis, without extension of the gangrene. The other nineteen recovered, the gangrene usually soon yielding to tonic regimen, and the local use of the strong muriatic acid. A very similar epidemic was observed at Lyons, in 1815; and another of the same character has been recently witnessed in Paris.

DISEASES OF CHILDREN.

DR. C. FLEMING ON IRRITABLE BLADDER IN CHILDREN.

In the *Dublin Quarterly Journal of Medical Science* for February, 1853, Dr. CHRISTOPHER FLEMING has commenced what promises to be a highly valuable essay on the Urinary Diseases and Morbid Conditions of the Urine in Children: viz., irritable bladder, incontinence of urine, and retention of urine, together with those morbid derangements in this secretion, attention to which is often important in practice. On the present occasion, he brings under notice the subject of irritability of the bladder.

CRYSTALLINE DEPOSITS. Irritable bladder, Dr. Fleming writes, occurs much more frequently in children than would at first appear, even independently of inflammation or organic disease. "The mother or nurse of the child so affected, states that the child is constantly applying the hand to the organs engaged; that it appears to suffer pain during micturition; that the act is frequent; that it is urgent, but when the urine has passed off the child appears relieved; that often, if the urine falls on the floor or clothes, it rapidly becomes muddy and whitish, and it is even stated by some that it is so at the moment of being passed; that when the child sits down for such purpose, it has an inclination to remain longer than is requisite; and, in some cases, that there is a disposition to prolapsus of the rectum from the forcing and straining attendant, and very frequently a discharge of bloody mucus from the rectum takes place; that these symptoms have continued for some time, notwithstanding the exhibition of medicine to regulate the bowels and produce other ordinary effects; that the child is losing strength, and wasting in flesh; that the appetite is most precarious, and that there is a great desire for drink; that the quantity of urine passed is very variable, sometimes deficient; that its quality is equally changeable, at times being pale, at others deep in colour, and again, clear, and often muddy and with copious sediment."

Children thus affected will often be found to be born of gouty or dyspeptic parents, and to have irregular diet and habits of life, besides being, in the humbler classes, ill-clad and cleansed. In the child, as in the adult, we may have the lithic, the oxalic, and the phosphatic diatheses; in fact, with few exceptions, saccharine diabetes being one worthy of note, every derangement of the urine found in the adult has been found by Dr. Fleming in the child, in its most exaggerated forms. The deposits of uric acid, urate of ammonia, and oxalate of lime, are most frequent; and next in frequency, conjointly with or separately from these, occur blood, pus, occasionally mucus, and very frequently vibriones. Prisms of the neutral triple phosphate may be seen with the crystalline deposits, already

mentioned, but it is very rare to meet with them as solitary deposits. It is also extremely rare, unless under most aggravated disease, to find excessive secretion from the mucous membrane of the bladder. In a case of a boy three years old, who was suffering from irritable bladder, and whose urine was loaded with lithates, and contained a tenacious mucous deposit, with blood-discs and crystals of triple phosphate, Dr. Fleming accidentally found that the alkaline mucus, blood, and phosphates escaped from the rectum, while the urine was acid, and contained lithates with oxalate of lime.

The crystalline deposits in children often occur conjointly; especially the oxalate of lime and urate of ammonia. Lithic acid sometimes occurs as "red sand"; but far more frequently in colourless, or nearly colourless crystals, of every variety of size and form, and in the children of the poor as well as of the rich. When deposits of lithic acid, or of oxalate of lime are present, the physical and chemical characters of the urine are often not remarkable. It is often pale; of sp. grav. 1007 to 1010; and the deposit is a mere tomentous semitransparent cloud. The suffering in these cases may be very great; and the clear condition of the urine may divert attention from an examination of its state.

In the treatment of local or general irritation from the crystalline deposits, the usual dietetic and therapeutic means must be employed; and if these fail, a local cause must be sought for in the bladder or other organ implicated. This state of the urine is most likely to lead to the formation of calculus.

ORGANIZED DEPOSITS. Blood may be present in the urine of children, in large quantity, and yet be attended with not much local or general disease; it may, however, be pathognomonic of renal disease, sometimes malignant. Dr. Fleming has seen a case, in which the urine of a child almost constantly contained a large quantity of blood; it died under twelve months old of encephaloid disease of the kidney. Blood *singly* is a rare addition to the urine of children, except from injury, or from the passage of calculus; but it very rarely attends stone in the bladder in the child.

Pus is much more frequently met with. In girls, when the affection is persistent, local examination must be made, as muco-purulent secretions from the vulva and vagina, often with phosphates, are of frequent occurrence: much urinary irritation may be present. In a case of this kind, Dr. Fleming has found the urine acid, with few pus-globules, but loaded with lithates.

Irritability of the bladder, with pus in the urine, may also occur in girls from an ulcerated fissure of the vagina, analogous to fissure of the rectum in the adult. The principal suffering is referred to the bladder; and the pain before and after micturition is very acute.

Purulent urine, however, Dr. Fleming finds to be more frequent in boys than in girls; and sometimes, like hæmaturia, it is intermittent in its character, and not productive of considerable local or general irritation. The case of a boy aged seven years, admitted under Dr. Fleming's care into the Richmond Hospital, is typical of this form of irritable bladder. Notwithstanding his prolonged sufferings, his bodily health was almost perfect; his symptoms were very severe, and contrasted remarkably with those, comparatively mild, in a boy in an adjoining bed with calculus of the bladder. The irritability of the bladder was almost incessant. The urgency to pass water was great; the agony excruciating towards the end of micturition, and the act only tolerant in the sitting posture. The pain he described as cutting: he referred it to the bladder and the glans penis, and tried to relieve himself by pulling and pinching the prepuce and end of the penis. There was often a sudden interruption to the stream of urine, but by changing his position it recovered itself, and dribbled off. In observing the passing of the urine, its muddiness throughout the whole act of micturition was obvious; the quantity discharged was variable, but always small. There was no incontinence, nor prolapsus. He complained of no pain or tenderness in the lumbar region: but there was—what Dr. Fleming has not unfrequently observed in cases of this kind—great tenderness on pressure and percussion in the supra-pubic region. The disease was of more than twelve months' standing; and was attributed by the boy to having been obliged to keep his bladder painfully distended during school hours. The following was the character of the urine—its usual condition in such cases. "Colour, muddy and whitish; reaction acid; density 1010 to 1012; deposit of rest, an opaque greenish-white stratum, abruptly defined at its upper surface, and about one-fourth of an inch in depth at the bottom of the test-glass. Supernatant fluid almost aqueous, nearly transparent, and, within a limited period, uniformly miscible with deposit. Under the microscope, numerous pus-globules visible. No fibrinous or

tubular casts; no epithelial *débris*; no phosphatic deposit." The bladder was examined for calculus, but none was detected; and Dr. Fleming is certain that where this character exists, calculus will rarely, if ever, be present. In a case, to which he refers, of a child five years of age, there was purulent urine, and an oxalate of lime calculus in the bladder; after death the left ureter was found to have an ulcerated opening near its middle, communicating with an extra-renal tumour, full of fætid and purulent urine.

In ascertaining the source of blood or pus in the urine of children, much must depend on accurate observation of symptoms as they present themselves; and Dr. Fleming finds that *the uniform miscibility of blood or pus with urine, while passing from the urethra, is an invaluable guide in estimating their source.* In nearly all cases of purulent urine in children, the change of the fluid is obvious through the whole act of micturition. In the case above related, he believes that there was renal disease, although there was no lumbar pain or tenderness. In the child, as in the adult, irritable bladder, with purulent urine, has been found connected with disease of the kidneys, the bladder being free from disease. Sometimes this form of disease has its seat in the mucous and sub-mucous membrane of the bladder, and is of strumous origin.

The prognosis is "most unfavourable when the combination of pus, of blood, and of mucus coexists, or even of blood and mucus; and especially if the density of the urine is low, and continues so; if its colour be aqueous; the smell fætid; the reaction alkaline; and the deposit phosphatic: and if the morbid conditions of the urine are attended with lumbar or nephritic pains, and general symptoms of urinary hectic. . . Lumbar symptoms will present themselves in cases of calculus, where the phosphatic diathesis predominates; and hence great caution is required in the diagnosis, lest the operating surgeon should confound them, and materially compromise his character."

Vibrios have been found in the urine, by Dr. Fleming, in many cases of lithic deposits.

Irritable bladder also often attends intestinal worms. In these cases, as well as where vibrios are present, Dr. Fleming finds creasote of great service. He has been in the habit of giving it with benefit in combination with the common aperients of children, and in irritable bladder he constantly orders it, with or without calomel, according to circumstances.

Buchu and uva ursi, with lime or magnesia water, or nitric and hydrochloric acids, are of benefit; and in the chronic cystitis affection, cod-liver oil, alternated with mild preparations of iron, will do much good; and mild counterirritation in the supra-pubic and lumbar regions with tincture of iodine will assist. Sea-air and tepid or cold bathing are valuable in many cases.

It is indispensable to attend to the state of the bladder. In all painful urinary affections, children probably do not entirely empty it; and Dr. Fleming has found in it from four to six ounces of urine, even after great efforts on the part of the child. In such cases, the use of the catheter is necessary. In girls, adhesions of the labia and vagina may induce retention, with most painful symptoms of irritable bladder. Dr. Fleming relates a case in which such symptoms occurred in a child, aged two years, who was recovering from anasarca after scarlatina. He found the labia adherent from before backwards, and a small cribriform veil of mucous membrane covering the orifice of the urethra.* In boys, symptoms resembling those of irritable bladder may (but not necessarily) arise from smallness of the opening in the prepuce, and its great distance from the end of the glans. On observing the passage of urine, it will be found that the stream is scattered, and that the prepuce is distended into a pouch. The author prefers mechanical dilatation of the prepuce to its division.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, MARCH 5TH, 1853.

JOHN BISHOP, Esq., F.R.S., President, in the chair.

ELECTION OF OFFICERS. The balloting commenced at seven o'clock, and terminated at eight.

After the President had declared the ballot closed,

Mr. C. WING said, that he wished to direct attention to the inconvenient manner in which the election of officers is at present conducted. The names of those already in office were

* Dr. Fleming regards this as one of congenital adhesion of the labia. Yet there had never been any difficulty in passing urine before the attack of scarlatina; and hence we are more disposed to regard the morbid adhesions as the result of scarlatinal vaginitis.

sent, with a list of the Fellows of the Society; and it was a troublesome task to choose from these the persons to fill the vacant offices. He suggested that it would be better for the Council to nominate four or five candidates for each office, and furnish them to the Fellows, in order that they might make their selection from them.

Dr. C. J. HARE objected to Mr. Wing's suggestion, that it was introducing the system of "house-lists".

Dr. SISBON would prefer a return to the system of election formerly pursued in the Westminster Medical Society, before its amalgamation with the Medical Society of London. The candidates for the various offices were nominated openly at one meeting of the Society; and the officers were selected from those nominated, by a ballot at the ensuing meeting.

CALOMEL IN ASIATIC CHOLERA. Mr. TAYLOR read a paper on the *modus operandi* of Calomel in Asiatic Cholera. He supposed that, by the use of calomel, a dysenteric state of the intestinal canal was set up, which was antagonistic to the cholera. He stated that he had been led to this conclusion by having observed some cases in which dysentery appeared to have rendered persons insusceptible of the action of the cholera poison.

ANNIVERSARY MEETING, TUESDAY, MARCH 8TH.

JOHN BISHOP, Esq., President, in the chair.

The society assembled at 5 P.M., in the Thatched House Tavern, St. James's Street.

NEW OFFICERS OF THE SOCIETY. The result of the ballot for the election of officers was declared to be as follows:—

PRESIDENT: Forbes Winslow, M.D. **VICE-PRESIDENTS:** E. Canton; S. Stedman; Tyler Smith, M.D.; John Snow, M.D. **TREASURER:** Henry Hancock. **SECRETARIES IN ORDINARY:** C. Cogswell, M.D.; Edward Smith, M.D. **SECRETARY FOR FOREIGN CORRESPONDENCE:** T. Davidson, M.D. **COUNCILLORS:** R. Barnes, M.D.; J. Bishop, F.R.S.; J. Chippendale; W. D. Chowne, M.D.; J. F. Clarke; J. B. Daniell, M.D.; Victor de Méric, M.D.; W. C. Dendy; R. Druitt, M.D.; A. H. Hassall, M.D.; S. W. J. Merriman, M.D.; John Probert; B. W. Richardson; C. H. Rogers Harrison; C. H. F. Routh, M.D.; W. B. Ryan, M.D.; R. H. Semple, M.D.; W. Smiles, M.D.; J. S. Stocker, M.B.; E. J. Tilt, M.D. **ORATOR FOR THE YEAR 1854:** W. F. Barlow.

DR. SNOW'S ORATION. Our space does not enable us to do more than briefly glance at the very able and interesting address delivered by Dr. SNOW, which was listened to throughout with marked attention, and at its conclusion elicited hearty applause.

The subject of the oration was, "Continuous Molecular Changes, more particularly in their Relation to Disease". The speaker expressed the opinion, that the attraction existing at insensible distances, amongst the atoms or molecules of matter, was a constantly acting force, like that of gravitation. He said, that one of the most important properties of many of the actions or changes resulting from this attraction, was, that they were the cause of their own continuance and extension, as they might observe in combustion and the various kinds of putrefaction and fermentation. In the instance of combustion, they possessed an instrument—the thermometer—with which they could measure the force which extended the action to adjoining materials; but, in the other instances, they had no such instrument. It was in living beings that this continuity of change was most striking; for the actions to which these beings owed their development, were never caused by anything except the previous actions which had preceded them in the same species. These changes, it was true, sometimes admitted of being suspended, but, when they re-commenced, it was in the same materials, and exactly at the point at which they ceased; so that the continuity was not broken. The *matrices morbi* of communicable or contagious diseases resembled the species of living beings, inasmuch as it depended on continuous molecular changes. It also resembled them in the property of increasing and multiplying itself. The epidemic character of diseases was entirely due, in his opinion, to their property of being communicated, either directly or indirectly, from one person to another. He considered that far too much influence had been attributed to atmospheric causes, and to what were called noxious effluvia, in the propagation of epidemic diseases. He said, that even the existence of malaria as a cause of ague had not been proved, and quoted some instances in which intermittent fever had been caused by drinking ditch or marsh water. The cause of these fevers, whatever it might be, probably entered the system by the alimentary canal, and not by the lungs; and agues might possibly belong to the class of communicable diseases, although this character had not been discovered by direct ob-

servation. The communication of tape-worm from person to person had never been observed, although, from various circumstances, it was known to be caused by persons unconsciously swallowing the eggs which had been produced in another patient. He recommended the increased investigation of communicable disease; and concluded with an allusion to the discovery of Jenner, who was one of the early members of this Society.

FOTHERGILLIAN MEDAL. The President presented Alfred Poland, Esq., of Guy's Hospital, with this mark of distinction for his essay on "Wounds and Injuries of the Abdomen, and their Treatment".

THE SOCIETY'S SILVER MEDAL was presented by the President to Nathaniel Clifton, Esq., late Hon. Treasurer of the Society, for the zeal and success with which he had managed its financial affairs, and the great interest which he had uniformly taken in the business of the meetings.

THE DINNER.

Upwards of seventy Fellows and guests sat down to dinner, at 7 o'clock. The President (Mr. Bishop) was supported on the right by Dr. Paris, President of the College of Physicians, and on the left by Mr. Caesar Hawkins, President of the College of Surgeons. Many toasts were proposed, and many speeches made, which, though very suitable for the occasion, do not require to be reported at length. Between the speeches, there was some capital glee and song-singing by professional performers; and everything passed off in the most excellent spirit, every one feeling that such meetings are admirably calculated to remove those angular projections and asperities which must sometimes necessarily arise in connexion with the debates of societies, and the vicissitudes of professional intercourse.

The President successively proposed the Queen, Prince Albert and the Royal Family, the Army and Navy, Dr. Paris and the College of Physicians, Mr. Hawkins and the College of Surgeons. The next toast was Mr. Eyles and the Society of Apothecaries, proposed by Dr. Cormack; then followed the President, proposed by Dr. Paris; the Vice-Presidents, proposed by Dr. Daniell, (and responded to, in an eloquent speech, by Dr. Lankester); the President-Elect, proposed by Dr. Theophilus Thompson; the Treasurer, etc. etc.

In proposing the Medical Society of London, the President stated that it was founded in 1773; and that they were therefore celebrating its eightieth anniversary. The idea of founding the Society had undoubtedly originated with Dr. Lettsom, who was enabled to carry out his ideas with the co-operation of twenty-one distinguished practitioners, among whom were Fothergill, Sims, Jenner, Ware, Woodville, and Babington: and the link connecting the present with the past, existed in the revered Father of the Society, Dr. Clutterbuck. Dr. Lettsom gave the Society its freehold premises in Bolt Court, contributed towards the formation of its library, founded the Margate Infirmary, and introduced vaccination into America. He was President of the Society down to the period of his death. He gave the Society £500 for founding the prize of the gold medal; he also gave £500 to the Physical Society of Guy's Hospital, £500 to the Royal Humane Society, and £500 to the Society of Arts. He was the intimate friend of Benjamin Franklin, with whom he consulted on the best means of averting the calamity of the American war. The Society had always counted amongst its Fellows some of the most distinguished practitioners in London. In their obituary, the Society had to deplore the loss of the following Fellows: Mr. Hooper, Dr. Herbert Mayo, Dr. George Gregory, Dr. Manson, Dr. Bowie, and Mr. Samuel McCulloch. In eighty years, the Society had published ten volumes of Transactions, and had contributed a large series of papers to periodicals. The revenue of the Society was quite sufficient to cover its ordinary expenditure, and, from the judicious management of the Treasurer, there was a considerable balance; and the Society contained within itself the elements for prosecuting researches in medicine and surgery, and for advancing these subjects in connexion with the physical sciences with which their pursuits were so intimately associated.

Dr. PARIS, in returning thanks for his health, (which had been proposed in connection with the College of Physicians,) mentioned that he had a vivid recollection of having been present forty-two years ago, when a student, at some of the meetings of the Medical Society, in Bolt Court. The scene was still vividly impressed on his memory; and he could see at the moment, portrayed before him, the faces and attitudes of the different physicians and surgeons who were there assembled. The general effect was very different from that of a similar meeting of professional men in the present day; for, at that period, all professional men wore wigs and pigtails.

ASSOCIATION INTELLIGENCE.

MEETING AT WORCESTER, TO PETITION AGAINST THE INCOME-TAX IN ITS PRESENT FORM.

A meeting of the members of the medical profession resident in the city and county of Worcester, was held on Thursday, the 3rd instant, in the Board Room of the Worcester Infirmary. It was convened by the Council of the Provincial Medical and Surgical Association, for the purpose of considering the propriety of petitioning Parliament against the income-tax in its present form.

Sir CHARLES HASTINGS, M.D., having been called to the chair, said, that the meeting had been called in consequence of the general feeling that the income-tax pressed upon the medical profession with peculiar hardship. Medical men by no means sought to be relieved from taxes at the expense of any other parts of the community; they only shared in the very general opinion that the income-tax, as a tax on labour, was unjust; that it was unjust to tax the profits of labour in the same proportion as property which had been capitalised. Scientific men, who had given their attention to statistical finance, were of opinion that there was no difficulty in more equitably adjusting the tax; and the medical profession, in common with all others whose livelihood depended on the exertions of their brains or their hands, required, therefore, that its burden should be more fairly distributed. He would now call upon Dr. Malden to lay before the meeting a petition which had been drawn up by the Committee of the Provincial Medical and Surgical Association, and which had also been approved by several other members of the profession in the locality.

Dr. MALDEN (Worcester) said that, as Chairman of the Income-Tax Committee of the Association, it became his duty to read, and propose for the adoption of the meeting, the petition referred to by Sir Charles Hastings; and, in doing so, he must say that that committee was greatly indebted to its admirable secretary, Dr. Thomas Smith, (who had, at much inconvenience, come to attend the meeting that day,) for the manner in which he had made himself acquainted with all the details and bearings of the question. This petition, of course, came before the meeting for adoption, rejection, or amendment. In the petition, allusion was made to all persons dependent on temporary or life incomes; which he was glad, because it had been a question whether the members of the faculty should take this matter up separately, or call a general meeting of the various professions who felt themselves aggrieved by the income-tax. If they had done so, they would no doubt have had a multitudinous assembly; but it was thought that this tax pressed more hardly upon the medical profession than on any other, and that therefore they should address Parliament on the merits of their own case, leaving other professions to follow their example. There was no question that the tax did press with peculiar hardship upon the medical profession; for, while a vast majority of medical practitioners worked harder than any post-boys, and were worse paid, statistics established that their lives, on an average, were much shorter than those of other professional men. Their rest was continually broken, than which nothing tended more to the shortening of life; and they were peculiarly liable to disease and accident. On all these accounts, it had seemed better to the Council of the Provincial Medical and Surgical Association, that the present meeting should be confined to the medical profession. Further details he would leave for Dr. Smith to lay before them.

Dr. Malden then moved the following resolution:—

"That it is the opinion of this meeting, that the income-tax, as now levied, bears unjustly and severely upon the members of the medical profession; and, therefore, that the following petition be agreed to, and afterwards signed by the chairman on behalf of the meeting, and presented to the House of Commons:—

"The Humble Petition of the undersigned Members of the Medical Profession practising in the City and County of Worcester.

"This petition sheweth, That your petitioners only derive from their professional exertions most uncertain and precarious incomes, and which of necessity cease under impaired health, in advanced life, and at death.

"That your petitioners are, for the most part, married men, with families, for whose education and present and future support, under the contingencies of illness, advanced age, and death, they have to provide by these uncertain and precarious incomes.

"That your petitioners feel it a great grievance, and cannot but consider it most unjust, that their professional incomes, thus precarious, should be taxed at the same rate as incomes derived from realised property, which are not affected by the health or age of the possessors, and which descend to their families after their death.

"That your petitioners respectfully submit, that the unequal pressure of the assessed taxes, the higher rate of house-duty, the inquisitorial nature of the income-tax, and its assessment on the maximum amount of the last year's receipts, are felt to be extremely oppressive and unfair towards them, and severely prejudicial to their interests.

"That your petitioners, therefore, humbly pray that, in considering the subject of general taxation, your honourable House will so deal with this impost, if it be indispensable to retain it, as to make it press less grievously upon them, in common with all others depending upon temporary and life incomes."

Dr. THOMAS SMITH (Cheltenham) said that, not being a resident in the county, he could have wished the matter to have been discussed by others who would have come more strictly within the requirements of the advertisement convening the meeting; but, having taken much general interest in the subject of the income-tax, he could not urge any cogent reason why he should not comply with the request of the chairman to take a part in the proceedings. He was convinced that the ill will, engendered by a continuance of the income-tax, would be so great as to compel any minister who might be in office to grapple with it in a manner much more effectual than any that had been at present contemplated. (Hear, hear.) At present, he knew many medical practitioners struggling with difficulties, who felt themselves compelled to make returns which their duty to their families did not warrant, but for which they hoped future success in life would atone. That the returns made to the income-tax commissioners were kept secret, was an absurdity and a farce. He himself last year was obliged to pay his income-tax in the presence of twenty people, every one of whom knew the exact number of pounds he had to put down. Last year, at Cheltenham, one of the income-tax collectors became a defaulter, in consequence of which the board in London made an arbitrary order, against which there was no appeal, that the town should pay a certain part of its income-tax over again; and the assessment papers were left openly at each man's door. He held in his hand now one of these papers, which had been left upon a tradesman's counter, so that all his customers could see how small an amount he paid. Those who did not at once make their returns to the board in London, but placed themselves in the hands of the local boards of commissioners, found themselves in a truly pitiable condition. The supervisor of the district, being paid a per centage on all he got, thought everybody was trying to make his income appear as little as possible, and took a very different estimate of a man's gains to that which he did himself, and generally surcharged him. If he did not appeal, he was set down as a person who had been dishonest: if he did appeal, after being kept waiting for some hours, he was subjected to a vexatious cross-examination, in which he perhaps lost his temper, and so the surcharge was confirmed. He went away like a man who felt himself convicted of a fraud, though he probably knew it was most unjust that he should be required to pay. The person who committed an overt act of smuggling, or adulterated the articles which he sold, was liable to a penalty: the man who had made an unjust return to the income-tax commissioners, was just as much blameable; but the income-tax did not back its own enactments with penalties, because it was known to be unjust in its requirements. The medical profession felt this tax to be peculiarly severe, because theirs was not simply a mere life income; it was only a health income. They moreover were required to pay in much larger proportion than the man in trade; for, while the tradesman's mill, warehouse, cart to carry out his goods, and man to attend to his horse, were all exempt from tax, because these were held to be necessities for his business, the medical man had to pay house-tax at a higher rate than his neighbours, and neither his vehicle, his horse, nor his servant, were exempt, however necessary they might be to carrying on his business. Dr. Smith enlarged upon the difficulties with which many of the medical practitioners had to contend, and the hardship which the tax was to them, especially in its present mode of collection; and he hinted that one reason why they had not more attendants that day, might perhaps be the fear that the eye of the local collector would be upon them, and that he would visit them the next year with a surcharge. He thought nothing would be done effectually towards improving the tax, till the whole system of local assessment was

abolished, and the matter put into the hands of commissioners in London, chosen from the various professions.

The resolution was carried unanimously.

The petition, it was agreed, should be entrusted to the Rt. Hon. Sir John Pakington, Bart., for presentation; and that the various members for the county, city, and boroughs of the county, should be requested to support its prayer.

On the motion of Dr. MALDEN, seconded by Mr. BUDD (Worcester), the thanks of the meeting were voted to Dr. Smith, for his attending the meeting, and the zeal, talent, and industry, which he had displayed as Honorary Secretary to the Income-Tax Committee of the Association.

Dr. TURLEY (Worcester) moved, and Mr. W. C. WEST (Malvern) seconded, a vote of thanks to Sir Charles Hastings, for taking the chair.

Sir CHARLES HASTINGS, in reply, said that the medical profession seldom mixed itself up with the agitations of the day; but there were occasions when it was a duty to step forward and publicly express their sentiments on matters wherein they were deeply interested. As Englishmen, they were ready to pay, and to pay largely, for the blessings of free institutions; but it was for each class to see that it did not bear an unjust share of the burdens. In seeking to remove such an unjust burden from the shoulders of the medical men, he was not coming within the category of agitators. He was only performing his duty in complying with their call to take the chair, and assist them with the important business of that day.

RULES OF THE METROPOLITAN COUNTIES BRANCH OF THE ASSOCIATION.

1. THAT members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION be admitted as members of the Metropolitan Counties Branch, on signifying to the Secretary of the Branch their desire to have their names enrolled.

2. That the power of legislating for this Branch reside in the whole body of its members, the voice of the majority present being decisive.

3. That its executive government be conducted by a Council, consisting of a President, President-elect, an honorary Secretary, a Treasurer, and fifteen ordinary members.

4. That a General Meeting of the Branch shall be held at least once annually, at such place as the members at a General Meeting shall appoint; and that a General Meeting may at any time be called by the Council, on their own authority, and shall also be called by them on receiving a requisition of any ten members of the Branch, such requisition to be advertised in two numbers of the Journal of the Association, prior to the date of the said meeting.

5. That the President-elect be appointed at each Annual Meeting of the Branch, who shall enter on his office at the Annual Meeting next ensuing.

6. That the Secretary and Treasurer be appointed annually, but that they be eligible for re-election.

7. That the fifteen ordinary members of the Council be likewise elected annually, and that all be eligible for re-election, with the exception of the five who have attended the fewest meetings of the Council, who shall not be eligible for one year.

8. That at each Annual Meeting, the members receive the Council's report, elect officers for the ensuing year, transact necessary business, and discuss such subjects, connected with the interests of the profession, as may be brought before them.

9. That all subjects connected with medical science or the profession, be admissible for discussion.

10. That no alteration be made in the constitution, rules, or regulations, nor any rule enacted or abrogated, except at a General Meeting, nor unless special notice of the proposed alteration, enactment, or abrogation be given, either at a General Meeting of the Branch, or to the District Council, through the Secretary, one month before the meeting at which they are to be considered.

11. That the Annual Meeting be held in summer, and at least one month before the Annual General Meeting of the parent Association.

12. That a dinner be provided on the day of the Annual Meeting.

13. That an annual subscription of two shillings and sixpence (due on the 1st of January) be paid by each member to the Treasurer, for the necessary expenses of this Branch.

JOHN FORBES, M.D., *Chairman*.

T. OGIER WARD, M.D., *Hon. Sec.*

BYE-LAWS OF THE BRANCH. At a meeting of the Council, held on Tuesday, February 8th, 1853, the following bye-laws were adopted:—

1. That the ordinary Meetings of Council be held at 4 P.M., on the first Tuesday of February, April, June, October, and December.

2. That special Council Meetings may be called by the President, or Council, or by a requisition of three Members of Council to the Secretary; the nature of the business to be transacted to be stated in the notices for such meetings.

3. That at every Meeting of Council, five constitute a quorum, provided that three at least be ordinary members.

4. That the President of the Branch be, *ex officio*, Chairman of the Meetings of Council.

5. That at all Meetings of Council, in the absence of the President and President elect, the Chairman be chosen by the majority of the members present.

6. That it be the duty of the Secretary to mention, in the summonses announcing the ordinary Meetings of Council, all notices of motions which have been communicated to him in writing by any Member of Council.

7. That the summonses be issued at least seven clear days before the ordinary Meetings; and two clear days before the special Meetings of Council.

8. That all accounts and charges be laid before the Council at the ordinary Meetings; and that all orders for payments be signed by the Chairman and Secretary.

JOHN FORBES, M.D., *Chairman*.

T. OGIER WARD, M.D., *Hon. Sec.*

MEDICAL BENEVOLENT FUND.

At a meeting of the Committee, held on the 22nd of February, letters of acknowledgment of the receipt of grants having been read, Mr. TOYNBEE reported that the £10 placed in his hand for the benefit of a poor medical man, who, with a wife and four out of five children, were destitute, had been applied by him as follows:—Six shillings and sixpence had been paid for an advertisement, through which a situation had been obtained for the father, capable of supporting all his family; and the remainder of the sum of £10 had been devoted to starting them again in a home. There was a balance still due to the treasurer. The treasurer reported that a draft deed of the gift of the six houses, mentioned at the previous meeting, was in his hands.

The following cases were presented:—

i. The widow of a medical man, who died many years since, and who has educated her two children, the one being a medical student, the other a governess. Her sister, who had assisted her, had lately died. Voted £10.

ii. The widow of a medical man, aged 48, supporting herself and five children, by teaching at a school. Voted £10.

iii. A physician in very distressed circumstances, having been unable to succeed in practice, with a wife and eleven children dependent upon him, is anxious for aid to assist him in emigrating to Australia. Voted £30.

iv. The wife of a medical man, with three sons, whose health had slowly declined for some years, and who had lately become insane. Voted £10.

v. A physician in a country town struggling to establish a practice. Voted £5.

vi. A medical man practising in the country, having five children, and in considerable difficulty. Voted £5.

vii. A medical man, of great literary attainments, who has undergone great trials, and whose health is now very bad. Voted £10.

viii. The widow of a country surgeon, aged 63, is entirely dependent upon her children, who are unable to support her. Voted £10.

ix. The wife of a surgeon, she being partly blind, he being insane, having two children dependent upon her for support. Voted £10.

x. The widow of a medical man, destitute on account of the small sum left her, by her husband being detained in a foreign land. Voted £10.

xi. The widow of a young medical man, having two young children to support. Voted £5.

EDITOR'S LETTER BOX.

THE PRESENT OBJECTIONABLE MODE OF CONDUCTING CORONER'S INQUESTS.

LETTER FROM JONATHAN TOOGOOD, M.D., TO THE EDITOR.

SIR,—A FEW years since, I published a letter in the *Times* on this subject, which attracted a good deal of attention, and was subsequently copied into the medical journals, pointing out the mischief which frequently resulted from the appointment to the responsible office of coroner, of ignorant men totally unfitted for it by education or acquirements, and who often sought it to supply the deficiency of income, occasioned by the failure of their original occupation, from their want of ability or of industry. This naturally excited the wrath of these functionaries generally, who assailed me with coarse invective and abuse, in which they were joined by one or two angry medical practitioners, whose unguarded conduct had laid them open to remark. They all failed, however, in refuting my argument, or impugning the truth of my statements. I was therefore convinced that I had taken a step in the right direction; and experience has confirmed that opinion.

In the arbitrary exercise of their office, coroners frequently refuse an investigation into the cause of death, when absolutely necessary, and record verdicts not only at variance with the evidence, but in direct contradiction to facts, which patient examination would have developed. This belief is gaining ground, and becoming so general, that a leading public journal, not long since, summed up an able article in the following words: "The sooner 'Crownser's Quest Law' engages the attention of the Legislature, the better; and it would not be surprising to see one of these days an Act of Parliament passed: 'Whereas, the office of coroner has, by change of circumstances, become cumbersome, useless, and mischievous to the public, be it therefore enacted, etc.' And when this reforming measure shall have received legislative authority, every one will discover what a set of old Charles the coroners were, how utterly unsuited to the present times, and how worthy of every kind of retrospective fun and ridicule."

The office of coroner is, however, in my opinion, one of vital importance. It concerns the morals, the lives, and the liberties of the community. The law, as it stands at present, is totally unsuited to the times, and must be reformed. Coroners do not appear to be guided by any fixed principle of action: they arbitrarily hold inquests unnecessarily, in cases where death has resulted from accident, in the presence of many witnesses, and without a shadow of suspicion; they neglect it in others under precisely similar circumstances; and yielding to the wishes of friends, or the arguments of their legal adviser, they sometimes omit it, in cases of persons found dead in bed without any assignable cause. Each of such instances has occurred more than once in my own practice.

That inquests held by coroners are often solemn farces and mockeries of justice, is as true as that they are often held unnecessarily, and that they "shield off" by their pretended performances, that duty of searching inquiry which is the public's greatest safeguard; and that investigations are sometimes stifled, cannot be denied. These functionaries are sometimes open to conviction, especially in cases in which a lawyer attends to "watch the proceedings" on the part of the friends of the deceased, and spare the feelings of the survivors—a circumstance always open to remark, and sometimes to suspicion.

I proceed to give some examples in corroboration of my statements.

The housekeeper of a friend of mine, mistaking the door of an ashpit for the larder, fell into it. The accident was seen by the master from his dressing-room, and by some of the servants, and she was quickly rescued. She did not appear to be much hurt; notwithstanding, I was desired to see her, when I found that she had broken two ribs. I visited her twice on the following day, and once on the third, when she expressed herself as feeling so little inconvenience, that I did not think it necessary to see her the next day; but just as a servant entered the room that morning, she suddenly expired. An inquest was held, but no medical evidence was called.

A different course was pursued in the following case. I was called into consultation in the case of a gentleman who had been thrown from his horse, and had suffered a fracture of the base of the skull, with great extravasation of blood, from which he died at the expiration of four days, having, after the first twenty-four hours, recovered his consciousness, and given a

distinct account of the accident. His friends did not think an inquest necessary, and preparations were made for the funeral. But on the morning when it was to have taken place, the clergyman of the parish received a *mandamus* from the coroner of the district, who had been made acquainted with the accident by one of his *employees*, not to bury the body until an inquest had been held, which it would not be convenient for him to hold until the following day. The friends were much annoyed at this proceeding; but seeing there was no remedy, they requested the funeral attendants to reassemble on the following morning. I was desired to be present, and met the legal adviser of the family, who contended that an inquest was unnecessary; and, after a short time, succeeded in convincing the coroner, assuring him at the same time that his fee, together with the customary expenses, would be paid. The conclusion appeared to me a proper one, although it was impossible to approve of the means by which it had been arrived at. I do not remember to have seen any report of an inquest on the late Sir Robert Peel, whose death occurred under somewhat similar circumstances.

I am not certain whether a practice, which prevailed some years since, still exists, of employing some idle individual in a parish to report to the coroner any case in which an inquest may be held, by straining the law. The following is an example. I was called to a child, accidentally burnt in the presence of the father, mother, and their nearest neighbour, and who survived the accident three weeks; when it died, and was buried. Fourteen days afterwards, the body was exhumed by order of the coroner, and a verdict of "accidental death" returned. It turned out that a man of the name of Bawden gave notice to the coroner, and received the usual fee of half a crown. Everybody must condemn such an inquest, as a cruel and unjustifiable mockery.

Although cases might be multiplied to an almost unlimited extent, to prove that these statements are grounded on facts, I shall content myself with adducing one instance which fell under my own observation, showing that inquiry is sometimes withheld where it may be justifiable and proper. A lady who had complained of a common cold for two or three days, retired at her usual hour, and was found dead in her bed when the servant went to her room in the morning. No inquiry was made as to the cause of her unexpected death; and this was by some attributed to the fatal event having occurred in the house of an acute lawyer.

It appears from the annexed and other cases, that coroners are not guided by any fixed principle of action. The following is copied from a provincial paper.—"FATAL ACCIDENT. On Wednesday evening last, a man named Haines was knocked down by a van on the Bath road. He died about ten the same night. No inquest was held on the body. The reason assigned for not doing so is, that the recorder will not allow the expenses of the coroner after any person injured has spoken."

The conduct of coroners to medical men has, on some occasions, been not only rash, but impertinent, and extremely reprehensible. This was strongly exemplified in a case of asphyxia from hanging, to which Dr. Shearman, of Rotherham, was called. Under his judicious treatment, the man recovered for a time, but died afterwards of secondary asphyxia. The learned functionary, too ignorant to comprehend the possibility of such a case, not only peremptorily refused the necessary investigation, but slandered the reputation of a highly respectable and intelligent practitioner. (Vide *Provincial Medical and Surgical Journal*, 1844.) He who sitting as judge was bound to confine himself to the evidence, listened to the gossip of a practitioner, who was not a witness before the court; and upon the authority of that gossip, impugned the practice of the medical witness, thereby giving currency to reports injurious to his reputation.

A still more flagrant breach of decorum occurred at an inquest held at West Anstey, before Mr. Partridge, a coroner for Devon, on the body of Elizabeth Tapp. Mr. Trevor, the surgeon who attended the deceased, and to whom she had made an important communication, offered some suggestions which he considered material; upon which the coroner, in the most peremptory manner, ordered him to be silent, and called for the constable to turn him out of the room, after forbidding him to publish any account of the inquest in the papers, declaring that he would ask the jury nothing, but would conduct the case as he thought proper, and according to the "instructions of the magistrates". And this too he did, contrary to the opinion of some of the jury, who would have probably returned a different verdict from that of *felo de se*. This unusual verdict was returned in the absence of all evidence as to the state of mind of the deceased. Mr. Trevor, in a letter to the editor of

the *Exeter and Plymouth Gazette* (vide *Provincial Medical and Surgical Journal*, July 9th, 1845), says: "that the feelings of bereaved parents have been outraged, and the inhabitants of a quiet secluded village have been shocked, by witnessing the stern administration of a barbarous law"; and adds: "but then the coroner got home in time to a late dinner, and the county of Devon was saved twenty-one shillings"; and that he purposely forbears from making any remarks upon the personal rudeness and vulgarity which the learned "judge" of his own court exhibited towards himself, because such conduct from that individual was more a matter of indifference than surprise.

The necessity of making *post mortem* examinations in all doubtful and suspicious cases, is too obvious to be insisted on. I hold it to be the imperative duty of every coroner to direct such an examination to be instituted, unless there exists sufficient apparent cause of death to satisfy the minds of the jury. Such a course ought to have been observed in the case of Elizabeth Tapp, and, *à fortiori*, in the case of James Dimond, who was poisoned with arsenic, administered by that wholesale murderer Sarah Freeman; for if the surgeon had prudently refused to give any evidence, which every man is justified in withholding (unless there be obvious and apparent cause of death), without being allowed to satisfy himself, the coroner must have directed a *post mortem* examination, when arsenic would have been discovered in the stomach, where it was found on the body being exhumed many months afterwards, and the result would probably have been the prevention of two subsequent murders. The fear, however, of the Court of Quarter Sessions is before the eyes of the coroner; and his bill is too often kept down by the rejection of the most important witness. If the reason assigned be the correct one, "that the magistrates are particular as to the expenses", the purse of the public is treated with more respect than their lives. The matter thus stands between the magistrates and coroners. The public mind ought to be set at rest on this point, and the misconception or misrepresentation removed. I cannot imagine that so respectable a body of men, as the county magistrates, would sanction any course which is calculated to impede the proper administration of the law.

I have been induced to offer these remarks, by reading the report of Mr. Hicks's case in the *ASSOCIATION JOURNAL* of the 4th February. It appears that this gentleman has been committed to prison on the coroner's warrant for manslaughter, on the evidence of two practitioners in his own neighbourhood, after a *post mortem* examination made in his absence, and without his knowledge. This proceeding is monstrous. That a mistake in diagnosis (no neglect having been proved) should be followed by imprisonment, is a thing unheard of in the annals of criminal jurisprudence. If such is to be the practice of coroners' courts, and the fate of men who unfortunately commit errors, verily, our prisons must be enlarged to make room for the whole body of medical practitioners; for I believe there is scarcely a candid medical man who has seen any practice, who will not readily admit that he has sometimes arrived at a wrong conclusion. I confess that I am not one of those fortunate practitioners "who never made a mistake in my life". In the course of a long life, and very extensive practice, I have often seen "effects attributed to wrong causes", and sometimes made mistakes in common with men of the highest attainments, and of acknowledged skill and ability. Nor is this matter of surprise in so difficult a science as medicine.

I will not take upon myself to determine whether a member of the medical or legal profession would be the most fit person to preside over a coroner's court; but certain am I, that had one of the former been the judge in the case of Mr. Hicks, he would have been far more competent to deal with the case, and would have subjected the medical witnesses to such a cross-examination, as would have resulted in a juster verdict.

It is, indeed, high time that the whole body of the profession should be "up and stirring", to amend this antiquated law of coroner, and to protect themselves from incompetent coroners, illiterate juries, and malevolent rivals.

I am, etc.,

JONATHAN TOOGOOD, M.D.

The Crescent, Taunton, February 15th, 1853.

HOMŒOPATHY A REACTION AGAINST OVER-DRUGGING.

SIR,—I fancy all candid medical observers regard homœopathy as the reaction against the over-drugging system, which resulted from the practical English public wishing to pay in proportion

to the quantity of medicine they swallowed, owing to their belief that medicine *cured diseases* instead of chiefly *assisting nature*. "My children," said an acquaintance, who had adopted homœopathy, "have got through the measles very well on homœopathic treatment." "So they would with no medicine at all, but with diet, warmth in bed, and a few external applications. Measles, and such like diseases, run their course, and no medicine cures them." "Medicine does not cure measles and scarlet fever? Then I have been always regularly humbugged." This was a *bona fide* conversation. If the public have been accustomed to believe that draughts every four hours, charged at one and sixpence each, are essential to recovery, then they will believe that infinitesimal globules every four hours, at an infinitesimally smaller price, are also as efficacious. The cure, therefore, for this delusion, founded on such premises, lies with ourselves as a body. But again, if legitimate practitioners are not rational ones, they tend to support homœopathy more than all the advertisements, manuals, and fools. To give a case. A young lady comes into the country, out of health. She has a good organization, is essentially a healthy person, but lives on the following *strengthening plan*—rum and milk in bed before breakfast: a glass of wine at eleven: a pint bottle of porter and two glasses of wine at an early dinner at one: a glass of wine at five o'clock, and some again in the evening. She was supplied with saline draughts; with rhubarb draughts; and with chalk mixture if the rhubarb acted too much. Her abdomen was distended. She had constipation alternating with slight diarrhoea, and it turned out that she required castor oil and a simple diet. Now, in such a case, would not a homœopathic doctor have gained credit by merely attending to the diet more reasonably? By advising treatment, so irrational and absurd, members of our own body become the supporters of the silly homœopathic delusion.

I am, etc.,

CARDIUS.

PAYMENT OF MEDICAL REFEREES BY ASSURANCE COMPANIES.

LETTER FROM THE SECRETARIES OF THE MANCHESTER MEDICO-ETHICAL ASSOCIATION, TO THE EDITOR.

SIR,—We are directed by the Committee of the Manchester Medico-Ethical Association, to request the insertion in your columns, for the benefit of the profession at large, of the accompanying "list of Assurance Companies which recognize the principle of remunerating the medical attendants of applicants for insurance, should their professional opinion be sought by the office." We further beg leave to enclose a copy of the report of the proceedings of the Association during the past year, and also a list of practitioners who reside within twenty miles of Manchester, published by the Medico-Ethical Association.

We are, etc.,

JOHN AIKENHEAD,

W. C. WILLIAMSON, } *Hon. Secs.*

Manchester, Feb. 19th, 1853.

List of Life Insurance Companies which recognize the principle of remunerating the medical attendant of an applicant for assurance, should his professional opinion be sought by the office:—

Adamant, Bloomsbury Square, London.
Age, 64, Chancery Lane, London.
Agriculturist, 20, Cockspur Street, Charing Cross, London.
Albert, 11, Waterloo Place, London.
Albion, New Bridge Street, Blackfriars, London.
Athenæum, 30, Sackville Street, Piccadilly, London.
Beacon, 6, Waterloo Place, London.
Britannia, 1, Prince's Street, Bank, London.
British Empire Mutual, 37, New Bridge Street, London.
British Protector, 28, New Bridge Street, London.
British Provident, 4, Chatham Place, Blackfriars, London.
British Mutual, 17, New Bridge Street, Blackfriars, London.
Caledonian, 10, George Street, Edinburgh; and 27, Moorgate Street, London.
Cambrian and Universal, 27, Gresham Street, London.
Catholic, 8, Coventry Street, London.
Church of England, Lothbury, London.
City of Glasgow, 40, St. Vincent Place, Glasgow; and 12, King William Street, London.
City of London, Royal Exchange Buildings, London.
Clerical, Medical, and General, 99, Great Russell Street, Bloomsbury, London.
Commercial and General, 112, Cheapside, London.

County Mutual, Hertford.

Deposit and General, 18, New Bridge St., Blackfriars, London.

East of England, 6, King William Street, London.

Engineers, Masonic, etc., 345, Strand, London.

English and Scottish Law, 12, Waterloo Place, London.

English Widows' Fund, 67, Fleet Street, London.

European, 10, Chatham Place, Blackfriars, London.

General Benefit, 4, Farrington Street, Blackfriars, London.

Great Britain, Waterloo Place, and King William St., London.

Guardian, 11, Lombard Street, London.

Hand-in-Hand, 1, New Bridge Street, Blackfriars, London.

Hope Mutual, 4, Prince's Street, Bank, London.

Imperial, 1, Old Broad Street, and 16, Pall Mall, London.

India and London, King William St., and Waterloo Pl., London.

Indisputable, 72, Lombard Street, London.

Industrial and General, 2, Waterloo Place, London.

Insurance Company of Scotland, 95, George Street, Edinburgh.

Kent, High Street, Maidstone.

Kent Mutual, Old Jewry, London.

Law Property, 30, Essex Street, Strand, London.

Leeds and Yorkshire, Commercial Buildings, Leeds.

Legal and Commercial, 73, Cheapside, London.

Life Association of Scotland, 2, Hanover Street, Edinburgh;

and 20, King William Street, London.

London Assurance Corporation, 7, Royal Exchange, Cornhill,

and 10, Regent Street.

London Mutual, 63, Moorgate Street, London.

London and Provincial, 17, Gracechurch Street, London.

Medical, Invalid, and General, 25, Pall Mall, London.

Medical, Legal, and General, 126, Strand, London.

Mentor, 2, Old Broad Street, London.

Merchant's & Tradesman's, 5, Chatham Pl., Blackfriars, London.

Metropolitan, 3, Prince's Street, Bank, London.

Metropolitan Counties, 27, Regent Street, Waterloo Pl., London.

Mitre, 23, Pall Mall, London.

Mutual, 39, King Street, Cheapside, London.

National Guardian, 19, Moorgate Street, London.

National Loan Fund, 26, Cornhill, London.

National Mercantile, Poultry, London.

National Provincial, 34, Moorgate Street, London.

New Equitable, 449, West Strand, London.

North British, 64, Prince's Street, Edinburgh.

North of England, Old Haymarket, Sheffield; and 11, Cheap-

side, London.

Northern, 3, King Street, Aberdeen; and 1, Moorgate Street,

London.

Phoenix, 1, Leadenhall Street, London.

Prince of Wales, 105, Regent Street, London.

Professional, 76, Cheapside, London.

Protestant, 19, Parliament Street, London.

Provident, 50, Regent Street, London.

Prudential Mutual, 35, Ludgate Hill, London.

Royal, Royal Insurance Buildings, Liverpool; and 29, Lombard

Street, London.

Royal Exchange, Royal Exchange, and 29, Pall Mall, London.

Royal Farmers, 346, Strand, London.

Scottish Equitable, 26, St. Andrew's Square, Edinburgh; and

126, Bishopsgate Street, London.

Scottish Widows, 5, St. Andrew's Square, Edinburgh; and 4,

Royal Exchange Buildings, London.

Solicitors and General, 52, Chancery Lane, London.

Sovereign, 49, St. James's Street, London.

Standard, 3, George Street, Edinburgh; and 82, King William

Street, London.

Star, 48, Moorgate Street, London.

Union, Cornhill, and Baker Street, London.

United Guarantee, 36, Old Jewry, London.

United Kingdom, 8, Waterloo Place, London.

United Kingdom Temperance, 39, Moorgate Street, City,

London.

United Mutual, 54, Charing Cross, London.

United Service and General, 20, Cockspur Street, and Charing

Cross, London.

Universal, 1, King William Street, London.

University, 24, Suffolk Street, Pall Mall, London.

Waterloo, 355, Strand, London.

Wellington Reversionary, 4, Chatham Place, Blackfriars,

London.

Westminster and General, 27, King Street, Covent Garden.

Yorkshire, St. Helen's Square, York; and 12, John Street,

Bedford Row, London.

THE UNIVERSITIES OF LONDON AND EDINBURGH WITH REFERENCE TO PARLIAMENTARY REPRESENTATION.

LETTER FROM DR. SNOW BECK TO THE EDITOR.

SIR,—I feel you will accord me a further space in our Journal, in order to explain some parts of my previous letter.

It is gratifying to know that you consider the claims of the University of London to be elevated to the rank of a Parliamentary constituency, as fully made out. You further say, that even should the University of London succeed in obtaining representatives in Parliament, these members will not represent the medical profession; and "that the great body of the profession in England will not stand quietly by, and see their concerns committed to the keeping of a favoured few." In these sentiments I fully concur. It was never contended that the representation of the London University would represent the great body of the medical profession; nor that this representation should satisfy them; but simply, that through the medical graduates of the University, "medical interests will be more fully attended to in Parliament than they have yet been". It is merely contended that this is a step in the right direction; probably only a first step, and as leading the way for others to follow.

Respecting the value of the degrees of the University of Edinburgh, I am unacquainted with any Act of Parliament, or any Charter, giving to them any power which raises them above "a mere honorary certificate". The degree, so far as I am aware, confers no rights nor authority in the University; the graduates form no part of any corporate body of the University; nor do the degrees give any legal privilege to practise medicine. I have always understood that the degrees of Oxford and of Cambridge alone confer the right to practise medicine in England: the College of Physicians of London, I am aware, has a similar power. But in stating this, I by no means wished to draw any invidious comparison between the degrees of the University of Edinburgh and those of the University of London; for it is well known that the latter has been from its foundation, and is at the present time, in the same position as the former. The metropolitan degrees, equally with those of Edinburgh, are merely honorary, conferring on the possessor no authority in the University, nor giving any right to practise medicine. It is quite possible that those degrees may "constitute the sole legal qualification of many of our most eminent provincial physicians"; but does this not show that these physicians, eminent though they be, are practising without any legal qualification? So far from wishing to degrade the Edinburgh M.D., I intended to point out this singular anomaly—an anomaly which ought to be removed, and which is capable of removal, through the exertions of the graduates. The graduates of the University of London have been so alive to these facts, that for the last five years they have constantly urged the Senate to remove them, by applying for a new charter, incorporating the graduates into the University, and giving them certain rights and privileges. And now, after five years' agitation, there is every reason to believe that this will be conceded. Why should not the same be done in Edinburgh?

The argument, that representatives in Parliament are not likely to be given to an University which does not admit its graduates as members, and give to them a voice in their affairs, is not an argument of mine, but one emanating from ministerial authority. I mentioned it as a practical objection which had been made to the University of London; and which, probably, would be taken to other universities in a similar position, and seeking a similar advantage. I did so under the impression, that it was always a most difficult thing to have any new principle in the representation affirmed by the legislature. I further wished to point out, that it was better to take the present instalment of Parliamentary representation through the University of London, however inadequate that may be to the just demands of the profession, than to wait for the prospective possibility of obtaining it through the University of Edinburgh. My own feelings are in favour of extending the franchise, not to the University of London alone, but to all universities; and I would gladly aid in this object. In discussing these subjects, however, we must not forget that the experience of some years in the attempted legislation for the medical profession has clearly

* The simple fact is, that the diploma of M.D. from a Scottish University entitles a man to practise medicine in any part of the British empire, where there are no local restrictions enforced giving exclusive right of practice as physicians to others.—EDITOR.

shown, that graduates of universities of either of the sister kingdoms cannot be depended upon to represent either the feelings, or the interests, of the English medical practitioners.

I am, etc., T. SNOW BECK, M.D.

February 1853.

PROVIDENT OR SELF-SUPPORTING DISPENSARIES.

LETTER FROM HENRY LILLEY SMITH, Esq., TO THE EDITOR.

SIR,—I shall be obliged by your inserting the following comparison of provident or self-supporting dispensaries, with the present objectionable system of our medical charities:—

OLD SYSTEM.

1. Medical accounts, however moderate, are, except when sickness is of short duration, much beyond the means of the majority of working men.

2. Medical accounts not paid, or deferred till an unpleasant feeling has been created between patient and doctor, totally opposed to feelings of gratitude on the part of patient, and destructive of mutual confidence, which ought to be cherished between them.

3. Quack's medicines, family physic, amateur male and female doctors, or unlicensed practitioners, are of necessity resorted to by the poor.

4. Improvidence, drunkenness, folly in dress, pauperism, and beggary, are begotten, caressed, and encouraged by mere eleemosynary dispensaries, lying-in hospitals, and all the modes of medical charity, which time-servers uphold by balls, bazaars, and all other contrivances, to gild and blazon forth the pseudo-benevolence of the frivolous and the wealthy.

5. Bottle bill, drug bill, day-book, dispenser's salary, wages to errand-boy.

6. Ingratitude, faithlessness, thanklessness, degradation, idleness, and frequently loss of elective franchise.

7. Medical men are separated by jealousy, suspicion, weakness, and unfair competition; while they are likewise subjected to ceaseless toil in one dirty round of street or country duty.

NEW SYSTEM.

1. Payment of one penny per week for adults, and one half-penny for children, brings the best medical advice within the reach of the poorest working men who have employment.

2. Subscriptions paid in advance; and if paid with forfeits for delay, the collector, and not the doctor, bears the obloquy.

3. The qualified practitioners of the Dispensaries resorted to by the poor. [There is no distinction of London, Dublin, Edinburgh, or Glasgow, licentiates, members, or fellows. The lives of rich and poor are of equal value in the sight of God.]

4. Provident habits, sobriety, dress suited to the station in life, and independence encouraged; and the heavenly lessons practically taught to the poor, that it is equally a duty of all to "bear one another's burdens", and to "provide for his own household".

5. No surgery expenses, no bill writing, no bill delivery, no dunning, no courting.

6. Gratitude, respectability, union and thankfulness, industry, and the probability of acquiring the elective franchise.

7. Medical neighbours are brought together and made friendly, forbearing, and accommodating, by learning that they have a common interest in assisting each other, so that they might escape occasionally from the fatigues of practice, without finding on their return that their interests had been neglected or any advantage taken of them during their absence.

I might add to the above list many other indirect advantages likely to spring from teaching the poor to provide for sickness. One of these I will mention, namely, that provident dispensaries might be made the productive nuclei of provident banks and life assurance societies.

Your inserting these remarks in our ASSOCIATION MEDICAL JOURNAL, and calling attention to them, in connexion with your recent well directed censures upon the monstrous abuses of most of our medical charities, may, I trust, be productive of

some good. It will afford me much pleasure to supply information on the subject of this letter, to any member of the profession who may seek for it.

I am etc.,

HENRY LILLEY SMITH.

Southam, Warwickshire, 1st March 1853.

COMPULSORY VACCINATION.

LETTER FROM GEORGE KING, Esq., TO THE EDITOR.

SIR,—In the *Standard* of this evening (Saturday) it is stated that there is a Bill now in the House of Lords, to render vaccination compulsory. Is it possible that such a measure, so affecting the liberty of her Majesty's liege subjects, and so interesting and important to the medical profession, can be passing into a law without their knowing it, or the medical press having heard of it? I hope you will immediately get a copy of this Bill, and let us know in the next number of the ASSOCIATION JOURNAL what it contains, and if the statement of the *Standard* be true. I suppose this is the act of the Poor Law Commissioners; and if they are to have the management of it, it will be adding another insult to the medical and surgical practitioners in England, Ireland, and Scotland. The placing of the Vaccination Act under the control of the Poor Law Commissioners, and Poor Law Guardians, instead of the medical corporations, or medical men, was most iniquitous and degrading to the profession. People will not bring their children to be vaccinated at the beck of the Poor Law Commissioners; there is something revolting in an Englishman's mind to having his children pauperized. Still, I fear, it will be useless to pass Small-pox prevention Acts unless it is made penal for parents to neglect having their children vaccinated before a certain age, say four months; they would then get it done by their own medical attendant, we should have no two shillings or eighteen penny vaccinations, and we should also get rid of the interference of the Poor Law Commissioners. If you give this a place in the Journal, it may lead others to take up the subject, so as to prevent any more wrong being done us by legislation.

I am, etc.,

GEORGE KING.

Bath, March 5th, 1853.

ECONOMY OF THE ECONOMIC LIFE ASSURANCE SOCIETY.

LETTER FROM THOMAS GODFREY, Esq., TO THE EDITOR.

SIR,—I do not know whether the subjoined letter, which bears its own tale, is worth space in our JOURNAL, as a "caution to medical men".

I am, etc.,

THOMAS GODFREY.

Herne Bay, March 6th, 1853.

6, New Bridge Street, Blackfriars,
28th February, 1853.

SIR,—In reply to your favour of the 26th instant, I beg to inform you that it is not the practice of this office to pay a fee to the medical referee of a party whose life is proposed for assurance; it being required that "the proposer do furnish the directors, at his own expense, with evidence of the life proposed being eligible for assurance".

I am, etc.,

A. MACDONALD, Secretary.

THOMAS GODFREY, Esq.

HOMOEOPATHY IN THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

LETTER FROM A PROVINCIAL PHYSICIAN TO THE EDITOR.

SIR,—The facts revealed in the last number of the ASSOCIATION JOURNAL, relative to the proceedings of the governing body of the Royal Medical and Chirurgical Society, render it unquestionable that external legislation is required.

There is another circumstance alluded to, which excites considerable astonishment, and calls aloud for animadversion and correction. It is the "heavy scandal" that a Society expressly instituted for the improvement of medical science, should, even negatively, countenance a system at variance with all science. It is a disgrace to the Society that it should tacitly consent to serve as an advertising medium for adepts in homeopathy;—adepts is the term which best defines the *Cagliostro* of the age.

Professional men in the provinces have ceased to look to the London Colleges and London Societies, administered as they are, for protection against this most fraudulent and insidious of quackeries; but with the faith of a free-trader in the potency of his league, we rely on our own Association for the suppression

of charlatanism, and for the reformation of abuses; and we trust to our own Journal for denouncing both.

The memorable Meeting at Brighton affords every assurance, in spite of corporate supineness, equivalent to breach of privilege, that our Association will continue to maintain the honour and dignity of the profession. Deeply imbued with this conviction,

I remain yours, etc.,
SOCIUS.

March 7th, 1853.

NEWS AND TOPICS OF THE DAY.

CORONER'S INQUESTS AND POST MORTEM EXAMINATIONS. Mr. CARTER, coroner for Kent, lately held an inquest at the Railway Tavern, Dartford, on Elizabeth Reed. A suspicion of foul play existed, and Dr. Culhane performed a *post mortem* examination, as Mr. King, his assistant, could not arrive at a satisfactory conclusion respecting the cause of death. Dr. Culhane informed the coroner that an analysis of the stomach was indispensable, and that it should be made by a competent chemist. The coroner demurred to the proposition for engaging Professor Taylor, as the analysis would cost £6:0, and he could only give the surgeon who performed the necropsy £2:2. At the adjourned inquest, the coroner informed Dr. Culhane that he could fine him £5 for not complying with his warrant, and therefore he called upon him to give evidence of the result of his analysis of deceased's stomach. Dr. Culhane refused compliance for the following three reasons:—1st, want of ability; 2ndly, want of a proper apparatus and analytical experience; 3rdly, want of remuneration. Dr. Culhane called upon the coroner to read a letter which he had received from Professor Taylor upon the subject. The coroner accordingly read the letter, which stated that the want of a proper apparatus, and the absence of experience, rendered it impossible for a medical man to perform a satisfactory analysis of the stomach: that was the result of twenty-five years' experience. There were not twelve men in London competent to make a full and satisfactory analysis. The coroner observed that Baron Parke and Mr. Justice Coleridge recommended an application to the Home Secretary, who would, he had no doubt, order such expenses to be paid. The coroner asked Mr. Callow, the assistant overseer, to sign an order for the analysis, which Mr. Callow declined doing without the auditor's permission; but Mr. Gurnet, one of the churchwardens, undertook the responsibility, and the order was handed to Dr. Culhane for transmission to Professor Taylor, of Guy's Hospital, where the stomach has been lying nearly three weeks. Does not all this show the urgent necessity for a reformation of coroners' courts?

INSANITY. THE PRIZE of twenty guineas, found by Lord St. Leonard's, when Chancellor of Ireland, has been awarded by the Dublin College of Surgeons to Joseph Williams, Esq., M.D., for his essay on "Hypochondriacal Insanity".

EXTRAORDINARY FECUNDITY. On Sunday morning, February 6th, an in-lamb ewe, belonging to Mr. Whiting, of Northampton, died rather suddenly at his barn. She was of a large size, it was supposed from water; but, on being opened, was found to contain six perfect and remarkably fine lambs.

MEMORIAL FROM MEDICAL PRACTITIONERS IN WAKEFIELD AND ITS VICINITY TO THE ROYAL COLLEGE OF SURGEONS.

[TO THE PRESIDENT AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

GENTLEMEN,—We, the undersigned members of the College, have seen with great regret that it is your intention to confer the degree of Licentiate in Midwifery on persons who have not previously taken any degree either in medicine or surgery, not have gone through a course of study equal to that required from candidates for the membership of the College; and we feel it incumbent upon us to protest against a measure which we cannot but regard as both unnecessary and mischievous.

The present members of the College, and the licentiates of the Apothecaries' Hall, are amply sufficient to supply the obstetric knowledge and skill required by those classes of the community, among whom the licentiates in midwifery would probably practise.

By adding a new section to the already too numerous

branches of the profession, the difficulty of future legislation on medical subjects will be greatly increased.

The members of the College will be exposed to the competition of a class of practitioners, who have gone through a course of study inferior to that required from themselves; for it is absurd to suppose that the licentiates in midwifery will confine themselves to the practice of that branch of the profession alone. And this competition will be the more injurious, as it will spring from a class of persons who will have some pretence for holding themselves out to the world as qualified practitioners, and who will be so regarded by large classes of the community who know little and care less about the distinction of fellow, member, or licentiate, but who will be apt to regard all who have passed an examination at one and the same place as being on an equal footing; and it is little likely that those who take the license in midwifery without having obtained the diploma of membership, will be unwilling to encourage the delusion, and to act upon it to our disadvantage.

We also fear that the introduction of an inferior class of practitioners into the College will have a tendency to lower the whole body in public estimation; for if, as is very possible, the tone of professional morality of the proposed licentiates in midwifery should be lower than that of the members of the College, any discredit attaching to that circumstance would, in the eye of the public, be to some extent shared by us.

We therefore most earnestly but respectfully beg that you will again take this subject into consideration.

We have the honour to be, Gentlemen,
Your obedient servants,

Name.	Address.	Date of Diploma.
Benjamin Walker ..	Westgate End, Wakefield.	June 7, 1805.
Samuel Marshall ..	Westgate, Wakefield.	Nov. 6, 1806.
Ebenez. Walker, sen.	Wakefield.	April 17, 1807.
Joseph Bennett, sen.	Market Street Wakefield.	Aug. 2, 1816.
Charles Bailey ..	Redcar.	May —, 1816.
William Statter ..	South Parade, Wakefield.	Feb. 3, 1829.
S. Holdsworth, M.D.	Grove House, Wakefield.	July 3, 1835.
T. G. Wright, M.D.	South Parade, Wakefield.	— —, 1831.
Benjamin Kemp ..	Westgate End, Wakefield.	Dec. 29, 1843.
Henry Dunn ..	Market Street, Wakefield.	Feb. 20, 1824.
William R. Milner ..	Prison, Wakefield.	Feb. 23, 1838.
John Burrell ..	Westgate, Wakefield.	Aug. 23, 1839.
Josh. Bennett, jun.	Market Street, Wakefield.	Mar. 3, 1848.
William Wood ..	Cheapside, Wakefield.	July 25, 1842.
Samuel Secker ..	Kirkgate, Wakefield.	Mar. 12, 1841.
Thomas Walker ..	Northgate.	July 14, 1848.
Francis Horsfall ..	The Grove, Wakefield.	June 20, 1845.
William Saville ..	Kirkgate, Wakefield.	Nov. 5, 1852.
Henry Horsfall ..	Kirkgate, Wakefield.	Dec. 23, 1842.
Ebenez. Walker, jun.	Drury Lane, Wakefield.	Oct. 27, 1843.
William W. Kemp ..	Horbury.	Aug. 16, 1844.

Wakefield, Feb. 19, 1853.

BEDFORD LENT ASSIZES.

THESE assizes commenced on Thursday, March 3rd. Sir F. Pollock, the Lord Chief Baron, arrived at six o'clock in the evening by special train from Aylesbury, and was met at the Bedford station by H. Littledale, Esq., the High Sheriff, and the usual staff of javelinmen.

CROWN COURT. After the usual proclamations had been read, the Chief Baron charged the Grand Jury. He said the calendar which would be presented to their notice contained neither a large number of prisoners nor a large amount of serious crime. In one case, however, the depositions had not been furnished to him—the case of a surgeon, at an advanced period of his life, charged with manslaughter. He was told, on inquiring for the depositions, that there was some intention of postponing the trial; that, however, was not a sufficient reason for withholding the depositions from him, because, if the case came before them, it might be necessary that he should make some remarks to them upon the evidence to be brought before them. He would urge them to give their most serious attention to this case. If any medical man was guilty of positive carelessness or negligence which resulted in death, he was guilty of the charge of manslaughter; but if the evidence was not very clear—if it was only a case of suspicion, then he would suggest to them to exercise their constitutional function, and see that the charge was really one which should be brought before a jury. It appeared to him that this was a case worthy of their most serious attention.

THE ALLEGED MANSLAUGHTER AT TODDINGTON. Mr. Burcham, on the part of the prosecution, applied for the postponement of

the trial Ward against Hicks, owing to the absence of a material witness. The mother of the deceased child, the subject of this charge, was near her confinement, and quite unable to attend at this assize.

Mr. Power, who appeared for Mr. Hicks, said he was quite sure if his lordship had read the depositions he would have seen that there was no charge against Mr. Hicks, to warrant the verdict of the Coroner's Jury. And with reference to this application he must be allowed to say, that it was too bad to keep the charge hanging over Mr. Hicks for several months longer, when he was prepared to go into the case and show that there was no ground whatever for the accusation.

The Chief Baron: I have already cautioned the Grand Jury against coming to too precipitate a determination.

Mr. Power said he believed that he could satisfy his lordship and the jury that Mr. Hicks's treatment had been most judicious. He was proceeding to make some remarks about the inquest and coroner.

Mr. Bureham objected to these remarks being made. Mrs. Ward was prepared to give further evidence than appeared on the deposition taken at the inquest.

Soon after the application for postponing the trial, the Grand Jury returned

NO TRUE BILL AGAINST MR. HICKS, FOR MANSLAUGHTER.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

- BARNES, J. W., Esq., elected House-Surgeon to the Kent County Ophthalmic Hospital, at Maidstone.
 CLEATON, J. D., Esq., appointed Medical Superintendent of the Lancashire New County Lunatic Asylum, at Rainhill, near Liverpool.
 MUNK, William, M.D., elected Physician to the Small-Pox Hospital, in the room of the late Dr. George Gregory.
 STEVENS, Henry, Esq., elected Resident Medical Officer to St. Luke's Hospital for Lunatics, in the room of Dr. Arlidge, resigned.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were members of the Association.]

- COWDERY, Jonathan, M.D., at Norfolk, U. S., recently, aged 86. He was the oldest surgeon in the American Navy, having served in it fifty-two years.
 CHARLESWORTH, Edward Parker, M.D., at Lincoln, aged 71, on February 21st.
 GORDON, George James, Esq., formerly of the Bengal Medical Service, at 16, Elizabeth Terrace, Westbourne Park Road, February 20th, aged 66.
 JONES, James Cove, M.D., at Southsea, Hants, aged 64, on February 16th.
 MACKAY, William, M.D., late Surgeon in H.M. navy, at Bredgar, near Sittingbourn, Kent, aged 72, on February 6th.
 MANSON, Fredericke Robert, M.D., Physician-Accoucheur to the Royal Pimlico Dispensary, at 33, Park Street, Grosvenor Square, on March 4th, aged 31, in consequence of a poisoned wound received in the performance of his duties.
 MARWOOD, Richard, Esq., Surgeon, at Mount Pleasant, Liverpool, aged 69, on February 23rd.
 McCULLOCH, Samuel, Esq., at 120, Duke Street, Liverpool, on February 20th. He was late senior surgeon to the Liverpool Dispensary, and Consulting-Surgeon to the Liverpool Fever and Workhouse Hospitals; Corresponding Fellow of the Medical Society of London, and Member of the Royal Physical Society of Edinburgh. In his youth, Mr. McCulloch served in Spain, in the Duke of Wellington's army, as Assistant-staff-surgeon to the Royal Horse Artillery, and afterwards with the army on the Canadian frontier. After the close of the war, he practised as a surgeon at Liverpool. He died, after a few days' illness, of a disease of the lungs, produced by exposure to the weather in the course of his professional duties.
 MITCHELL, Henry, Esq., Surgeon, at St. Andrew's Street, Cambridge, aged 34, on March 1st.
 MONCKTON, Jonathan, Esq., Surgeon, at Brenchley, Kent, aged 56, on February 16th.
 PACK, Richard, Esq., Surgeon, at Kilmoganny, co. Kilkenny, Ireland, on February 21st.
 POCOCK, John Innes, Esq., jun., Surgeon, at Exeter, aged 34.

RAE, George, M.D., Surgeon to H. M. S. *Calypso*, at La Guayra, on December 31st, 1852.

RISK, John Erskine, M.D., Royal Navy, at Plymouth, aged 72, on February 15th.

ROBINSON, Simon Davie, M.D., formerly of Bridport, Dorset, at 10, Oxford Street, Cheltenham, aged 76.

ROBSON, William, M.D., late Physician to the Forces, at Edinburgh, on February 20th. Dr. Robson entered the service in March 1805, and served in the Peninsula from Dec. 1811 to the end of the war in 1814, and received the war medal with one clasp for Badajoz.

*STEED, George, M.D., Senior-Physician to the Royal South Hants Infirmary, at Portland Place, Southampton, lately.

WRIGHT, John, Esq., surgeon, at High Pavement, Nottingham, aged 50, lately.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of members of the Association.]

- ANDERSON, William J. HYSTERICAL AND NERVOUS AFFECTIONS OF WOMEN. pp. 39. London: 1853.
 BETHLEM HOSPITAL. Return, ordered to be printed by the House of Commons, 14th December, 1852. CONTENTS:—1. Report of the Commissioners in Lunacy. 2. Minutes of Evidence taken before the Commissioners in Lunacy. 3. Correspondence with the Home Office. 4. Observations by the Governors of Bethlem Hospital upon the Report of the Commissioners in Lunacy to the Secretary of State. 5. Letter from Dr. Wood to the Right Hon. S. H. Walpole, enclosing Observations on the Management of Bethlem Hospital, with Reference to the Report of the Commissioners in Lunacy. 8vo., pp. 415.
 *BIRD, Golding, M.D. URINARY DEPOSITS: their Diagnosis, Pathology, and Therapeutical Indications. Fourth Edition. pp. 473. London: 1853.
 *BURGESS, T. H., M.D. CAZENAVE ON THE HUMAN HAIR, with a Description of an APPARATUS FOR FUMIGATING THE SCALP. 12mo., pp. 110. London: 1853.
 CHRISTOPHERS, John C., Esq. OBSERVATIONS ON SYPHILIS and on INOCULATION AS A MEANS OF DIAGNOSIS. 8vo., pp. 74. London: 1853.
 *COOPER, W. White. ON NEAR SIGHT, AGED SIGHT, IMPAIRED VISION, AND THE MEANS OF ASSISTING SIGHT. Second edition. pp. 320. London: 1853.
 CORRIGAN, D. J., M.D., etc., Physician in Ordinary to the Queen in Ireland. LECTURES ON THE NATURE AND TREATMENT OF FEVER. 8vo., pp. 104. Dublin: 1853.
 COX, W. J. HOMOEOPATHY: ITS GLOBULES [BUBBLES?] ANALYSED. pp. 38. London: 1852.
 DICKSON, Thomas, Esq., Resident Medical Superintendent of the Manchester Royal Lunatic Hospital. IMPORTANCE OF ESTABLISHING PUBLIC HOSPITALS FOR THE INSANE OF THE MIDDLE AND HIGHER CLASSES. 8vo., pp. 62. London: 1852.
 HAMILTON, F. H., M.D. NEW VIEWS ON PROVISIONAL CALLUS. pp. 15. Buffalo: 1853.
 HAYWARD, George, M.D. PERMANENT CURE OF REDUCIBLE HERNIA. pp. 25. Philadelphia: 1852.
 LEDWICH, Thomas H., F.R.C.S. Ireland, and LEDWICH, Edward, F.R.C.S. Ireland, Lecturers on Anatomy in Dublin. PRACTICAL DESCRIPTIVE ANATOMY OF THE HUMAN BODY. 8vo., pp. 922. Dublin: 1852.
 NELIGAN, J. Moore, M.D., M.R.I.A. PRACTICAL TREATISE ON DISEASES OF THE SKIN. 8vo., pp. 439. London: 1852.
 *SHAPER, Thomas, M.D., Physician to the Devon and Exeter Hospital. SANITARY MEASURES AND THEIR RESULTS; being a Sequel to the History of Cholera in Exeter in 1832. 8vo., pp. 32. London: 1853.
 SPURGIN, John, M.D. SIX LECTURES ON MATERIA MEDICA, and its Relations to the Animal Economy. Delivered before the Royal College of Physicians, in 1852. 8vo., pp. 204. London: 1853.
 TILLY, Edward J., M.D. DISEASES OF WOMEN. Second edition. pp. 276. London: 1853.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XI.

LONDON: FRIDAY EVENING, MARCH 18, 1853.

NEW SERIES.

PAYMENT OF SUBSCRIPTIONS. The Law of the Provincial Medical and Surgical Association is as follows:—

“Each Member of the Association shall pay One Guinea annually: the Subscription to commence from the 1st of January in each year, and to be considered as due, unless notice of its being withdrawn be given to the Secretary or Secretaries antecedently to the year for which it would be payable; for such Subscription each Member shall receive a copy of all publications issued for the general use of the Members of the Association.”

Subscriptions may be paid, direct by Post-Office Order, to the Treasurer, SIR CHARLES HASTINGS, or to the General Secretary, JAMES P. SHEPPARD, Esq., of Worcester; through any of the Secretaries of the Branches; and also through Mr. THOMAS JOHN HONEYMAN, the publisher of the Journal, of 37, Great Queen Street, Lincoln's Inn Fields, London.

PUBLIC ESTIMATE OF MEDICINE, AND OF THE OTHER PRACTICAL SCIENCES.

If the last speech from the Throne is to be accepted by the nation as an indication of its political prospects, we may hope ere long to hear that a measure has been brought into Parliament for the purpose of promoting the advancement of Practical Science.

Why such an important measure has slumbered so long in the minds of observing statesmen, is a question too profound to be answered by the writer of to-day. The disadvantages under which men of science labour—the discouragements and insults to which they are constantly subjected—the advantages they offer to the world in their researches—are facts well known to the scientific circle itself, though “invisible or but dimly seen” by the people at large.

The public, however, seems willing at last to open its eyes to the importance of the advancement of science; and our leading public journal, the *Times*, in a late number, has discussed in such admirable terms the value of scientific knowledge, and the degree of unpopularity by which this knowledge is oppressed, that we make no apology to our readers for transcribing these remarks.

The writer has been pleading the cause of the “fine arts”, and then passing on to the defence of practical science, thus proceeds:—

“But is science, it will be asked by some people, a proper subject for national encouragement? On every ground of national obligation we answer in the affirmative. Men of science are the priests of nature, and their researches are a sort of religion. Even their smaller discoveries and the tenour of their information are of immeasurable importance to the world. But science in this country labours under every possible discouragement from its cradle to its grave. So great is the religious suspicion and secular contempt under which it lies, that in most rising and reading families in this country it is thought a positive misfortune when a child betrays a scientific taste. When a friend or a

phrenologist, or the lad's own schoolmaster, proclaims that he has no aptitude for words, for composition, or for criticism, but a craving for facts, a readiness to receive material impressions, or ideas of form and beauty, the countenance of the parent falls, and it is felt throughout the family circle that the lad is a positive misfortune, and had better never been born. What is to be done with him? What respectable profession can he embrace? What school can he go to? What associates must he mix with? How is he ever to get his living? Nor are these apprehensions ill-founded. The young Newton or Faraday is out of place at home, at school, and at college. To pursue the natural bent of his mind is the worst sin he can be guilty of; and, if his anxious mother hears that he has made a telescope, or produced a tumbler of carbonic acid gas, she thinks his doom all the more sealed. The boy is out of place at school, from which all consideration of the material universe is absolutely excluded; unless the names of cities that no longer exist, and rivers that cannot be identified, be thought material facts. At college, we believe, something like a *habitat* and an occupation is hereafter to be found for the unfortunate youth, but hitherto there has been none. Indeed, at Oxford it is at present much better that the student should not know anything that the world has discovered or learnt since the revival of Greek literature in the fifteenth century. Nor, supposing this long Slough of Despond fairly passed through, is there anything to look forward to in the way of prize, distinction, or even maintenance. It is true, that here and there a scientific youth may become a railway engineer, and even speculate to advantage in that line. He may perhaps discover a good patent, and sell it for a round sum. But, if he confines himself to science, there is nothing for him but to pick up a precarious subsistence by lecturing at institutions, and at the very few schools and colleges where science is allowed. Rank, estimation, he can scarcely hope to attain, unless by the by-path of mercantile speculation, oftener disastrous than not. Now, it cannot be for the advantage of a country, as it certainly is not seemly and really natural, that the knowledge of the material universe should be under such serious discouragement, not to say disparagement. It ought to be a regular profession, with its teaching, its progress, its prizes, its preferments, and some share of those honours and dignities that, enjoyed by few, stimulate the ambition of many and reflect a lustre over all.”

After so truthful a description of the present condition of the sciences, it would be unnecessary for us to enter on the subject in its general sense. We may, however, with considerable advantage, consider the matter in relation to our own science—the science of medicine.

That the profession of medicine, wherever truthfully practised, is, in importance and usefulness, the first of all the practical sciences, few, we presume, are prepared to deny. Its worth is not to be seen only, but to be felt also: seen always in its universality—felt often by every one in its speciality. In civilised communities, there lives scarcely a man who, sometime or other in his life, seeks not the assistance of medical science, reaps not its benefits. In uncivilised communities, it is the civilised blessing first hailed, and is often the only one that remains blessed. For the acquisition of scientific medical knowledge, the most healthy mind is required, the most industrious hand, the most

watchful eye. In the administrator of this knowledge, there must be a resolute determination, a high sense of justice, a gentlemanly demeanour, a kind heart. He, moreover, who would shine as the true scientific physician, must grasp in his educational pursuits a general knowledge of all sciences. These are but a few of the qualifications and labours which bind themselves more or less closely round the conscientious medical practitioner.

And yet, and as if to prove what we believe to be the fact, that in this country the actual worth of a science is in the inverse ratio to its value in the public eye, the profession of medicine is, of all professions, callings, and trades, the one least assisted, the one most grievously contemned. The youth, who with energetic mind, with sufficient resolution to meet ordinary trials, and with a determination to advance his profession, to live *for* it—as well as *by* it; the youth, we repeat, who with these qualifications enters the profession of medicine, hoping that time, sooner or later, will proffer a little of that honey with which the portions of others in life are sweetened, finds, when the grey hair crowns his head, that hyssop is still his portion. What more, indeed, can come to him? Watched by the public as by an omnipresent gendarme, he must at all time be chary not to offend the morality of this most righteous inspector, either in word or in deed. If a general practitioner, he may have to undertake, forsooth, the duties of an union practice, and to find himself placed betwixt Scylla and Charybdis—the board of guardians the Scylla, the unfortunate poor the Charybdis. The man has two masters in such a case, and he cannot, with the slightest chance of happiness, serve both. If, again, the medical man exhibit a devotion to the pursuit of general science and general literature, he becomes distrusted on all sides, is dubbed *theorist*, *sceptic*—anything in fact but a practitioner in whom the public can place confidence. If by an accident he commit a real or supposed error in his practice, an error, which if real, no wisdom, perchance, could have foreseen, and which happening to a man in another occupation would excite pity, he is subjected to the most ignorant and unfeeling criticisms; criticisms which often emanate from the tea-table, and have their roots in minds puerile from senility. Lastly, if the scientific medical man spend his talents in promoting the interests of his own science, he does so under every disparagement. To meet the severe but necessary criticism of his compeers is no trifling matter, but is as nothing to the chilling carelessness with which the world receives his labours. Honours but few, and these rendered almost dishonourable by unworthy distribution, wait for him. Fortune and wealth must not be dreamed of; the grateful love of an obliging people it would be madness to expect. Nothing, in truth, remains for him to hope for, save that in some future day more kindly eyes may peruse his labours, and more thankful lips speak his praise; a last hope, cheerless as the grave in which he will lie before an appreciation of his worth shall be realised.

We might, if space permitted, refer to the slight value which is attached to the gratuitous services of the officers of public charities, and to the manner in which people patronize the veriest impostors in medicine, and even insolently compare the assumed skill of such impostors, with the knowledge of those who practise the healing science faithfully and skilfully. The end, however, which we had in view is attained. We desired to show the usefulness of scientific medical knowledge, and the low estimation in which that knowledge is held by the public. The descriptions which we have given are sufficient to illustrate,

that it is necessary for every man who sincerely loves the profession of medicine, to demand from our legislature, that in any scheme for the advancement of practical science, due attention be paid to the interests of the medical body; that the true medical inquirer be no longer forced to go on in his labours of love, uncared for and unknown; and that quacks of all kinds, in lieu of being shielded by the law, be exposed to its just severities, as enemies of morality, and traitors to the commonweal.

DEATH OF ORFILA.

IN our last number we discharged the pleasing duty of recording the munificence and good judgment with which ORFILA had bestowed a large portion of his ample fortune upon objects connected with the advancement of medical science, and the encouragement of those who labour in that sacred cause. To-day it is our melancholy office to record the death of this truly good man. The kindness of heart and urbanity of manners of Orfila have been felt, we doubt not, by many of our readers; and few will join more sincerely with our colleagues in France, in deploring his loss, and in reverently embalming his memory with the recollection of his scientific achievements and his social virtues, than those Englishmen who have studied medicine in Paris during the last twenty-five years.

Orfila died at Paris, on Saturday last, the 12th, and was buried on Monday the 14th. The brief space allowed to elapse between his death and funeral has justly occasioned surprise and dissatisfaction in the French capital. We understand that the deceased had been suffering from phthisis for some time past; but at last his death was rather sudden. He was able to dine with the Parisian Medical Society on the 26th of February. Since that time, however, we have observed notices of his bad state of health in the French papers, but we have, likewise, repeatedly seen it mentioned in them that his life was not supposed to be in danger. It now appears, however, that his friends and physicians, Chomel, Andral, and Rostan, had despaired of him for some days before his death; and that this was carefully concealed from the newspapers, as the illustrious invalid insisted upon reading what the daily journals contained regarding his health.

The career of Orfila marks a memorable epoch in the progress of medical science, commencing, in 1814, with the publication of the first edition of his *Toxicology*, and closing with the events of yesterday,—his benefactions to science, and his burial in the cemetery of Mont Parnasse, close to the tomb of Baruel, one of his first preceptors. Before the appearance of Orfila's work, *Toxicology* had few cultivators, no teachers in the schools, and little claim to be regarded as a science: now, it is zealously studied in all countries, taught in every school, and so simplified by the labours of many eminent men, as to be practically available, by every educated practitioner, in the detection of crime, and in the preservation of life. It is remarkable that the great champion of French science, whose death we are now lamenting, should, like Napoleon, the great soldier of France, have owed his birth-place and his blood to a foreign soil. Napoleon was born in Corsica, and was the son of a Corsican; and Orfila, though a naturalized Frenchman, and for many years Dean of the Medical Faculty of Paris, was by descent a Spaniard. He was born in Spain, at the frontier town of Mahon, and studied at a Spanish university—~~at~~ Valencia—during the first years of his medical career.

ORIGINAL COMMUNICATIONS.

HISTORY OF A FEW CASES ILLUSTRATIVE OF THE USE OF THE FORCEPS IN DIFFICULT LABOUR.

By EDWARD WILLIAM MURPHY, M.D., Professor of Midwifery in University College, and Obstetric Physician to University College Hospital.

(Read before the Medical Society of London, Feb. 26, 1853.)

QUESTIONS connected with the use of instruments in difficult labour are so embarrassing, and have given rise to such warm controversies, that any light which may be thrown upon them by individual experience is of value. With this object, I have ventured to bring before the Medical Society a few cases of difficult labour, which required instrumental aid; and which, it appears to me, illustrate some important points connected with this subject. One of these questions concerns the comparative merits of the crotchet and the forceps, as a means of delivery when the head is fixed in the brim of the ovate pelvis. Some practitioners do not hesitate to perforate the head in these cases; they consider that the safety of the patient requires it, and object strongly to the forceps as a dangerous instrument under such circumstances. I believe that these objections have no foundation in fact. On the contrary, I am inclined to the opinion, that not only in these cases may the long forceps be safely used, but that even in some of those where the head has not entered the brim of the pelvis in consequence of disproportion, it may be made to do so by this means, or by the operation of turning the child. These observations apply exclusively to the ovate deformity of the pelvis, where the whole difficulty exists in the diminished conjugate measurement of the brim.

Some years ago, I met with a case which enlightened me very much on this question, and made me hesitate greatly as to the propriety of perforating the head of the child when thus situated. A lady had been in labour of her twelfth child, each labour being more and more difficult. The head was above the brim, and so remained the whole night, apparently prevented from entering the pelvic cavity by want of space in the conjugate axis. I attempted to apply the long forceps; but, after several efforts, failed. No alternative seemed left to me but to perforate. I proceeded with great reluctance to the operation, and very fortunately pushed the head with the perforator from the brim towards the iliac fossa. The arm came down, and I immediately proceeded to turn the child, in which I completely succeeded, and delivered it alive. Having this useful lesson strongly impressed upon my mind, I met soon afterwards with the following instance.

CASE I. PELVIS CONTRACTED IN CONJUGATE AXIS TWO INCHES AND THREE QUARTERS: DELIVERY BY TURNING THE CHILD. On February 25th, 1848, I was sent for to see a hospital patient, living in King William Street, Strand. She had applied several months previously at University College Hospital, for aid in her confinement, and had been twenty-hours in labour before I saw her. The os uteri was nearly dilated, the head resting on the brim of the pelvis. She was a pale delicate looking woman, and very intolerant of her pains, which caused her great agony. The pelvis was contracted in the conjugate axis of the brim, as nearly as I could judge, to two inches and three quarters, certainly not quite three inches; the cavity was wide, and also the outlet, only that the coccyx was bent so much forwards as to become an obstruction. I saw no probability that labour, no matter how long continued, should terminate naturally; and there remained only the choice of allowing labour to continue some hours longer, in the hope that the head might enter within the brim, or to deliver at once. I preferred the latter course, because I did not wish to expose the woman to any great protraction of her intense suffering, and I wished to give the child the best chance for its life.

She was placed under the influence of chloroform, sufficiently to blunt the intensity of her pains; and having allowed labour to continue for a little time under its use, I proceeded to apply the long forceps (that which I used was straight). I found it, however, impossible to act with it; because, when the blades were applied to the head, the shaft and handles pressed strongly against the perineum and coccyx, which was bent so much forwards, that no efforts could prevent the handles taking the same direction, and the blades, of course, the opposite one,—that is, off the head. I threw them aside, and determined to make the attempt to turn the child. The perineum and coccyx opposed greatly the passage of the hand and arm, and there was much difficulty in directing it towards the brim of the pelvis (the axis of the brim and that of the outlet were at an angle of nearly 45°). The hand, however, passed through the brim more easily than I expected, and a limb of the child was brought down, but not without some trouble. Want of space in the passages made it equally difficult to reach and bring down the remaining limbs; however, the body was brought through the pelvis safely, but the head still remained. The finger was placed within the mouth, the back of the neck seized, and the hands made to correspond as nearly as possible with the transverse axis of the pelvis; extraction was then made, but, after several efforts, I could not move the head. The funis still pulsated; and having placed it out of reach of pressure, I allowed the patient a little rest. Efforts were again made to extract, which at length succeeded, but the child was still-born, the bones being very strongly overlapped. I think that its death occurred while the head was passing the brim; because pressure on the funis was unavoidable, and this was too long continued, in consequence of the delay in the transit.

So far as the extraction of the child through the pelvis is concerned, this was by far the most difficult operation of turning I ever had to perform,—not so much from contraction in the brim as from want of space in the outlet, in consequence of the abrupt curve of the coccyx. The woman recovered without a single unfavourable symptom.

The result of this case convinced me of the practicability of turning in this degree of disproportion; and the child was so nearly saved, that it seemed to me to afford a powerful evidence in its favour over perforation. The only doubt I had was, whether I might not have succeeded as well, if not better, had I used a curved in place of a straight forceps in the first instance. I thought that the curve of the forceps, corresponding to the curve of the coccyx, might have enabled me to apply the instrument more easily. This doubt was removed in the following year (1849), when the same woman applied for aid under precisely similar circumstances. She was again pregnant; labour took place in March. She was under the care of a very intelligent pupil; and as soon as the os uteri was fully dilated, I determined on delivering her. I brought for the purpose a forceps strongly curved, but found it just as difficult to apply as the straight one that I had tried before. I therefore had recourse again to turning the child, in which I experienced nearly the same difficulty as on the previous occasion; the child, also, was still-born.

Had this patient come for assistance at the seventh month, when she was desired, I have no doubt that the child could have been saved. She recovered from this labour equally well: and the results of the operation in both instances convinced me that perforation was a most unjustifiable operation to adopt, in cases where the disproportion in the conjugate axis of an ovate pelvis exceeded two inches and a half. This view was confirmed by the following case.

In November 1847, I delivered a woman by perforation, in consequence of a contracted pelvis. As it was the first case in which I had the opportunity of using chloroform, and judging of its effects, I reported it in a tract published in 1848, entitled *Chloroform in the Practice of Midwifery*; and from that publication I shall quote as much as is necessary for the subsequent history.

CASE II. CONTRACTED PELVIS, TWO INCHES AND A HALF FROM PUBIS TO SACRUM: DELIVERY BY PERFORATION, AFTER THIRTY-NINE HOURS' LABOUR. E. G., aged 36, living in Grove Street, Camden Town, of moderate height and delicate appearance, was taken in labour with her seventh child, Nov. 24th, 1847. All her previous labours had been protracted, varying from fifty-six to eighty hours, and all her children (males, with one exception) had been still-born. In her last confinement, after being sixty hours in labour, she was delivered by the forceps of a dead child. Her present labour commenced November 24th, at six o'clock, A.M., and the pains continued without interruption the whole of that day and night. She was seen on the following morning about eleven o'clock. The os uteri was nearly dilated, the vagina moist and cool, the head above the brim of the pelvis, and its conjugate measurement contracted to two inches and a half. It was evident that the head could not descend into the pelvic cavity; but labour was suffered to proceed, in order to ascertain whether it might enter the pelvis sufficiently to be extracted by the long forceps. She was seen again in the evening, at half-past eight o'clock, having been left in charge of the gentleman in attendance during the day. She had now been more than thirty-eight hours in labour, during the whole of which time she had very strong and regular pains, but without any alteration in the position of the head; the writer therefore determined on delivery by perforation.* This woman had been placed under the influence of chloroform, delivered, and made so favourable a recovery, that she was walking about Camden Town three weeks afterwards. She had been very strictly charged to apply at the hospital before the seventh month, if she should ever again become pregnant. She did so in 1849. Premature labour was induced; the child presented the breech, and was delivered still-born.

The same charge was again given to her, but she neglected to attend to it. She became pregnant in 1851, and gave us no notice of it until near the full term. I have reason to know that she was quite determined not to have children: the last child was very nearly saved, and she was not solicitous to go through the same ordeal again to save another. I therefore did not see her until she was in labour. I called in the evening, and found the os tincæ nearly dilated, the head above the brim. I might then have delivered her as before; but the same determination which led her in one direction, led me in another and an opposite one. She cared only about saving herself: I was resolved to use every effort to save the child. I therefore allowed labour to go on for twenty-four hours, in charge of the gentleman in attendance; and, although frequently solicited to deliver her, did not see her until the following evening. I delayed, in the hope that the head might possibly be forced within the brim of the pelvis, so that I might apply the long forceps; and was greatly pleased to find my wishes realised. I found the head fixed there. She was again placed under the influence of chloroform; the long straight forceps were applied, and with extreme difficulty the head was brought through the brim into the cavity, from which it was easily extracted. I could not, however, save the child: its death was caused by the extreme pressure of the brim, which was so great as to produce an indentation in the cranium of two or three lines in depth. As on former occasions, so in this, she recovered perfectly, without any drawback.

The case was a very instructive one, because, when I first saw her in 1847, the pelvis had been very accurately measured, and the conjugate axis did not exceed two and a half inches—a space through which it seemed to me impossible for the unreduced head of the child to pass. Let the vault of the cranium be compressed as it may, still the transverse measurement of the base is two and a half inches; and, therefore, the inference must be that it would not pass: but it did so nevertheless; and I can only attribute it to the expansion of the pelvis—the head, like a powerful wedge, stretching the symphysis pubis and sacro-

iliac articulations to their utmost extent. The conclusion, therefore, at which I arrived, was, that whatever doubt might exist as to the propriety of attempting to deliver with the forceps, or by turning, when the conjugate axis was two and a half inches, there was no question about it when the space exceeded that amount; and that a diminution to three inches, or even to two and three-fourth inches, would not be too great to make it possible to avoid perforation.

CASE III. CHILDREN STILL-BORN IN SEVEN SUCCESSIVE LABOURS: CRANIOTOMY SEVERAL TIMES: DELIVERY BY FORCEPS IN EIGHTH LABOUR: CHILD ALIVE. The above view was supported by a case that I was requested by Mr. Collins, of Camden Town, to see, in July 1851. His patient had been in labour of her eighth child, not one of the previous children being born living, and several of them delivered by craniotomy; so much so that, when I was sent for, she expected that, like preceding consulted accoucheurs, I should proceed at once to deliver by perforating the head. I saw her at midnight, and found the os uteri nearly open, the membranes ruptured, and the head above the brim of the pelvis. I could pass the four fingers of my left hand easily within it, and judged that the degree of disproportion in the conjugate axis was about three inches. I might have then turned the child, but I preferred allowing the labour to proceed, in the hope that the head would get within the brim of the pelvis. Having arranged with Mr. Collins to see her sooner, if he thought necessary, we agreed to meet the following day at twelve o'clock, leaving her to nature for twelve hours more. When I arrived, what I hoped for had taken place: the head of the child had entered and remained fixed in the brim of the pelvis. The long forceps was at once applied; and, after several powerful efforts were made, the head at length moved, and I succeeded in bringing it into the cavity, from whence it was easily extracted. The child was born living, greatly to the astonishment of the mother (a woman in humble circumstances) and her nurse; both of whom imagined that, as on former occasions, it must be destroyed. So little did she expect to hear its cry, that she had no baby-clothes prepared for it, which caused some little confusion. This woman recovered without any unfavourable symptoms.

Taking these cases collectively, they seem to me to determine some of those questions that I would submit:—1st, Whether, in the ovate deformity of the pelvis, we are justified in perforating the head and destroying the child, when the head is fixed in the brim of the pelvis? This, I think, will be answered in the negative. 2ndly, When the head has not entered the brim of the pelvis, what amount of space in the conjugate axis will justify the attempt to save the child, either by the long forceps, or by turning? I think we may do so, if it exceed two and a half inches. The probability of saving it may be slight, but still it is by no means impossible; and, as the necessity for destroying it is not proved in such cases, we are not justified in doing so.

When the head of the child has entered the pelvic cavity, and ceases to advance, the arrest may be caused by a slight deformity of the cordiform character; that is, the planes of the ischia may be pressed inwards sufficiently to prevent the rotation of the head. No further progress is made, and the head is said to be impacted; the ear cannot be touched without great difficulty; and it is impossible to pass the finger laterally between the head and the pelvis. The treatment of such cases as these became a question of great interest to me soon after my arrival in London, because the propriety of using the forceps when the head was "impacted", was very warmly disputed by no mean authorities in obstetrics; and my own experience was decidedly opposed to any such attempt, in the kind of cases that came under my observation when a resident physician in the Dublin Lying-in Hospital. The cases of impaction that there presented themselves, were of quite a different character. The large head of a male child, much advanced in ossification, was wedged in the deeply conical cavity of a perfectly unyielding pelvis. It was very difficult to apply the forceps; and when the attempt was made, the instrument became as impacted as the head.

* Chloroform in the practice of Midwifery, p. 6.

not be moved; and great injury was done to the passages. The obvious conclusion was against making such attempts, but rather to perforate the head, and extract with the crotchet as soon as the child ceased to exist. This could always be ascertained by the stethoscope, in sufficient time to operate before any symptoms dangerous to the mother presented themselves.

I was anxious, therefore, to ascertain whether such cases of impaction were frequent here; and whether, in this controversy about the forceps, the term "impaction" had precisely the same meaning as I had given to it. I soon found that this was not the case; that such instances were rare; but that the same degree of disproportion was produced in a manner altogether different. The pelvis was slightly distorted; the cavity presented the characters of the cordiform pelvis, in which the head was wedged, and might be called impacted; the ossification of the bones was not advanced more than usual, sometimes not so much so; the child was frequently a female; and if the constitution of the patient were strong, and the action of the uterus powerful, I have no doubt that the head would be forced through the pelvis by the natural efforts alone. *The case, however, always failed here: the habit was feeble, the pains weak, or, if vigorous, soon ceased to be so; and, as no advance was made perhaps for several hours, aid was called for. Were we to perforate in these cases of impaction, or to use the forceps? I came to the conclusion of adopting the latter course, and found it successful; so much so, that I think I have not performed the operation of perforation five times since I came to London. Time will not permit me to detail several of these cases, in which I delivered with the forceps. I shall, therefore, only select a few of the most striking.*

CASE IV. IMPACTION OF THE FETAL HEAD: FEEBLE UTERINE ACTION: DELIVERY BY PERFORATION IN FIRST LABOUR, AND OF LIVING CHILDREN BY FORCEPS IN TWO SUBSEQUENT ONES. In 1847, I was summoned to a lady, who had been nearly five days in labour of her first child. She had suffered great agony during that time; and when I saw her, the head was fixed in the pelvic cavity, the bones overlapping very much: the vagina was congested and tender, and the discharge from it very offensive. The child was evidently dead; and I agreed with the gentleman who called me in, that perforation alone could be performed. A putrid child, of a very large size, was thus delivered.

This lady became pregnant of her second child; and was attended by a different practitioner. On September 20th, 1849, labour commenced in the morning, with irregular but severe pains, which became more uniform towards night, but were not strong. Labour continued more regularly during the 21st. The pains ceased, however, on the morning of the 22nd; and there was no active labour during that day. Ergot of rye had been given without effect. In the evening, I was sent for. The head was tightly fixed in the cavity of the pelvis near the outlet; the ear could just be touched, but with great difficulty. I applied the forceps, and, in about half an hour, delivered a living girl, to the great joy of the mother, who supposed that, as before, the child must be destroyed.

In 1851, she requested my assistance for the third time, and engaged me especially for this confinement. Labour commenced on August 6th in the evening. She had the usual severe pains during the night, which, however, I controlled by chloroform; and about eight o'clock in the morning the head entered the pelvic cavity, where it remained until one in the afternoon. I waited thus for five hours, and finding no progress made, applied the forceps. The head gradually descended, and in about an hour a very large girl was delivered living.

In this case, the disproportion was in the cavity and outlet. Though slight in degree, it was sufficient to prevent delivery; because the action of the uterus was more powerful, the pains caused agony, and were very inefficient. In her first labour, the patient was four days suffering in this way, by which the progress of the labour was much interrupted; and at length the pains failed altogether, the child died, became putrid, and was so extracted. In

her second labour, she was two days suffering the severest pains, to no purpose; they ceased, and in the evening, I delivered her of a living child with the forceps. She would not then have chloroform; but in her third labour, the apprehension of her former sufferings, and the more favourable accounts that she heard about this anæsthetic, led her to wish for it. I gave it to her sufficiently to relieve the intensity of the pains, but not to remove consciousness. The labour proceeded most favourably. In about ten hours, the head descended into the pelvic cavity, from which it might have been at once removed. I waited, however, for five hours, in order to give the uterus fair play—a delay that I cared less about, because she did not suffer much pain during that labour.

CASE V. IMPACTION OF THE HEAD: DELIVERY BY FORCEPS: CHILD STILL-BORN. A few years ago, I was sent for by Mr. Griffith, of Greville Street, to see a lady, in labour of her first child. She had been in pain about forty-eight hours before I saw her. I found the head in the pelvic cavity, which it filled so completely, that the ear could not be felt. The bladder was fully distended, and the vagina very much congested; it was extremely hot and tender. The pains were active and regular. Finding matters in this condition, I was very unwilling to use the forceps then, and I would not destroy the child. It was agreed, therefore, to give the uterus a further trial, but to use means to prevent the increase of inflammation. The urine was drawn off, a cathartic enema administered, and other means used for this object. We met at night, and arranged to meet again the following morning at nine o'clock.

When I called, I found that no advance had been made. I therefore determined to remove the child, and at least to try the forceps for this purpose. The urine was again drawn off. There was great difficulty in applying the forceps; and, when they were applied, it was equally difficult to act with them. However, the head at length began to advance, to descend slowly on the perinæum, and was brought through. The child (a girl) was still-born; and every effort to establish respiration failed. It was unusually large, and the head was greatly compressed.

This lady recovered most favourably from the effects of this labour. She was soon able to be up and about; but just as the month concluded, I was urgently summoned to her, and found her dying, in consequence, I believe, of some violent and unexpected shock; but the cause of this change was then a mystery. There was no hæmorrhage, or other way of accounting for it; and, unfortunately, no *post mortem* examination was allowed.

This case resembled the most nearly the kind of impaction that I had been accustomed to. It differed, however, altogether in the general character of constitution and temperament. The lady had a fine delicate complexion, with small bones, and was in no way robust. She had much more the appearance which indicates a scrofulous diathesis, than that of rude health. I inferred, therefore, that the difficulty arose from slight disproportion in the pelvic cavity, which was sufficient to prevent the head of so large a child from making any advance, and produced impaction. Had she been delivered the night before, it is probable that the child would have been saved.

CASE VI. IMPACTION OF THE HEAD: DELIVERY BY FORCEPS: CHILD ALIVE. In February 1851, I was requested by Dr. Bowman, of Dalston, and Mr. Gill, of Islington, to see a lady who had been two days in labour of her first child. An obstetric physician had seen her early that morning; he would not then interfere, but gave it as his opinion that labour should be permitted to proceed for six hours longer; and if delivery did not then take place, the child should be removed by the crotchet. Other engagements prevented this gentleman from again seeing her; so I was sent for, and arrived about four o'clock in the afternoon. The case was very like that which I have just detailed. The head was fixed in the pelvic cavity very tightly; the ear could be felt, but not without difficulty; there was no great pressure on the urethra, neither was there any evidence of inflammation in the vagina: so far, therefore, the balance was in

favour of this patient. I stated to the gentlemen who consulted me, that I thought the child might be delivered by the forceps; and, as they agreed, I proceeded to the operation.

There was great difficulty, from want of space, in applying the pubic blade: it was at length placed over the ear of the child. The opposite blade was more easily introduced. When the instrument was fixed, the pains, which had ceased, returned with vigour; and, by acting with them, the child was delivered in half an hour. It did not at first inspire, but the heart was acting: by degrees, respiration was fully established, and the child saved. This lady recovered without any unfavourable symptoms.

These cases, to which I might add others of a similar character, convinced me that in these discussions about the comparative merits of the forceps and crotchet in difficult labours when the head was "impacted", we were not speaking of the same thing. When the head is impacted, because the pelvis is slightly distorted, the forceps may and should be used; but when the impaction is caused by the conical cavity of the masculine pelvis, it should be avoided. The former class of cases prevail here in a much greater degree than the latter; and, consequently, the operation of perforation should be very seldom performed. I have stated how it may be avoided in those cases, where it has been performed in consequence of want of space in the conjugate axis of the pelvis. I trust that I have now shewn that it may also (with these few exceptions) be avoided when the head is fixed in the pelvic cavity. If this be granted me, an important corollary follows this conclusion; viz., that delays under such circumstances are always dangerous. If I am obliged to perforate, I delay the operation as long as possible, to avoid destroying the child; but if I think that it can be saved, the sooner the mother is delivered, consistently with her safety, the better. Hence, as soon as the disproportion is ascertained, and three or four hours are allowed, in order to estimate the power of the uterus, the forceps may be used: a longer delay exposes the patient to all the risks of inflammation. In fact, many of the bad effects of forceps operations arise from having recourse to this aid far too late, when the passages are inflamed. The action of the uterus is suspended, because inflammation is commencing in the tissues; the head of the child is allowed to remain in the same position for ten, twelve, even twenty-four hours; at length, the forceps is applied, and produces perhaps a slough, and consequently a fistula; the perineum never escapes. Such unfortunate results might all be avoided by more timely interference.

These facts may also shew the importance of a more careful study of the peculiarities of the pelvis and their diagnostic characters. By this means only can we recognize the true character of the difficulty the moment it presents itself. I know of no other way of discriminating cases, which require aid, from those which may be left to themselves. To decide such a question by time alone, exposes the patient to all the risks to which allusion has been made. A previous knowledge of the cause of arrest is absolutely essential, in order to avoid unnecessary delay.

Henrietta Street, Cavendish Square, February 1858.

ILLUSTRATIONS OF DISEASES OF THE HEART AND AORTA.

By R. HUTCHINSON POWELL, M.D.

(Concluded from p. 206 of last number.)

II. ILLUSTRATIONS OF ANEURISMAL DISEASE.

AN extract taken from some manuscript notes of lectures delivered by Dr. Corrigan, of Dublin, in 1838-9, clearly, though very briefly, sums up the pathology, diagnosis, and principles of treatment of internal aneurismal diseases, as exhibited in the succeeding cases; and will prove interesting, from the close correspondence existing between the lecturer's *dicta* and the results of independent and varied observation. I am individually responsible for the correctness of the report.

"Aneurism of the aorta is divided into true and false. In the first variety, simple dilatation of its coats exists; in the second, ulceration takes place through the inner and middle coats, causing rupture; the latter variety is most frequently met with.

"Its pathology essentially consists of disease set up in the lining membrane, and subsequent deposition of lymph between it and the fibrous coat. The latter ultimately gives way, and the areolar tissue alone then forms the aneurismal sac; the opening from the aorta into the aneurism being mostly small. True aneurism is never cured when present at the mouth of the aorta; the blood being always fluid. In false aneurism, the process of cure consists in the deposition of lymph at that part of the sac which is most remote from the circulation. The lining membrane, which is ultimately formed by, and constitutes the innermost of the fibrous layers, becomes continuous with that of the aorta, and takes on the characters of serous membrane. No deposition of lymph ensues in true aneurism; hence, no reparation is effected, the blood continually circulating through the dilated aorta.

"As to the diagnostic symptoms of aneurism of the aorta, death may ensue without its detection previously. In ordinary cases, a pulsating tumour is observed to the right of the sternum, between the second and third ribs, on the right side of the aorta. Pulsation cannot be detected, if a quantity of coagulated blood intervenes. The pulsation may be rendered more evident by the aid of a prolonged lever; its movements being thus made more apparent, as from the increased movement of the leg in popliteal aneurism. There usually exist dulness on percussion, and absence of the normal respiratory murmur over the affected part of the chest. *Bruit de soufflet* may or may not be present. When organic disease exists in the chest, it is rendered more evident on the patient's "taking cold". The pulse is not to be depended upon. The negative symptoms of the non-existence of other thoracic diseases will much assist in the diagnosis. If the bellows-murmur be heard in aneurism of the aorta, the valves will be invariably found engaged, unless where the murmur arises from depletion. Aneurismal disease is especially indicated by the morbid sound being intense and circumscribed in a place in which it does not naturally exist in the course of the vessel.

"Aneurism of the abdominal aorta is marked by severe pain, intermittent in character: it is usually of the false variety. In thoracic aneurism, there is usually but little pain complained of. It is said that aneurism of the aorta produces hypertrophy of the heart; but it never does so, unless when obstruction or diseased valves exist.

"In abdominal aneurism, it is to be observed that the diagnosis is very difficult in the early stage: there are more violent neuralgic pains than in thoracic aneurism. In the erect or sitting posture, no bruit is detected by the stethoscope; but when the shoulders are placed lower than the hip, a loud bellows-murmur is then perceptible. It is a severe disease; and the patient is very liable to sudden death. In chronic enteritis, dyspepsia, and derangement of the nervous system, a bruit is occasionally heard, but along the entire abdominal aorta; the aneurismal murmur being circumscribed. Aneurism may be known from a tumour pressing upon the abdominal aorta, by the murmur not becoming inaudible or of less intensity on change of the supine or lateral posture; by the expansive and heaving motion of aneurism; by the constantly recurring and severe pain and bellows-murmur; by the immobility of the tumour; and by the history of the case. Coldness of the extremities is a common symptom, owing to the non-reception of the normal amount of blood, much of which is detained in the aneurismal sac.

"In the treatment of aneurism, the indications are: First, to promote the coagulation of the blood in the aneurismal sac, and thus to diminish the chance of rupture: this may be effected by moderate and repeated venesection, by the use of digitalis, spare diet, and by using but little liquid; the object being to cause the blood to possess a large amount of fibrin, so as to promote its coagulation in the sac.

Second, to relieve neuralgic pains involving the pleura, peritoneum, and the nervous trunks, by sedatives and by local bleeding, occasionally conjoined with the exhibition of mercury to touch slightly the gums. By these means, the inflammatory action, which is liable to arise in the coats of the sac, may be overcome. It should always be remembered, that the pulse in many cases is not a sufficient guide in the treatment, venesection often giving relief when the pulse cannot be felt at the wrist.* The abstraction of blood acts by emptying the sac, and lessening its pressure on adjacent parts. New aneurisms may form in the course of the aorta; those farthest removed from the heart being most likely to take on the reparative process."

CASE VI. TRUE ANEURISM AT THE ROOT OF THE AORTA. (Related by Mr. Oubr .) A married woman, 35 years of age, nine months advanced in pregnancy, was observed, half-an-hour after retiring to bed, to become speechless, though conscious. Death ensued one hour subsequently.

On *post mortem* inspection, the pericardium was found to contain about a pound of dark coagulated blood. The heart's tissue was rather flabby. The aorta was externally of a reddish hue, bulging at one part, and partially adherent to the serous envelope. The internal lining membrane was also reddened, and showed three points of ulceration, which had made way through the outer coats of the vessel, and had given rise to the fatal h morrhage. The abdominal organs were healthy, excepting the liver, which was slightly enlarged.

This is an instance of the absence of any direct diagnostic character of impending death, resulting from disorganization of the arterial tissues; no bruit, or other sign referrible to the heart or blood-vessels being complained of, or recognisable during life. The probable recurrence of incidental inflammation of the internal vascular coat in this as in other succeeding cases, serves to account for the giving way of the tissues, ulceration being a common sequence, and leading to a fatal issue from extravasation of blood.

CASE VII. ANEURISM OF THE AORTA THROUGH ITS ENTIRE COURSE. J. H., aged 45, a wheelwright of phthisical family, had, about seven years previous to coming under Dr. Hare's notice, fallen from a high loft, and cut his head. He had become emaciated, and had suffered from cough and expectoration for two years. His present symptoms were a sense of oppression when in the recumbent position, especially on the right side; cough, with some expectoration; dysphagia; hoarseness; short breath on exertion; pain in the right shoulder, and on the right side of the sternum; the tongue was furred; he had some thirst; pulse 95, small, easily compressed. A tumour existed between the first and second ribs, close to the right border of the sternum. It was circular in shape, two inches in diameter, and projected from a quarter to half an inch from the chest. Pulsation was very strong, the parietes feeling thin. There was no murmur, but the sounds of the heart were distinct. Auscultation and percussion of the chest indicated some solidity of the lungs, especially the right.

A month subsequently, the patient had an attack of dyspnoea, and inability to swallow, with lividity of the face and hands. The pulse was 100, full. He was relieved by a small bleeding, together with a mixture of digitalis and nitre (previously in use), conjoined with ipecacuanha and squilla. The tumour subsequently diminished in size, so that in three months there was merely a slight prominence, and its diameter was reduced to half its former size, with proportional diminution of pulsation. The man became gradually weaker, now suffering, in addition to his other symptoms, from giddiness, irregular pain in the chest, and occasional partial syncope. The left hand and arm had lately become oedematous. He died without a struggle, six months after coming under observation.

A *post mortem* examination revealed tuberculated and excavated lungs. The heart was large; the mitral and aortic valves were thickened, but smooth. Copious deposition of cartilage and bone was found in the lining membrane of the aorta. The aneurism arose from the superior surface of the arch of the aorta, close to the arteria innominate; it was globular in shape, and was filled with large coagula. Besides displacing some large vessels in the vicinity, it had produced absorption of a small portion of the sternum, flattening of the trachea, with slight ulceration, and partial absorption of some of its cartilages. Another small aneurism was found, commencing at the under part of the aorta, at the point of junction of the arch with the descending portion of the vessel; two small bulgings appeared on the anterior aspect of the arch.

CASE VIII. STERNAL TUMOUR SIMULATING ANEURISM OF THE AORTA. (Mr. A. Anderson.) A woman, aged 59, had been under treatment, with little relief, five years previous to her death, for pains at the top of the sternum, supposed to be neuralgic or rheumatismal. Two and a half years subsequently, a small pulsating tumour was observed over the site of the former pain. It was very tender on slight pressure. It increased in size, to the right and left of the summit of the sternum; the tenderness becoming aggravated. Acute pain was felt, six months prior to death, in the lower extremity as far as the knee. She had had slight h moptysis on two or three occasions. The tumour followed the respiratory movements; and a bellows-murmur existed over the swelling.

On *post mortem* examination, the heart and arteries were found almost healthy. The calcareous matter of the sternum had nearly disappeared, the bone enclosing, instead, a fibrous encysted mass, about two and a half inches in antero-posterior diameter, which pressed upon the aorta.

CASE IX. TRUE THORACIC ANEURISM OF THE DESCENDING AORTA NOT RECOGNISABLE DURING LIFE: DEATH FROM SECONDARY H MOPTYSIS. (Dr. A. T. Thomson.) W. W., of weakly constitution, suffering occasionally from h moptysis and dyspnoea, was emaciated on coming under Dr. A. T. Thomson's observation. The pulse was 84; the heart's sounds normal; coarse respiration was heard throughout the right side of the chest; the breath-sound was defective at the summit of the left lung, over which there existed dulness on percussion. Purgatives and gallic acid were given. On the second day, he had copious h moptysis. The other symptoms persisting, he was bled. The blood was neither buffed nor cupped. Gallic acid was continued. On the third day, he had further h moptysis. Venesection was repeated to eight ounces. On the fourth day, there was still greater h moptysis. Refrigerants were substituted for gallic acid. On the sixth day, there was subcrepitant rhonchus under the left clavicle. On the seventh day, he had further frothy h morrhage, followed by some mitigation of the general symptoms. On the ninth day, he was dry-cupped, and bled to twelve ounces. Up to this time, the pulse had increased in force and frequency; acetate of lead was now administered. On the twelfth day, all the symptoms wore a less promising aspect, with nocturnal delirium. Pulse 120, irregular; tongue dry; rusty and scanty expectoration; much dyspnoea, anxiety, and jactitation. Wine, beef-tea, and carbonate of ammonia in decoction of Peruvian bark, were given. On the thirteenth day, dyspnoea was very urgent; the physical signs indicated pneumonia. Death ensued at five p.m.

Post mortem appearances. The right lung was congested, and further advanced in inflammatory change. The bronchial membrane was deeply injected; a few tubercles were visible. The upper lobe of the left lung was very firm, and resistant to the knife: its section was of a brownish red colour, and, under the microscope, showed exudation corpuscles, which were not present in the lower lobes; the middle and lower lobes contained patches of extravasated blood, of varying size. The bronchus, where it passed under the arch of the aorta, was not affected. The pulmonary veins, to their minute ramifications, were filled with a dense dark coagulum. The chief bronchi were compressed by an

* An instructive case is given in the *Lancet* (March 27th, 1852), under Dr. Addison's care, in Guy's Hospital, in which the pulse of the left radial artery from being feeble, ultimately became nearly imperceptible. This was (*post mortem*) traced to obliteration of the left subclavian artery from the pressure of an aneurismal tumour in the arch of the aorta.

aneurismal tumour, formed by the entire arch of the aorta ; its ascending portion, one inch from the valves, being also dilated ; and about one inch and a half from the origin of the left subclavian artery, a tumour, of the size of a small apple, was seen. The internal coat of the arch, and that of the aneurism, were studded with a calcareous and atheromatous deposit ; the latter was determined by the microscope to consist of cholesterine and oily matter. The aneurismal tumour was formed by uniform dilatation of the aortic coats. The heart was healthy, excepting an atheromatous deposit upon the aortic valves.

This case is suggestive of many reflections. All the symptoms were readily referrible to tubercular disease and its effects. No bruit was audible, in consequence of the comparatively normal condition of the aortic valves ; and the signs usually present in posterior thoracic aneurism were absent, from the tumour just clearing, and not compressing, neighbouring organs. Continuous pulmonary congestion would probably serve to excite suspicion as to the existence of this disease, in the absence of more positive signs, as the buffed appearance of the blood ; which latter sign, though absent in this case, most likely from the cachectic condition of the patient, usually exists in states of the circulatory apparatus leading to aneurism.

CASE X. RUPTURE OF THE DESCENDING AORTA, WITH TRACES OF INFLAMMATORY ACTION. (By Dr. Campbell). A carpenter, stout in person, aged 38, complained of deep-seated pain in the left chest on inspiration, with dyspnoea, especially at night, and when in the horizontal position. Pulse 80, hard and small ; no palpitation existed. He was blistered, and took tartarised antimony, with relief to his symptoms, the pain being relieved by stimulants. He was found dead by his wife about midnight.

On *post mortem* inspection, the heart was seen to be quite healthy, as were the other viscera of the thorax and abdomen. The posterior mediastinum was torn on the left side, the corresponding pleural sac being filled with blood. The arterial tube was ruptured in various directions, not being enlarged or dilated, but thickened, and having a slight blush of redness, and having its coats infiltrated with atheromatous deposit, from the origin to the seat of rupture.

The order of events in this instance, and in some of the preceding cases, would appear to have been slow abnormal change in the arterial fibrous tissue ; and subsequently, inflammatory action in the internal serous or epithelial lining, terminating in ulceration and fatal extravasation.

CASE XI. TRUE ANEURISM OF THE DESCENDING THORACIC AORTA. (By Mr. Forbes.) The subject was a gentleman, aged 53, previously in good health, and of robust constitution, who had complained, five years before death, of severe dyspeptic symptoms, præcordial pain, emaciation, and great sensibility to cold. No physical signs existed, prior to death, indicative of pulmonary, cardiac, or other thoracic affection ; there being neither cough, dyspnoea, abnormal percussion, nor respiratory or cardiac murmurs.

On *post mortem* inspection, there was found a small basinful of nearly coagulated blood. The lungs, pleura, heart, and its valves, were quite healthy. The escape of blood was traced to an orifice close to the spinal column, connected with a rent in the descending thoracic aorta, nearly three inches below the arch ; it had there become dilated into a pouch, which had contracted adhesions to the anterior aspect of one or two of the dorsal vertebræ, and at this part the sac had given way. No fibrous laminæ or coagula lined the sac, but its coats were ulcerated, and nearly perforated in various directions, and the pressure exerted on the vertebræ had caused their absorption to a considerable depth. The ascending portion of the aorta was similarly diseased in its coats, though in a less degree, and was considerably dilated. The abdominal viscera were healthy, excepting the presence of a slight blush in the large curvature of the stomach.

This case is discouraging to the diagnostician ; as not a single *direct* sign or symptom existed which would serve as an index to the formidable disease, insidiously progressing

towards a fatal issue. The præcordial pain was naturally referred to the dyspeptic disorder, there being no physical evidence of cardiac or aneurismal disease present. In similar instances, the persistence and severity of the functional disturbance should excite suspicion, especially if *great sensibility to cold* be present in subjects otherwise in good condition, and free from thoracic or nervous disorder. The indirect method of excluding all other morbid states, may further throw some light on this obscure disease. It will be observed that, in the above case, as pressure was not exerted on the thoracic contents, excepting the dorsal vertebræ, so the corresponding symptoms were absent ; and no murmur was audible, as the aortic valves were unaffected.

CASE XII. ABDOMINAL (TRUE) ANEURISM. The case (under Dr. Stroud's care) was that of a smith, who applied with an epigastric tumour, with impulse, but no sound. Some narcotics were prescribed, to relieve a severe pain complained of about the crista ili, but not in the vertebræ. The man died suddenly, in University College Hospital.

A *post mortem* examination showed an abdominal extravasation of twenty-one ounces of coagulated blood, and forty-eight ounces of serum. The tumour was of the size of the closed hand, and was bounded posteriorly by the vertebral column. The sac firmly adhered to the duodenum, and thus accounted for obstinate alvine obstruction which had existed. Some coloured fibrinous clots were seen in the interior of the sac, and a rent was found of the size of a halfpenny. The dilatation of the artery had begun about two inches below the origin of the renal arteries.

CASE XIII. ABDOMINAL (DIFFUSED FALSE) ANEURISM. (By Mr. Obré.) The subject was a policeman, aged 45. He had formerly suffered from cholera in India, and was a man of resolute character. Three years before his death, he was knocked down, and kicked in the loins, and eighteen weeks ago he was doubled back across a balustrade. He subsequently suffered much from pain in the loins and abdomen. He constantly had to lie down, leaning towards the left side, and was obliged to discontinue his occupation. He had constipated bowels, cough, etc. A tumour was detected, three weeks before death, to the left of the spine, and over the eleventh rib, just underneath the inferior angle of the scapula. It was soft and elastic, about three inches and three quarters in length, by two and a half inches in apparent breadth. The eleventh and twelfth ribs were perforated quite through. The impulse of the tumour, synchronous with that of the heart and the pulse, was inconsiderable, except towards the centre. The tumour probably progressed rapidly just prior to death. No murmur was audible anteriorly or posteriorly. Death suddenly occurred while he was sitting up in bed, and conversing with his wife.

On *post mortem* inspection, the body was found emaciated, the left side of the thorax filled with blood (the bulk of two closed hands), and serum (two quarts). The diaphragm was seen bulging upwards, its fibres being split, and enclosing a clot of blood. The heart was small, and surrounded with fat. The arch of the aorta contained a deposit, consisting of cholesterine and fat. Some effused blood was detected in the descending aorta, where it passes through the diaphragm ; the coats of the vessel were ruptured to an inch and a half in extent, giving rise to the formation of an aneurismal tumour. Laminæ existed on the right side, and clots of blood on the left. The tumour had pushed the diaphragm upwards, its coats being partially derived from that muscle. Its circumference was about twenty inches ; its coats being an internal fibro-cellular layer, and the diaphragm and pleura externally. The body of the eleventh dorsal vertebra, and the heads of the eleventh and twelfth ribs, were absorbed ; thus leaving the tumour with but a muscular and tegumentary covering, no fibrous coats existing posteriorly. The abdominal aorta below the rent exhibited bony plates on its internal surface.

It is obvious that any accident would peculiarly tend to rupture a vessel thus predisposed to disease in its coats conjointly with the exciting nature of the man's occupation, and strongly acting circulatory apparatus.

diagnosis was rendered peculiarly difficult, from the tumour being posterior to the diaphragm. No murmur was audible in the tumour, as no blood-current existed therein, nor was there any bruit heard in the abdominal aorta, there being no pressure or other condition productive of murmur, in the calibre or contents of the tube, as was evidenced by the absence of œdema or venous obstruction. The ascending vena cava lay over the aneurismal swelling, but this did not apparently retard its circulation; the pressure of the tumour was directed towards the exterior of the body, and there exhausted.

In the absence of direct signs of cardiac or aneurismal disease, the diagnosis must be guided by collateral circumstances, and by those symptoms which arise from functional derangement in adjacent or related organs or structures. With reference to the former (indirect) source, it is peculiarly significant to note the occupation of most of the above subjects, as implying much and strenuous bodily exertion, prompted by a sanguineous temperament, and, in some cases, great mental excitement or anxiety. As regards functional derangement, this will depend upon the anatomical or physiological relations; œdema, lividity, vertigo, dyspnoea, etc., may or may not exist, according to the interference with, or freedom from pressure on the adjacent structures. The more or less intermittent character of pain or other functional disturbance, is worth observing in these sometimes profoundly obscure cases; the symptoms being for the most part paroxysmal, probably arising from varying conditions of blood-pressure, or other perturbations. Their aggravation at night, and in the recumbent posture, is very characteristic. The contents of the stomach and intestines exert a certain amount of pressure on the arterial tube, sufficient to decide its rupture, in its diseased and weakened state. The sudden and quiescent dissolution of individuals suffering from cardiac or aneurismal disease, is a conspicuous occurrence in such cases. In those cases but little complicated with other structural disease, death took place at night, and in the absence of all excitement. It is probable that the vascular apparatus is unusually loaded and strained at this period, both from this posture favouring accumulation and obstruction, and from the tendency to vascular repletion induced by the abeyance or diminution of functional activity in other organs. This diagnostic mark is of less value in cases associated with disease of the lungs, etc., in which death ensues in a more gradual and less unexpected manner, in consequence of the progressive wearing out of the system, and general loss of power.

In some, if not all, of the preceding cases of aneurismal disease, the blood probably abounded in fibrin, death occurring in one of them (Case VI) in an advanced stage of gestation. This function, it is well known, is attended with a buffed condition of the blood, and in other ways favours the operation of the more immediate causes productive of aneurismal or cardiac affections. In many of these cases, either fibrin, fat, cholesterine, or calcareous salts, more or less conjointly or separately, were found incrusting or replacing the normal tissues; thus indicating a disturbance of the balance obtaining in the healthy nutrition of the organism. Some showed evident traces of inflammation, and others exhibited aberrations of structure less evidently connected with the latter operation, though not the less arising out of malassimilation and loss of equilibrium in the blood-constituents. Of what cases either of these metamorphoses may be respectively predicated, it is impossible at present to affirm with any degree of precision; but a careful collation of all concomitant symptoms, with reference to age, sex, temperament, habit of body, etc., may enable the practitioner to assume, with some probability, the presence and nature of structural disease existing in the heart or blood-vessels.

The preceding cases, though the remarks appended have been of necessity disjointed and inconclusive, have served the purpose of bringing under observation some important subjects involved in the nature, diagnosis, and treatment of cardiac and aneurismal diseases. An extensive collection of similar cases will be required in laying

the foundation of a goodly and unassailable superstructure; so that trustworthy data as to the variation of symptoms corresponding with the site and character of the morbid change may be at length acquired, and acted upon in the diagnosis and treatment of these formidable affections.

21, Edwards Street, Portman Square, February 1854.

ON THE TREATMENT OF DIARRHŒA BY DILUTE SULPHURIC ACID.

By EDGAR SHEPPARD, Esq.

THE prevalence of diarrhœa at this unusual season of the year, in the locality where I reside, leads me to record a few additional cases illustrative of the success of the treatment by dilute sulphuric acid. In the last volume of the *Provincial Medical and Surgical Journal*, (No. 19, p. 471), I had the honour of submitting to the profession some remarks upon this subject; and the cases which I then detailed went far to prove, that when used with judgment and discretion, there is no remedy which can in any disease act more rapidly, or produce more strikingly beneficial effects, than the mineral acid above alluded to, in this common form of bowel affection to which we attach the term diarrhœa. And with respect to this treatment it may be further observed, that the profession has been almost unanimous in assenting to its advantages and benefits. Mr. Rogers of Plymouth* tried it, and came to the conclusion that difference of locality might produce a different type of disease, requiring an essentially different treatment. His cases would not yield to—nay, they were rendered worse by—the acid. This was the only exception to the efficacy of the dilute acid of which I have been enabled to hear. It indeed seemed nothing more than another testimony to the truth of there being distinctive characters, and essentially varying forms, of every disease, prevailing in different localities at one and the same time. Another gentleman, however, practising in the same town, was most successful with the acid, and gave the strongest evidence of its beneficial and rapid action. I thought that Mr. Rogers's doses were too small, and not exhibited with sufficient frequency; but he tried what I suggested (half-drachm doses) with an equal want of success.

How are we to account for this contradictory evidence? Was the acid of one practitioner harmless and inert; or were all the cases which one practitioner met with of that type which would only be aggravated by an acid treatment? The description of Mr. Rogers's cases would not lead to this latter conclusion; the former alone seems to yield the proper solution of such discrepancy in the results. But, be that as it may, Mr. Rogers stood almost, if not quite alone, in the conclusions to which he came as to the inefficacy of sulphuric acid. I proceed now to detail a few cases.

CASE I. J. P., for three seasons had been incessantly troubled with diarrhœa in the hot summer months. He usually applied then, as often as once a fortnight; relief for that short period being afforded—and that often with great difficulty—by chalk, opium, and astringents. When the diarrhœa proved more obstinate than usual, carbonate of soda and chlorate of potash were resorted to. A dry and furred tongue, with constipation and great flatulence, was always the ultimate result of the above treatment.

Last season he first applied in June, with the old train of symptoms; and I gave him the dilute sulphuric acid in half-drachm doses, with compound tincture of cardamoms and sugar. He was directed to call on me again the next day, if he was no better. He did not call; and therefore I could not report his case in my first paper upon the subject. Indeed, I never saw him after that period, until about six weeks ago, when, having chopped off one of his fingers with an axe, he was again brought under my observation. On my making inquiries touching his usual malady, he said that he had never had a day's illness since the "nice sharp"

* See last vol. of *Med. Times and Gazette*, No. 124.

medicine which I gave him in the summer. This is the most marked case I have ever seen, for the man was a perfect martyr (I had known him as such for three years and a-half) to diarrhoea, dyspepsia, and hypochondriasis.

CASE II. W. G., a strong healthy-looking man, but often afflicted with diarrhoea, applied on February 5th. He complained of constant pain in the bowels; great flatulence; thirst; and incessant purging; the stools being watery and colourless. Two doses of the acid effected a perfect cure. On February 27th he applied again: the same treatment was employed, with the same results.

CASE III. F. W., a delicate-looking, unhealthy individual, applied for relief. He had griping pains; great distension of the bowels; a white creamy tongue, with red edges; and profuse watery and colourless dejections. He was relieved by three doses of the acid.

CASE IV. Last week I determined to try the effect of this remedy in that form of diarrhoea, which is beyond all others so difficult to arrest, because usually dependent on different and much more serious causes—that of the last stage of phthisis. No benefit had been obtained latterly from the ordinary astringents, with chalk and opium; and but very slight and temporary from the combination of trinitrate of bismuth, and powdered acacia, suggested by Dr. Theophilus Thompson. Extract of logwood, rhatany root, and sulphate of copper, were also tried in vain. Dr. Cotton, in his recent valuable monograph upon *Consumption*, says, speaking of the acid, “for the advanced stages it cannot, I think, be trusted; in one or two instances I found it did some good, but in others it evidently aggravated the symptoms. The very circumstance that phthisical diarrhoea frequently comes on at the time when sulphuric acid is being taken to check perspiration or hæmoptysis, shows that, however useful it may be in some of the simple forms of diarrhoea, we have little to expect from it in consumptive cases.” (p. 227.) An additional inducement was offered me here to try the effects of the acid, in the circumstance of my patient, never having tried it for the symptoms so common in phthisis, for which it is generally resorted to. There had been an entire absence of perspirations from the beginning to the end of this case. The mouth was studded with aphthous sores, which necessitated the exhibition of the acid through a quill. The purging had not ceased for three days previous to this trial, a dejection taking place about every two hours. It was now arrested for twelve hours, by one dose. It then returned, and one more dose was given, but with no benefit. The last struggles of mortality were at hand; but I am content to think that this remedy did give some ease and comfort for a brief period, and so soothe the passage of my poor patient, and help to “lead her gently out of Vanity Fair”.

CASE V. Mrs. R. H., who had been confined three months previously, and was much reduced by nursing, was seized, on March 1st, with violent pains in the bowels, great relaxation and slight sickness. Two doses of the acid arrested the purging. The infant was not griped, although the mother continued to suckle it. Doses of five grains, thrice daily, of the citrate of quinine and iron have completely restored Mrs. H.’s health.

Upon what the diarrhoea which has recently obtained here is dependent, unless it be upon the wet and sodden state of the country, I do not pretend to determine. Is it prevailing elsewhere? It differs from the summer cases in there being much less thirst, and rather less pain. In fact, the general disturbance is not so great. It is equally amenable to treatment by dilute sulphuric acid; as, I trust, the foregoing cases have demonstrated.

Enfield, March 9, 1853.

IS HYPOSPADIAS A BAR TO MARRIAGE?

By DANIEL NOBLE, Esq.

SOME years ago, I was consulted by a gentleman, of high education and great intelligence, as to the propriety of his marriage. He laboured under that defect of the generative

organs called *hypospadias*; that is to say, the penis, which was short, was wholly imperforate; and the urethral opening was precisely at the point of junction between the scrotum and the inferior aspect of the organ. I informed him that he might marry; but that offspring, though not impossible, was improbable.

He married accordingly, about four years and a half ago. No signs of conception followed until last summer; and, a few days ago, the wife gave birth to twins, a son and a daughter. They were fine children, and alive.

As the individual cases of this description are generally of an embarrassing nature to the practitioner when consulted, I have thought it right to put this instance upon record.

For obvious reasons, I avoid names, and any address that might risk the slightest indication of the parties referred to.

Manchester, March 6th, 1853.

BIBLIOGRAPHICAL NOTICES.

ASYLUMS FOR THE INSANE. OBSERVATIONS UPON THE IMPORTANCE OF ESTABLISHING PUBLIC HOSPITALS FOR THE INSANE OF THE MIDDLE AND HIGHER CLASSES, etc. By THOMAS DICKSON, L.R.C.S.E., Resident Medical Superintendent of the Manchester Lunatic Hospital. pp. 62. London: 1852.

THE LUNACY QUESTION; OR, THE LUNATIC BENEFITED AND PROTECTED: with an Inquiry into Public and Private Asylums. By JOSEPH WILLIAMS, M.D., etc. pp. 48. London: 1852.

THE object of these pamphlets is to advocate the proposition, that *all* lunatics should be confided to the care of government. The vicious principles upon which existing arrangements for the isolation of the affluent insane are founded; the extinction of private asylums; and the amalgamation of the laws affecting the sequestration, detention, treatment, and inspection, of all classes of the insane, are a few of the objects aimed at in this sweeping measure.

Dr. DICKSON recommends his views by endeavouring to identify the treatment of mental disease in private establishments with “commercial enterprise”, and with such selfish and sordid motives as pecuniary dishonesty, “continued detention of those eligible by convalescence to trial, at least, in society”, and accessibility “to the interested suggestions of nominal friends”. He cites the abuses and atrocities disclosed by the parliamentary inquiries of 1815, which, it must be noted, applied to public as well as private asylums; together with instances of maltreatment, mismanagement, and unjust seclusion, detected by the Commissioners in Lunacy of late years, as inexpugnable arguments for saving the rich insane “from the evils they have long suffered through the rapacity and unscrupulousness of proprietors of private asylums”, whose “interest it is to *obtain* and *retain* the insane and the alleged insane, the curable and the incurable, and, maintaining their bodily health, to hurry them through the several gradations of mental disease, till imbecility ultimately accrues”. In the last place, he enters into calculations to show that the expense of fifteen public hospitals, constructed, furnished, and maintained, for the express purpose of suitably accommodating the higher classes, would be more than met by the funds at present appropriated for the benefit of the proprietor, rather than for the support of the patient.

Dr. WILLIAMS has a mortal quarrel with certain medical critics; but into this we do not feel it to be our duty to enter, further than to remark that, though he may have had some grounds of complaint, the bitterness of his retort impairs the force of his argument.

Dr. Williams’s thesis is, that “government should assume a more direct control over the medical officers both of public and private asylums”; and that the latter should be “done away with”.

In discussing this, however, he condemns as inexpedient "the removal of incipient cases of insanity of every kind to an asylum", but especially those of puerperal insanity, of delirium after fever, or of moral insanity, even when the patients belong to indigent families. His objections to seclusion are of various kinds; but may be resolved into the superior advantages of treatment at home; the evil effects of association with other forms of mental disease, as illustrated in the frequent alienation of nurses and attendants (which is apocryphal); the fact that lunatics are made objects of profit; and lastly, the illegalities and irregularities which have been shown, and may be suspected to exist, in receptacles for the insane. He conceives that a board of £1000 per annum is a temptation to detain a patient after the mental faculties have been restored.

We are not prepared to deny that certain benefits—particularly constant and long-continued scientific observation, and enlightened medical and moral treatment—might be more effectually secured by placing the insane of the noble and affluent classes in public asylums. But it is sound policy to agitate such changes only as are practicable. The compulsory seclusion of patients belonging to the higher classes in government or public asylums, is so totally inconsistent with our social condition, our prejudices, even with many of the feelings which lean to virtue's side, and with our notions of freedom, that such a project, however philanthropical, must be pronounced to be visionary. But were such obstacles swept away, it is very doubtful whether a public asylum is best suited for *all* forms of alienation; whether the guarantee afforded by publicity is to be preferred to the tranquillity and repose of privacy; whether, in fact, the features of a home, which may be given to a retreat for a small group, but which are scarcely compatible with the regulation of a large community, may not prove a direct instrument of restoration. We differ from Dr. Williams as to the efficacy or possibility of the cure of the insane at home; we pronounce such a course scarcely attainable to the wealthy, impracticable even to those of moderate means, and a mere self-delusion wherever attempted. Under it, all remedial measures are frustrated; moral influences are devolved upon servants; and imminent perils are momentarily encountered. But we are not blind to the existence of certain drawbacks and disadvantages which are inseparable from public asylums. They are, in general, we believe, conducted upon a system of large benevolence and sound science; but still *it is a system*, and therefore, to a certain extent, excludes the individualization of treatment. They must be governed by rules and rigid discipline; *they cannot form families*, cemented together by mutual dependence and affection. It has long been obvious to practical men, that while the great majority of cases of derangement are not only adapted for public asylums, but cannot be judiciously treated elsewhere, there is a certain proportion which may derive benefit from a different arrangement, and that it is the office of true wisdom and humanity to distinguish these classes, and to apportion to each that destination best calculated to effect amelioration and to secure happiness.

That the proprietors of private asylums derive profit from the misfortunes of their charges, is sufficiently obvious; but so do the physicians who attend such patients in their homes; and it is, to say the least, a gratuitous assumption that, *in general*, either the one or the other would prostitute his responsibilities in the manner so often and so broadly suggested. If the Reports of the Commissioners in Lunacy be appealed to, as evidence of the existence of abuses, such documents likewise show how few these are, and by how many advantages they are counterbalanced. It is no argument to say that Equirol was, and Conolly is, the proprietor of a private asylum; but it does bear closely upon the subject, that a large number of the class to which they belong, and of which it is desirable that they should be the types, are educated medical men.

That irresponsibility engenders neglect and deviation from duty, is axiomatic; but this may be removed by searching and constant inspection; by the limitation of the

license to medical or properly qualified men; and by the publication of the results of treatment; without annihilating a provision which is consonant with existing opinion, and has produced such splendid illustrations of its capabilities, as Brislington, Ivry, and Varines.

Drs. Dickson and Williams have performed what they esteem a public duty, fearlessly and faithfully; and while we recommend to them a more favourable estimate of the motives of their professional brethren, we feel that they are entitled to a candid hearing for having conscientiously discharged what they must have felt to be an ungracious task.

SANITARY MEASURES AND THEIR RESULTS; being a Sequel to "THE HISTORY OF CHOLERA IN EXETER, in 1832." By THOMAS SHAPTER, M.D., Physician to the Devon and Exeter Hospital, etc. pp. 32. London: 1853.

DR. SHAPTER is well known to the profession as an earnest sanitary reformer; and although he with true modesty keeps out of sight his own personal merits in the great work in which he has been so long engaged in the city of Exeter, we can have no hesitation in giving him a large meed of praise for the results which his present pamphlet lays before us. It is indeed a source of honour to our ASSOCIATION, that foremost in the work of sanitary reform we should number so many members, thus carrying on their divine mission; and we can almost envy the man who, like Dr. Shapter, has the fearlessness to overcome the prejudices of the people, the ability to carry on the work, and the satisfaction to see its result in a decreased mortality, a more healthy locality, and a more salubrious atmosphere. The work is written, as the author informs us in his preface, solely with a view to place in a clear and strong light, a very striking instance of the public benefit derived from the adoption of judicious sanitary measures.

"On the first occurrence of the Asiatic cholera in 1832, Exeter, in common with London, Bristol, and Plymouth, experienced a large amount of mortality; on the recurrence of the pestilence in 1849, London and Bristol suffered more than, and Plymouth as severely as, on the former occasion; while Exeter escaped with only a very small amount of disease and death." (p. 7.)

Let us proceed with Dr. Shapter, and see how he accounts for this satisfactory result. In the year 1832, the cholera in Exeter attacked the most unhealthy localities, where the houses were badly ventilated, undrained, and but scantily supplied with wholesome water. Between that year and 1849, Dr. Shapter was steadily engaged, in conjunction with his medical brethren, in convincing the citizens that many of the causes of the pestilence were of a preventable nature; and the hope expressed by him in his "History of the Cholera in Exeter in 1832", was realised in every particular.

The disease in 1832 found Exeter having a dense population of 28,000 persons, occupying old houses, with an airy suburb; the streets of this city were generally narrow, with numerous courts and alleys; the roads had gutters in their centres in nearly every street, and formed the only means by which the sewage was removed, there being no plan of general drainage; the supply of water was small and difficult to be procured. Here, indeed, was a focus of pestilence! But this was not all: the houses of the poorer districts were overcrowded, amidst slaughter-houses and pig-styes, with cellars filled with poultry and dunghoops everywhere: while the scavengers' visits took place but once a-week. Can it be wondered at, that with this condition of things, the cholera should have destroyed, between the 19th July and the 19th October 1832, four hundred and two persons, while one hundred and forty-two deaths took place during that period from other causes? The mortality, too, was distributed among the four parishes, out of the twenty which comprise the city, which "were precisely those characterized by bad drainage, and a generally ill-cared for and unwholesome state."

Turning to the second period of the inquiry, Dr. Shapter

finds that, on the recurrence of the cholera in 1849, Exeter had a population of 31,212, and that the total deaths from cholera and diarrhoea, from the 19th July to October 29th, during which the epidemic prevailed, amounted to *forty-three only*. Of this number the very large proportion of twenty-six occurred in the lower portions of the city, near the streams which there traverse it, or else resided in houses conspicuously filthy, and "offering those conditions which usually predispose to malignant and fatal disease."

We now come to account for this marked change in the mortality. Immediately after 1832, active means were taken by the water-company to increase the supply: the commissioners established a perfect system of underground drainage, and removed several courts and old houses, so as to secure the permeation of free and wholesome air. In 1847, when the attention of the public bodies was called to the progress of the cholera westward, extensive operations took place; parochial committees were formed for household visitation, so that many objectionable nuisances were removed; handbills were distributed calling attention to the provisions of the "Health of Towns Act", which was speedily put in force; and, in October 1848, a Board of Health entered upon active duty, having for its chairman Dr. Shapter himself; this board sat weekly, and were assisted by an efficient staff of medical and other officers; the markets were closely watched, and all offensive provisions destroyed whenever detected.

"The immediate and very evident effect was the marked diminution in the former amount of diffused sickness, more especially of fever, which had been previously the almost constant occupant of the lower parts of the city." (p. 13.)

In 1849, the city was portioned into ten districts, with a medical officer over each, medicines free of cost were supplied, lists of nurses kept, temporary hospitals and houses of refuge provided, and a handbill issued suggesting precautionary measures. Dr. Shapter's anticipations were singularly correct; the pestilence was mitigated, so that the services of the medical attendants of two districts only were required.

"The total deaths from cholera, in Exeter, in the two epidemics of 1832 and 1849, amounted to four hundred and forty-five. Of these four hundred and two, or ninety per cent., took place with the concomitants of bad drainage and a deficient water supply; while, with in great measure an absence of these conditions, the complementary number of forty-three, or ten per cent. only occurred. Can any more convincing statement be adduced of the beneficial influence of sanitary improvements?" (p. 14.)

Our limits will not permit us to follow Dr. Shapter in his very interesting appendices. One point, however, calls for our especial notice, viz., that this vast amount of public good could not have been obtained without the cordial, anxious, and energetic assistance of the medical superintendents of districts; and that, nevertheless, when the pestilence had subsided, and Dr. Shapter, as chairman of the sanitary commission, drew up a report "on the services of the medical officers of the sanitary commission", recommending to the corporation that a sum of not less than £50, should be presented to each of these gentlemen, "the recommendation was not complied with to its full extent." How long will the profession thus minister, at the bidding of an ungrateful public, to the wants of those who are sick and dying, from pestilences which may not spare themselves; and persevere in their endeavours to mitigate diseases, from the hazardous and engrossing attendance on which they are not allowed to derive any portion of their daily bread? How many, alas! of those who risk their lives and consume their days amidst destructive epidemics, receive no other remuneration of their labours than the reward of a good conscience.

DISEASES OF THE HUMAN HAIR: from the French of M. CAZENAVE. With a description of an apparatus for FUMIGATING THE SCALP. By T. H. BURGESS, M.D. 12mo. London: 1851.

This is a very useful little treatise, and its perusal is well calculated to disabuse the public of the ridiculous heresies which are so common regarding the management of the hair. The description of Dr. Burgess' apparatus for fumigating the scalp is very interesting.

After an account of the general causes which induce baldness, we find the following observations, which, though not new, are so true, and yet so entirely lost sight of by all of us—doctors and patients alike—that we cannot help quoting them.

COVERINGS FOR THE HEAD. "The heavy covering for the head to which men have been doomed, is an unfailing cause of injury to the hair. Even at the present day, *the hat*, by its weight, impermeability, and the pressure which it occasions round the head, materially assists in the premature destruction of the hair. M. Rostan entertains a similar opinion. He considers that the caloric accumulated between the hat and the surface of the head, and also the rarification of the air, which is like that of a stove, exercise an injurious influence upon the hair itself. M. Prècy, in an interesting thesis, insists upon the truth of this. He says that this pressure, in proportion to its force, will have the effect of diminishing the circulation of the parts, and consequently the nutrition of the hair, which then becomes easily detached, and falls off. In support of this view, he remarks that valets, footmen, etc., who remain a great part of the day with the head uncovered, preserve for a long time a copious supply of thick hair; and that soldiers, who are obliged constantly to wear heavy caps and helmets, very soon become bald." (P. 75.)

HYSTERICAL AND NERVOUS AFFECTIONS OF WOMEN. By WILLIAM JOHN ANDERSON, F.R.C.S. 8vo. pp. 39. London: 1853.

This is a slight popular sketch of some of the more common forms of hysteria.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

IS THE ARCUS SENILIS DIAGNOSTIC OF FATTY DEGENERATION OF THE HEART?

IN 1850, Mr. EDWIN CANTON demonstrated to the Medical Society of London, that the *arcus senilis* consists in a fatty degeneration of the cornea. This had been previously hinted at by Dr. Schön, of Hamburg. The most important point of a practical nature in Mr. Canton's paper, is his attempt to establish that the presence of the arcus is an indication of the existence of fatty degeneration of the heart. He says: "I have in no instance found this senile arc, when well developed, unaccompanied by fatty degeneration of the heart. The ocular muscles have been always more or less in the same condition; and the extent of the degeneracy in them, and in the heart, has appeared to me to bear a relation to the degree to which the cornea has been invaded by the deposit." There is now reason to believe that, although the rule laid down by Mr. Canton may be found, upon further investigation, to be correct in its general bearing, it is by no means so precise, or so universally true, as to entitle it to be considered as an absolute or certain guide in diagnosis.

Dr. HASKINS, of Clarksville, Tennessee, publishes the results of his inquiries into this point in the *American Journal of the Medical Sciences* for January 1853. Speaking of Mr. Canton's observations, he says: "Allowing all that can be claimed for these observations, that where fatty degeneration of the heart exists, the arcus senilis is generally present, *they by no means show the converse—that where the arcus senilis is found, the fatty degeneration of the heart exists.* For this end, another and a somewhat different line of research must be instituted. It must be inquired, how often, in a given number of subjects with the arcus senilis, the fatty condition of the heart is found or suspected from symptoms and other signs?" Dr. Haskins tabulates twelve cases, being all the instances of arcus senilis

which had come under his notice during the three months preceding the publication of this paper; and in two cases only were there any symptoms referable to the heart, and in only one of them was change of structure suspected. We subjoin Dr. Haskins's table. In the first column, W. and B. mean that the subject was white or black; M. or F., male or female; and the figures denote the age.

Colour, sex, & age.	Colour of eyes.	Pathological state of eyes.	Social condition, medical history, etc.
W. M. 52	Dark blue.	Arc above and below on both corneæ. Well developed on lower.	Printer in early life, now publisher; temperate in habits; health very good; has no embarrassment of the action of heart or lungs; has never suffered from inflammation of the eyes.
W. M. 62	Dark hazel.	Deep and well developed zone on both corneæ.	Easy in circumstances; habits temperate; corpulent; subject to fits of palpitation of heart, with "short breath"; pulse irregular; has never suffered from inflammation of eyes.
B. M. 52	Black.	Well defined zone on both corneæ.	Slave, but well treated; common field hand; under treatment for phthisis of two months' standing; action of heart undisturbed; has never suffered from "sore eyes".
B. F. 90 (?)	Black.	Well marked zone on both corneæ.	Superannuated slave; health good, except <i>paralysis agitans</i> ; no embarrassment of action of heart or lungs; eyes good for her age.
B. M. 82	Black.	Well marked zone on both corneæ.	Common labourer; has been well treated; health very good; no palpitation of heart or disturbed respiration; eyesight good; has never suffered from inflamed eyes.
W. M. 58	Light blue.	Upper and lower arc on both corneæ; lower most developed.	Circumstances easy; temperate habits; general health good; no embarrassment of action of heart or lungs; neuralgic pains of lower extremities; has never had inflammation of eyes.
W. M. 38	Light blue.	Upper and lower arc on both corneæ; lower well developed, upper indistinct.	Stone-mason; health very good; has generally been healthy; habits temperate; has no embarrassment of action of heart or lungs; has never suffered from inflammation of eyes.
W. M. 70	Light blue.	Well defined zone on both corneæ.	Circumstances easy; temperate; health very good; stout frame; no derangement of action of heart or lungs; eyes have never been inflamed.
W. F. 60	Black.	Lower arc distinct on both corneæ; upper feebly traceable.	Circumstances easy; rather delicate frame; health generally good; suffers hysterical attacks, with palpitation of heart; respiration at all times easy; never had inflammation of eyes.
W. M. 61	Light blue.	Zone of uncommon ellipticity on left eye; right eye "out".	Circumstances easy; remarkably stout, and quite healthy; action of heart and lungs healthy; right eye lost from severe inflammation; left has never been inflamed.
W. M. 34	Dark hazel.	Slight arc on lower segment of both corneæ.	Practitioner of medicine; health unsound; deranged digestion; no embarrassment of action of heart or lungs; has never had inflammation of eyes.
W. M. 27	Light blue.	Well defined arc on lower border of both corneæ.	Stout frame; takes much exercise; very healthy; temperate habits; no palpitation of heart or embarrassment of respiration; has never suffered from inflammation of eyes.

It is obvious that, while such observations as those of Dr. Haskins shake the validity of the conclusions of Mr. Canton, they are nevertheless incomplete; and that a real settlement of the question as to the value of the arcus senilis can only be arrived at by an extended statistical inquiry, conducted within some of our large hospitals. In a thousand cases, taken without selection on admission, let a statement be recorded as to the absence, or the presence, and character if present, of the arcus senilis: then, in the cases which terminate fatally, let the appearances found on dissection and microscopical examination of the heart be accurately ascertained, and dispassionately tabulated opposite the entries made when the deceased were admitted. By an analysis of a sufficient number of facts obtained in this way, a result might speedily be obtained, by which the matter in dispute would be finally and satisfactorily settled.

DR. QUAIN'S INQUIRY INTO FATTY DEGENERATION OF THE HEART.

DR. RICHARD QUAIN'S researches on fatty degeneration of the heart, were communicated in an elaborate paper read before the Royal Medical and Chirurgical Society, on March 12th, 1850. He pointed out the difference between the growth of fat-tissue between the muscular fibres, and the degeneration of the muscular fibre itself into a granular or molecular fatty matter. The latter process was the immediate subject of his paper; he described it as a process of decay, or true degeneration, and analogous to the formation of adipocere. The symptoms are those of impaired structure and function; and the treatment, which has been found more successful than might have been supposed, is such as is calculated to improve the condition of the blood.

PROGNOSIS AND TREATMENT OF VALVULAR DISEASE OF THE HEART.

THE importance of the observations of Drs. C. J. B. WILLIAMS and SEMPLE, on the fact that disease of the heart does not always tend to shorten life, will serve as a sufficient apology for our reproducing them in this place, notwithstanding that some time has elapsed since their publication.

In his valuable papers on the *Prognosis and Treatment of Organic Diseases of the Heart*, published in the *London Journal of Medicine* for April and May 1850, Dr. Williams says: "It is a satisfactory result of extended experience on this subject, that organic lesions of the heart, even of considerable amount and complexity, are not incompatible with prolonged life, and, under favourable circumstances, with a moderate share of health and comfort. For example:—About fifteen years ago, I was consulted by a medical man of middle age, who presented formidable signs and symptoms of obstructive and regurgitant disease of the aortic orifice, with greatly enlarged heart, and dilatation of the ascending aorta. The symptoms at that time were not only those of inordinate action of the heart, but the functions of the brain were occasionally impaired; exertion or emotion sometimes causing confusion of thought and indistinct articulation. Yet this gentleman has been engaged in a pretty extensive practice ever since; and within the past year, when I last heard of him, he had not abandoned his professional duties. And when at length death does occur in such cases, I have been often surprised at the enormous amount of disease that had gradually accumulated, yet sometimes without causing those alarming and distressing sufferings which occur in other instances, where the lesions are much less considerable. . . . In many instances, I have felt the heart's impulse extending from the midsternum to the seventh or eighth rib, beyond the line of the left nipple; I have heard the harshest and loudest valvular murmurs; and, in the most tranquil state of the circulation, the walls of the chest have been visible by the strong, exaggerated movements of the diseased organ: yet the patient has complained of little or no suffering, and, under favourable circumstances, has survived, and even enjoyed life, for years. With such instances we may contrast others, in which, with signs far less prominent—an impulse rather tumultuous and irregular, than extended or violent; and murmurs rather peculiar and deep-seated, than loud or long—the distress and disturbance of the circulation have been sudden and serious, and death has occurred within a few days or weeks from the first development of the symptoms."

In the *London Journal of Medicine* for November 1850, is published a paper by Dr. R. H. Semple, on *Valvular Disease of the Heart*. It was read before the Medical Society of London, on October 19th, 1850. The author asks, "whether this branch of medical science has not been pushed somewhat too far in modern days? and whether, led away by the brilliancy of the re-

searches into cardiac diseases, and fascinated by the simplicity which now attends their physical investigation, some practitioners do not now lay too much stress upon the aids derived from auscultation, and neglect the attendant phenomena, which modify the healthy and morbid conditions of the central circulatory organ." He proceeds to observe that, while distressing symptoms and fatal results often follow hypertrophy and dilatation, without any disease of the valves; yet the most serious diseases of the valves may be unattended with any remarkable symptoms, and may not tend either to shorten life, or to derange materially the health. He then relates three cases, of which he had made *post mortem* examinations. In the first case, there was cartilaginous transformation of the mitral and osseous deposit of the aortic valves, apparently of long standing. The patient died at seventy years of age. In the second, there was cartilaginous deposit on the mitral valves, and the aortic valves were "converted into masses of bone, which nearly filled up the orifice, leaving only a small chink for the passage of the blood". The patient died suddenly, without any previous illness, at sixty-nine years of age. In the third case, there was thickening and hardening of the mitral valves, and "the aortic valves were completely rigid, and converted into bone: they met in the centre, leaving only a small chink at their juncture on the middle line". This patient, a woman, died at the age of eighty-three. When she was seventy-three years of age, Dr. Semple detected disease of the heart, by auscultation; though she had never applied for relief on account of any symptoms referrible to cardiac disorder.

In forming a prognosis in cases where physical signs of disease of the heart exists, Dr. Williams points out that we must take into account, 1, circumstances relating to the heart itself; and 2, circumstances relating to the state of the blood, and its general circulation. He says, that structural disease of the heart may be considered serious and dangerous, in proportion as it impairs the power of the organ to carry on the circulation; and that this is indicated by the degree and mode in which the natural sounds are superseded by murmurs, or changed from that type in which they represent a healthy working organ. But we must also take into account not only the present amount of the lesion, but what it is likely to become; whether it be stationary, or be increasing so as to interfere with the natural sounds and action of the heart, although at present apparently not of so serious import. The conditions of the blood which affect the prognosis in organic diseases of the heart, are its richness or poverty, and its purity or deterioration, dependent on the condition of the excreting organs. Anæmia renders the symptoms of heart-disease very distressing; and this condition has been induced by the injudicious employment of lowering treatment.

On the treatment of diseases of the heart, Dr. Williams offers many highly valuable practical remarks; but we must merely refer to his observations on the treatment of anæmia, as our object is to direct attention to the necessity of giving tonics, especially iron, to persons with weak hearts. After referring to the remedies calculated to relieve the attacks of excessive action of the heart, Dr. Williams says of tonic agents, that they are more applicable than is generally supposed to the treatment of organic disease of the heart. In the more inflammatory cases, nothing stronger than the mineral acids, or weak vegetable astringents, may be borne. A class somewhat less sthenic, may tolerate and receive benefit from salts of zinc or silver, tannic or gallic acids, and weak chalybeates combined with salines. A third group, bordering more on the anæmic and irritable condition, with much action but no strength, bear the more decided tonics of iron or quinine, especially when guarded by sedatives, such as hydrocyanic acid, aconite, etc. But for the useful and safe administration of all tonic remedies, in connexion with an injured and irritable heart, it is essential that the secretions be free.

Anæmia, when it occurs after rheumatism and fever, or such diseases as injure the quality of the blood, aggravates heart disease, if it be present; and Dr. Williams observes here, "that the heart symptoms are ultimately relieved, as the heart and vessels become invigorated by more and better blood; but it is here necessary to proceed cautiously and slowly in the administration of iron and other tonics". He therefore recommends that they should be combined with sedatives, and increased gradually; the state of the secreting organs being at the same time attended to. He says that, under these circumstances, iodide of iron has appeared to answer better than any other preparations; or a combination of iodide of potassium with acetate or citrate of iron.

POTASH IN THE TREATMENT OF SCURVY.

Everybody knows that lime-juice and fresh vegetables cure and prevent scurvy; and in recalling attention to a theory and mode of treatment propounded by Dr. GARROD some years ago, viz., that *scurvy depends upon a deficiency of potash in the blood, and is to be cured by giving this substance medicinally*, we do not mean to cast any doubt upon this old and familiar truth to which we have referred. Dr. Garrod's idea is, that the blood in scurvy is deficient in potash; and, that, as a consequence of this deficiency, nutrition of the muscular fibre is imperfectly performed.

Dr. Wm. HAMMOND, assistant-surgeon in the United States army, in the *American Journal of the Medical Sciences* for January 1853, supports by his experience the views of Dr. Garrod; and he concludes a review of the facts which had come under his observation, by declaring, "that not only as a *remedy* is potash valuable in scurvy, but that as a *prophylactic*, its qualities entitle it to a high rank among that class of agents"; and he adds, "on the score of economy, a better one could not be obtained".

Dr. Hammond was stationed with troops in New Mexico, where, from the scanty vegetation of the country, the disease is very prevalent; but in the particular position where he was placed, only four or five cases originated, so that he believes that "he saw less of scurvy than any medical officer stationed in New Mexico". In the explanation given of this remarkable immunity, lies the chief interest of the essay now before us. "This immunity from the disease", says the author, "I ascribe to the fact, that the small stream which flows past the post (the water of which was used by the troops) contains potash in quite an appreciable quantity. From one of the springs situated among the mountains, which supply the main stream, I obtained very satisfactory evidence of the existence of potash in considerable abundance, a large precipitate of the bitartrate being thrown down by a solution of tartaric acid." Twelve cases, successfully treated by potash, are reported. None of the patients had vegetables, simply because they could not be procured. "All recovered perfectly, and in no case did lameness or other deformity, remain. The minimum period of treatment was three days; the maximum twenty-one days; and the average nine days and six-tenths of a day." So thoroughly satisfied is Dr. Hammond of the value of potash in scurvy, that he says, "A small portion of some salt of potash (say the bitartrate, as the most agreeable) issued to the troops as a component part of the ration, would, I am confident, entirely prevent the occurrence of this affection among them." He suggests that a knowledge of this might save much of the dreadful mortality among the overland emigrants to California.

DISEASES OF THE EAR.

AUSCULTATION OF THE EUSTACHIAN TUBE.

The *American Journal of the Med. Sciences* for January 1853, quoting from the German journals, mentions that Professor RICHTER states that he has discovered a method by which he can supply the place of Harvey's auriscope, and render unnecessary the dangerous and difficult operation of catheterism of the Eustachian tube. Richter's method is thus described:—

"The external cartilage of the ear is bent forwards, and pressed flat upon the external orifice of the ear, closing it tightly. A stethoscope, having the expanded or funnel end of small size, is placed upon the cartilage, bent over the ear, as described above, making sufficient pressure to keep the cartilage flat upon the skull, and the external orifice of the ear entirely closed. When the Eustachian tube is free, the passage of the breath through the mouth and throat is distinctly heard, as well as the sound made in speaking, whistling, or hawking. The most striking effects are observed when one is enabled to produce *consonance* in the Eustachian tube. For this purpose the patient is requested to sing, or, better still, to whistle the notes of the musical scale, if possible, the entire extent. In certain tunes, the listener as well as the patient will hear distinctly the consonance or accord in the ear which is closed; and even at times accompanied by a metallic echo produced in the stethoscope. The notes *c*, *f*, *e*, in the small and large octave, with *a* and *e*, will be heard in whistling, and *c* and *a* in singing. Should the Eustachian tube be closed, the effects enumerated will be entirely wanting."

THE MOIST COTTON REMEDY FOR DEAFNESS FROM PERFORATED TYMPANUM.

In the *Medical Times* of March 12, Mr. JAMES M. CRENSHAW.

quotes the following passage from p. 105 of *Todd's Anatomy of the Ear*, a work published in 1832. It has an instructive bearing upon recent discussions.

"From all that has been hitherto, it does not appear, however, that we know of any agent, or class of agents, which have the power of exciting the principles of life to develop those textures whose absence is the cause of congenital deafness. . . . Nevertheless, we have reason to think, from the spontaneous cures recorded to have taken place at particular stages of life, that the vital principle in those parts is susceptible of peculiar excitement, and that, if it does not generate structures hitherto defective, it can, at least produce such a revolution in the textures that exist, as to make them subservient to the original intentions of their formation. Ought we not, then, to endeavour, by every means in our power, to solicit such fortunate issues? And, supposing all the means which we have ventured to notice fail in producing the evolutions which we so much desire, are we altogether without resources, or have we not still other means by the employment of which the severity of deafness may at least be alleviated? When we reflect on the economy of the eye, and on the benefits derived from the mere use of glasses, does it not appear possible that dulness of hearing, and some cases of deafness, may be relieved by the employment of an acoustic apparatus? When we refer to the various cases which have been recorded of extensive injuries having been done to the apparatus tympani without producing much deafness, does it not appear that, so long as the tympanum possesses a texture in communication with the labyrinth, and that texture has the principles of sensitive motion, it must have the power of communicating effects capable of exciting a sensation? That such a sensation can be perfect, no one will for a moment suppose; but, limited or imperfect as it may be, it clearly demonstrates that the peculiar phenomena of hearing can be excited without the presence of an apparatus complete in all its parts, and that the acuteness of the sense may probably be increased by certain remedies of a mechanical nature. In this idea we are confirmed, when we consider the relief derived from the mere introduction of a little lint into the meatus externus, in those cases where the membrana tympani has been ruptured or destroyed by the violence of disease. So great, indeed, is the improvement which takes place from the application of this simple remedy, that patients will frequently appear astonished on being so easily relieved."

OPHTHALMOLOGY.

DISLOCATION OF THE CRYSTALLINE LENS.

Dr. COMPERAT has given, in the *Annales d'Oculistique*, tome xxviii, p. 146, an elaborate account of a case, in which the crystalline lens became spontaneously dislocated into the anterior chamber, from which it was necessary to extract it. It had undergone considerable alteration in form; one portion which had been denuded of its capsule having increased considerably in bulk by imbibition of aqueous humour; the remainder, still covered by capsule, retaining its normal condition.

"The organ", (says Dr. Comperat), "plunged into alcohol directly after its extraction from the eye, immediately exhibited phenomena, which fully confirmed, in my opinion at least, the theory according to which I had regarded the different phases through which the crystalline had passed during its residence in the interior chamber. Thus, the swelled portion, deprived of its covering, and which had undergone all the phenomena of long maceration, ought necessarily by its hygrometric condition to be that which should, when in contact with alcohol, exhibit certain changes arising from the well-known affinity of this spirit for water. It was so; scarcely had this portion touched the spirit, when, yielding immediately all the water it had contained, it acquired a very considerable opacity, and a denser white than the other presents even now. This other portion, on the contrary, which had preserved its capsule, did not lose its transparency in any sensible degree even after a very prolonged immersion in the spirit. Indeed, after six years infusion therein, the swelled portion retains the cretaceous aspect which it acquired on the instant of its immersion, whilst the other has lost very little of its transparency."

AMAUROSIS ACCOMPANYING DISEASE OF THE HEART AND BLOOD-VESSELS.

Dr. BLODIG has given, in the *Zeitschrift der k. k. Gesellschaft der Aerzte in Wien*, as quoted in *Ann. d'Ocul.*, xxviii, p. 190, observations on thirteen cases of amaurosis accompanying affections of the heart and large vessels.

In one case there was complete amaurosis of both eyes; in one, complete amaurosis of the right, amaurotic weakness of the left; in one, incomplete amaurosis of the left, amblyopia of the right; in two, incomplete amaurosis of both eyes; in three, amaurotic weakness of both; in five, a similar affection on one only.

Six amauroses were plainly congestive, two rheumatic, two abdominal, two torpid, and one syphilitic. As to the concomitant cardiac affections, there were three cases of imperfection of the aortic valves (two being ossification), three of the mitral valves; all six having more or less enlargement of the left ventricle; and seven cases of excentric hypertrophy of this part.

APPLICATION OF NEUTRAL ACETATE OF LEAD IN THE TREATMENT OF PTERYGIUM.

Dr. DECONDÉ has given, in the *Annales d'Oculistique*, tome xxviii, p. 181, an account of the successful application of the neutral acetate of lead, to the treatment of pterygium. The first patient was a soldier, who had a membranous and vascular pterygium at the inner angle of the left eye. On the 17th February, 1852, the neutral acetate of lead was applied to this, and after five applications the diminution of the growth was so considerable that there only remained a sort of pimple about a line from the cornea. The base had been completely destroyed. On the 6th March the pterygium had completely disappeared, and the sight had benefited materially.

TUMOUR OF THE SEMILUNAR FOLD OF THE EYE.

Dr. KANKA has described, in the *Ungarische Zeitschrift für Natur- und Heilkunde*, as quoted in the *Annales d'Oculistique*, tome xxvii, p. 192, a rare disease—a tumour of the semilunar fold of the eye. It was about the size of a raisin, and had gradually developed itself in the eye of a peasant, after an attack of inflammation. In general appearance it resembled the growths which are occasionally seen after the operation for strabismus.

Microscopical examination demonstrated that it was an exudation tending to organization, and made up of cells and fine fibres, frequently interlacing and disposed less regularly than those of normal cellular tissue.

DISEASE OF EYES PRODUCED BY MANUFACTURE OF TOBACCO AND CIGARS.

M. HIRSCHLER states, in the *Ungarische Zeitschrift für Natur- und Heilkunde*, as quoted in the *Annales d'Oculistique*, tome xxvii, p. 192, that the manufacture of tobacco and cigars is one of the causes which favour the development of acute blenorrhœa of the eye, having observed whole families so affected who were engaged in this occupation.

REPORTS OF SOCIETIES.

PARISIAN MEDICAL SOCIETY.

ANNUAL DINNER, FEB. 26TH.

We are glad to find that this institution, so useful and agreeable to English and American students resorting to Paris, continues to flourish. Since its foundation in 1837, through the exertions of Dr. Hughes Bennett and others, it has proved of great service by offering to strangers on their arrival in the French capital the best means of pursuing their studies. The experience of old students regarding hospitals, teachers, and dissecting rooms, is at once, by the friendly intercourse of society, made available for the assistance of those who might otherwise lose much precious time in obtaining it. It is under the patronage of the principal resident English physicians of Paris, as well as of several of the native celebrities, some of whom have been its officers. We strongly advise every British medical student on his arrival in Paris, to join the Parisian Medical Society.

The annual dinner took place on Saturday, the 26th of Feb., at Hamel Vefour's, the celebrated restaurant, 82, Palais Royal. Upwards of forty gentlemen were present; among whom were Dr. Harley, (president), Mr. W. O. Priestley, (vice-president), MM. Orfila, Ricord, Nélaton, Valleix, Briere de Boismont, and Verdeil.

MEDICAL SOCIETY OF LONDON.

SATURDAY, MARCH 12, 1853.

FORBES WINSLOW, M.D., President, in the chair.

Votes of thanks to the officers of the Society for last year were passed.

THE PRESIDENT'S ADDRESS.

Dr. Winslow expressed his sense of the honour conferred on him in being elected to the chair of Lettsom, Fothergill, Clutterbuck, and Jenner. He regarded the objects of the meetings to be, not the display of oratory or elocution, or the dexterous detection of fallacies, but the pursuit of truth—the advancement of the knowledge of medicine. No study is more calculated to enlarge the capacities, to invigorate the intellect, discipline the understanding, and improve the heart, than that of the science of medicine, when cultivated in a cautious, truth-loving, honest, philosophic spirit: and yet it must be admitted that our science peculiarly exposes us to many sources of error and fallacy, unless we apply to its cultivation the great principles of inductive philosophy. The rules of induction must be rigidly followed, before medicine can claim rank with the exact sciences. In the study of medicine, perhaps more than in that of any other science, we are exposed to the danger of adopting false facts, of being seduced by specious and hasty generalisations, and of being led into error by deducing general principles from a few particulars. Dr. Winslow gave examples of the fallacy to which he alluded: and with reference to conclusions drawn from the action of remedies in certain cases, pointed out that we must take into account the influence of idiosyncrasy, the operation of the *vis medicatrix nature*, the influence of mental emotion, and a variety of other circumstances, known materially to operate favourably or unfavourably, either on the curative or disorganizing process. While he urged the necessity of inductive reasoning, he also cautioned his hearers against the spirit of unphilosophical scepticism occasionally exhibited by those professedly engaged in the cultivation of science, but who made slight progress because they obstinately refused to recognize the laws of legitimate causation. This vicious medical scepticism, he said, had been fully appreciated and satirised by Voltaire.

PSYCHOTHERAPEIA. BY W. C. DENDY, ESQ.

The author asserted the reciprocal action of mind and matter; and pointed out the effects produced on the functions of the body by the sentiments and passions of the mind—the effect of these, when moderate, being salutary; but when excessive, productive of disease, and even of death. Mr. Dendy alluded, among other examples, to the sudden production of jaundice through anger; and to the instances in which the hair is said to have turned white in a short space of time from grief or fear. He also alluded to the brooding over imaginary disease by hysterical and hypochondriacal persons, in whom actual disease of an organ was sometimes brought on by its being imagined to exist. The paper was concluded with some remarks on the therapeutic application of a knowledge of the influence possessed by the mind over the body: but the time allowed for reading papers did not permit the author to do more than very cursorily refer to this important subject.

ASSOCIATION INTELLIGENCE.

MIDLAND COUNTIES' BRANCH.

The General Quarterly Meeting was held in the Board Room of the General Hospital, near Nottingham, on the 10th instant, at 3 o'clock, P.M.; Dr. WILLIAMS, of Nottingham, in the chair.

The following gentlemen were present:—Thomas Paget, Esq., Leicester; Dr. Barclay, Leicester; Charles Bowman, Esq., Leicester; Dr. Goode, Derby; W. Cantrell, Esq., Wirksworth; Dr. Smyth, Bingham; John Higginbottom, Esq.; B. Eddison, Esq.; A. Darby, Esq.; J. C. L. Marsh, Esq.; Dr. Sloane; Dr. H. Payne; J. S. Alderson, Esq.; G. E. Stanger, Esq.; H. Higginbottom, Esq.; J. N. Thompson, Esq.; J. White, Esq.; etc.

MEDICAL REFORM BILL.

It was proposed by THOMAS PAGET, Esq., of Leicester; and seconded by WILLIAM CANTRELL, Esq., of Wirksworth, "That the Midland Branch of the Provincial Medical and Surgical As-

sociation respectfully request the Members of Parliament for the Midland Counties favourably to consider the New Medical Bill in Parliament; and, if possible, to accompany the deputation of the Association which is appointed to wait upon Lord Palmerston, at his residence in Carlton Gardens, on Thursday, the 17th inst., at 12 o'clock, for the purpose of submitting to his lordship the said bill."

This resolution was unanimously adopted; and it was then determined that a copy of it should be sent to each of the Members of Parliament for the district.

INCOME-TAX.

It was moved by Mr. EDDISON, of Nottingham; seconded by Dr. GOODE, of Derby, and resolved, "That a petition to Parliament, relative to the unjust bearing of the Income-Tax, be prepared, and sent for signature to the different parts of the Midland district."

NEW MEMBERS.

Dr. BARCLAY, of Leicester, proposed that the following twenty-eight new members of the Association, be elected members of the Midland Branch:—Dr. Shaw; A. Cooper, Esq., T. W. Benfield, Esq., W. May, Esq., J. H. Stallard, Esq., W. Derington, Esq., John Buck, Esq., and Dr. Irwin, all of Leicester; W. J. Franks, Esq., Billesdon; E. McIlree, Esq., Claybrook; T. Spencer, Esq., Earl Shilton; T. W. Paterson, Esq., Ibstock; Dr. Eddowes, Loughborough; S. Hunt, Esq., Loughborough; F. Stevenson, Esq., Loughborough; J. Gill, Esq., Syston; H. Nuttall, Esq., M.D., Syston; J. C. Robinson, Esq., Syston; J. Hunt, Esq., Thornby; J. Keal, Esq., Melton Mowbray; J. B. Bradshaw, Esq., Quorn; R. Wing, Esq., Burrow-on-the-Hill; T. S. Ludlow, Esq., Sapcote; J. M. Fewkes, Esq., Glem Magna; J. H. Spencer, Esq., Hallaton; W. Orton, Esq., Narborough; H. Hudson, Esq., Somerby; and S. Wright, Esq., Mount Sorrel.

Mr. PAGET seconded this motion, which was carried unanimously.

ERYSIPELAS.

Mr. HIGGINBOTTOM read a paper on "Erysipelas as a Local Disease", which we have received, and hope to be able to publish in an early number.

After an interesting discussion on Mr. Higginbottom's paper, in which Mr. Paget, Mr. Eddison, Dr. Goode, Mr. Cantrell, and others, took part, a vote of thanks to the author was moved by Mr. Eddison, seconded by Mr. Paget, and carried unanimously.

MEDICAL ETHICS.

This subject was introduced by Dr. GOODE, of Derby, who read the Rules of the Medico-Ethical Societies of Manchester and Huddersfield; and suggested that the opinion of the meeting should be taken as to the propriety of adopting a code of ethical rules for the Midland Counties Branch.

After remarks by Dr. Barclay and Mr. Paget, of Leicester; Mr. Stanger, Mr. Eddison, and Mr. Higginbottom, of Nottingham; and Dr. Smyth, of Bingham, all of whom agreed as to the absence of any necessity for the introduction of such rules in this neighbourhood,—

Dr. BARCLAY, of Leicester, moved, and Mr. DARBY, of Nottingham, seconded, "That the Midland Branch of the Provincial Medical and Surgical Association decline to adopt any code of ethical rules, as unnecessary in this district." This resolution was carried.

NEXT ANNUAL MEETING OF THE BRANCH.

The next meeting (the Annual Meeting of the Branch) was appointed to take place at Leicester, on Thursday, the 10th of June, under the presidency of Thomas Paget, Esq.

A vote of thanks to Dr. WILLIAMS, for his able conduct in the chair, was proposed by Mr. STANGER, and seconded by Mr. PAGET, and carried unanimously.

METROPOLITAN COUNTIES BRANCH.

A Special Meeting was held on Tuesday, at 4 P.M., at 87, Great Queen Street, Lincoln's Inn Fields: Dr. FORBES, the President, in the Chair.

MEETINGS OF THE BRANCH.

Mr. RICHARDSON (of Mortlake) asked whether it was intended that there should be more than one General Meeting of the Branch in the course of each year? He thought that Quarterly Meetings of the Branch would be most desirable, as by this means the members would be enabled to express to each other their opinions regarding the state and prospects of the profession, and to read and discuss papers connected with the advancement of medical science.

The PRESIDENT thought that as this meeting was called for two special purposes, Mr. Richardson's remarks, though important, were scarcely in order.

Dr. CORMACK quite agreed with what Mr. Richardson had said; but, after what had fallen from the chair, he should only now observe that it was his intention, at the next Council Meeting, to urge the propriety of holding Quarterly Meetings of the Branch.

INCOME TAX.

Dr. CORMACK said, that the propriety or impropriety of an income-tax was hardly a question for a medical society to give an opinion upon; and it was a question of general politics, with which he would not trouble the meeting. The political bias of the day was in favour of direct taxation, and it was certain that the income-tax would be re-imposed, and probably become permanent. A more just distribution of the tax was therefore the point upon which it behoved the medical profession to concentrate its energies. He therefore moved—

"That inasmuch as the present mode of assessing the Income-tax is peculiarly severe upon all who depend upon temporary or life incomes; and as it presses with special injustice upon members of the medical profession, from their incomes being not only terminable by death, but even contingent upon daily health; it is the duty of the Metropolitan Counties' Branch of the Provincial Medical and Surgical Association to petition both Houses of Parliament in favour of a more equitable distribution of the said income-tax, should it be again imposed."

Dr. ARCHIBALD DOUGLAS seconded the motion, which was put by the Chairman, and carried unanimously.

Dr. SIBSON moved: "That the following petition be adopted as the petition of the Metropolitan Counties' Branch of the Provincial Medical and Surgical Association, be signed by the Members, and then forwarded by the Secretary to Sir Benjamin Hall, M.P., for presentation to the House of Commons, and to Lord Brougham, for presentation to the House of Lords:—

"The Humble Petition of the undersigned Members of the Metropolitan Counties' Branch of the Provincial Medical and Surgical Association, sheweth—

"That your petitioners have, for the most part, no other income than that derived from their professional exertions.

"That their income so derived is uncertain and precarious, necessarily ceasing under illness, in advanced life, and at death.

"That considering their position in society, the exercise of their profession requires them to maintain unusually expensive establishments, involving considerable direct taxation.

"That your petitioners are, for the most part, married men, with families, for whose education and present and future support they have to provide by these uncertain and precarious incomes, under the contingencies of illness, advanced age, and death.

"That your petitioners represent, moreover, that their lives are shorter, they are more liable to accidents and disease, frequently communicated by their patients; and that the decline of their professional incomes is earlier than in any other profession.

"That for the above reasons and others that might be adduced, the capitalized value of the precarious income of a medical man is not only below that of an income derived from a permanent annuity, but is also even considerably below the value of a received life annuity, which itself is scarcely half the value of a permanent annuity.

"That for the above reasons, your petitioners feel it a great grievance, and cannot but consider it most unjust, that their professional incomes, thus precarious, should be taxed at the same rate as incomes derived from realized property.

"And your petitioners therefore humbly pray that it may please your Honourable House so to deal with the income-tax, if it be indispensable to retain it, that its pressure on medical men and others, whose incomes are temporary and uncertain, may be equitably adjusted in proportion to their real value.

"And your petitioners will ever pray, etc."

Mr. CARTER (of Hadley) seconded the motion.

Dr. O'CONNOR urged the necessity of appointing a deputation to wait upon the Chancellor of the Exchequer. It was of the first importance to communicate with him, and that too as early as possible.

The PRESIDENT thought it doubtful whether such a proposal could be considered, as it was not mentioned in the advertisement calling the meeting.

Mr. RICHARDSON supported Dr. O'Connor's views.

Dr. SIBSON did the same.

The CHAIRMAN then put the question, Whether it was the opinion of this meeting that Dr. O'Connor's resolution could be entertained?

The meeting, by a majority of votes, decided that it could be entertained.

Dr. O'CONNOR eventually withdrew his original resolution, and proposed the following modification of it:—

"That the following gentlemen do form a committee, to co-operate with the Income-Tax Committee of the parent Association, and to suggest the propriety of appointing a deputation from the Association to wait on the Chancellor of the Exchequer on the subject of the Income-Tax.

Dr. SIBSON,
Dr. POWELL,
Dr. GRIFFITH,

Dr. O'CONNOR,
Mr. ANCELL,
Mr. RICHARDSON,

With the PRESIDENT and SECRETARY."

Dr. GRIFFITH seconded this resolution, which was carried unanimously.

Dr. SIBSON moved, that Dr. Cormack, being a member of the Income-Tax Committee of the Parent Association, should be requested without delay to communicate with that body. This was agreed to.

Dr. CORMACK asked if he might, in writing to Dr. Malden, of Worcester, the Chairman of the Income-Tax Committee of the Parent Association, state, that it was the unanimous opinion of this meeting that a numerous deputation of the Parent Association ought, with as little delay as possible, to seek an interview with the Chancellor of the Exchequer, to plead the cause of the profession?

The PRESIDENT said, that he believed that Dr. Cormack rightly stated the feeling of the meeting. (Hear, hear.)

Mr. RICHARDSON moved, "That the sub-committee now appointed be instructed to wait upon Lord Brougham and Sir B. Hall, to request them to present the petitions of the Branch to both Houses of Parliament."

Dr. HOWARD seconded the motion, which was unanimously carried.

PARLIAMENTARY REPRESENTATION OF THE UNIVERSITY OF LONDON.

Dr. SNOW BECK, in an eloquent speech, introduced this subject. He said that it was very far from his wish, in making the motion with which he intended to conclude, to restrict the privilege of parliamentary representation to the University of London. He was in favour of extending it to all unrepresented universities. He thought, however, that if the privilege were given to the University of London, a good beginning would be made, and other universities could then demand similar rights. He had no wish to represent the question as identical with that of the parliamentary representation of the medical profession; but he must say, that such a constituency as the University of London would represent the profession better than it had ever yet been represented; and, as the medical graduates increased in number, the amount of medical representation obtained through the university constituency would be likewise increased. He concluded by moving the following resolution:—

"That this Society views with pleasure the present movement in the University of London, having for its object the extension of the parliamentary representation to the educated classes; and considers it expedient to support this movement by forwarding a petition to the House of Commons, praying that the franchise may be bestowed on the London University."

Dr. RISDON BENNETT had read with surprise, as part of the advertisement calling this meeting, the announcement of the subject which had been brought forward by Dr. Snow Beck, as he conceived it to be one which was not within the limits of the Provincial Medical and Surgical Association. The question was purely a political one; and, as such, he deprecated its being discussed at any meeting of this Branch. If, however, he were asked to enter upon the merits of the question, he would say that a medical society ought not, as a medical society, to support the movement now being made by the London University, as it tended to make Parliament and the public suppose that granting representation to the University of London was equivalent to granting representation, to a certain extent, to the medical profession, which was very far from the truth. Parliamentary representation was one of the greatest desiderata of the medical profession; and no more effectual means could be taken to prejudice that question, than medical societies taking up the claims of the University of London as a question in which they had a peculiar interest. In any capacity except as

a member of a medical society, he could have no objection to sign Dr. Snow Beck's petition: but he wished to guard against damaging the question of medical representation in Parliament. And, as regarded the Universities, he must say that there were other unrepresented Universities which had a much stronger claim to have members of Parliament, both from the greater number of their graduates, and their more ancient and influential position.

Dr. SIBSON. Name them.

Dr. RISDON BENNETT said that he had no objection to do so: and he would mention Edinburgh and Glasgow. Believing that the cause of medical representation would be endangered by medical bodies taking the course recommended by Dr. Snow Beck, he would always oppose such a course: but, upon the present occasion, he specially objected to the motion on account of its exclusively political bearing.

Dr. SIBSON seconded Dr. Snow Beck's motion. He said, in reply to Dr. Bennett, that as more than one third of the graduates of the University of London were medical men, the question must be regarded as one which closely concerned the profession. To obtain the elective franchise for the University of London, would, in his opinion, be the getting in of the wedge, and be the beginning of a concession of similar privileges to all literary, scientific, and medical institutions.

Dr. POWELL, as an old graduate of the University of London, warmly supported Dr. Snow Beck's resolution.

Dr. CORMACK thought that the legal question mooted by Dr. Bennett was that which was immediately before the meeting; and that the simplest way of bringing the matter to an issue, was to decide whether Dr. Beck's proposition could be entertained without violating the spirit of the ninth law of the Branch, which was as follows:—"That all subjects connected with medical science or the profession be admissible for discussion." Supposing, however, that that law might be interpreted in its widest sense, he would still say, that, as a matter of policy, it was wrong for this Branch, or any Branch of the Provincial Medical and Surgical Association, at the present crisis, to take up the question of the parliamentary representation of the London University. As Dr. Bennett had stated, nothing could more endanger the claims of the profession to be represented. He entirely differed from Dr. Sibson, and denied that the questions of university and medical representation were in any way similar; and he thought that if medical men were at present to agitate for the parliamentary representation of the University of London, and that was to be obtained, they would be told that they had got the kind of parliamentary representation which they had first asked, and had therefore most desired.

Dr. RISDON BENNETT said, that to bring the question of order to a decision, he would propose the following amendment: "That the question of granting the elective franchise to the University of London, being essentially a political question, does not legitimately come under the consideration of the Provincial Medical and Surgical Association."

Dr. COGSWELL seconded this amendment. He observed that the parliamentary representatives of the Universities of Oxford and Cambridge rendered no service to the medical profession; and believed that the same would be the case with regard to any members which might be chosen by the University of London. He concurred with the remarks of Dr. Bennett and Dr. Cormack, and concluded by asking Dr. Beck or Dr. Sibson whether it was intended to secure to the University of London medical representation?

Dr. SIBSON again defended Dr. Beck's resolutions; and in answer to Dr. Cogswell's question, said that what the graduates of the London University wished to obtain, was certainly not exclusive medical representation, but general university representation, which would include medical representation.

Mr. RICHARDSON supported Dr. Beck's resolution. He thought that, if the profession would in any way be benefited by the franchise being given to the graduates of London, this meeting ought not only to entertain the question, but to give its best help. The representatives of such a constituency as the London University would undoubtedly be much influenced by the medical body which it contained; and as to the other question which had been alluded to—the claims of other universities—he thought that the present movement should not be regarded by them with jealousy, but be felt as a spur to similar exertions.

Dr. DOUGLAS maintained that the representation of the University of London was a purely political consideration, connected with a general redistribution of the elective franchise; and, as it was a political question, and therefore foreign to the objects of the Association, he would support Dr. Bennett's amendment.

Dr. SNOW BECK replied to the observations of the previous speakers.

The PRESIDENT put the amendment to the meeting, when it was found that an equal number voted for it and against it; whereupon he stated, that it lay with him to give the casting vote; and that in doing so, he felt bound to state, that he did not regard the question as a political one. It was not nearly so political as the income-tax question. When that was originally mooted in the Council, he had felt so strongly that petitioning in connexion with the income-tax was an improper interference with politics, that he had strenuously opposed it, though he had ultimately perceived that it might legitimately be entertained as a professional question by the Branch. After strongly deprecating the discussion of political questions at the meetings of the Metropolitan Counties Branch, he concluded by giving his vote against the amendment; which was then declared to be lost.

The PRESIDENT then put the original motion, whereupon Dr. CORMACK, after asking whether he was in order in offering another amendment proposed (with permission of the Chair), that, in place of "*London University*", the last two words of Dr. Snow Beck's motion, the words "*unrepresented universities*" should be substituted. He thought, from the tenor of the speeches of Dr. Snow Beck and Dr. Sibson, that they would not object to this proposition; and he hoped that it would meet with the unanimous concurrence of the meeting.

Dr. GRIFFITH said that, from the terms of the advertisement summoning the meeting, he did not think that such an amendment could be received. They were there specially assembled to consider the claims of the University of London, and of no other university.

After some conversation, Dr. Cormack withdrew his amendment.

The original motion was then put. Upon a division, the same result was obtained as when Dr. Bennett's amendment was put; and the motion was declared to be carried by the Chairman's casting vote.

Dr. SNOW BECK read the petition suggested for adoption.

It was moved by Mr. CARTER, seconded by Mr. RICHARDSON, and carried by the casting vote of the Chairman, that the petition read by Dr. Snow Beck be adopted.

After a vote of thanks to the Chairman, the meeting broke up.

[The Income-Tax Petition lies for signature at the office of the JOURNAL, 37, Great Queen Street.]

EDITOR'S LETTER BOX.

THE LATE INQUEST AT TODDINGTON.

LETTER FROM PATRICK BENSON, Esq., to the Editor.

SIR,—I think the time has now arrived, when I can with propriety enter into an explanation of the evidence I gave, as well as the part I have been compelled to take, in the late proceeding against Mr. Hicks, for manslaughter.

In the first place, I much regret, with Mr. Hicks, as well as with many of his friends, that his case did not come on for trial. Then I could, in open court, have vindicated and explained my conduct, without in the least injuring the cause of Mr. Hicks.

As I have already stated in my letter of the 18th ult., I was called to see the deceased child a few hours before its death, and was then informed, by its mother, that Mr. Hicks had been attending the child, and that he told her the bone was broken, and had treated it accordingly. In reply to a question, I said that there was no bone broken; and in consequence of that opinion, I was requested, by a relative of the deceased, to make an examination of the part, for the purpose of ascertaining whether the bone was broken or not. This I did in conjunction with Mr. Tomson. That was the only examination which ever was made; and it was made only for the purpose of satisfying the friends, and for no ulterior object, nor from any vindictive feeling, either on my part, or on the part of the relatives of the deceased; for I believe that the proceedings against Mr. Hicks had been instituted without their knowledge or consent. I then recommended the child to be buried, and gave no opinion as to the cause of death, nor did I hear any more of the affair until I was summoned, a month afterwards, to attend the inquest.

Who was the cause of instituting that investigation, I must leave Mr. Hicks to discover. At the inquest, and after hearing the evidence of the mother and other witnesses, I was asked, by the Coroner, what, in my opinion, was the cause of death?

replied, that the immediate cause of death was effusion or congestion of the brain, caused, in my opinion, by the shock which the nervous system received from the long-continued pain the child suffered from the abscess. And I added, as another cause, that it was possible that absorption of matter might have taken place, producing a similar result, and that this of course might have taken place quite independent of any pressure.

In answer to the next question, relative to the bandages, I replied that of course the bandages, by their pressure, increased and kept up the pain. And I now ask, what other opinion could I have given as to the cause of death, in the absence of any other apparent cause? for you will be pleased to bear in mind, that there had been no *post mortem* examination made, except of the affected part. I never, however, meant to convey by that opinion, nor did I think that the jury could infer, that it was Mr. Hicks's treatment that had caused the death of the child. I was not asked a question by the coroner that would have elicited a favourable reply; and, unfortunately, Mr. Hicks had no legal adviser to cross-examine the witnesses. I strongly urged on Mr. Hicks, jun., the expediency of procuring one, but he refused. Subsequently, seeing the impression apparently made on the jury—not by my evidence, but by that of the mother—I urged upon Mr. Hicks the propriety of his going home, that, in case an adverse verdict should be returned against him, he might get out of the way for a few days, until he could procure bail. For this humane and charitable advice, given to an old man bordering on seventy years of age, the coroner expressed his regret to some of my friends, and appeared much mortified that he had not been made acquainted with my advice to Mr. Hicks sooner, for he said that if he had, he would have certainly sent me with Mr. Hicks to prison, as an accessory after the fact, in aiding and abetting in that awful case of manslaughter.

Up to this period, I had never heard of an injury which, it appears, the child had received from a fall, nor of a dislocation of the head of the fibula, for which it now appears Mr. Hicks had treated the child; and not for a fracture, as had been represented to me, nor did I hear of the injury or of the dislocation until after Mr. Hicks had been committed to prison. Now, I cannot say whether or not there had been a dislocation. Not having any idea that I should be called upon to give evidence before a jury, I did not make that particular examination which I otherwise should have done; consequently, a dislocation of the head of the fibula might have escaped my notice, not expecting to find such an injury. Admitting, then, this to be the case, Mr. Hicks's treatment was perfectly justifiable and correct. I presume that he did not anticipate the formation of an abscess, which might have been produced either by the accident, or by a general bad state of health.

It is a matter of surprise why Mr. Hicks did not make known the above circumstances to the jury; but the only explanation is, that Mr. Hicks is very deaf, and I believe did not hear one word of what was said in the inquest-room. Mr. Hicks, jun., being a very young man, was so bewildered by the unexpected charge brought against his father, that he had scarcely power to make any explanation, or offer any observations.

In conclusion, I must a second time repel, as wholly untrue, the statement that I had been actuated by any unkind or vindictive feeling towards Mr. Hicks, in the part I was compelled to take in that inquest. Mr. Hicks has never injured me, nor I him purposely or wilfully; and all persons (whether medical or non-medical) who know me, are aware that I am wholly incapable of such base and dishonourable proceedings.

Begging you to insert this in your next number,

I am, etc.,

PATRICK BENSON.

Laton, Bedfordshire, March 14th, 1853.

PYÆMIA.

LETTER FROM HENRY LEE, Esq., TO THE EDITOR.

SIR,—MR. GAMGEE, an able writer in the ASSOCIATION MEDICAL JOURNAL of the 4th inst., has noticed my work on the *Origin of Inflammation of Veins*. He observes, "To argue, as Mr. Lee does, from the fact that, out of the body, blood coagulates round pus, therefore such a combination cannot circulate in the living body, is about as warrantable as it would be to predicate, from the observation that pure blood coagulates (in an unusual manner) in a basin, that it therefore cannot remain fluid in the ventricles of the heart." The opportunity was afforded me only yesterday of inspecting a preparation from a case, in which suppuration, to a limited extent, had taken place

in the pericardium; and in which the auricle and ventricle of the right side of the heart both contained a firm decolourised mass of fibrin. That in the ventricle weighed upwards of three drachms, was firmly adherent, and terminated in a long, slender process, which extended several inches into the pulmonary artery. Analogous cases are not very uncommon; and some such have been published in the work referred to. You will, therefore, be prepared to admit, to a certain extent, the truth of the above criticism. The only modification required, is the substitution for "pure blood", of "vitiated blood", to which alone my remarks applied.

I am, etc.,

HENRY LEE.

13, Dover Street, Piccadilly, March 11th, 1853.

EDITORIAL APPROPRIATION WITHOUT ACKNOWLEDGMENT OF THE REAL SOURCE.

LETTER FROM THE EDITOR OF THE DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE TO THE EDITOR.

SIR,—In the ASSOCIATION MEDICAL JOURNAL for February 18th, a translation of a paper on the "Iodide of Sodium", from an Italian journal, is stated to be abridged from the *Chemist*. This translation was made originally for my journal, and was published in the number for November 1852: it was thence quoted without acknowledgment by the Editor of the *Chemist*, I suppose, through inadvertence. You could not, therefore, have been aware of this fact.

I shall feel obliged by the insertion of this note in your Journal.

I am, etc.,

THE EDITOR OF THE DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE.

[In accordance with our universal plan, we gave the immediate source of our information. As to unacknowledged appropriation, we might say a good deal, as we are often amused to see the impudent and clumsy way in which our own pages are pilfered from. Our critical remarks being often blended with our abstracts are frequently cited as if translated from a foreign journal which we may have incidentally mentioned.—EDITOR.]

NEWS AND TOPICS OF THE DAY.

HOSPITAL FOR SEAMEN. During the past year, 2,316 patients were admitted on board the DREADNOUGHT, and those supplied with medical assistance and stores, as out-patients, amounted to 1554, making a total of 3870. £136 was received by the subscription-boxes under the care of the shipping-masters, which was contributed chiefly by seamen. The society received three legacies during the year—£300 from Mr. Benjamin Hill, £100 from Mr. Boucher, and £10 from Lady Colville. There were under cure, or convalescent, on the 31st of January last, 159. Of the 2316 admitted in the present year, there were discharged cured 1653, convalescent 181, relieved 88, not cured 10, deaths 75.

The patients of different nations received were in the following proportion:—Englishmen, 39,734; Scotchmen, 8199; Irishmen, 6035; Frenchmen, 249; Germans, 913; Russians, 871; Prussians, 1346; Dutchmen, 233; Danes, 907; Swedes and Norwegians, 2299; Italians, 639; Portuguese, 520; Spaniards, 313; East Indians, 1142; West Indians, 1167; British Americans, 918; United States, 1322; South Americans, 149; Africans, 391; Turks, 16; Greeks, 64; New Zealanders, 35; New South Wales, 36; South Sea Islanders, 226; Chinese, 42; born at sea, 137; total, 67,903.

In what service employed:—Her Majesty's navy, 3215; Hon. East India Company's service, 1798; merchant vessels of different nations, 62,890; total, 67,903.

The receipts for the year amounted to £8135:14:11; and the expenditure to £7716:11:4; leaving a balance of £419:3:7.

CHRIST'S HOSPITAL. The widow of the late Dr. Rice was, at the last meeting of the Governors, voted an annuity of £200.

ACADEMY OF MEDICINE IN PARIS. The following distinguished members of the medical profession were, on March 1st, elected foreign associates of the Academy of Medicine in Paris: M. Buffalini, of Florence; Dr. Valentine Mott, of New York; Professor A. Retzius, of Stockholm; Professor Riberi, of Turin; Professor J. Y. Simpson, of Edinburgh; M. Vlemminckx, of Brussels; and Dr. Warren, of Boston, America.

SCOTTISH UNIVERSITIES TESTS BILL.

[House of Commons, March 15.]

ON the motion of the Lord Advocate (MONCRIEFF), the House went into Committee on the subject of Religious Tests in the Scottish Universities.

The CHAIRMAN of the Committee moved that the Chairman be directed to move the House, that he be instructed to bring in a bill to regulate and modify the Tests to which the lay professors in the Scottish Universities are now subjected on admission to their chairs.

The motion was agreed to, and the bill was ordered to be brought in.

UNIVERSITY OF LONDON. DEPUTATION TO LORD ABERDEEN. On Wednesday the 16th inst., a deputation of the Graduates of the University of London, waited on Lord Aberdeen, prime Minister, to urge the claim of their University to be represented in Parliament. We understand that his Lordship expressed himself in general terms as favourable to the cause of University representation.

MEDICAL BENEVOLENT COLLEGE. The proceeds of the Bishop of London's advocacy of the claims of the college, on Sunday last, in Trinity Church, St. Marylebone, amounted to £85. His lordship in speaking of the casualties to which medical men are daily exposed, alluded to the lamented decease of the late Dr. Manson, mentioned in our last week's obituary. He truly said that such occurrences prove the duty which is imposed upon a Christian public, of aiding in alleviating the sorrows and privations consequent upon premature widowhood and orphanage.

THE ALLEGED HOMICIDE BY A DUBLIN PHYSICIAN. The bill for homicide against Dr. Banks, has been ignored by the grand jury, at the present criminal session. Dr. Banks, who was one of the physicians in ordinary to the Earl of Eglinton, during that nobleman's vice-royalty, struck a boy slightly with a cane for trespassing on his lands. The boy was soon afterwards seized with a disease in the neck which proved fatal. His friends attributed the boy's death to the blow; but the coroner's jury returned a verdict of "Natural Death". The family then preferred an indictment, which, as stated, was quashed by the grand jury.

THE FIRST PHYSICIAN OF THE EMPEROR OF THE FRENCH. Dr. CONNEAU has been all his life in the family of the present Emperor, and attended the latter's mother, Queen Hortensia. He was in London with Louis Napoleon, followed him in all his hazardous expeditions, and shared his captivity at Ham Castle. Dr. Conneau has given a proof of his good taste and sense of propriety, in declining to avail himself of the right he has just acquired as First Physician of the Emperor, to take his seat in the Academy of Medicine as Honorary President. This right is to be traced to the foundation of the Academy in 1820, when Portal, the first Physician to Louis XVIII, exerted himself so warmly in behalf of the society, that it was resolved to give him and his successors the honorary presidency of the Academy.

DISEASES AMONG THE BEDOUIN ARABS. Diseases are rare among them; and the epidemics, which rage in the cities, seldom reach their tents. The cholera, which has of late visited Mosul and Baghdad with fearful severity, has not yet struck the Bedouins; and they have frequently escaped the plague, when the settlements on the borders of the Desert have been nearly destroyed by it. The small-pox, however, occasionally makes great ravages among them, vaccination being still unknown to the Shammar; and intermittent fever prevails in the autumn, particularly when the tribes encamp near the marshes in Southern Mesopotamia. Rheumatism is not uncommon, and is treated, like most local complaints, with the actual cautery, a red-hot iron being applied to the part affected. Another cure for rheumatism consists in killing a sheep, and placing the patient in the hot reeking skin. Ophthalmia is common in the Desert, as well as in other parts of the East, and may be attributed as much to dirt and neglect as to any other cause.

The Bedouins are acquainted with but few medicines. The Desert yields some valuable simples, which are, however, rarely used. Dr. Sandwith, hearing from Suttum that the Arabs had no opiates, asked what they did with one who could not sleep. "Do!" answered the sheikh, "why, we make use of him, and set him to watch the camels." If a Bedouin be ill, or have received a wound, he sometimes comes to the nearest town, to consult the barbers, who are frequently not unskilful surgeons. Hadjir, one of the great chiefs of the Shammar, having been struck by

a musket-ball, which lodged beneath the shoulder-blades, visited the Pasha of Mosul to obtain the aid of the European surgeons attached to the Turkish troops. They declared an operation to be impossible, and refused to undertake it. The Sheikh applied to a barber who, in his shop in the open bazaar, quietly cut down to the ball, and taking it out, brought it to the Pasha in a plate, to claim a reward for his skill. It is true that the European surgeons in the service of the Porte are not very eminent in their profession. The Bedouins set broken limbs by means of rude splints.

The women suffer little in labour, which often takes place during a march, or when they are far from their encampment, watering the flocks or collecting fuel. They allow the children to remain at the breast until they are nearly two or even three years old, and, consequently, have rarely many offspring. (From *Discoveries in the Ruins of Nineveh and Babylon, being the result of a Second Expedition.* By A. H. Layard, M.P. London: 1853.)

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST. The fifth anniversary of this institution was lately celebrated at the London Tavern, Lord John Campbell in the chair, supported by three hundred patrons. The report which was read stated that since the opening of the hospital in 1848, upwards of 14,756 out-patients had been benefited by it. The expenditure for last year was £1755. The new hospital, Victoria Park, upon which £8000 has been expended, and the completion of which would require £8000, would be open early in summer for in-patients. At the close of the evening, Mr. R. P. Slater announced that the day's subscriptions amounted to £6000.

COMMUNICATIONS FOR THE EDITOR may be sent to the office of the Journal, or to the Editor's residence, Essex House, Putney, London.

ADVERTISEMENT.

Medical Society of London.—The

Subjects for the FOTHERGILLIAN GOLD MEDALS offered for Competition by this Society are, for MARCH 1854, "Diseases of the Fetus in Utero, not including Malformations"; and for MARCH 1855, "The Pathology and Treatment of Diabetes".

Candidates for these Medals are informed that practical and original facts and illustrations will be considered as especial merits in all Essays sent in for competition, which must be written in the English or Latin language, copied in a fair and legible hand, and delivered at the Society's Rooms, 32A, George Street, Hanover Square, on or before the 1st of November preceding the award, with a sealed packet, containing the Author's name, and having on the outside a motto or device, corresponding with a motto or device on the Essay; that any Essay in the Author's handwriting, or with his name affixed, or which may in any way discover him, will be excluded from competition, and that the Prize Essay will become the property of the Society.

The Society also offers for competition two Silver Medals annually,—one to be given to a Fellow, and the other to an Honorary or Corresponding fellow, or to any Author, not a Fellow, who may contribute a Paper during the Session considered worthy of that distinction.

The learned of all countries are invited to become Candidates for these honours.

C. COGSWELL, M.D. } Hon. Secs.
E. SMITH, M.D. }

* * * The Fothergillian Medal for 1855 was awarded to ALFRED POLAND, Esq., for an Essay on "Wounds and Injuries of the Abdomen and their Treatment".

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XII.

LONDON: FRIDAY EVENING, MARCH 25, 1853.

NEW SERIES.

THE RELATIONS OF THE COLLEGE OF SURGEONS OF ENGLAND TO THE MEDICAL PROFESSION.

MR. BRANSBY COOPER, in his oration delivered in the theatre of the College of Surgeons, on the 14th ultimo, in honour of the memory of JOHN HUNTER, had the good taste to avoid all reference to past or present causes of dispute between the Council of the College and the general body of the profession. In this respect he acted more wisely than some of his predecessors; and he has thereby deservedly gained the praises of the medical press. It is neither, however, for the purpose of again complimenting Mr. Bransby Cooper, nor of reproaching any of his distinguished predecessors, that we have now taken up the pen. Our object is more practical: it consists in a desire to give expression to a few thoughts which have been suggested to our minds by having been often asked, by junior members of the profession, why there is a total want of harmony between the Council of the College of Surgeons of England and those whom they nominally represent? and why the speaker of the Council, in the annual Hunterian oration, cannot, except at the risk of a tumult, advert to medico-political subjects?

The delicacy and the difficulty of these questions may cause us to answer them cautiously, and also to write with less passion than they inspire in many of our readers; but at the same time we feel that nothing can justify our avoiding their discussion in this Journal, as they lie at the very threshold of every inquiry which can be made into the nature of the reforms demanded by the present state of society and of the profession. It is not to exasperate difficulties, but to suggest grounds of conciliation and the basis of a lasting peace, that we venture to glance at this perplexed subject. We wish to make others feel, that which we sincerely believe, that with both parties there is a real community of interests; and that there is also, with both parties, an honest desire to do what will most advance the interests and insure the progress of the profession, even though that desire may occasionally be thwarted by the insidious bias of self-interest, or of that struggle for class-supremacy which springs from the sectional division of our profession.

The first topic which solicits our attention, is the position of the College as guardians of the Museum of Hunter.

It appears that there are two influences to be considered, which act at present in opposition: First, the moral responsibility (if we may use the term) of raising the standard of medical education, so that, among other results, the labours of Hunter may be duly appreciated by the mass of the medical profession; second, the necessity of obtaining money for the support of the Museum, and the payment of examiners and other officers.

Great and honourable as is the labour of preserving and adding to the Hunterian collection, and of employing it in the elucidation of the medical sciences, we maintain that the duty of its guardians has a much wider range; that, in

short, the elevation of the medical profession is closely connected with carrying out the work which Hunter began. We must not look on Hunter merely as a naturalist—though he was among the greatest of such; nor as a surgeon—though as such his name is honoured; but we must regard him as a man whose labours were calculated to advance his profession—and to elevate the standard of professional knowledge far above that of the age in which he lived and laboured. This result he produced; and the good effects of his labours are far from being exhausted after the lapse of nearly sixty years. It would seem, to adopt the expressions used by Mr. Bransby Cooper in his Hunterian Oration, “as if the advancement of surgical science, since his period, had tended to raise his fame; leading, in truth, to the belief that his example and his works had so extended the knowledge of his followers as to render them competent to estimate his due value, which, during his life, was not appreciated because his doctrines were insufficiently understood”.

The question then arises:—How far do the Council of the College of Surgeons fulfil the trust placed in them as guardians of the Museum of Hunter? how far do they endeavour to render the great body of the profession competent to estimate his true value?

The care and labour bestowed on the Museum, as a means of elucidating natural history and pathology, require no elaborate praise from us; nor need we enlarge on the additional value which it derives from the talent of an Owen and a Quekett; nor is it necessary to speak in commendation of the lectures delivered annually on comparative anatomy, histology, and pathology, for the illustration of which the preparations in the Museum are employed. We would, too, join with Mr. Cooper in congratulating the members of the College on the means which are being taken, by enlarging the building, “for increasing the capabilities of the collection, so that its resources may be progressively developed to a degree, the influence of which will, it is trusted, be beneficially felt by every branch of the medical profession”.

But it is also the duty of the College authorities to render the medical profession capable of appreciating the value of Hunter's labours—in other words, to raise it to a higher intellectual status. In this respect an amount of responsibility rests on them, over and above that which they share in common with other examining bodies.

But, alas, the possession of the Hunterian Museum actually furnishes a principle which acts in opposition to that to which we have referred.

No anatomical museum can be efficiently maintained without a great outlay of money; and the labour which the College bestows on the Hunterian collection obviously necessitates the provision of ample funds. For money, however, it almost entirely depends on the fees for its diplomas of Fellow and Member; and hence arises a temptation to encourage an influx of members, and to keep down the standard of education, in order that students may not be deterred from

becoming candidates for the diploma, and that the probability of rejection on account of insufficient knowledge may be diminished. We admit that the College does sometimes appear to exercise a wholesome severity against incompetent candidates; but we believe that the incompetency of the rejected is in a great measure due to the general facility of admission. Young men become lazy when they remember that a slightly crammed pastry-cook of Taunton, having got false certificates, had no difficulty in satisfying the Examiners of the College of Surgeons.

This then, is the position of the College of Surgeons:—they have to keep and improve the Hunterian collection, and their funds must be chiefly derived from the admission of Fellows and Members. If, then, they fail in their duty of elevating the standard of medical education, they are perhaps rather to be pitied than condemned, as their conduct is obviously not their choice, but the offspring of an imperious pecuniary necessity. Their imperfect curriculum, their superficial examinations, the repulsive coldness with which they treat comprehensive schemes of medical reform, (such as the Bill of our ASSOCIATION), and the sale of midwifery diplomas, are all very plainly the shifts and devices of men who dread impecuniosity.

A few months ago, it seemed as if the Council of the College had felt the force of the maxim

“Sera nunquam est ad bonos mores via”;

and had straightway resolved that midwifery, hitherto spurned by them, should be raised to its proper position in their examinations. They have, however, instead of incorporating an examination in obstetric medicine and surgery with that for their diploma, given to the license in midwifery an independent existence; and have even, by aid of their regulations, made it obtainable by persons who possess no diploma or license to practise medicine or surgery. It is the latter point on which we would especially comment; and in doing so we would refer our readers to the memorial of the Wakefield surgeons, published at p. 225 of our number for 11th March. The following is the College regulation to which we allude:—

“All other persons” (i.e., those who are not Fellows or Members of the London College, or who do not possess a diploma from some other College of Surgeons or University) “will be required to produce the following certificates:—Of being twenty-one years of age; of having been engaged for three years in the acquirement of professional knowledge; of having studied practical pharmacy for six months; of having attended lectures on anatomy and physiology, with demonstrations and dissections, during two winter sessions; of having attended one course of lectures on the practice of surgery; of having attended the medical practice of a hospital during twelve months; of having attended the surgical practice of a recognised hospital during twelve months; of having attended one course of lectures on midwifery and the diseases of women and children; and of having personally conducted twenty labours.”

That is to say, all persons who produce the certificates of attendance on lectures and hospital practice just enumerated—no matter how little they have profited by them in the acquisition of general professional knowledge—will be capable, after an examination in midwifery, of receiving a license to practise in that department. The result which must arise from the admission of such persons into the ranks of the profession, is well portrayed by Dr. F. H. RAMSBOTHAM in the *Medical Times* for January 15th. The development of the man-midwife into a “family doctor” is most truthfully delineated in the following sentences.

“It is universally conceded that the chief stepping-stone to general practice, among the less affluent at any rate, is attendance on cases of labour; nor can we wonder at that. If a woman has recovered satisfactorily after her confinement, and her infant is taken ill, to whom is it so natural that she should apply as to the person who assisted at the birth? When another child requires medical attendance, the same advice is sought. Both she and her husband send for him when they require ‘a little physic’, and thus that individual is established as the regular ‘doctor’ of the family.”

To those who already possess a diploma from some University or College, the midwifery license is for the most part superfluous, as this subject is recognised by most examining bodies. Those who have already obtained the diploma of the College of Surgeons, may, without detriment to the profession, be allowed to take out the new midwifery license; but with regard to the future, it is essential for the respectability of medical men that the midwifery test be incorporated with the general examination of the College, as is the case in Edinburgh. Let the Council obtain the abrogation of the absurd and mischievous bye-law, which prohibits members of their body from practising midwifery; and then, perhaps, we shall hear of their shewing more humanity to British ladies, and more regard to the honour and interests of their profession.

In conclusion, we would express a hope that it may, before many years, be our good fortune to hear or read an Hunterian Oration, in which medical politics may be gracefully introduced; and in which the orator may recapitulate, and the audience may gratefully acknowledge, the services rendered by the College towards the medical profession. But when will the Council of the College shew a mind as great in justice and liberality towards their brethren as was that of John Hunter in the comprehension of the works of nature? Not, we fear, till the legislature, responsive to the voice of an united profession, emancipates the College executive from the trammels of pelf, by making it no longer necessary, for the support of the Hunterian Museum and the remuneration of the members of the examining board, to sell a vast number of surgical diplomas or midwifery licenses. By such an endowment all would be gainers; sound science and brotherly feeling would flourish and increase; and the Reform Bill of our ASSOCIATION would lose half its terrors in the eyes of the Surgical Potentates of Lincoln's Inn Fields.

LORD LYTTTELTON'S VACCINATION BILL.

A VACCINATION EXTENSION BILL has been read a second time in the House of Lords. Its object is to eradicate small-pox by compulsory vaccination. We intended to have examined, in detail, the provisions of this Bill; but it is really so clumsy an attempt at legislation, that we do not think that it merits so much attention. So crude a measure never can, we think, become law; but as Lord Lyttelton, who introduced the Bill, has, apparently, no inclination to withdraw it, it becomes a question how, and how far, the profession ought to interfere in the matter? Some legislative measure is necessary; for, notwithstanding the existing acts, vaccination is extensively neglected, and the variolous epidemic has been very fatal of late, chiefly among the un-vaccinated. Moreover, it is very doubtful whether anything short of compulsion, or something approaching to it, will ever effect the general vaccination

of the poor. Still, the hostility which a compulsory act would naturally excite, and the odium which it would cast on one of the greatest of social blessings, ought to be well considered before the details of a measure based upon so doubtful a principle are finally determined. Meanwhile, it would be well to compare the results of the investigation made a few years since by our ASSOCIATION, with the forthcoming report of the Epidemiological Society; and thus to bring every possible ray of light into the arena of public discussion, before the nature of so important a measure is decided. The authors of the present Bill are not acquainted with some of the most important bearings of the subject.

As to its political aspect, we are not sure that it should be left to the management of such changeable and unstable bodies as boards of guardians. By protecting the poor, we protect the nation; and by vaccinating a poor man's child we destroy an arrow of death, which might otherwise have poisoned a parish or a city: it is, therefore, a national affair, and does not only concern pauperism. The existing acts ought probably to be wholly abrogated, and some provision substituted which shall more effectually provide for the actual vaccination of Her Majesty's subjects, not only here and there, where union surgeons and boards of guardians happen to be zealous in the cause, but also where zeal is most wanted, and neglect most palpable. One essential to good vaccination and vigilant zeal in its promotion, is the due remuneration of qualified vaccinators. This, the bill in question does not provide for; and thus it bears most unjustly on the medical profession, and makes a proportionably fallacious provision for the due execution of its objects.

The ASSOCIATION and the profession generally would do well to petition Parliament to reject this Bill; and then, if our Association were to appoint a Committee to meet the Small-pox Committee of the Epidemiological Society, for the purpose of agreeing in the provisions of a bill to be prepared without needless delay, we are not without hope that a really efficient and unobjectionable measure might be passed during next session. Nothing can be more injurious to the interests of the profession, and of society at large, than over hasty and random legislation on this important but somewhat difficult subject. We, therefore, invite the attention of our colleagues to the Bill, which we have reprinted at p. 264, so that each may form his own opinion, and then act as the emergency requires. Our own opinion is, that at present we ought to use our influence privately, and through petitions, to get the Bill thrown out of the House of Commons, as it will probably come down to that House from the Lords.

THE MEDICAL REFORM BILL.

It is with feelings of no ordinary satisfaction that we call attention to the hopeful aspect of the MEDICAL BILL of the ASSOCIATION, as disclosed by the report of the deputation to Lord Palmerston, and the letter from Mr. Hastings, printed at page 263. There is now a unity of action and a spirit of concession among all classes of medical reformers, which cannot fail to command success. When the Bill in its modified form is ready, we will publish it in the JOURNAL, along with a few commentaries.

ORIGINAL COMMUNICATIONS.

LETTSONIAN LECTURES FOR 1853.

By EDWARD WILLIAM MURPHY, M.D., Professor of Midwifery in University College, and Obstetric Physician to University College Hospital.

LECTURE FIRST.

FIRST STAGE OF LABOUR: IMPORTANCE TO THE PRACTICE OF MIDWIFERY OF A COMPETENT MEDICAL EDUCATION.*

MR. PRESIDENT AND GENTLEMEN,

THE very honourable office to which you have appointed me, imposes upon me duties which are both pleasing and responsible. My first and most pleasing duty is to tender to you and to the Council of this Society my warmest acknowledgments for the honour you have conferred upon me. My next duty is a most responsible one—so responsible, that I naturally feel some anxiety, some distrust, lest I should not accomplish my task in the manner I should desire.

You have heard from my predecessors most valuable lectures on highly interesting subjects connected with medicine and surgery. It is my duty to engage your attention equally in favour of midwifery; and with such an object, I confess that I have felt some difficulty in deciding upon the most attractive point of view in which I should present it to you.

This does not arise from any poverty in the subject itself; on the contrary, obstetric medicine is rich in interest, whether it be considered in a physiological, a pathological, or in a practical aspect. My embarrassment is much more the *embarras de richesses*. I might take the subject of parturition as a physiological question, and prove to you how deeply interesting to the physiologist is the observation of the phenomena of labour, but then I should involve you in a most difficult inquiry, and perhaps entangle you in a controversial web, from which I might not so easily extricate you.

I am at liberty to examine with you the pathology of the uterus, both in its unimpregnated and in its gravid state. If this were the question, a wide field of inquiry is open to us, that would afford an abundance of interest; but then, if I were to ask you to traverse it with me, so many questions in dispute oppose themselves, and I should have so many controversial gates to open in order to advance, that I fear such a trespass on your patience. The interest of the subject would hardly compensate for, or disguise the unpleasantness of having to wade through the mire of obstetric disputes.

I prefer, therefore, to present midwifery to your notice in a practical point of view; to consider the subject of parturition, its phenomena, its difficulties, its dangers, and then to inquire with you, whether it is not a duty of the first importance to rescue it from the consequences of that neglect which it has too long received, and to use our best exertions to place midwifery, both with regard to education and qualification, in the same position as medicine and surgery. On such a subject, I have no controversy to unravel; my difficulty is of a different kind. I have rather to ask you to aid me to overcome the *vis inertiae*—the dull weight of indifference that oppresses and retards the advance of this branch of medical science.

Before, however, we draw conclusions, we must first lay down our premises; and I shall in this lecture, having briefly explained the phenomena of parturition, point out to you where errors have been and may be committed in the management of labour, and where it is that ignorance too often causes unnecessary difficulty, and shelters itself from exposure, under the convenient cloak that nature affords her. It is an axiom, that "parturition is a natural process"; and therefore, whatever may occur in labour,

* This Lecture was delivered before the Medical Society of London, on March 9th, 1853.

Nature get the credit of it all. If the life of the unfortunate patient be not actually sacrificed; if it be only a greater delay and increased suffering; if an injury that may not show its effects for some months afterwards; if a difficulty, no matter how produced, that justifies a call for assistance; in all such instances, ignorance quietly makes her escape, and perhaps leaves to the consultant an undisputed claim to the merit of the case. "It was a very serious case—she did her best—she sent for the best assistance she could find—and from that moment was not further responsible." Such is the plausible justification that may conceal a host of blunders which converted a simple case into a most serious one.

My object is to point out where and how these blunders are committed, and to prove that the education of the obstetrician, whether in a scientific or in a practical sense, demands fully as much attention as that of the physician or the surgeon. Nay, I would say more: midwifery needs a more jealous guardianship, and for this reason; it does not possess any inherent power of protecting itself. The ignorant physician cannot succeed in his profession; because, if he know not how to combat the malady which he undertakes to cure, the progress of the disease will soon expose him. He can afford no relief, and the patient flies to a more skilful practitioner; or, possibly, an increasing mortality may soon terminate his career. If, therefore, medicine had no protection, if there were no examination required, the public now, just as they did centuries ago, would discriminate the wheat from the chaff. They would soon learn to appreciate the well informed physician, and would crowd round the Hippocrates, the Galens, the Celsuses of modern times, just as they did in the classic ages of Greece and Rome.

The surgeon who is unskilful, has a still less chance of escape; every case he meets with is an *experimentum crucis* of his knowledge. If it be the union of a fractured bone, the reduction of a dislocation, the removal of a limb, or even the passing of a catheter, his anatomical knowledge and his surgical skill are at once put to the test; his ignorance is immediately exposed, and the public are not long deceived.

I think I am correct when I state, that the most powerful plea in favour of a College of Surgeons, that which first proved its necessity, was afforded by the *palpable* mischiefs committed by ignorant men who had the hardihood to venture upon surgical practice. Their ignorance was felt as a grievance, and the remedy was applied.

Midwifery has not this advantage, because it consists neither in the curing of a disease, nor the repairing of an injury; but is essentially the scientific observation of a natural process. Nature herself combines the duties of the physician and the surgeon, and will generally succeed, even if unaided, in accomplishing the safe delivery of the parturient female. Sometimes, however, she cannot do so: difficulties interpose themselves; and then the necessity for the skilful accoucheur is acknowledged. The delivery cannot be completed without him, and a tardy admission is extracted, that education and skill are occasionally required even in midwifery. But such cases requiring interference bear no proportion to those that present themselves to the physician or the surgeon; and, consequently, the stimulus of necessity does not act in the same manner. Difficult cases are the exception, not the rule; and inasmuch as, in numerous cases, ignorant people seem to succeed very well in delivering women, the importance of a sound education is not so obvious as in medicine or surgery. But I would ask, Who can tell, in any given case, what the character of that case may be? Can any one say that flooding may not arise? that convulsions might not seize the patient? that an operation may not be required to deliver the child? And if it should happen that one single life is sacrificed through ignorance—not to say many lives; if some women are disabled through life, simply because their attendant knew nothing of parturition,—is it any answer or excuse for such a catastrophe, to say "that several women, attended just in the same way, never met with such accidents"? As well

might it be said that pilots are unnecessary, because ships are steered, often even through difficulties, without them. As well might it be argued, that the York Column, or the Monument at London Bridge, required no grating, because madmen do not always fling themselves from their summits. It required six deaths from the Monument to overcome the *vis inertiae* of the city of London: it would seem to require six hundred—I do not know how many more—to remove the incubus that oppresses obstetric medicine. If, however, the sophism to which I have alluded be admitted to be invalid; if it be granted, that it is the bounden duty of the public, or of those to whom the public have confided the responsibility, to use the most efficient means to secure the parturient female, in her hour of trial, against accident; if we allow that all women, under such circumstances, are exposed to risk, and require protection, although only a few may meet with such mischances,—it remains for me to prove that such protection can only be efficiently afforded by demanding of those who practise midwifery, an education fully equal and similar to that of the physician and the surgeon. It is my task to show you that the necessity for a scientific medical education is demanded in midwifery, the more urgently, because the very fact that women may be delivered with but little assistance, gives an encouragement to the ignorant, who are never remarkable for diffidence, to venture upon this branch of practice, where they dare not attempt it in either of the sister professions.

I shall first consider the manner in which the child is expelled from the womb, and point out the provisions of nature to secure the safe accomplishment of this process.

Let us suppose, then, the period of parturition to have arrived, and examine the conditions upon which its fulfilment depends. The child has attained its full intra-uterine growth; the womb, which envelopes it, occupies the whole of the abdomen; its mouth is closed, and the organ, thus immensely increased in volume, rests upon and above the pelvic cavity. In a mechanical point of view, then, we have to consider the body to be moved, the resistance to be overcome, and the power which impels it. The power exists in the muscular walls of the uterus, aided, when necessary, by the whole of the respiratory muscles. The resistance is three-fold: first, that which exists in the neck of the womb itself; secondly, that arising from the pelvis; and thirdly, that produced by the tissues which close the outlet of the pelvis—a resistance which constitutes the chief support to the pelvic organs in their ordinary state.

The body to be moved may be considered almost as an inert mass, yet not completely so. It seems to me to exert a certain independent, although limited, power to aid its expulsion. The motions of its limbs excite more efficiently the contractions of the uterus in the first stage of labour; and the motions of its head, in the second stage, seem to me not entirely dependent on the pelvis. The effect of pressure, perhaps the pain produced, leads it intuitively to alter the direction, so as to diminish these effects, and consequently to seek the widest space. This will be best observed by contrasting cases where the child is living, with those where it is dead before delivery. Labours are seldom so active (to use obstetric language) in the latter as in the former case.

The muscular power of the uterus is of enormous magnitude. This is well known to the practical accoucheur, who is occasionally obliged to pass his hand into the uterine cavity, to overcome these contractions, and to deliver the child or the placenta. The resistance he meets with would be insuperable, if he trusted alone to the antagonism of forces in order to oppose it successfully. If the whole of this power were exercised for the purpose of forcing open the mouth of the womb, the most serious consequences would ensue; the structure of the cervix could not resist this force; it must be torn by it, and a laceration be the result, which might extend through the peritonæum, and destroy the patient. Let us consider the manner by which nature controls and regulates this power. The most accurate observers have arranged the fibres of the uterus into certain sets of muscles, which we shall briefly con-

merate. On the external surface of the uterus, the fibres arrange themselves so as to form fan-shaped muscles, diverging from the round ligaments, which thus fulfil the duty of tendons. These muscles give great support to the womb during its growth, and now are the first to contract. They draw the womb down upon the pelvic cavity, keep it fixed in its position, and prevent a divergence to either side, which, by increasing the obliquity of the uterus, would derange its action. Thus, before the pains of labour are noticed, these muscles contract, gradually draw down the uterus, and render the abdomen less prominent than before; so also the walls of the uterus, felt through the abdomen, are more firm and resisting—a certain indication that other contractions will soon take place, that constitute the pains of labour. These occur in the fibres on the inner surface of the uterus, which arrange themselves into two sets, surrounding the openings of the Fallopian tubes, and forming concentric muscles. Some fibres pass round the lower portion of the uterus in irregular circles; these are especially to be observed at the junction of the body and neck of the uterus: others, but very difficult to trace, pass downwards towards the mouth of the womb, surrounded and imbedded in a large quantity of condensed cellular structure. By this arrangement, the simultaneous contraction of all the fibres of the uterus would equally reduce its volume; the walls of the womb would contract, and converge towards a common centre in its cavity: but a contained body, being compressed equally on all sides, would remain stationary. It is necessary that there be a succession, an order, in these contractions. The expulsive muscles must expand the opposing tissues: the fibres contained in these structures support them, and prevent over-distension; the former precede the latter in their contractions, and act alternately with them. The fundal muscles, those surrounding the Fallopian tubes, form the great expulsive force of the uterus; the fibres of the lower portion of the body and cervix are the guardians of its structure: the one set is in some degree, in opposition to the other, but that is more apparent than real. It is most essential that anything like antagonism between muscular forces be avoided; and, therefore, it is necessary that there should be some means of communication that will harmonise their actions. It is in this sense that the womb affords so beautiful an illustration of the reflex function of the nervous system: a perfect correspondence is maintained between the cervix and the fundus of the uterus, by which all collision is avoided. If the fundal muscles contract, the fibres of the cervix are passive; if the cervical fibres are excited to contraction, the fundal muscles suspend their action. So also the effort of the fundus uteri to distend and open the cervix must not be viewed merely as an illustration of mechanical power; there is, through the same reflex medium, a vital action set up, which, more than any other, contributes to the safe accomplishment of this object. The structure to be distended and opened is prepared for that purpose; the highly condensed cellular tissue of the cervix becomes softer, more yielding, more abundantly moistened with mucus; and sometimes what might be called an act of dilatation, takes place—the whole of the structure yields to the force of the fundus, with a suddenness that resembles, and has been mistaken for, the relaxation of a sphincter muscle. There is abundant evidence to prove, if time allowed me, that the fibres of the cervix do not perform the office of a sphincter muscle; and I am happy on this point to have the support of your late distinguished Lettsomian Professor, Mr. Hancock, who has shown you that neither in the bladder (an analogous viscus) do the circular fibres of its neck fulfil such a duty. "And so likewise in the bladder, the longitudinal fibres are more developed and stronger towards the fundus, whilst towards the middle and neck we find the circular and transverse in greater abundance. But I am not inclined to consider either these, or the analogous fibres round the lower part of the rectum, in the light of sphincter muscles."*

Notwithstanding all these means to facilitate the opening of the womb, there still remains a difficulty to remove. The highly condensed tissue of the cervix varies greatly in its density, and is at this time more than usually vascular: it is, therefore, easily inflamed; any irritation applied would first excite, and then derange, the order of uterine action. The irritation is instantly communicated to the fundus; its contraction follows. The structure of the cervix may not yield; and if so, the irritation is increased. Ultimately, inflammation of the cervix sets in; the muscular fibres existing there contract spasmodically; and the fundal muscles cease to act, or only act irregularly. All this would happen in the majority of cases, if the child were driven down as a wedge to force open the womb. Some provision is, therefore, necessary to avoid this; and thus you will perceive the importance of the final duty of the amnion and its contained fluid. The liquor amnii, surrounding and protecting the fœtus on every side, until it is able to protect itself, accumulates upon the cervix uteri, and conveys through a fluid medium the power of the fundus. By this means, the force is not merely directed upon the os tincæ, but is diffused and equalised. You are aware that any force applied to a contained fluid is distributed equally to every point of whatever contains it. On this principle, the force of the fundal muscles is not alone communicated to the cervix uteri, but is distributed to every other part of the uterine cavity; consequently, it is reflected against the fundus itself, so that, if the action of these muscles should be too powerful, they are opposed and controlled by their own reflected force.

Besides this, the fluid thus interposed between the child and the neck of the womb removes all irritation. If the os uteri dilate, the fluid insinuates itself within it; if any irregular contraction or unusual resistance occur at the cervix, the liquor amnii at once yields, but at the same time maintains a steady pressure. If the fluid enters within the circle of the mouth of the womb, the force of the fundus is conveyed by it directly against the margin of the os that surrounds it. Thus it is that a force possessing immense power is kept under perfect control, and at the same time rendered most efficient for the object which it has to accomplish. With such safeguards, it might be supposed that a steady, continuous action of the fundal muscles would soon open the womb, and expel its contents, just as occurs in the bladder or rectum; but this is not the case. Every one knows that the action of the uterus is an interrupted action, returning at intervals of variable length, the periods of repose being longer than in any other of the hollow viscera. Why is this? It is a further evidence of caution. The tissues of the cervix expand slowly, and not only is a sufficient, sometimes a very long time required for this purpose, but the structure itself must be relieved from the irritation which a continued pressure against it would certainly produce; hence the necessity for intervals of rest. The experienced obstetrician is well aware how these intervals are sometimes lengthened, where there is more than usual resistance to be overcome; he knows that the action of the uterus may be even suspended when previous efforts fail, or are producing irritation: but in ordinary cases this interrupted action of the uterus is equally a proof of the caution with which every possible provision is made to guard against injury to the opposing structure. Nature adopts for her principle, *Arte non vi*—"Time, not force"; and those who would follow her, must be content to walk in her footsteps.

In the whole of this process by which the womb is opened, there is nothing that calls for assistance. Neither medical nor surgical aid is demanded. If no accidental causes interfere with her, Nature is all-sufficient; and any one—the midwife, the nurse, the friend—may act as her handmaid; because, in fact, they have nothing to do but to offer consolations, a virtue which the midwife possesses in a most remarkable degree. But, unhappily, accidental causes do interfere, and so derange these operations, that it requires all the judgment of the educated physician, and sometimes the skill of the experienced surgeon, to bring

* *Lancet*, 1852, vol. i, p. 213.

the patient safely through the difficulty. Sometimes the accidents are unavoidable, and will happen irrespective of the most judicious treatment; but too often they are the results of ignorance, and would have been avoided, but for the mischievous dogma that places the parturient woman in the hands of ignorant persons. It is said, "labour is a natural process, and therefore any one may practise midwifery". Let us examine the consequences of this doctrine.

One of the causes that interfere with the efforts to dilate the womb, exists in the structure of the cervix; it may be more than usually dense and unyielding, and, notwithstanding all the provisions that nature has made to allow it to expand gradually, and to avoid irritation, still she sometimes fails: the tissues of the cervix will not relax—they become irritated—inflammation sets in, and what is called, in obstetric language, "a rigid os uteri" is the result. The consequence is, that this stage of labour is not only protracted, but the pains experienced by the patient become agonizing. The consolations of the midwife afford no comfort, and therefore she proceeds, to use her own language, "to assist the labour"; that is, she endeavours, by her manipulations, to dilate the vagina, and to open the mouth of the womb. The result is, that the inflamed cervix is yet more inflamed, the inflammation extending both to the vagina and body of the uterus. No doubt the membranes are also ruptured, perhaps intentionally; the head of the child is forced down upon these tender tissues; its body is tightly grasped by the uterus, in obedience to that law which prevails in all involuntary muscles, to seek a state of contraction; and although these contractions are increased during the pains, yet in the intervals the fibres are never perfectly relaxed. What, then, is the result? The agonies of the patient are increased in a ten-fold degree; she is dissipated by the great protraction of the labour, and exhausted by her sufferings; her friends are equally so. The midwife thinks it would be well to have another opinion; assistance is sent for; and then it is found to be absolutely essential to remove the child. There is only one operation available under such circumstances—one by which the child, if alive, is destroyed:—the head must be perforated, and the brain removed, in order that, thus reduced in size, it may be brought through the passages. In most instances, however, of this kind, the child has already ceased to exist; it dies in the womb, in consequence of the great pressure maintained on the circulation in the funis and the placenta. But this is not the only bad consequence; the patient herself, although delivered so far safely, is still exposed to risk from the pre-existing inflammation. It may reach the peritoneum, or engage the veins of the uterus, and end in the most fatal results.

In such a case as this, then, two lives may be sacrificed from mere ignorance. The inflammation was not recognized when it might have been arrested. When the difficulty that it caused is at length found out, the inflammation is considerably increased by the means that are used to overcome the obstacle; until ultimately ignorance acknowledges that the case is past her skill, and the consultant has to share all the onus, if not the odium, of these melancholy consequences.

I am persuaded that the Fellows of this Society, who practice midwifery, will bring to their recollection examples of mismanagement such as I have quoted, and will admit that I have not overdrawn the picture which I would present to you. With regard to my own experience, I may state that during my residence in the Dublin Lying-in Hospital, several such cases were sent in from the country, in which we had no alternative but to deliver them; and thus the number of perforations performed in that establishment were greatly increased beyond what they otherwise would be. To avoid an operation, is a much greater proof of skill than to perform one, and in no instance does that remark apply with more force than in the operation under consideration,—one in which the life of the child is necessarily sacrificed, and that of the mother placed in such danger, that, according to the most accurate statistics, one life in five is generally lost.

These cases are, unfortunately, not the only ones that

illustrate my argument. I shall direct your attention to one of a different kind that may arise during this stage of labour—one that requires for its management the soundest medical experience.

The womb, in its non-gravid state, is frequently the seat of a low inflammation, that shows itself prominently during the catamenial period, but subsides in the intervals. The leading symptoms are, extreme pain during menstruation, and a scanty discharge. We call it dysmenorrhœa, and relieve it by hip-baths, aperients, and sometimes depletion and anodynes. The popular theory of our treatment is derivation: we either endeavour to draw blood from the uterus, or relieve the circulation by taking blood elsewhere; but we are, in fact, treating the inflammation, which prevents the uterus from fulfilling its proper function. Now this inflammation is accompanied by a very remarkable condition of the nervous system. The neck and body of the uterus can generally be touched and examined, without causing much pain; the os tincæ is almost insensible. In these cases, however, pain is exalted to its highest intensity; if an examination be made by touch, the patient can hardly bear the finger to pass along the vagina; if the mouth or neck of the womb be examined, the pain is very great; and if the body of the womb be compressed, the patient suffers agony. This local distress is accompanied by that general nervous irritation which is so familiar to you as hysteria, and upon which I need not dwell.

Fortunately, these women do not generally conceive; but this sometimes happens. When they become pregnant, the new demand upon the constitution often relieves the prominent symptoms; they are less hysterical, and have no longer the agonies of dysmenorrhœa: but still they are much more irritable than other patients in similar circumstances; they are much more liable to uterine pains; and hence, during pregnancy they have frequent attacks of pain in the womb,—a uterine neuralgia, that is sometimes called rheumatism of the uterus. The motions of the child also often distress them very much. But these are only trifling inconveniences, when compared with those which take place when the period of parturition arrives. When these patients have to endure the pains of labour, then, indeed, their sufferings reach a climax. The pain that accompanies the action of the uterus in an ordinary, or what might be called a healthy labour, is no measure of the agony caused by its contractions when in this morbid state: consequently, the amount of suffering to which such patients are exposed, is more than they can bear. It is sufficient to overcome the fortitude of any woman; and women are remarkable for their fortitude in this their hour of trial. In the present case, however, the patient does not possess that fortitude; she is very impatient of pain; is highly irritable; and watches, with intense anxiety, every returning contraction of the uterus. The consequence is, that these contractions are feeble and inefficient. The influence of the mind on the uterus is familiar to every experienced practitioner. A slight shock, a surprise, will arrest the action of the uterus; but in these instances the sympathy (from this morbid derangement) is still more marked; hence the very apprehension of pain arrests the contraction, and, after hours of suffering, very little progress is made, although the cervix uteri does not present any unusual resistance.

Let us, then, suppose such a case in the hands of an ignorant person; the pains are too violent to be relieved by consolations, and therefore something must be done. "The pains are doing no good": warm stimulants are given; these failing, ergot of rye is perhaps tried as a display of medical knowledge; the uterus contracts spasmodically, the agonies of the patient are greatly increased; but this temporary effect soon ceases, and leaves the patient more exhausted, and more dispirited than ever. Possibly, the same manipulations may be attempted as in the former case, and the attendant endeavours to dilate the mouth of the womb mechanically. Fortunately, the patient can hardly bear this; but, if she should, the result is the same—~~inflammation~~ inflammation of the os and cervix sets in, and the difficulty is greatly increased. At length we arrive at the same point.

clusion as in the former instance. Ignorance can do no more; the case is past her skill, and assistance must be obtained: perhaps she may not make so honest a confession, but rather allow the anxious friends to arrive at the same conclusion. They urge her to have a second opinion, she is too conscientious to offer the slightest opposition—and aid is sent for: but under what circumstances? The patient is worn out by protracted suffering; the constitution may have received a shock from the intensity of pain, which gives rise to the most serious consequences; atony of the uterus, with its attendant, hæmorrhage, may occur at any time during the labour; convulsions may take place; and if the practitioner is fortunate in escaping these evils, and safely delivering his patient, still he is exposed to the risk of a protracted recovery; because a patient so exhausted is much more liable to attacks of fever or of inflammation than are healthy women.

Such a case as this requires the aid of the educated and experienced physician, as completely as any case of hysteria that he undertakes to treat. The disordered actions dependent on the womb in its unimpregnated state are the object of the physician's attention, and are acknowledged to require for their treatment all the advantages of a sound medical education: but the very same derangements, when the womb is gravid and is about to expel its contents, become, from this accident, unworthy of his care. The simple fact of the womb being gravid, and not gravid, seems to form the line of demarcation between ignorance and education. I am sure, sir, you will admit that such a position is untenable, and that cases like these, as well as those previously alluded to, prove that the obstetrician requires an education fully equal to the physician or the surgeon.

Thus far I have confined your attention to labours that are called "natural", where no assistance is required, and where it is assumed that there is no occasion for a medical or a surgical education to understand its management. Those labours, however, which are exceptions to the rule are acknowledged to require something of this kind, but then it is argued that whenever assistance is needed in such cases, it can always be obtained as soon as the necessity is known. This is not always true, especially in country districts. It is my duty, however, to point out to you that the argument itself is invalid. If, for instance, I were to direct your attention to those labours that are called "preternatural", those in which some other part of the child than the head presents, I could point out many instances, where the life of the child has been lost because the attendant did not know what assistance to give, or how to give it. Most of these, however, belong to the second stage of labour; and as I wish in the present lecture to confine your attention to the first stage, I shall only mention one instance in which ignorance sometimes contrives to do irreparable mischief.

When the arm and shoulder of the child are found to present at the mouth of the womb in place of the head, the case is one where art must supersede nature: the acknowledged rule of practice is to deliver the child, the moment that it can be done with safety to the mother. It is, therefore, of the greatest importance that this deviation be recognized early in the labour, and that the person in charge be prepared to turn and deliver the child, the moment a favourable opportunity presents itself—that is, as soon as the mouth of the womb is sufficiently open or sufficiently yielding to admit the hand to be passed through it without risk. Now, if a case of this kind unfortunately fall to the lot of an ignorant person, the worst consequences ensue. Nothing, whatever, is known of the presentation in this stage of the labour—their skill does not consist in recognizing positions; everything is done to console the patient under her sufferings; vain promises are made that "the birth will soon come"; perhaps stimulants are given to support her strength; but at last the period arrives when all these means fail, and an examination is made to ascertain the cause of the delay. It is then found out for the first time that the labour is unusual; the arm is felt in the vagina, and assistance is promptly sent for; but under what circumstances? The membranes are broken, and the liquor amnii has been dis-

charged long before; the uterus is contracted strongly about the body of the child; the protruding arm may be swollen so as to fill the whole vagina. To turn the child, under such circumstances, is always an extremely difficult and sometimes a most dangerous operation; the child never escapes, and I have known cases where the uterus was ruptured in the attempt. Thus, in fact, one life is certainly lost, and possibly both: because the patient has had the misfortune to entrust herself, in the first instance, to an incompetent person. Time, which was of the highest value, was lost; the period at which the child could have been delivered safely, and without risk was unnoticed, and the difficulty was only ascertained when it became dangerous.

I shall take another example of a still more serious character from the class of complex labours. It sometimes happens that the after-birth is attached to the mouth of the womb: and when it is thus situated, hæmorrhage is the necessary consequence of the dilatation of the os uteri. The most frightful flooding may take place the moment the womb opens, or the discharge may return with every pain in a less degree and gradually exhaust the patient. I know no case in the whole range of obstetric practice that requires more decision or more promptitude, nor one in which the line between ignorance and education is more strongly marked; because, here, ignorance has not time to take refuge behind a second opinion. Flooding will not wait; and if the proper treatment be not carried into effect in the first instance, the patient's life is sacrificed to the delay. In order, however, that this treatment be adopted, the nature of the case must first be ascertained, the attendant must know that the placenta presents, and here it is that ignorance shines so conspicuously. She knows nothing whatever about it; the hæmorrhage alarms her, and it is well if she does not leave the unfortunate patient to her fate. One fact is worth a thousand arguments, and I shall in illustration quote one case from Dr. Waller's valuable clinical remarks.* "The patient", he reports, "had been under the care of a midwife, who, on the preceding day, finding hæmorrhage, ruptured the membranes; this not succeeding, she left her. Another woman was sent for in the evening, who also got alarmed at the bleeding, and like her predecessor decamped, leaving the sufferer to her fate. A medical man saw her on the following morning, who immediately requested my (Dr. Waller's) attendance. At that time the hæmorrhage had abated, the pulse, though rapid and soft, was not so feeble and faltering as I have frequently witnessed in similar cases: there was a general warmth of the surface; but the countenance was deathly and corpse-like. On introducing the hand for the purpose of examination, the placenta was easily felt lying in the vagina, but no portion of the child; the knees presented. The child was readily drawn down: some difficulty was experienced in bringing the head through the pelvis. Notwithstanding the discharge was trifling, the signs of sinking had increased. . . . After an interval of about fifteen minutes, the pulse fell, the patient threw back her head on the pillow, and instantly expired."

Thus, from mere ignorance, was this woman's life sacrificed. All the aid that Dr. Waller could afford, failed, because it was too late; and even the effort of nature, the complete separation of the placenta, was unavailing, because, although the hæmorrhage had abated, no timely aid was given to save the patient from its effects.

Time will not permit me to trespass further on your attention this evening; but I trust that I have succeeded in proving to you the dangerous consequences that result, even at this stage of labour, from ignorant persons undertaking the practice of midwifery; and that the death of the parturient woman, and much more frequently the death of the child, is too often attributable to this cause alone. I might also advance instances in which, although the patient escaped with her life, the foundation had nevertheless been laid of very serious diseases, which left her a patient ever afterwards. I need only allude to that much controverted subject, inflammation and ulceration of the neck of the womb.

* Medical Times, January 16th, 1848.

"This disease is produced by various causes; but the history of such cases points to none more common than a previous labour, in which inflammation of the os uteri had commenced, had been unnoticed, and had been suffered to advance until the tissues became disorganized. When labour was concluded, and the patient recovered from its immediate effects, the inflammation which had but imperfectly subsided, was readily reproduced.

If such facts are true, you will admit that it proves the importance of a competent education among those who practise midwifery; and not only so, but the necessity of excluding from this branch of practice, those who do not prove themselves competent. I shall reserve to the concluding lecture some further observations upon this part of the subject.

In my next lecture, I shall enter upon the consideration of the second stage of labour.

Henrietta Street, Cavendish Square, March 1853.

GALACTAGOGUE AND EMMENAGOGUE EFFECTS OF WARM AND STIMULATING APPLICATIONS TO THE MAMMÆ.

By JOHN ROSE CORMACK, M.D.

DR. J. O. M'WILLIAM published in the *Lancet* of September 7th, 1850, some very interesting details regarding the use, among the natives of the Cape de Verd Islands, of fomentations with the leaves of the *Ricinus Communis* and *Jatropha Curcas*, for the purpose of accelerating and bringing on, or increasing the flow of milk when the secretion was tardy or deficient after childbirth; and in the *London Journal of Medicine* for October 1850, Dr. Tyler Smith described some trials made by him with the leaves of the *ricinus communis*, for the purpose of showing that similar galactagogue effects might be produced in London as in Boa Vista, by adopting measures similar to those employed by the natives of that island. The method adopted by Dr. Tyler Smith was essentially that detailed by Dr. M'William.

Dr. M'William's account of the native practice is as follows:—

"The *bofareira* (*ricinus communis*) grows in most, if not all, the Cape de Verd Islands. That used by the natives for the purpose I have mentioned is called by them *white bofareira*, to distinguish it from what appears to be nothing more than a variety of the same species, the *red bofareira*. The white, or that which possesses galactagogue qualities, is recognized by the natives by the light green colour of the stem of the leaf; whilst the leaf-stem of the *red* is of a purplish red hue. The latter plant is carefully avoided, as it is said to be a powerful irritant; and if applied, as it occasionally has been, by mistake for the *white*, it produces an immediate and often immoderate flow of the menses.

"In cases of childbirth, when the appearance of the milk is delayed, (a circumstance of not unfrequent occurrence in those islands), a decoction is made by boiling well a handful of the *white bofareira* in six or eight pints of spring water. The breasts are bathed with the decoction for fifteen or twenty minutes. Part of the boiled leaves are then thinly spread over the breasts, and allowed to remain until all moisture has been removed from them by evaporation, and probably in some measure by absorption. This operation of fomenting with the decoction, and applying the leaves, is repeated at short intervals, until the milk flows upon suction by the child, which it usually does in the course of a few hours.

"On occasions where milk is required to be produced in the breasts of women who have not given birth to, or suckled a child for years, the mode of treatment adopted is as follows:—Two or three handfuls of the leaves of the *ricinus* are taken, and treated as before. The decoction is poured while yet boiling into a large vessel, over which the woman sits, so as to receive the vapour over her thighs and generative organs, cloths being carefully tucked around her so

as to prevent the escape of the steam. In this position she remains for ten or twelve minutes, or until the decoction cooling a little she is enabled to bathe the parts with it, which she does for fifteen or twenty minutes more. The breasts are then similarly bathed, and gently rubbed with the hands; and the leaves are afterwards applied to them in the manner already described. These several operations are repeated three times during the first day. On the second day, the woman has her breasts bathed, the leaves applied, and the rubbing repeated three or four times. On the third day, the sitting over the steam, the rubbing, the application of the leaves, and the fomentation of the breasts, are again had recourse to. A child is now put to the nipple, and in the majority of instances it finds an abundant supply of milk. In the event of milk not being secreted on the third day, the same treatment is continued for another day, and if then there still be want of success, the case is abandoned, as the person is supposed not to be susceptible to the influence of the *bofareira*."

Dr. Tyler Smith did not subject his patients to the steaming process.

From a number of observations which I have made at various times, and in cases of very different character, I am fully satisfied that the cases of Drs. M'William and Tyler Smith do not in any way support the notion of a special galactagogue power belonging to the leaves of any particular plants. It will be found, I think, that simple warmth, still more hot fomentations, and in a yet higher degree stimulating embrocations and cataplasms, have an extraordinary power in exciting the mammary glands to the secretion of milk, even in circumstances apparently the most adverse to the performance of their function. The leaves of the *ricinus communis* and of the *jatropha curcas*, when applied to the mammæ, produce decided stimulation; as we might expect, when we remember that they belong to the natural family *Euphorbiaceæ*, of which acridity is the leading character. This acridity exists in a very high degree even in the seeds of the *ricinus communis*; and Pereira quotes, along with similar cases, the case of a girl, eighteen years of age, who died of gastro-enteritis, from eating about twenty of these seeds.

My object at present is to establish, by the brief narration of a few facts, the following propositions:—

- 1st. Warmth and stimulants applied to the mammæ often act powerfully as *galactagogues*.
- 2nd. Warmth and stimulants applied to the mammæ often act powerfully as *emmenagogues*.
- 3rd. The leaves of the *bofareira* (or *ricinus communis*) and *jatropha curcas* act as *galactagogues* and *emmenagogues*; but not from their possessing any peculiar or specific power.

I. WARMTH AND STIMULANTS APPLIED TO THE MAMMÆ OFTEN ACT POWERFULLY AS GALACTAGOGUES.

CASE I. MILK RESTORED TO THE MAMMÆ BY HOT FOMENTATIONS. Last month, a lady, when nursing her infant, about seven months old, was attacked with acute bronchitis of moderate severity, which was successfully treated by low diet, and tartar emetic in small doses. At the end of four days, the bronchitis was cured; but the milk, which had previously been failing, almost entirely left the breasts. On the fifth day, from exposure to cold, she experienced a relapse of the bronchial affection. As she had been considerably weakened by the previous attack, and as the symptoms of the relapse were not sufficiently severe to justify recourse a second time to antimony, I ordered her to take a draught containing ammonia and chloroform, as an *anodyne*, expectorant, and diaphoretic, every eight hours; and to carry out similar intentions, I also directed a succession of pillow-cases, filled with heated moist bran, to be applied to the chest. When I saw her on the following day, after the treatment had been employed, she told me that she had profusely perspired for some hours; she was (after copious expectoration) free from cough, and pain in the chest, and, what was equally a source of pleasure and surprise,

her, *her breasts had become distended with milk.* This lady was able to resume nursing, and to continue it with the assistance of a suitable diet.

CASE II. EFFECTS OF A SINAPISM APPLIED TO ONE OF THE MAMMÆ OF A LADY, FIVE MONTHS ADVANCED IN PREGNANCY: EFFECTS OF WARMTH IN THE SAME CASE. A lady was under my care for bronchitis, at the same time as the patient whose case I have just sketched. She was directed one night to apply a sinapism over the sternum, which she did, but having fallen asleep, it slipped to the side, and remained undisturbed for about an hour upon one of the breasts. For some days, this mamma was very much larger in size than the other, and its areola was also much darker. From the delicacy of this lady, and the unusual severity of the weather, I directed her to wear a double flannel jacket, and a wadded wrapper round the chest. She tells me that *the breasts are larger, and the areolæ much deeper in colour than they ever were in any of her ten previous pregnancies even at the full time;* and these conditions were established while her general health was exceedingly depressed by illness.

CASE III. STIMULATING EMBROCATION INCREASING THE SUPPLY OF MILK. A lady, though in excellent health, had a very scanty supply of milk for her infant, when it was a few weeks old. She consulted me as to the use of means to remedy this evil; and I advised her to rub the mammae gently, every six or eight hours, with an embrocation containing a small quantity of tincture of cantharides and oil of thyme, and to sheath the mammae very warmly in wadding. *In a few days the milk was abundant.*

CASE IV. HOT POULTICES KEEPING UP THE SECRETION OF MILK WHEN THIS WAS NOT DESIRED. A lady suffered, after her confinement, from a succession of abscesses and abortive abscesses in the breast. The surgeon who attended her treated her by antiphlogistic medicines, under which discipline she passed some wretched months, from mental and bodily depression, aggravated by hysterical attacks. The local affection did not seem to make any satisfactory progress; and the great obstacle to a cure was stated to be the impossibility of getting rid of the milk, in spite of saline purges being freely administered. The mammae during the whole of the period to which I refer, had been ceaselessly treated, night and day, with hot poultices and medicated fomentations. These applications were abandoned, and a generous diet prescribed. *In a few days there was not a drop of milk in the breasts;* and the abscesses, actual and threatening, had ceased to give any pain, and had, in fact, almost disappeared.

I might refer to other cases, which I have vividly in my memory; but the above, which have occurred within the last three months, seem sufficient to establish the first proposition; viz., that *warmth and stimulants applied to the mammae often act powerfully as galactagogues.* I need hardly add, that along with the use of such means, the regular application of an infant to the breast would greatly assist in reproducing lactation, as, according to the testimony of various authors, this stimulus has of itself proved sufficient to restore the secretion of milk, and has actually caused it to flow, not only from virgins and other women who had never been pregnant, but even from males.* Excitement and sanguineous turgescence of the gland is induced; and these conditions afford to the organ both a power and a stimulus to perform its previously dormant function.

II. WARMTH AND STIMULANTS APPLIED TO THE MAMMÆ, OFTEN ACT POWERFULLY AS EMMENAGOGUES.

Warm clothing of the abdomen and limbs, hot hip-baths, and medicines which stimulate the bladder and rectum (such as ergot, cantharides, and aloes), have undoubtedly emmenagogue powers in properly selected cases of retarded or suppressed catamenia; and, indeed, they constitute, in various combinations, the principal measures by which the physician usually endeavours to excite the ovarian nius

upon which menstruation depends. The observant physician knows well, that while his treatment is directed to the uterus through the ovaries, the effects produced upon the mammae are generally very striking, and the first indications which he expects to find of the uterus being roused from its torpor are turgescence and tingling of the mammae; phenomena which also usually precede normal menstruation. It is equally true, though not so familiarly understood, that measures which act directly and primarily upon the breasts, such as warm clothing to the bust, and the application of stimulants, not only cause them to swell and throb, but likewise stimulate the ovaries, and cause the menses to flow. The practice adopted by some practitioners, of applying leeches to the mammae in amenorrhœa, owes its efficacy to fomentations used, and the irritation of the bites.

In 1834, Dr. Charles Patterson published, in the *Dublin Journal of Medicine*, a paper in which he described the emmenagogue power of irritation of the mammae by sinapisms. This paper fell into my hands at the time of its appearance, when I was an Edinburgh dispensary pupil, practising, I believe, with more zeal than knowledge, and using, often with more confidence than discrimination, that plan of treatment which I had seen most recently or most enthusiastically recommended. In these circumstances, I successfully employed Dr. C. Patterson's method in amenorrhœa. The beneficial results which I then obtained, produced a very strong impression upon my mind as to the efficacy of irritation of the mammae in producing menstruation; and the experience of nineteen maturer years has confirmed this impression.

As Dr. Patterson's facts do not seem to be referred to by subsequent writers, and as the practice which he recommends is so little noticed by authors, I subjoin an extract from his paper. Dr. Patterson writes as follows:—

"Mary Reardon, aged 24, of moderately corpulent habits, was admitted into the Rathkeale Hospital on the 10th of August 1832. She laboured under slight synochial fever, which in a few days yielded to venesection and purgatives. On the 19th August, symptoms which were considered of a hysterical character presented themselves, with pain in the upper and outer part of the right side of the chest. For the latter affection, a small sinapism was prescribed; but from inattention of the nurse, it was made so large, that it covered a considerable portion of the mamma. The sinapism remained on for half an hour. At the visit on the following morning, the 20th August, Reardon complained that the right breast was exceedingly painful—the pain being very different in its character from that which she had before experienced. On examination, the whole side of the chest was found considerably swollen: there was slight diffused redness of the skin; and though the mamma itself was enlarged to four or five times its natural bulk, yet there was no circumscribed hardness, nor any tendency to suppurative inflammation. On the 21st August, the right mamma and adjoining parts of the chest were found much more enlarged than they had been at the preceding visit. The left mamma and side of the thorax were unaffected; and it was announced by the nurse that the catamenia had that morning appeared, and were then in considerable quantity. This discharge, which, as the patient stated, had been for two years and a half wholly suppressed, continued to flow for two days; then it began to decline, and with it the tumefaction of the mamma gradually disappeared." (pp. 193-194.)

Dr. Patterson's attention having thus accidentally been directed to mammary irritation as an excitant of the torpid uterus, he resolved to try its efficacy when a suitable opportunity presented itself. His next case is thus described:—

"Catherine Power, aged 19, applied to me on the 14th September 1832. She complained of headache, languor, loss of appetite, and inability to attend to her usual business, that of a servant. She stated, that about the middle of April, the menstrual discharge being then present, she incautiously exposed herself to cold in washing clothes at

* Cases in which men have suckled children are on record. The essential character of the gland is the same in both sexes.

a river. The catamenia then suddenly ceased, and had not since returned; and from that period she had been constantly subject to ill health. She had consulted different medical gentlemen, and taken a great variety of medicine, with little advantage. I directed that the clavicular half of the right mamma should be covered with a sinapism. It was allowed to remain on for thirty minutes; and on visiting her in six or seven hours after its removal, I found the whole right breast considerably swollen, hot, and painful. The next morning, the enlargement of the mamma was very much increased, the tumefaction having extended to the clavicle and axilla of the irritated side. There was no hard circumscribed or prominent tumour, but a painful, diffuse, elastic distension of the mammary gland, and surrounding cellular substance. On the evening of the day next succeeding the application of the sinapism, this poor girl with much joy reported that the catamenia had appeared. The flux having continued for two or three days in moderate quantity, she then found herself greatly relieved of the headache and other most distressing symptoms; and in a week her health was so far restored, that she ceased to require any further attendance." (pp. 194-195.)

I am disposed to regard irritation of the mammae as a convenient and rapid agency for the induction of menstruation; but one which must neither be rashly nor indiscriminately employed. In numerous cases it may be used alone; but, generally speaking, it may be advantageously combined with other means.

In cases of acute suppression of the menses, I am in the habit of prescribing, along with sinapisms to the mammae, warm clothing of the bust and limbs, and the hot hip-bath every twelve hours.

In anæmic amenorrhœa, it need hardly be stated, that irritation of the mammae is only calculated to do good in conjunction with, or after a course of, a metallic medicine, such as some of the preparations of iron, manganese, or arsenic. In such cases, where we can trace a monthly ovarian nîsus, though there be no catamenial flow, these periods should be seized as the appropriate times for using the sinapisms, and then also we may sometimes, by venturing a few doses of forcing medicine, such as cantharides and ergot, bring the case at once to a favourable issue.

The emmenagogue effects ascribed to the application of the leaves of the ricinus communis, by Drs. M'William and Tyler Smith, can easily be understood, when we remember their irritative character, and the consequences which we have found to be induced by irritation of the mammae caused by other stimulants.

"When the breasts", says Dr. M'William, "are small and shrivelled, the plant is said to act more upon the uterine system, bringing on the menses if their period be distant, or causing their immoderate flow if their advent be near."

In the subjoined case, related by Dr. Tyler Smith, the effect produced may have been owing partly to the application to the breasts, and partly to the application to the genitals.

"I have used," says Dr. Tyler Smith, "the remedy in a case of scanty menstruation of a remarkable kind. Owing to exposure to marsh malaria some years ago, the patient had scarcely a sign of coloured discharge at the usual catamenial periods. She used the infusion of the leaves of the red bofareira at the date of her period, applying the infusion and leaves to the breasts, and the vapour to the genitals, with the effect of producing, in two days, a considerable flow of the catamenia."

III. THE LEAVES OF THE BOFAIREIRA DO NOT PRODUCE THEIR GALACTAGOGUE AND EMMENAGOGUE EFFECTS IN VIRTUE OF ANY SPECIFIC PROPERTY.

The facts which have been already cited, point out pretty plainly that the effect of the leaves of the bofareira does not depend upon any specific property possessed by them; but simply on the determination produced by warmth and the irritative juices which they contain. That a good

deal depends upon the mere warmth of the poultices, is sufficiently obvious. I have seen frequent examples in my own practice. I will not, however, enter into the particulars of these cases; but will conclude by mentioning two circumstances, which thoroughly corroborate this view.

In the *Boletín de Medicina, Cirujía, y Farmacia* of 14th November, 1852, a short abstract was given of Dr. M'William's paper. In the same journal of the 19th December following, a correspondent writes to say, that in consequence of the notice which had appeared of Dr. M'William's paper, he had used fomentations of fig-leaves (*hojas de higuera*) to promote the secretion of milk in three cases, in which it had wholly or nearly ceased. In all the cases the benefit was decided. The Spanish practitioner wrote to confirm the practice recommended by Dr. M'William, but he has in reality, by using the wrong leaves, shown very clearly the galactagogue effects of poultices and fomentations, even when destitute of stimulating properties. I may likewise here state, upon the authority of a Spanish lady (with whom I conversed on this subject a few days ago), that in Cadiz women are in the habit of bringing back the milk to their breasts after it has left them in consequence of weaning the child, or of any other cause, by means of drinking an infusion of the wild lupin (*altramuz*), and applying to the mammae fomentations made with the same plant. This plant has no stimulant or irritative quality, and the efficacy of the poultices made with it must, as in the case of the fig-leaves, depend simply on heat and moisture, as in a common poultice. The internal use of the infusion might be dispensed with.

IV. CONCLUSION.

I have now made out a good plea in favour of warmth and irritation of the mammae, being regarded as powerful galactagogue and emmenagogue agencies; and I have also shown that the interesting facts recorded by Drs. M'William and Tyler Smith are not examples of specific action, but illustrations of a general principle, which may be rendered available in rational therapeutics.

Injurious effects may so readily be produced by *excessive irritation of the mammae* upon themselves, upon the ovaries and uterus, and (as a consequence of the undue excitement of any of these organs) upon the whole system, that, in following the practice recommended in this paper, it is necessary to proceed with caution.

FIRST, as regards the *mammæ* themselves, care must be taken not to produce too much irritation, lest troublesome inflammation be excited in them, and in the glands of the axilla;—consequences which I have seen produced in such a degree as to require, for several days, cooling lotions and general antiphlogistic measures.

In irritable subjects, or when the effects of the treatment cannot be daily ascertained, stimulating embrocations ought to be preferred to sinapisms. When sinapisms are applied every eight or twelve hours, for some days continuously—as is sometimes necessary—they ought to be compounded of two or three parts of bread to one of mustard; and a fold of soft linen ought to intervene between them and the skin. By attending to these conditions, patients will generally endure the poultice without injury for half an hour or an hour; and a greater amount of benefit will be obtained than by causing violent stimulation for a short period. It is always essential to maintain, during the intervals, great local warmth, by means of abundance of cotton wadding. If mammary irritation have been carried so far, through mistake or accident, as to necessitate recourse to refrigerating lotions and lowering treatment, it need hardly be remarked, that the object for which it was used is not likely to be accomplished.

SECONDLY, as regards the *ovaries* and *uterus*, the effects produced upon these organs must be attentively watched; for the very greatness of the power which irritation of the mammae exerts over these organs, may constitute an element of danger. In endeavouring to excite mammae,

we must take care that we do not excite inflammation of the ovaries, or of the womb. When we find the patient complaining of severe pain in the loins, and suffering from general fever, we ought at once to discontinue mammary irritation, and prescribe rest in bed, abdominal fomentations, and the frequent use of the hip-bath. In cases of this description, as in ordinary attacks of dysmennorrhœa, we may often not only relieve pain, but accelerate a resolution of the inflammation, by administering opiate enemata.

Caution on the part of the practitioner will generally enable him to prevent or speedily remove the evils and inconveniences to which reference has been made. They may, however, so easily occur through the want of it, and lead to so much discredit and embarrassment, that I have been anxious to give them the prominence which they deserve.

Essex House, Putney, 19th March, 1853.

ON DISTICHIASIS.

By HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Central London Ophthalmic Hospital, Assistant-Surgeon to St. Mary's Hospital, etc.

DISTICHIASIS having been lately brought before the members of the Association through the medium of our JOURNAL, I am desirous to record my own views respecting that condition of the eyelashes which this term is meant to imply.

Distichiasis, from *dis*, twice, and *σῆλος*, a row (one of the many pedantic words that yet obscure the writings devoted to diseases of the eye), is usually employed to signify that a second, or supplemental, row of cilia or eyelashes exists; but the correctness of this, as a pathological state, I dispute. The matter is not devoid of practical interest, and this I purpose to show in a subsequent communication on the treatment of certain affections of the eyelids.

I maintain that the supposed new row consists of the natural cilia merely displaced; and that the idea of super-added eyelashes is an error, which arises out of the normal yet irregular disposition of the manner in which they are set on the lid, and which becomes very apparent when the extremities of those which are most internal are turned inwards and away from those which are most external. The deception is still greater, when abortive cilia supplant those along the inner margin of the eyelid, and grow without any curve, but straight, and incline rather towards the eyeball than in any other direction. I have observed examples of abortive eyelashes growing inwards, nearly at a right angle to the tarsal cartilage. Of the truth of the assertion of the irregular disposition alluded to, any one may convince himself by selecting for experiment a healthy eyelid, separating the most internal of the eyelashes with a probe, and producing the so-called distichiasis. This is, in fact, what is done by disease, and is effected in three ways—by the agglutination of some of the cilia with lachrymal secretions, in certain affections of the conjunctiva, or of the Meibomian glands, in consequence of which they are turned against the eyeball; by long-continued malposition in inversion of the eyelid; and, most frequently of all, by disease of the edge of the eyelid, producing pathological changes in the dense fibro-cellular tissue that surrounds the hair follicles, and perhaps also by changes in the follicles themselves. A case, remarkably illustrative of the last clause, came under my notice at the Central London Ophthalmic Hospital. A lad was brought there with chronic inflammation of the upper eyelid, of three years' duration, by which the edge of the lid was considerably thickened, and the eyelashes separated into two distinct rows. Several months afterwards, when all traces of preternatural vascularity had ceased, and the eyelid had nearly recovered its natural size, the duplex arrangement of the cilia was no longer apparent.

So far as I am aware, there are not any physiological facts that at all support the theory of hair being developed after foetal life; that is, there is not on the surface of the

body any secondary formation of hair follicles, these being of primary existence. The appearance of hair on parts apparently devoid of it, after the application of blisters, or the accession of increased vascular action, has been often advanced in proof of the secondary creation; but this argument is quite demolished by the fact that the entire surface of the body, with the exception of the palms of the hands and the soles of the feet, is thickly set with hair follicles; and by the deduction from this fact, that when hair is so accidentally developed, the phenomenon must be ascribed to hyper-nutrition of normal germs.

Those who contend for the existence of distichiasis, but cannot overcome the fact of there being no secondary creation of hair, declare that the irregular eyelashes, although proceeding from old hair follicles, perforate the lid more internally than natural. This cannot be, unless the hair pass through the tarsal cartilage (a supposition that is manifestly absurd); for the most internal of the eyelashes, as every one who has dissected the eyelids minutely, knows, issue as close as it is possible by the side of the cartilage.

In the *Dublin Quarterly Journal of Medical Science* for February 1853, the reviewer of my treatise on "Operative Ophthalmic Surgery", makes the following remarks on this question:—"It has always appeared to us surprising, that any one could imagine this extraordinary growth, how it could be, or why it should be produced. We have examined a very large number of persons affected with the disease under consideration, and could not, in any case, discover the extra number of cilia, comparing the diseased with a sound eye in the same person—the only possible way, we maintain, by which a fair and correct opinion can be formed; for it is obvious that, if we were to compare the number of cilia to be found in the lids of one suffering from the complaint, with those in sound eyelids in another person, we would be proceeding upon very irregular principles, were we to found any argument upon such data."

60, Brook Street, Hanover Square, March 1853.

REMARKS ON A NEW KIND OF CATHETER, MADE OF VULCANIZED INDIA-RUBBER.

By W. VINER BEADLE, M.D.

FINDING, in a case some time since under my care, that the ordinary catheters produced or kept up irritation of the mucous membrane of the bladder, and produced also great general disturbance, I was induced to try a catheter made of vulcanized India-rubber.

CASE. Mr. H., aged 80, had at different times suffered from incomplete retention of urine; but the attacks had always hitherto passed off without instrumental assistance. In this attack, after exposure to cold, he had felt colicky pains in the umbilical region, combined with slight diarrhœa. He had constant calls to micturition, though unable to pass more than a small quantity at a time, and that in drops. In a day or two, the retention becoming urgent, and the pain severe, although urine was still passed, he applied for assistance. The bladder, having become more distended, had in the same ratio lost more of its contractile power, and no longer possessed the power of lessening its cavity, or expelling the contents. Such was the state in which I first saw him, on the 16th of July. Being five or six miles from my residence, and unable to return that night with instruments, I prescribed fomentations and an anodyne. These measures afforded little relief.

July 17th. Early this morning, I used the catheter, drawing off a good deal of urine, of a dark colour, and which, on cooling, showed a considerable deposit of mucus. The catheter passed easily; and the prostate, though tender, did not seem greatly enlarged. I prescribed the following pills to be taken at bed-time, and an aperient draught in the morning:—

R. Pilulæ hydrargyri,
Pilulæ saponis comp. aa gr. v. Ft. pil. ij.

July 18th. The urine was drawn off. It was still dark,

and contained a good deal of mucus. He had had frequent calls to micturition in the night; the urine, however, coming only in drops. He had slept but little, and felt very uneasy. The pulse was 90; the tongue pale and furred. He was ordered to take at night five grains of the compound soap pill. A diaphoretic mixture, with hyoscyamus, was also ordered to be taken during the day.

July 19th. He had slept a little after the pill, but was very uneasy this morning. The urine was, if anything, more loaded with mucus, mingled with lithates. It had an acid reaction on litmus. The compound soap pill at bed-time was repeated; and he was ordered to take some castor oil in the morning.

July 22nd. He had taken the pill each night; but on this day, notwithstanding the sedatives, etc., the tenderness of the perineum had increased, and the pain in the bladder was greater, accompanied with smarting, and extending through the pelvis and hips. The effects of irritation on the general system were also more marked, and accompanied by flushes and slight rigors; and a tendency to low fever seemed rapidly setting in, whilst the bladder was assuming that state of chronic inflammation which so soon gives rise to the acute form, reversing, as it does, the ordinary course of inflammation. I prescribed as follows:—

R. Pulveris Doveri,
Sodæ sesquicarbon.,
Potassæ nitratis, aa gr. v. M.

Fiat pulvis 4tis horis sumendus.

July 24th. Since the 22nd, he had taken the last prescribed medicine regularly, with veal broth and barley water, freely as diluent. In some respects he had been relieved.

From the very frequent calls to micturition, it had been found necessary to keep the catheter constantly in the bladder, though removed each day. The long coils had, no doubt, by its being frequently passed, been one cause of keeping up the irritation of the mucous membrane of the bladder, and more especially of the prostate; both these organs being at all times, under such circumstances, exceedingly liable to become irritable. The urethra also was discharging mucus, and one of the testes had begun to swell.

Under these circumstances, I resolved to try the effect of a vulcanized India-rubber catheter; and I procured some small tubing of that substance for the purpose. I then placed *within* one extremity the end of a catheter, cut off for the purpose, and about an inch and a half long, snipping out a small piece of the tube corresponding with the eye of the inner piece. The extremity was then carefully closed, cemented, and smoothed. When well greased, it passed, without much difficulty, on a stiff stilette; and was not removed for a week. By the injection of warm water, the tube was easily kept free from mucus or other obstruction.

In a few days, under the use of anodynes, beef-tea, arrow-root, and wine, etc., he had so far recovered as to be able to walk in his garden, feeling but little inconvenience. The tincture of sesquichloride of iron was soon after exhibited; and he continued the compound soap pill for some time at night. Under the use of the iron and the catheter, the bladder soon recovered its powers. At the end of nearly two years, the patient is now hale, hearty, and well, for a man so greatly advanced in years.

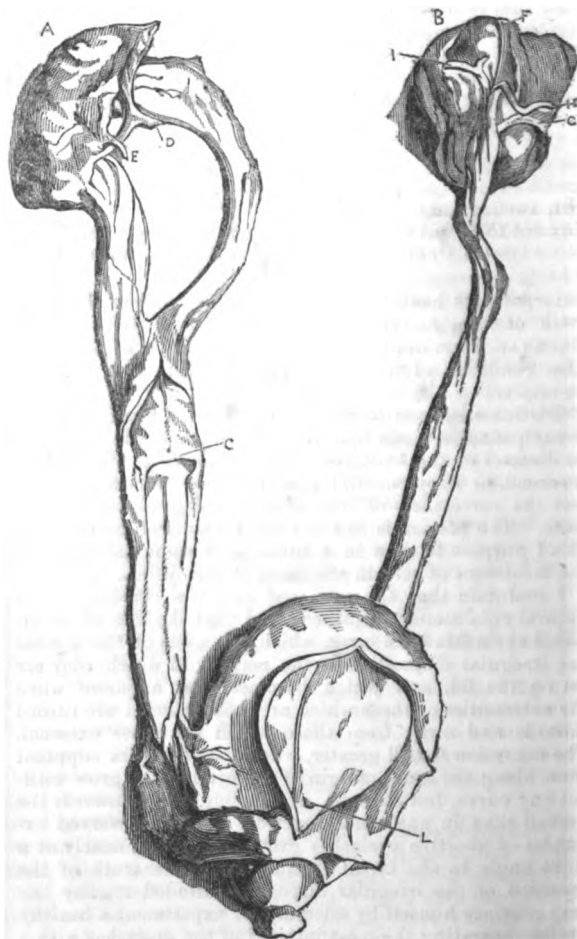
REMARKS. In this case, the ordinary catheters seemed, by their firmness and the length of their coil, to produce irritation of the urethra and bladder, and, by their frequent passing, also of the prostate—all already so prone to it. From the comfort with which the vulcanized India-rubber tube was borne, the cessation of uneasiness and irritation, the facilities which it afforded the muscular fibres of the bladder to recover their tone, dilating or contracting as it does with each motion of the urethra, it was certainly of great benefit in this case. In one or two other cases in which I have adopted a similar instrument, it has fully answered my expectations. In cases similar to that which I have described, the vulcanized India-rubber catheter seems to offer great advantages.

Tewkesbury, Gloucestershire, March 10th, 1853.

CASE OF MALFORMATION AND COMPLICATED DISEASE OF THE URINARY ORGANS.

By SPENCER THOMSON, M.D.

THE accompanying drawing may interest the readers of the ASSOCIATION MEDICAL JOURNAL; in the first place, on account of the malformation which it represents, and in the second, as an illustration of the distinctly traceable effects of complicated disease.



- A. Right kidney: ureter double.
- B. Left kidney: vessels double.
- C. Union of canals of double ureter.
- D. Right renal vein.

- F. Right renal artery.
- G. Left renal vein, double.
- H. I. Left renal arteries, double.
- L. Opening of left ureter into thickened bladder.

The figure represents the kidneys, ureters, and bladder, taken from a young man who had suffered severely from stricture of the urethra. He subsequently became the subject of diabetes insipidus, and finally died in consequence of suppression of urine. The case occurred in the practice of Messrs. Tomlinson and Tome, of Burton-on-Trent, who kindly afforded me the opportunity of making the drawing from the parts.

On the right side, the enormously dilated ureter is double; on the left, there is a double set of renal vessels. The bladder, not larger than usual, is considerably thickened.

Unquestionably, the thickening of the bladder must have been directly occasioned by the stricture; and its dilatability being thus impaired, it must have become less than commonly adapted to accommodate the extra accumulation of urine, which the combination of diabetes and stricture necessarily involved. The confined fluid, consequently, must have been dammed up within the ureters; and to such an extent, apparently, had this

taken place, that these tubes were dilated to a calibre equalling that of the small intestines, which, indeed, they greatly resembled. Moreover, the valves of the kidneys were likewise much dilated, and the cortical substance diminished to a corresponding extent, for the glands themselves were not enlarged.

Haunton, Burton-on-Trent, March 1st, 1853.

CASE OF GLANDERS IN A FEMALE.

WITH REMARKS ON THE TRANSMISSION OF THE DISEASE FROM THE HORSE TO THE HUMAN SUBJECT.

By ARCHD. WM. COCKBURN, M.D.

CASE. Mrs. Slims, aged 52, wife of a cab-driver, was seen by me on Friday, 4th February, 1853. She had been in bed for nine days, complaining of feverishness and rheumatism. When I saw her, she had excessive pain in the extremities, especially the lower limbs. The ankles were red, swollen, and tender, but not glazed. On the right forearm there was an abscess the size of an egg. The body and limbs were covered with spots, some of a bright livid colour; others with pus; some like mere pimples; and on some parts there were patches similar to erythema. On the forehead, over the right temple, was an ulcer, or rather a cluster of vesicles injured by a blow since their formation. This ulcer was irregular and superficial, with dark, ragged, angry looking edges, and trifling discharge; it was about the size of a half-crown. There was much thirst and fever. The pulse was quick and small; the tongue dry and foul; the urine scanty and high-coloured; the countenance depressed and anxious. She had been slightly delirious the previous night, but was now sensible. She was ordered to take a mixture of acetate of potash, every two hours, and a pill of soap and opium at night. A poultice was applied to the forehead and arm, the feet and ankles were wrapped in cotton wool.

February 5th. She was much the same; had had some ease, and two hours' sleep after taking the pill. The feet were not quite so red, but still very painful. The urine was clearer, and more abundant. She had had one dark, offensive motion. She was sensible, and complained of pain in the stomach from the medicine. The acetate of potash mixture was changed for one with colchicum and hyoscyamus; and a pill with colchicum and conium was ordered to be given at night.

February 6th. During the night, a sudden discharge of very offensive dark-coloured pus took place from the nose, at half-past ten, A.M. She was drowsy all night, but was sensible when roused. She had not passed urine, unless in bed. The bowels had been moved once, and the motion was less offensive. The nostrils were dilated, and clogged with dark glairy matter; the throat was full of viscid phlegm, with difficulty of expelling it: the eyes were swollen and closed, with copious discharge. The pustules were abundant all over the body; none seemed to have burst, except on the forehead, where bruised. The pulse was weaker; the tongue moist, but coated; the arm better. The wool had not been removed from the ankles. The attendant said that the matter from the nostrils was peculiar and sickening. The patient was almost in a state of low delirium. The colchicum was omitted, and she was directed to take bark, with diluted hydrochloric acid and stimulants, also an expectorant.

Vespere. She was more sensible. The phlegm was very copious, but more easily expectorated. The nostrils were much dilated, and discharged a dark sanious fluid. The pustules generally appeared more suppurative; some over the chest were as large as a sixpence, full of pus, but without inflamed edges round them; those on the legs were in all stages; and the patches of erythema were very bright. The eyelids were closed, but she could open the right one. She had taken some porter. Bark and expectorant were continued, and the eyes were ordered to be well washed with warm water.

February 7th. She died at half-past two o'clock in the morning.

REMARKS. On my first visiting the patient, the state of fever, the severe pain of the joints, and the redness and swelling of the ankles, led me to think that she was suffering from acute rheumatism. I concluded that the pustules over the body were of the epidemic character that has so long prevailed, and that the occurrence of the acute rheumatism at the same time was merely accidental. The urine being scanty and high-coloured, I prescribed (what I have never found to fail in acute rheumatism) the acetate of potash every two hours, with a pill of soap and opium at bed-time. But this opinion did not satisfy me. There was an indefinable expression about the patient, and a varied peculiarity about the appearance of the eruption, for which I could not account; and I left her with the unsatisfactory conclusion that she was very seriously ill, and that I did not know what was the matter with her. As I passed through the stable (she lived in the loft) on my way out, I asked her husband if his horses, three in number, were healthy, and he said that they were so.

On the next day, her general appearance was in no way improved. She had a low typhoid look, and yet she was sensible and collected. The urine had improved: but as the general symptoms had not, I altered her medicine, and gave her colchicum with an anodyne.

On the third day, the sudden and profuse discharge of sanious matter from the nose; its peculiarly offensive, sickening odour; the dilated nostrils; the sudden affection of the throat; the swollen, discharging eyelids; with the more suppurative character of the pustules, at once induced me to set down the disease as glanders. Accordingly, I prescribed bark, with diluted hydrochloric acid, an expectorant, and stimulants. In the evening, my opinion was more confirmed.

The patient died about six hours after my evening visit.

I examined the three horses. They were all in sound health; their nostrils dry; their eyes free from discharge; they had no coughs; their coats were in good condition; but one had grease in the near hind leg. Though denied by the husband, there seems no doubt that the woman had washed this leg. The disease was not extensive, but still it was a leg discharging matter.

Her constitution seems to have been very susceptible of absorbing poison: for, two years ago, she injured her finger when attending as nurse on a patient with a suppurating wound of his leg, and she suffered much then from pustular fever and eruption.

In the present attack, she had been ill for eight days before I saw her. Farcy had preceded the glanders; though Professor Dick says "the two diseases are only modifications".*

Entertaining some doubts as to the possibility of the discharge from grease conveying glanders, I begged my friend Mr. Lizars to ask the opinion of Mr. Williamson, veterinary surgeon of Edinburgh, on this point. Mr. Lizars, in reply, writes to me thus:—

"I have read over your views on glanders to Mr. Williamson, who corroborates the greater part of them. He says that if you inoculate a horse with the matter from a leg affected with grease, or quittor, or foul sore, the horse will become affected with glanders. Therefore, there can be no doubt that the poor woman caught the disease from the horse's leg. Glanders often commence with farcy."

Two points in this case struck me as remarkable. First, as noticed by Dr. Graves,† "the variety of inflammatory actions observed in the skin"; second, as noticed by Dr. Ballard,‡ "the close resemblance in the condition of the nervous system to that in delirium tremens".

Kensington, March 10th, 1853.

* Manual of Veterinary Science, p. 85.

† Clinical Medicine.

‡ Lancet, 1850.

BIBLIOGRAPHICAL NOTICES.

URINARY DEPOSITS, THEIR DIAGNOSIS, PATHOLOGY, AND THERAPEUTICAL INDICATIONS. By GOLDING BIRD, M.D., F.R.S., etc. 12mo. pp. 473. Fourth Edition. London: 1853.

A FOURTH and enlarged edition of this classical treatise will be cordially welcomed by a numerous body of the best class of medical practitioners. The popularity and rapid sale of former editions not only speak loudly in favour of its merits, but likewise proclaim a highly advanced state of general professional knowledge; for without such knowledge, combined with a zealous and conscientious spirit of scientific inquiry, the labours of Dr. GOLDING BIRD could not have met with that hearty welcome which they have received, and which they so well deserve.

It would be out of place to give an analysis of a work which is so well known as that now before us; and we have only to state that the present edition contains considerable additions, especially in the chapters devoted to the therapeutic action of remedies. The chapter which treats of "Blood-depuration by the kidneys as a remedy in disease" is an important contribution to the philosophy of therapeutics; and we would particularly call attention to the author's remarks upon the *substitution of renal depurants for mercurials*. On this point he says:—

"I would most anxiously urge upon my professional brethren the importance of giving a fair and patient trial to the acetate of potass, in a large class of ailments where the blood is obviously in an unhealthy state, especially where glandular engorgements and furunculous eruptions exist. Indeed, in many of these forms of chronic indisposition in which there is no evidence of organic mischief, but where the general health is depressed, the face sallow, the urine coloured by purpurine, constituting the condition in which the patient is popularly said to be 'bilious', the advantage gained by the use of this remedy is remarkable. Hitherto, whenever a remedy influencing the general health through the capillary circulation is required in chronic disease, we generally fall back upon mercury; indeed, a mercurial and an alternative are nearly convertible terms. Instead then of trusting to mercurials nearly exclusively, or after they have been administered without benefit, or in the strumous diathesis, where for the most part they are not well tolerated, I would advocate the use of renal depurants, especially of acetate of potash.

"Although in these remarks I have especially alluded to the acetate of potash, yet I have merely selected it as a type of a large class of remedies, many of which equal it in their remedial effects. The citrates and tartrates of potass and soda constitute remedies of probably equal value. Indeed the utility of the popular 'saline draughts' of these salts is in all probability to be explained by their influence as renal depurants. The solutions of potass and soda, as well as their carbonates, are most useful remedies of their class, but decidedly of much less value than the acetates and citrates. Two reasons may be given for this; first, they are very likely to become neutralized whilst in the *primæ viæ*, by acids, which, like the hydrochloric and phosphoric, are not decomposed whilst passing through the circulation; secondly, the conversion of acetates and citrates into carbonates takes place in the blood, and thus they in the *nascent state*, when their chemical tendencies are the highest, come in contact with those matters which it is important to eliminate from the blood. It is well known that a considerable quantity of liquor potassæ is required to render the urine even neutral, whilst a few grains of an acetate or a tartrate will rapidly render it alkaline." pp. 441-443.

LITHOTRITY AND LITHOTOMY. By WILLIAM COULSON, Surgeon to St. Mary's Hospital. 8vo. pp. 388. London: 1853.

THE substance of this work was delivered in St. Mary's Hospital in the form of lectures, which were subsequently published in the *Lancet*. In its present improved form it must be regarded as the most complete monograph upon Lithotritry and Lithotomy which has yet appeared in our language. Even when the reader cannot exactly adopt the

conclusions of the author, he will find that the information imparted is so fairly and fully given, as to enable him to form his own opinions. The value of the work to the surgeon and the student is much enhanced by ninety-seven wood cuts, and a good index.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 8TH, 1853.

JAMES COPLAND, M.D., President, in the Chair.

PATHOLOGY OF OBSTRUCTION OF THE VEINS (OBSTRUCTIVE PHLEBITIS), AND THE NATURE AND PROXIMATE CAUSE OF PHLEGMASIA DOLENS. BY F. W. MACKENZIE, M.D.

THE author observed that, since the publication of the late Dr. Davis's paper on the proximate cause of phlegmasia dolens, in the twelfth volume of the *Medico-Chirurgical Transactions*, the profession had generally recognised the important relations which subsist between certain lesions of the crural veins and the general phenomena of the disease. The facts adduced by Dr. Davis had been fully substantiated; but the theory based upon them had not been so generally accepted; for, whilst many, with Dr. Davis, regarded the lesion of the veins as the proximate cause of the disease, others regarded it rather as a secondary effect, or as an incidental circumstance. The author's investigations were therefore directed, in the first place, to a solution of this question; and, having stated the distinctive characters of phlegmasia dolens, as given by Callisen and Hull, he proceeded to investigate how far these were producible by inflaming and obstructing, by various means, the iliac and crural veins of dogs.

EXPERIMENTAL INVESTIGATIONS. Three series had been made: first, the effects of ligaturing the iliac veins, as observed at definite periods after the operation; second, the effects of irritating the whole length of the lining membrane of the iliac veins, by means of chemical and mechanical irritants; and third, the effects of sustained compression and contusion of the femoral veins. In illustration of the first series, the effects of ligaturing the iliac veins were minutely detailed, as noted at periods of 24, 48, 72, and 96 hours, and 9 days, after the operation; and illustrative drawings of the dissections were given. The author pointed out the difference between inflammation of the iliac veins, thus induced, and the ordinary symptoms of phlegmasia dolens. In particular, the constitutional effects were very transient, being most marked on the day of operation, and subsequently rapidly subsiding. The local effects were also transient rather than persistent, and were confined to swelling, stiffness, and inability to move the extremity. There was no tenderness or preternatural heat of the limb; the swelling was of a simple oedematous character; and it and the other local symptoms rapidly passed away in a few days. He then described, in a general summary, the condition of the iliac veins at the several specified periods after ligature; the limited character of the inflammation; the absence of extensive coagula in the veins; and the general dissimilarity between the condition of the veins, and that met with in phlegmasia dolens. These phenomena were strictly in accordance with those which had been observed from time immemorial, in connexion with wounds, injuries, and operations upon these vessels.

The results of more extensive irritation of the iliac veins were then detailed. This part of the inquiry comprised, first, the effects of applying a strong solution of nitrate of silver to the lining membrane of the iliac veins, from the femoral up to the cava; and second, the effects of forcibly introducing a solid piece of bougie into them, throughout their entire length, and securing it there for several days. From the results of these experiments, illustrated by drawings, it was clearly shown that inflammation of the iliac veins, thus extensively induced, was not capable of giving rise to phlegmasia dolens. A similar conclusion was arrived at with regard to the results of long-continued compression and contusion of the femoral vein.

The author concluded, from these experiments, that phlegmasia dolens could not be dependent upon mere inflammation of the crural veins; and that, therefore, such inflammation could not be regarded as its proximate cause. Nevertheless, clinical history and *post mortem* examinations showed that lesions of the crural veins, although not the proximate cause,

must yet be regarded as an essential pathological constituent of the disease; and must be rationally accounted for, in common with its other pathological characters.

ORIGIN, NATURE, AND CAUSES, OF OBSTRUCTION OF THE VEINS. This subject was investigated more particularly in relation to local and constitutional causes. In pursuing this inquiry, the author treated in detail of the influence of irritation and inflammation of the external and internal coats of veins; of changes primarily and independently taking place in the blood; and of the conjoint influence of irritation of the lining membrane and the blood, in giving rise to the phenomena in question. In numerous cases, strong solutions of nitrate of silver, and other chemical irritants, were extensively applied to the external coat of the veins of dogs; and in others, it was severely contused, and otherwise mechanically injured. The general results appeared to justify the conclusion that, whilst the external coat of veins very readily reacted under the influence of irritating causes, and quickly developed the anatomical characters of inflammation, such inflammation was neither disposed to extend in the course of the vein, nor to give rise to obstructive phlebitis. In all the cases, the vein was not obstructed, nor was the lining membrane inflamed. The correctness of these conclusions was sustained by clinical facts.

In investigating the effects of irritation and inflammation of the lining membrane of veins, it would be necessary first to study these in veins from which blood had been altogether excluded; for thus only could we learn the exact share taken by the lining membrane of the vein in the causation of obstructions. Gendrin had observed, that such irritation of the lining membrane of veins rapidly gives rise to exudation of lymph, and thus to entire obstruction; and Dr. Mackenzie had applied solutions of various irritants, such as nitrate of silver, bichloride of mercury, and sulphate of zinc, to the lining membrane of veins, at the same time excluding the blood. The results, in a variety of cases, tended to disprove the opinion of Gendrin, and to show that very irritating solutions might be applied to the lining membrane of veins, without giving rise to perceptible exudation of coagulable lymph; and that, therefore, veins were not ordinarily obstructed by such exudation. In all the observations, the morbid appearances of the vein were strictly limited to the irritated portion; inflammation, therefore, of the lining membrane, as of the external coat, was not disposed to extend indefinitely. The application of this fact to the pathology of veins was briefly indicated.

The influence of primary and independent changes in the blood, in giving rise to obstruction, was considered under two heads: first, the influence of extreme vital prostration in giving rise to spontaneous coagulation of blood in the veins; and second, the action of various abnormal matters in the blood, in producing coagulation, irrespectively of any action of the veins. The first question arose from the fact, that it had been assumed that polypi in the heart and great vessels were a consequence of extreme prostration. The author had repeatedly bled dogs, and kept them on a limited supply of food; and had also had recourse to mechanical compression and ligature of some of the principal veins, but these had failed to give rise to obstruction beyond the ligatures. Two cases were reported in illustration, in one of which the femoral veins of a parturient bitch had been ligatured after considerable bleeding; and the author concluded that veins were seldom obstructed from purely vital prostration. He could not subscribe to the opinion that a coagulum in a vein acted as a foreign body, and so gave rise to phlebitis; because, in the cases in which the iliac veins had been ligatured, and a coagulum formed on the distal side of the ligature, this had been found in adherent, and the vein healthy, at periods of twenty-four and forty-eight hours after the coagulum had formed.

In considering how far veins might be obstructed by morbid matters in the blood, producing coagulation independently of the veins, the author examined the views of Mr. Henry Lee, and pointed out several sources of error in his experiments. In particular, various simple and indeed normal fluids, when added to the blood out of the body, would, under certain circumstances, hasten its coagulation; and in all cases in which pus, or any other abnormal agent, was thrown into the veins, inasmuch as it must come into contact with the lining membrane of the vessel, as well as with the blood, any resulting phenomena could not be legitimately referred exclusively to either. In injecting pus into the veins, moreover, the author had not been able to verify the observations of Mr. Lee; and he cited cases in which pus was injected into the femoral veins without producing any remarkable coagulation of the blood. Where such a result

did follow, Dr. Mackenzie believed that it might be accounted for on another principle than that assigned by Mr. Lee.

To ascertain the conjoint influence of the blood and irritation of the lining membrane of veins, in producing obstructive phlebitis, the jugular veins had been exposed in several dogs, and their distal branches ligatured, so as to prevent the entrance of blood. One of the distal branches was then opened, and through the opening some lint, saturated with a strong solution of nitrate of silver, was passed for some distance. The opening was then closed; and, the ligatures having been taken off the other branches, the blood was allowed to re-enter, and circulate through the vein. In each case, the blood had coagulated throughout the portion of vein which had been irritated; and, according to the date at which the examination was made, it was more or less firmly coagulated and decolorised, and the vein exhibited more or less fully the phenomena of obstructive phlebitis. Hence irritation of the lining membrane of veins could modify, in a remarkable manner, the condition of the blood; and upon this would follow all the changes constituting obstructive phlebitis. With regard to the question, whether actual inflammation of a vein was essential to the production of such coagulation of the blood, it was conclusively shown, after a lengthened inquiry, that such was not the case; for, on throwing irritants into a vein, and examining the condition of the blood and the vessels at short periods after the operation, it was found that, whilst coagulation of the blood had taken place in the track of the irritant towards the heart, and the coagulum had become adherent to the lining membrane of the vein, the latter was found, on careful examination, to be perfectly smooth, polished, and free from redness or inflammatory appearance. The author hence concluded that phlebitis was not the primary, or even an essential condition, of the pathology of venous obstruction; that mere irritation or excitation of the lining membrane of the vein would give rise to it; and that the phenomena primarily commenced in, and depended upon, a disturbance of the relations normally subsisting between the blood and the lining membrane of veins. He then proceeded to investigate how far this condition of the lining membrane might be produced by constitutional causes alone, or a general vitiation of the blood; for, although such might be inferred from the results of his previous investigations, he was unwilling to accept the fact as a matter of inference. He accordingly had performed a course of experiments, in which lactic acid, and other abnormal agents, were injected into the blood, and their effects in giving rise to obstruction of veins carefully noted. The results enabled the author to affirm the principle, that, by vitiating the general mass of the blood, not only particular veins, but even large portions of the venous system, might become obstructed, in the absence of local injury or inflammation of these vessels.

Having shown that extensive obstruction of veins was not producible by exciting local inflammation of these vessels, whilst, by vitiating the blood, large portions of the venous system might be readily irritated, obstructed, and inflamed, the author concluded that the cause of venous obstruction should rather be sought for in the blood than in inflammation of the veins. This cause, he believed, would also account for all the known phenomena of phlegmasia dolens; for regarding it as arising from the blood rather than from any local or specific affection of the veins, nerves, muscles, lymphatics, and cellular tissue of the affected extremity, we could reasonably account for the *concurrent* disturbance of all these several organs and structures, which, indeed, was an essential condition of the disease, and which, by giving rise to irritation coetaneously in them, would occasion that tense elastic swelling, loss of motor power, morbid sensibility, lesions of the lymphatics, and obstructed and inflamed condition of the veins of the limb, which together constitute the pathognomonic symptoms of the disease.

To determine how far this theory of the disease was supported by its clinical history, the author entered upon the analysis of one hundred cases of the disease, as recorded in systematic treatises or in various medical periodicals. This number comprehended sixty cases which had occurred after parturition, and forty which had occurred independently of this function. The former series comprised twenty deaths and forty recoveries; the latter an equal number of deaths and recoveries. The principal facts of these cases were carefully analysed and tabulated; but before applying them to the solution of the question under consideration, the author laid down the following principle:—That the origin of a local disease from constitutional causes might in general be deduced from two series of facts; first, its having been preceded by local or constitutional causes calculated to vitiate the blood; and, second, the simultaneous existence of

various local affections in different organs. Upon these data he tested the validity of the opinion which he had espoused on the proximate cause of phlegmasia dolens; and having shown that the more general circumstances connected with the labour, the date of attack, and the extremity affected, in the puerperal cases, supported rather than opposed this view, he entered upon an especial consideration of the principal antecedents and probable causes of these cases, their concomitant affections, and the *post mortem* lesions in fatal cases.

The analysis of their antecedents gave the following results. Of the sixty cases, thirty-five had followed upon some form of puerperal fever: thirteen upon exposure to cold, and consequent arrest of the cutaneous secretion; three upon dietetic errors, and consequent derangement of the assimilative processes; three upon the operation of epidemic influences; four had occurred in the progress of pulmonary consumption, or some other constitutional disease; two had followed quickly upon severe or protracted labour; whilst in three no particular information was given. Thus, in nearly all, the attack had been preceded by some circumstance calculated to vitiate the blood, such as fever, suppression of the natural excretions, epidemic influences, derangement of the assimilative processes, or some constitutional disease. Dr. Mackenzie then entered upon a critical examination of the *modus operandi* of these influences in giving rise to venous obstruction and inflammation, as well as to the special symptoms of phlegmasia dolens. The thirty-three cases preceded by puerperal fever were referable to two divisions, viz., those which had been attended by injury or inflammation of the uterine organs during, or subsequent to, labour, and those which had occurred from other causes. Believing the former to be typical of the operation of local causes in contaminating the blood, by furnishing unhealthy or inflammatory secretions, and so giving rise to the disease, he pointed out the several modes in which such causes may operate. In connexion with the cases which had been preceded by some form of puerperal fever, unconnected with any local injury or lesion of the uterine organs, he entered into the consideration of the peculiar circumstances under which irritation, obstruction, and inflammation of veins might occur from fever or constitutional causes, and pointed out the influence of the three following in co-operating to this result: 1, constitutional debility; 2, a redundancy of the fibrinous element of the blood; 3, an affinity between the morbid elements in the circulation and the lining membrane of the veins. He further considered under this head, the reason why the venous system should more especially suffer from constitutional causes than the arterial; and lastly, the circumstances which determined irritation and obstruction of particular veins, rather than of others. Cases which had occurred from exposure to cold, might be legitimately connected with an abnormal condition of the blood; for whenever the cutaneous functions were arrested or interrupted from this cause, material as well as dynamic changes ensued in the blood and the circulation. The analogy between such cases of phlegmasia dolens and rheumatism, moreover, afforded a strong argument in favour of their blood-origin; and lactic acid, an important constituent of the sweat, and the supposed *materies morbi* of rheumatism, had been actually detected in the blood of puerperal women, either in morbid excess, or as an abnormal agent. Errors of diet, and derangement of the assimilative processes, were shown to be productive of a morbid condition of the blood, both by giving rise to a crude, unassimilable matter, which, on entering the blood-vessels, might prove a source of irritation to the system; and also by producing sympathetic fever, which would tend to impede or arrest the excretory functions. In treating of the cases which followed upon the operation of epidemic influences, the author more particularly spoke of the erysipelatous poison, and showed that whilst its primary action was upon the blood, its secondary might be upon the lining membrane of veins, just as it had been shown to be upon the skin and cellular tissue. The cases following upon pulmonary consumption, and other constitutional disease, needed no particular remark—they were clearly referable to an abnormal condition of the blood. Thus, in fifty-seven out of the sixty puerperal cases, the attack had been preceded by causes calculated to produce a vitiation or impurity of the blood; and with regard to the three remaining, of which no antecedent history was given, coexistent lesions were found in other parts of the body. On investigating the concomitant affections met with in these cases, it was found that in forty-five out of the sixty, some evident local or constitutional malady coexisted with the local affection of the extremity. Thus, in fourteen, or in about one-fourth, there was evidence of the coexistence of some form of thoracic inflammation or disease; in fourteen, also, there were symptoms of abdominal inflammation or disease; in

nine there were cerebral symptoms; whilst in others various local affections were met with. Of the forty non-puerperal cases, ten followed upon some form of fever; eleven upon exposure to cold; three upon suppression of the catamenia; eight occurred in the progress of consumption, or some other constitutional disease, whilst seven followed upon the operation of local causes, calculated to vitiate the blood, such as suppurating wounds, malignant ulcerations, etc., which the author had shown to be capable of giving rise to a morbid condition of the blood, and thus to the phenomena of the disease. An analysis, in the last place, of the concomitant affections and *post mortem* lesions in the non-puerperal cases, showed that, with few exceptions, various local affections coexisted with the affection of the extremity; and in the fatal cases, extensive lesions were found in distant organs and structures. In concluding his investigations, the author observed that the results of clinical experience thus harmonized with those of physiological research; and he finally proceeded to lay down the general principles upon which he conceived the treatment of the disease should be conducted.

A discussion of considerable interest followed the reading of Dr. Mackenzie's very able paper. The speakers were Mr. Henry Lee, Mr. Arnott, Mr. Hodgson, Dr. Copland, and Dr. Locock. As many of their remarks evidently proceeded from an imperfect impression of the scope of the paper, we have thought it best upon the whole entirely to omit the speeches referred to, as well as the author's reply. By following this course, we have been enabled to publish so clear and full an abstract of the paper as will enable our readers to arrive at their own conclusions. Papers like that of Dr. Mackenzie's are too elaborate in their details, and contain too much new matter, to be advantageously subjected to extemporaneous discussion.

TUESDAY, MARCH 22nd, 1853.

JAMES COPLAND, M.D., President, in the chair.

CASE OF GANGRENA SENILIS TREATED SUCCESSFULLY BY AMPUTATION OF THE THIGH HIGH UP. BY T. W. GARLIKE, ESQ.

The patient was a man aged 60, who was the subject of senile gangrene in the right foot. After the disease had progressed some time, a distinct line of demarcation was set up; and formations of matter took place in the leg, producing much distress, which diminished as they subsided. The temporary improvement was followed by an aggravation of the local and constitutional symptoms, and suppuration occurred in the knee-joint. After this, however, as there were evidently renewed attempts of nature to repair the injury, and the patient was importunate to have an operation performed, Mr. Garlike amputated the thigh as high up as possible. The femoral artery was found ossified through two-thirds of its calibre, at the line of section: the profunda was in the same condition. The tube of the femoral stuck out an inch on retraction of the muscles, and the small arteries felt like wire. Not much blood was lost during the operation. The patient made a favourable progress, had a good stump, and regained appetite and flesh. At the end of two months, a ligature was found remaining; and many weeks after, an annulus of bone exfoliated. Fifteen months have elapsed since the operation was performed; and the man continues in good health, except that the left lower limb presents indications of obstructed arterial circulation. The author thought that country air had given to his patient an advantage which hospital patients could not possess.

Mr. ADAMS (of the London Hospital) mentioned corroborative cases. He believed that very many more had occurred than had been recorded. This form of gangrene was by no means limited to persons advanced in life.

Professor FERGUSON said, that it was well for the surgeon to know those precepts of his art which had been formed out of the accumulated experience of his predecessors, and it was right to be generally guided by them in his practice; but it was equally important that he should be able to appreciate exceptional cases, and know when he might be most likely to benefit his patient by a deviation from the common path. He thought that success in Mr. Garlike's case depended upon exceptional treatment having been judiciously applied in an exceptional case; and that a favourable result in a few such cases was not enough to unsettle the established principle, that interference with the knife in gangrena senilis was generally wrong, and that it was most prudent to let nature do her best. Possibly, by amputating high up, the danger of sloughing flaps was lessened. Gangrena senilis was an objectionable term, and was often applied to cases etiologically distinct.

Mr. ARNOTT disliked the term *gangræna senilis*, as it led the mind away from the true nature of the disease. That dry and mummified condition of a part which resulted from obstructed circulation in it, might more appropriately be called *spontaneous gangrene*. It certainly was not an affection peculiar to old age, as was shown by the testimony of many authors: and this very condition had occurred in a child three years and a half old, who had recovered under the use of opiates and calomel in his hands; and the case had been described by Mr. Solly. Mr. Arnott had never seen a case of arteritis, but he did not mean to deny that there really was such a disease.

Mr. H. B. NORMAN thought that there were some circumstances in the case which removed it from the category of cases of senile or spontaneous gangrene. There was, for example, a sthenic inflammation of the knee-joint.

PRACTICABILITY OF ASCERTAINING THE PERMEABILITY OF THE EUSTACHIAN TUBE WITHOUT THE AID OF THE CATHETER. BY JOSEPH TOYNBEE, ESQ., F.R.S.

The method referred to by Mr. TOYNBEE, was the performance of the experiment described in the abstract of his paper read before the Royal Society, given at p. 177 of our number for February 25th. He objected to the use of the Eustachian catheter; first, on account of the uncomfortable sensations which it produced; secondly, on account of the difficulty of applying it. Its use was to be discouraged in obstruction of the Eustachian tube from thickening; but in those more rare cases, where a plug of mucus obstructed the canal, it might be useful. The absence of the sensation produced by swallowing with the mouth and nostrils closed, or of the sound heard with the auroscope, might indicate obstruction from adhesion of the lips of the tube from mucus, or from a mucous plug, or from (more rarely) permanent obstruction.

The Society then adjourned to Tuesday, the 12th of April, when it is expected that a paper by Professor Syme, of Edinburgh, on the "Treatment of Stricture", will be read.

ASSOCIATION INTELLIGENCE.

MEDICAL REFORM BILL:—DEPUTATION TO LORD PALMERSTON.

On Friday the 18th of March, a deputation of the Provincial Medical and Surgical Association waited, by appointment, upon Lord Palmerston, at his residence in Carlton Gardens, to present to his Lordship the Bill that they have prepared for the regulation of the medical profession, and to request him to introduce it into Parliament as a Government measure.

The deputation consisted of Sir Charles Hastings, M.D., D.C.L., President of the Council; A. Robertson, M.D., of Northampton; Geo. Webster, M.D., of Dulwich; Mr. Noble, of Manchester; Mr. Southam, of Manchester; Mr. Cartwright, of Oswestry; Mr. Bree, of Stowmarket; Mr. Bottomley, of Croydon; Mr. Stedman, of Guildford; Mr. Walsh, of Worcester; Mr. Nunneley, of Leeds; Mr. Hastings, Barrister—being the Committee of the Association who have charge of the bill; John Forbes, M.D., President of the Metropolitan Counties' Branch; J. C. Williams, M.D., Nottingham, President of the Midland Counties' Branch; C. Chadwick, M.D., Leeds, President of the Yorkshire Branch; J. Beddingfield, M.D., Needham Market, President of the Suffolk Branch; J. Heygate, M.D., Derby; Mr. Norman, Bath; F. R. Horner, M.D., Hull; G. S. Jenks, M.D., Brighton, Vice-Presidents of the Association; J. Conolly, M.D., Hanwell; C. Cowan, M.D., Reading; W. P. Brookes, M.D., Cheltenham; Mr. Nunn, Colchester; Mr. Clements, Shrewsbury; H. Johnson, M.D., Shrewsbury; E. V. Mainwaring, M.D., Bournemouth, Members of the Council: Dr. Renton, late President of the College of Physicians of Edinburgh; Dr. Combe, President of the College of Surgeons, Edinburgh; Sir John Liddell, of the Medical Department of the Navy; and Mr. Wakley, late M.P. for Finsbury.

The following Members of Parliament accompanied the deputation. The Rt. Hon. T. B. Macaulay; the Rt. Hon. M. T. Baines; the Rt. Hon. T. M. Gibson; Lord Alfred Hervey; Lord Elmsley; Lord Hotham; Mr. O. Ricardo; Mr. Walter; Mr. Brotherton; Sir G. Pechell; Sir T. Winnington; Capt. Rushout; Mr. Laslett; Mr. B. Westhead; Sir H. Willoughby; Mr. W. Knight; Mr. Crawford; Hon. R. H. Clive; Mr. Cobden; Sir G. Goodman; Mr. Bright; Hon. Capt. Duncombe; Mr. Alcock;

Mr. Pigott; Mr. Phinn; Mr. Langton; Mr. Raikes Currie; Mr. Booker; Mr. Aglionby; Mr. Tomline; Mr. Whalley; Mr. C. Berkeley; Mr. G. Berkeley; Mr. Brown; Mr. Martin; Mr. Price; Mr. Headlam; Mr. Cobbett; Mr. Bass; Mr. Drummond; Mr. Mangles; Mr. Bell; Mr. Stafford; Viscount Newark; Mr. Barrow; Mr. Vernon; etc.

The deputation having been courteously received by Lord Palmerston,

Sir CHARLES HASTINGS addressed his Lordship on their behalf, and said that the Provincial Medical and Surgical Association had existed for twenty-one years, and numbered nearly two thousand members, residing in all parts of the kingdom. It was established for the advancement of medical science; but, finding many obstacles from the incongruous state of the profession, they had found that it was absolutely necessary to improve the organization of the profession. They had, from the first, laid down broad principles of medical reform, and had never swerved from them. These were, uniformity of qualification, equal right to practise throughout the United Kingdom, and the adoption of the representative principle in the formation of the councils or other governing bodies. They had from time to time presented petitions to Parliament, and memorials to Government on the subject; and, within the last three years, Sir G. Grey had expressed a resolution to give his sanction to any measure that might be generally approved of by the medical profession. Since that time a Committee of the Association had framed a bill with the assistance of Mr. Hastings, a barrister, which had been repeatedly submitted to the profession, through the medical societies, and the district branches; and it had been altered and improved to meet various suggestions. As the result of their labours, he might now state that the bill had received an unparalleled amount of support. The London College of Physicians had given it their approval, and declared that it was in harmony with their proposed new charter. A deputation from the Edinburgh Colleges was present to express their approval: and it was warmly supported by a vast majority of medical practitioners throughout the kingdom. In fact, no opposition had been made to its principles, though some exceptions might have been taken to its details. The bill embraced the establishment of a Medical Council, of a Board of Examiners before whom every candidate for a right to practise must go, and of a system of registration. Sir Charles then expressed the wish of the Committee, that, should any objections be made to the measure, his Lordship would give them an opportunity of replying through their secretary, Mr. Hastings; and in placing the bill in his Lordship's hands, he trusted that he would think fit to pass it into law, and thus to confer a great benefit, not only on the medical profession, but on the sick and suffering of the whole community.

Dr. RENTON, and Dr. COMBE, on behalf of the medical Colleges of Edinburgh, then expressed their perfect approval of the bill.

Sir JOHN LIDDELL pointed out the need of better education for medical officers in the navy; at present they had men well versed in surgery, but ignorant of pharmacy, and *vice versa*. The establishment of a common Board of Examination would remedy this evil.

Mr. WAKLEY then addressed his Lordship, and said that he had been engaged for twenty-nine years in the work of medical reform, but never till now had he seen much hope of a successful result. Various measures had been introduced into Parliament by Sir James Graham, and by himself, but they had all failed. Now, however, there was a very great approach to unanimity on the subject; and if Lord Palmerston took up the bill as a Government measure, which he implored him to do, it would receive the most powerful support, it would pass into law without any serious opposition, and would be productive of incalculable good.

Dr. WEBSTER, as an old medical reformer, and one supposed to take rather extreme views, begged to express his entire concurrence in the bill.

Mr. BRADY, M.P., and several other gentlemen having spoken to the same effect,

Lord PALMERSTON said that he was deeply impressed with the subject which had been brought before his notice by the deputation, affecting, as it did, not only the interests of the public, but those of a most highly educated and important profession. Many attempts had been made to legislate on it, but without success. When out of office, some years since, he had been requested to take up the subject, but had declined to do so, on account of the discordant opinions then entertained by the medical profession. Now, however, a different feeling seemed to prevail, and a great approach towards unanimity had

evidently been made, as was manifest from the importance and varied character of the deputation. He should give his best attention to the measure that had been laid before him; and if there was a good prospect of bringing it to a satisfactory settlement—and he thought he saw, now, such an opportunity—he should feel it his duty to bring it before Parliament, in conjunction with his colleagues, as a Government measure, and to carry it out with energy. His Lordship added that he should take an early opportunity of communicating with the secretary, Mr. Hastings, on the subject.

Sir CHARLES HASTINGS thanked his Lordship, on behalf of the deputation, for his personal courtesy, and for his promise to take the Bill into his favourable consideration.

The deputation then withdrew.

EDITOR'S LETTER BOX.

MEDICAL REFORM BILL.

LETTER FROM THE SECRETARY OF THE COMMITTEE TO THE EDITOR.

SIR,—As Secretary to the Committee of the Association, appointed at the anniversary meeting held at Oxford in July last, "to consider the Draft Bill prepared by the Central Council", I am anxious to announce to the members of the Association, through the medium of your columns, what have been the proceedings of the Committee up to this time, and what is the present position of affairs in regard to the Bill.

Shortly after their appointment, the Committee proceeded to give their best attention to the measure that had been committed to their charge; and, although scattered over the length and breadth of England, have held various meetings for the purpose of discussion, and have corresponded with me, and with each other, on the subject. One of the first resolutions at which they arrived was, that the measure ought, if possible, to be one for the whole of the United Kingdom; and in pursuance of this determination, they appointed Mr. Nunneley, of Leeds, and myself, as a deputation to confer with the Scotch medical bodies. I am happy to say that our visit to Edinburgh was attended with the happiest results; that the Edinburgh Colleges agreed to the Bill, under certain very reasonable conditions, and that they have since afforded to the Committee a zealous and valuable support. We have also negotiated with the London Colleges of Physicians and Surgeons, and have received from the former an approval of the measure, given upon certain conditions, but in a liberal and disinterested spirit.

The Committee have also reason to believe that an alteration in the Bill, which would not affect its principle, nor diminish, in their opinion, its practical efficiency, would remove any objection which the College of Surgeons may have entertained towards it.

The Committee came a short time since to the resolution that, as the principles of the Bill met with no opposition, and as the objections made all referred, more or less, to matters of detail, they would obtain an earlier solution of these minor difficulties, and thus better fulfil the trust confided to them, by submitting the measure to Lord Palmerston at once, and leaving the arrangement of these details to his Lordship's discretion.

Accordingly, on Friday, the 18th inst., the Committee, accompanied by a deputation from the Scottish Colleges, by a number of medical men from all parts of the kingdom, and by nearly sixty members of Parliament, waited upon Lord Palmerston, by appointment, and placed the Bill in his hands, with an earnest entreaty that he would take it into his favourable consideration.

As you will probably give an account of the interview in your columns, I need only say, that the answer given by his Lordship was one of the most satisfactory nature, and that he promised to communicate with me shortly upon the subject.

Until his Lordship's decision be known, it would be manifestly improper for me to enter into any more detailed explanation of the former proceedings of the Committee; nor would I advise any immediate movement in the Association in favour of the Bill.

The Committee have appointed a sub-Committee, charged with the duty of making preparations for a vigorous agitation in favour of the measure, as soon as it shall be laid on the table of the House; and their experience in the last fortnight has proved to them, that the amount of parliamentary influence

which they can bring to bear, is beyond their most sanguine expectations.

There can, therefore, be no doubt of ultimate success; and I trust that, before the close of the Session, I may be able to congratulate the members of the Association on their having definitely settled the question of medical reform.

I am, etc.,

G. W. HASTINGS.

Oxford Circuit, Shrewsbury, March 21st, 1853.

NEWS AND TOPICS OF THE DAY.

LORD LYTTLETON'S BILL, INTITULED "AN ACT FURTHER TO EXTEND & MAKE COMPULSORY THE PRACTICE OF VACCINATION".

WHEREAS an act was passed in the fourth year of the reign of Her present Majesty, intituled "An Act to extend the Practice of Vaccination": and whereas an act was passed in the fifth year of the same reign, intituled "An Act to amend an Act to extend the Practice of Vaccination": and whereas it is expedient that the practice of vaccination should be still further extended: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. The father or mother of every child born in England or Wales after the first day of August in the year of our Lord one thousand eight hundred and fifty-three shall, within six calendar months after the birth of the said child, or in the event of the death, illness, absence, or inability of the father and mother, then the person who shall have the care, nurture, or custody of the said child, shall, within seven calendar months after the birth of such child, take, or cause to be taken, the said child to the medical officer or practitioner appointed according to the provisions of the first-recited act, or to some other duly qualified practitioner, for the purpose of being vaccinated; and the said medical officer or practitioner shall, and he is hereby required, thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child, without fee or reward other than is provided for by the said recited acts.

II. Upon the successful vaccination of any child, the medical officer or practitioner who shall have performed the operation, shall (without fee or reward) deliver to the father or mother of the said child, or to the person who shall have the care, nurture, or custody of the said child, a certificate under his hand, according to the form of schedule herein-after inserted, marked (A.), that the said child has been successfully vaccinated; and such certificate shall, without further proof, be admissible as evidence of the successful vaccination of such child, in any information or complaint which shall be brought against the father or mother of the said child, or against the person who shall have had the care, nurture, or custody of such child, as aforesaid.

III. If such medical officer or practitioner be of opinion that any child which shall be brought to him for vaccination, is not, at the time when so brought for the purpose aforesaid, in a fit and proper state to be successfully vaccinated, he shall postpone the vaccination until such time as he thinks the operation may be safely and successfully performed; and he shall, in the event of such postponement, thereupon and immediately deliver, without fee or reward, to the father or mother of such child, or the person having the care, nurture, or custody of the said child, a certificate under his hand, according to the form of schedule herein-after inserted, marked (B.), that the child is in an unfit state for successful vaccination; and such certificate shall remain in force for three calendar months from its delivery as aforesaid; and the father or mother of the said child, or the person having the care, nurture, or custody of the said child, shall, within three months next after the delivery of the said certificate as aforesaid, and if the said child be not vaccinated at or by the termination of such period of three months, then, during each succeeding period of three calendar months until such child has been successfully vaccinated, take, or cause to be taken, to the said medical officer or practitioner, such child, to be vaccinated by him; and if the said medical officer or practitioner deem the said child to be then in a fit and proper state for successful vaccination, he shall forthwith vaccinate it accordingly, and shall, without fee or reward, deliver to the father or mother of such child, or person having the care,

nurture, or custody of such child, a certificate under his hand, according to the form of schedule herein-after inserted, marked (A), that such child has been successfully vaccinated; but if the said medical officer or practitioner be of opinion that the child is still in an unfit state for successful vaccination, then he shall again deliver to the father or mother of such child, or person having the care, nurture, or custody of the said child, a certificate under his hand, according to the said form of schedule (B.), that the child is still in an unfit state for successful vaccination; and the said medical officer or practitioner, so long as such child remain in an unfit state for vaccination, and unvaccinated, shall, at the expiration of every succeeding period of three calendar months, deliver, if required, to the said father or mother of such child, or person having the care, nurture, or custody of such child, a fresh certificate under his hand, according to the said form of schedule.

iv. The guardians or overseers of the several unions or parishes in which the operation has been performed, shall keep a register of the persons so reported by the said medical officer or practitioner as having been successfully vaccinated; and such register shall be under the care and control of some person appointed by them for that purpose, who shall, at all reasonable times, allow searches to be made of any such register book in his keeping, and shall give a copy, certified under his hand, of any entry or entries in the same, on payment of the fee herein-after mentioned; (that is to say,) for every search extending over a period of not more than six months, one shilling, and one shilling and sixpence for every additional year, and the sum of sixpence for every single certificate.

v. The registrar of births and deaths in every union, parish, or district, shall, on the birth of any child within that union or parish, give notice in writing, according to the form of schedule herein-after inserted, marked (c), to the father or mother of such child, or in the event of the death, illness, absence, or inability from sickness or otherwise, of the father and mother, then to the person upon whom the care, nurture, or custody of such child shall have devolved, that it is the duty of such father or mother, or person having the care, nurture, or custody of such child as aforesaid, to take care that the said child shall be vaccinated in the manner directed by this act; and if, after such notice, the father or mother of the said child, or the person so having, as aforesaid, the care, nurture, or custody of the said child, shall not accordingly cause such child to be vaccinated, then such father or mother, or person having the care, nurture, or custody of such child as aforesaid, so offending, shall forfeit a sum not exceeding two pounds.

vi. A fee of one penny shall be paid to such registrar for the performance of such duty; and he shall keep a book, to be provided by the guardians or overseers, containing a minute of his having duly given such notice; and the said fee shall be payable in the same manner as the fee now payable to such registrar for registering the birth of such child as aforesaid is paid.

vii. That in the event of a child becoming sick or indisposed, in consequence of having been vaccinated as aforesaid, then and in such case, it shall be the duty of the medical officer and practitioner who vaccinated the said child to attend upon and prescribe for the said child during such sickness or indisposition, and to furnish it with such medicines as may be necessary for its recovery, without fee or reward, other than is provided for by the above first-mentioned act.

viii. If any child be born out of England and Wales, that then the father or mother of such child, or person having the care, nurture, or custody of the said child, shall, within two months after the arrival of the said child in England or Wales, under a penalty of forty shillings, to be recovered under the provisions of this act, cause the said child to be vaccinated by such medical officer or other qualified practitioner as aforesaid, subject to the provisions hereinbefore contained in relation to children born in England.

ix. All penalties by this act imposed shall be recovered before any two justices of the peace for the county, city, or place where the offence shall have happened, upon the information or complaint of any person; and if, on the conviction of the offender, such penalties, with the costs of conviction, shall not forthwith be paid, the same shall be levied by distress and sale of the goods and chattels of the offender, by warrant under the hand and seal of such justices; and for want of distress, such justices may commit every such offender to the common gaol or house of correction for the county, city, or place where the offender shall be committed, without bail or mainprize, for any term not exceeding one calendar month, unless such penalty, and all reasonable charges attending the recovery thereof, shall be sooner paid.

Schedules referred to by this Act.

SCHEDULE (A).

I, the undersigned, hereby certify, that _____, the child of _____, aged _____, of the parish of _____, in the county of _____ has been successfully vaccinated by me.

Dated this _____ day of _____, 185 _____.

(Signed) A.B.

Surgeon to the Union or Parish (as the case may be).

SCHEDULE (B).

I, the undersigned, hereby certify, that I am of opinion that _____, the child of _____, of the parish of _____, in the county of _____, aged _____, is not now in a fit, and proper state to be successfully vaccinated, and I do hereby postpone the vaccination until the _____ day of _____.

Dated this _____ day of _____, 185 _____.

(Signed) A.B.

Surgeon of the Union or Parish (as the case may be).

SCHEDULE (C).

I, the undersigned, hereby give you notice, and require you to have C.D. vaccinated within six months after the birth, or within three months after your having the guardianship of the said C.D., and the said C.D. shall be six months old, pursuant to the Provisions and Directions of the Act of the 16 Victoria, cap. _____. As witness my hand this _____ day of _____, 185 _____.

J.B.

Registrar of Births and Deaths for the _____ Union or Parish (as the case may be).

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

*FRASER, Patrick, M.D., elected Physician to the London Hospital, in the room of the late Dr. Pereira.

GUTHRIE, C. Gardiner, Esq., elected Surgeon to Westminster Hospital.

HOLTHOUSE, Carsten, Esq., appointed Assistant-Surgeon to the Westminster Hospital.

MILLER, James, M.D., appointed, on March 21st, Assistant-Physician to the London Hospital, in the room of Dr. Fraser.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

GRAVES, Robert James, M.D., at his residence, Merrion Square, Dublin, on the 20th instant, after a protracted illness, aged 56. Dr. Graves was one of the most eminent physicians of Dublin; and had a world-wide fame. His writings tended much to advance practical medicine; and we believe that to him the Dublin School of Medicine was chiefly indebted for the introduction and development of clinical teaching, before it was generally instituted in London, in accordance with that plan which at an earlier period raised the University of Edinburgh to so high a degree of celebrity under its Cullens and its Gregorys.

NIXON, Robert Law, M.D., at Grenville Street, Dublin, on the 15th instant.

ORFILA, M., in Paris, on March 12th, aged 70.

OVERWEG, Dr., one of the travellers employed in determining the boundaries of Lake Tsad, in Africa, lately.

SWEENEY, Daniel, M.D., on the 11th instant, at Cork.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

BRINTON, William, M.D. DR. G. VALENTIN'S PHYSIOLOGY. Part I, 8vo., pp. 320. Illustrations on Wood, Copper, and Stone. London: 1853.

COULSON, William. LITHOTOMY AND LITHOTRITY. pp. 388. London: 1853.

WIBLIN, John, Esq., and *HARVEY, Alexander, M.D. ACCOUNT OF YELLOW FEVER, as it occurred on board the R.M.S. ship *La Plata*, in November 1852. London: 1853.

*BENNETT, James Henry, M.D. INFLAMMATION OF THE UTERUS, its Cervix and Appendages, and on its Connexion with Uterine Disease. Third edition. 8vo., pp. 532. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal.

Apothecaries' Hall.—The Next Preliminary Examination in CLASSICS and MATHEMATICS will take place on TUESDAY, JULY 19. Gentlemen who intend to present themselves are requested to give notice on or before June 20. The Classical subjects are:—The Gospel of St. Mark in Greek; the 1st Book of Homer's Iliad; the 1st Book of Virgil's Georgics; the 1st Oration of Cicero against Catiline.

The Classical subjects for the year 1883-84 will be:—The Twelve First Chapters of the Acts of the Apostles in Greek; the 2nd Book of Homer's Iliad; the Catiline War, by Sallust; the 2nd Book of Virgil's Aeneid.

HENRY BLATCH, Secretary to the Court of Examiners.

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CONTENTS.—Preliminary Remarks.—On the Simple Microscope.—On the Construction of the Dioptric Compound Microscope.—Directions for the Use of the Dioptric Compound Microscope.—On the Solar Lamp, Oxhydrogen, and Photo-Electric Microscope.—Of the Catoptric Compound Microscope.

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Edinburgh Graduates.—It is proposed to form a Committee of EDINBURGH GRADUATES, for the purpose of watching over their interests in connexion with rumoured measures of University Reform, and the Parliamentary Representation of Universities. A preliminary Meeting will be held after Easter. Gentlemen desirous of attending, are requested to communicate, by letter, with EDINBURGH, 37, Great Queen Street, Lincoln's Inn Fields, London.

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ASSOCIATION MEDICAL JOURNAL.

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NEW SERIES.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

THE EDITOR attends at the office, 37, Great Queen Street, Lincoln's Inn Fields, on Wednesdays, from 4 to 5 P.M., when not unavoidably prevented by other duties.

ADVERTISEMENTS, letters regarding the ALTERATION OF ADDRESSES, and all communications regarding the COMMERCIAL DEPARTMENT, ought to be addressed to the Publisher, Mr. THOMAS JOHN HONEYMAN, and not to the Editor.

THE RELATIONS OF MEDICAL CORPORATIONS AND MEDICAL SOCIETIES TO THE MEDICAL PROFESSION.

IN our former article on the relative position of the College of Surgeons and the profession, we were engaged in the delicate and certainly distasteful task of examining into the *ways and means* of that learned body, and the influence which dire necessity has exercised in checking the progress of medical education. We now propose to call the attention of our readers to a different view of the same subject; and, as our present purpose is to deal mainly with the position and fortunes of the profession at large, we do not feel ourselves trammelled by that natural reserve which attaches to the minds of those who are called upon to question the policy or to condemn the acts of corporate bodies.

We stated that there was felt to be "a want of harmony between the Council of the College of Surgeons of England, and those whom they nominally represent". Now, we are desirous of showing upon what grounds we have ventured to assert that the representation is *nominal*, not real; and, since we are convinced that much misapprehension exists on this head, we shall make no apology for entering fully into the subject.

First let us ask, Has the medical profession, as a profession, a real existence? that is, Are those conditions fulfilled within it which are considered essential to the permanence of all social states? Without taking the pains to demonstrate at length what those conditions are, we at once answer, that the profession of medicine is a *reality*; and it is sufficient for our purpose to declare that its existence is manifested in *practice*. If, then, practice is the life of medicine, so to speak, those who practise are the *real representatives* of the art; for let it be remembered, that the early discipline by which the student is compelled to concentrate the energies of his mind on the one end before him, and the feeling of allegiance to established truths, and even time-honoured theories, which confirm his belief in the fundamental principles of his profession, only prepare him for the active ministrations of his calling. The sick-room is the field of his duties; and, as it is in the sick-room alone that the reality of what he is doing can be seen, so is it evident that all antecedent or collateral means can only be re-

garded as tributary streams to the great ocean of usefulness.

But it may then be inquired, Does the College of Surgeons take no part in forming the character of those who are to practise? Far be it from us to deny the honour which is due to that Corporation. The College is one of the fountains of education, the appointed, and, in many respects, the well-organised portal of surgery in this kingdom; but it is not the depository, nor, if we may use the expression, the guardian of our professional faith. We might as well call the universities of Oxford and Cambridge the representatives of the church and the bar in England, as the College of Surgeons the representative of the profession of surgery.

We are now, however, led to consider a much more intricate part of the subject, namely, to investigate the causes which have governed the actions of that collective mass which we call the general profession, and particularly to examine into those complex laws of social polity which, by insensible degrees, have given a voice to the real representatives of medicine—the practisers of the art throughout the length and breadth of the land. The operations of medical skill are universal; for, like her great antagonist, Medicine is found at the doors of all classes of the community,—

"Æquo pulsat pede pauperum tabernas
Regumque turres".—

Yet the general diffusion of this catholic spirit alone would not have produced that imperative demand for even-handed justice which is now heard out of the mouths of reformers. A mightier engine has been brought to bear on medical society in common with other institutions; we allude to the formation of companies and associations, which appear to have been established chiefly for protective purposes, in consequence of the pressure from without of circumstances hostile to the well-being of the community concerned.

Now, here we may see exemplified a character which belongs in a peculiar degree to the constitution of human nature—namely, a tendency to change, not only the manners and customs of individuals, but the whole face of society itself; and, adopting the language of a profound thinker, we may go on to affirm, that "the principal cause of this peculiarity is the extensive and constant reaction of the effects upon their causes. The circumstances in which mankind are placed, operating according to their own laws and to the laws of human nature, form the characters of the men; but the men, in their turn, mould and shape the circumstances for themselves, and for those who come after them."* Let us now see how this reciprocal action has affected, and is still likely to affect, the medical commonwealth.

The first effect of the operation of the laws of the particular circumstances, is the establishment of associations and

* Mill's Logic, vol. ii, p. 503.

separate societies. At present, however, associations and societies react on the circumstances which have called them into existence, and two prominent results immediately follow this reaction: first, the overwhelming force of a confederation of men who are crying out for justice for themselves or for the liberties of science; and second, the levelling property which particularly belongs to what may be called the domestic companies of medical men. In our associations and societies, now so general throughout Great Britain, every man finds his place—birth, fortune, success in practice, or collegiate titles, all fail alike to secure for their possessors any particular deference. A man is esteemed for the qualities of his mind, and is listened to in proportion as he can bring those qualities to bear on the subject under discussion. A well-informed apothecary will rank in the estimation of his brother associates, and, therefore, eventually in public opinion, before an illiterate Fellow of a College; and the highly educated and accomplished village doctor will surpass the fashionable physician of superficial acquirements and powerful connexions.

The development of an aristocracy of merit within our ranks is, we think, an evidence that the reaction of such effects on their causes is producing not only progress but improvement.

There yet remains one other phenomenon to be noticed as resulting from this correlation of the elements which compose society. It is acknowledged on all hands that a tone of sobriety and refinement has spread itself generally over the face of the profession; and we venture to suggest it as probable, that the influence which the highest principles have had on the moral taste of the medical public has arisen, in the first place, from a reciprocal vigilance on the part of the minor societies and their component members. A scoffer at religion may dare to put forth his opinions in a book, or even in a lecture; but in a debating society his indecencies would be at once checked by a general feeling of propriety.

We here for the present close our sketch of the interchange of relations which is constantly going on between individuals and congregations, and of the results which spring from it.

CAPABILITIES OF THE DISTRICT BRANCH SYSTEM.

DURING the last few weeks, the medical profession in many parts of the kingdom has been actively engaged in preparing petitions to Parliament, and adopting other measures with the view of obtaining a more just apportionment of the Income Tax. At much inconvenience, and in many instances at considerable personal sacrifice, meetings have been attended: and by this kind of intercourse, as well as by the instrumentality of the JOURNAL, a bond of co-operation has been strengthened between those who require redress of various wrongs—a bond which we trust may at last enable a united profession to achieve not only a more equitable adjustment of the Income Tax, but also the reformation of other abuses which now press upon us both from within and from without. The events of the last few weeks have shown that it was neither contentment nor indifference, which prevented the voice of the medical profession from having been long ago heard loudly protesting against the present assessment of the Income Tax: and these events have likewise shown that within our ASSOCIATION there is a

machinery by which the opinions of the profession can be elicited, through which its rights can be defended, and its complaints be made known. We are very far from asserting that the organization of the ASSOCIATION is complete in all its parts, though we think that the approximation to completeness is most wonderful, when we remember that the institution only came into existence twenty-one years ago, and that long before its creation, and during the whole period which has since elapsed, the profession has been rent asunder by distracting influences. It has been the destiny of our ASSOCIATION greatly to assist in reconciling these differences; and to teach, both by example and precept, that much may be gained by mutual concession, while no reform can be accomplished so long as each party clamours in favour of a theoretical standard of perfection, and denounces every scheme which does not harmonize with its own. If imperfections exist in our constitution, they admit of easy remedy, as circumstances may require or justify; and if the District Branch system were extended, so that all the members of the ASSOCIATION were embraced within the geographical boundaries and the defined jurisdiction of a District Branch, having its local officers and its representatives in the Executive Council of the parent ASSOCIATION, we cannot conceive, theoretically or practically, a sounder basis of organization. This organization is in accordance with the letter and the spirit of our laws: and now that our numbers are swelling so rapidly, the time is evidently approaching when the fullest effect may be given to the *thirteenth* and *fourteenth laws* of our excellent code, viz.:

13. That the District Branches be free to govern themselves as their respective members may think fit; but that the bye-laws ordaining the special government be submitted to the General Council previously to their taking effect, in order to guard against the possibility of any such bye-laws contravening the fundamental laws of the ASSOCIATION.

14. That the District Branches be empowered to present for election such of their members, as it may be deemed advantageous to the general and local interests of the ASSOCIATION to place on the General Council.

It is very evident that by making the Branch system universal, and also changing the *power of presentation for election into the right of actual election*, and restraining at the same time the numbers of those to be elected, there would be constituted, as the Council of the Association, a representative body which might with truth be regarded as a British Medical Parliament. It would likewise be in accordance with our law, custom, and tradition, that along with the representative element, the Council should contain an element of permanency. This might be attained by a limited number of our most experienced members being elected life-members of Council; and in this way the energy and freshness which springs from the representative system would be guided by the conservative caution of mature minds.

The limits of many of the Branches are at present too wide for the establishment of efficient discipline and organization; moreover, a large number of members are not attached to any of the Branch Societies. In these two defects lies our weakness: in their removal might be our strength.

As many of the new members have written to us for information regarding the operation of the Branch System, we have thought that the preceding remarks might be useful, by supplying some information regarding the *undiscovered* or latent excellencies of our constitution.

That the members of the Association who have not yet joined a Branch Society may know how to set about it, we subjoin a list of the District Branches, with their presidents and secretaries.

I. BATH AND BRISTOL BRANCH. *President*, G. Norman, Esq. *Secretaries*, J. S. Bartrum, Esq., J. Colthurst, Esq.

II. DORSETSHIRE BRANCH. *President*, Charles Cowdell, M.D. *Secretary*, Henry A. Arden, Esq.

III. EASTERN BRANCH, including Cambridge, Essex, Huntingdon, and Norfolk. *President*, ——. *Secretaries*, E. M. Murray, M.B., J. B. Pitt, Esq.

IV. LANCASHIRE AND CHESHIRE BRANCH. *President*, Robert Bickersteth, Esq. *Secretaries*, John Hatton, Esq., Ellis Jones, Esq.

V. METROPOLITAN COUNTIES' BRANCH. *President*, John Forbes, M.D. *Secretary*, T. Ogier Ward, M.D.

VI. MIDLAND COUNTIES' BRANCH. *President*, J. C. Williams, M.D. *Secretaries*, Henry Goode, M.D., T. W. Fearn, Esq., Jos. White, Esq., J. Barclay, M.D., T. C. Simpson, Esq.

VII. NORTH WALES BRANCH. *President*, Ed. T. Hughes, M.D. *Secretaries*, Ed. Williams, M.D., D. K. Jones, Esq.

VIII. SHROPSHIRE BRANCH. *President*, Robert Broughton, Esq. *Secretaries*, Thomas J. Drury, M.D., John Robert Humphreys, Esq.

IX. SOUTH EASTERN BRANCH. *President*, ——. *Secretary*, Peter Martin, Esq.

X. SOUTH WESTERN BRANCH. *President*, P. C. De la Garde, Esq. *Secretary*, William Dashwood Kingdon, M.D.

XI. SOUTH WALES BRANCH. *President*, George Gwynne Bird, M.D. *Secretary*, W. H. Michael, Esq.

XII. SUFFOLK BRANCH. *President*, James Bedingfield, M.D. *Secretary*, W. P. Kirkman, M.D.

XIII. WEST SOMERSET BRANCH. *President*, S. F. Bridge, Esq. *Secretary*, F. H. Woodforde, M.D.

XIV. YORKSHIRE BRANCH. *President*, Charles Chadwick, M.D. *Secretary*, William Materson, Esq.

This list shows that the greater part of the north of England, and the whole of Scotland and Ireland, are without Branch Societies. As our numbers are as yet few in Ireland, we cannot in the mean time hope to see Branch Societies established there: but in the north of England, such towns as Newcastle and Carlisle might become influential centres; and in Scotland several District Branches might without difficulty be erected. For instance, the districts with the most convenient means of access to Inverness, Aberdeen, St. Andrew's, Edinburgh, Glasgow, and Dumfries, might be joined together for the purpose of forming Branches; each of the proposed Branches having respectively as head-quarters one of the leading towns just enumerated.

THE INCOME-TAX.

IN consequence of a communication from the Metropolitan Counties Branch, made to Dr. Malden through Dr. Cormack, the former gentleman consulted the Central Council at Worcester as to the expediency of a deputation from the whole Association waiting upon the Chancellor of the Exchequer. The Central Council are of opinion that such a course is not expedient. They likewise express a desire that the members of the Association be again urged to sign petitions similar to those which have emanated from Worcester and other places. At Leeds, Dr. Chadwick, by means of a circular, obtained about sixty signatures to the same form of petition as that which we printed at p. 219.

ORIGINAL COMMUNICATIONS.

VACCINE LYMPH.

By J. A. HINGESTON, Esq., Surgeon.

(Read before the Brighton and Sussex Medico-Chirurgical Society, March 3rd, 1853.)

WHEN Jenner broached his opinions concerning Vaccination, in 1798, his idea was by no means a new one. It took most of his countrymen by surprise, and, for the time, provoked against himself the most unfounded suspicions. But a ray of light had already dawned upon this obscure subject: for, as early as 1770, nearly thirty years previously, his Majesty, George the Third, had directed the attention of his Parliament to this point in a speech from the throne, in which he mentioned with deep concern the spreading of a fatal disease of an eruptive character among the horned cattle; and it appears, from the debates which arose on this curious political topic, that the previous existence of the disease was not unknown to some of the members of the House of Commons. Indeed, it had been observed in this country as far back as 1745; and its ravages continued as late as 1780. It was known, likewise, that the same eruptive disease had infested distant parts of Europe; and that in 1711, between eighty and ninety years before Jenner appeared on the field, a pustular disease of this description had broken out in Italy, spread with astonishing rapidity, and in a few months carried off in Piedmont no less than 70,000 head of cattle. Ramazzini, Lancisi, and Lanzani, who describe this epidemic, do not hesitate in regarding it as true variola, or small-pox. Vicq d'Azyr noticed a mild form of the same malady in Picardy. What Jenner saw in 1798 was the remains of this terrible disorder.

These historical facts seem to have been unknown to the discoverer of vaccination, whose genius has shed so lasting a lustre on the title of the British physician. He evidently acted on his own sagacity, the results of which are consequently so much the more valuable, as they are the products of an enquiry the most original of its kind. But while Jenner was thus pursuing his investigations by himself, Dr. Layard, in his second paper read before the Royal Society, mentioned inoculation from cow to cow as being employed to mitigate the disease in these animals, with as much success as inoculation was practised among human beings for a similar purpose. At this period, small-pox was attracting the attention of the world. It was making great havoc everywhere; men and cattle suffered alike from its ravages; and it was remarked, that during the prevalence of the small-pox, in a given locality, several dairies would become affected with cow-pox at the same time. Horses, as well as cows, suffered from it. Jenner imputed the origin of the vaccine virus to the horse's greasy heels, which he regarded as the real source of the variolous disease in the cow. He lived to correct this erroneous notion, which, however, he had his reasons for entertaining. He remarked the disposition to grease in the horse, occurring chiefly in the spring and autumn, when the cow-pox also occurs in the dairies. He imagined that it was conveyed by the man who groomed the horse to the cow, which he likewise milked, and that in this way the cow became infected with the variolous disease. There was some truth in this supposition. For it is now ascertained that the horse, like the cow, is liable to the variolous disease, and suffers from its attacking that part of the heel, apt to become greasy, where the skin is the thinnest and most favourable to the formation of the vesicles. Hence the pardonable mistake into which Jenner fell. He was never quite satisfied with his own conclusions. His sagacity pointed out to him the want of identity in the two diseases, and some facts led him to suppose at last that the greasy heel might be a modified small-pox—an idea not far from the truth. It must have staggered his contemporaries to be told, that from the horse's heels the cow contracted a disease, which, when transferred to man, proved to be a protective against the small-pox; and yet such was

the fact, although not according to Jenner's interpretation of it.

But this is not all that relates to the variolous disease among cattle; for there is information of a much more recent date than this, and not less interesting in its character. The cows in Bengal suffer from a disease, the same as ours, and the natives call it by a name significant of the word variola. Mr. Mc Pherson, in India, vaccinated a child in 1832 with virus taken from an Indian cow, and the true variolous vesicle was produced. Mr. Wood, at Gwalpara, 1839, produced the same phenomena in the same way; only the symptoms were in his case both very severe and threatening. The intensity of these symptoms might have arisen from an accidental intensity of the disease in the cow; although, when first transferred to man, its effects are usually the more intense, in exact proportion as they approach nearer to their source from the cow.

The small-pox has been conveyed from man to the cow, just as it has been communicated from the cow to man; and Dr. Waterhouse, of Massachusetts, in a letter to Dr. Jenner, quoted in the *Prov. Med. and Surg. Journal* (vol. viii, p. 23), gives a case in point. This experiment is said to have succeeded in Berlin in 1801. M. Viborg, of Copenhagen, declares he has communicated the disease to dogs, apes, and swine. Dr. McMichael informed the College of Physicians, in 1828, that vaccine matter having failed in Egypt, the medical gentlemen were led to institute certain experiments, by which it was discovered, that by inoculating a cow with the small-pox from the human body, fine active vaccine virus was produced, by which children were vaccinated with complete success. Professor Sonderland, of Bremen, wrapped cows in sheets in which small-pox patients had slept, and thus succeeded in infecting those animals. Gassner had already variolated the cow in Germany, as far back as 1807. Dr. Basil Thiele, of Kasan, in South Russia, succeeded in similar experiments. He appears to have been successful in 1836, at a time when Mr. Ceely was fruitlessly engaged in endeavours to make arrangements for some experiments of his own. In 1838 Dr. Thiele was again successful. He fixed upon some milch cows, and operated upon them in the spring, maintaining the cow-house at a temperature of 66° Fahrenheit. The udder was the part he selected for inoculation, and the animals on which he succeeded were precisely such as Mr. Ceely rejected. Many punctures were rewarded with the result of only a few vesicles. It will be seen, that the chance of success is very uncertain, and that different operators, in different quarters of the globe, unanimously acknowledge the difficulties with which variolation of the cow from the human subject is surrounded. Perhaps we do not yet know the precise conditions under which it must be undertaken; nor are we yet sufficiently acquainted with the laws of animal poisons, to enter on the investigation with the facility proper for scientific research. Although more than half a century has elapsed since the time of Jenner, vaccination is but in its infancy, and calls for the combined energies of pathologists all over the world for its further elucidation and pursuit.

In this country, Mr. Ceely, of Aylesbury, has been distinguished for accomplishing this object. He produced vesicles on the cow, from which he vaccinated several hundred patients, who exhibited all the phenomena of vaccination in the most complete degree: there was no attendant eruption, nor anything else that could lead him to suspect that he had not in this manner propagated the genuine variola vaccina. This virus was tested by other practitioners, whose experience in vaccination left no room for doubting the just weight of their testimony; and these gentlemen affirmed that it produced regular vesicles, exactly like those so beautifully delineated in Jenner's first publication. Others, who saw these vesicles without being aware from whence the virus that produced them had been drawn, acknowledged their correctness. Nothing could be more conclusive than experiments such as these, which, in a practical point of view, established the identity of the two diseases. The cow had been inoculated with virus

taken from man, and the virus taken from the cow had produced the usual phenomena of vaccination. The fact was self-evident, and reasoning was at an end.

Moreover, since Mr. Ceely vaccinated the cow from man, it has been effected at Passy, near Paris; and the lymph found there among the cows, in 1836, has since then been passed through the animals again; and this is called retro-inoculation. The human lymph, when transmitted in this manner, loses some of its activity, rises later, and produces smaller vesicles; but it recovers its activity by successive inoculations on man again. This, again, is one of those delicate tests, which speaks for itself.

It would seem, then, that cow-pox and the small-pox are identical diseases, and that the vaccine disease is not the preventive of small-pox, but the small-pox itself—the substitute, rather than the antidote; so that the person who has been vaccinated, has had the small-pox in a mild form. Cattle are liable to the small-pox, which co-exists with the same disease as an epidemic among men. When severe in cattle, it produces by inoculation a similar severity in man; and, as man may have it from the cow, so the cow may have it from man. When a mild small-pox is taken from the cow, and conveyed by vaccination to the human body, it produces a mild disease, such as Jenner first described it; and proves to be, in the greater number of instances, an effectual protective against the infection of small-pox. No one of any experience can pretend to contradict this substantial statement of facts; nor dare to deny that vaccination, properly performed, is a positive safeguard against the small-pox pestilence. This datum is irrefragable, and forms a fixed point in the history of medicine, from which a new era commences.

Subsequently to Jenner, nothing new has been added to his original discoveries. What he saw, we continue to see, such as he described it. The inflamed point of the third day; the small pustule of the sixth; the areola, sometimes extensive and erysipelatous, of the eighth; the dark scab of the twelfth; and the black, dry crust, of the fourteenth, are the same now as they were then. He said the virus was most potent while it was lymphatic, that is, on the seventh day; and so it now is. He said that deep incisions in vaccinating, or inoculating, were injurious; and that puncturing or wounding the cuticle alone was the safest and most effectual mode of performing this little operation; and we find it to be so. He remarked, that cow-pox was not infectious, but only contagious, which every one is aware of. He considered that the areola or inflammation took place sooner in cases disposed to reject the specific action of the virus; and, in second vaccinations, we find the inflammation rising on the sixth day, instead of on the eighth. In his time, when persons performed vaccination with imperfect virus, it of course failed as a protective agent; and what happened then, happens now, and is one of the reasons why the public have lost their implicit confidence in its protective power. He declared, that vaccine virus loses none of its characteristic properties by passing through successive generations; and his declaration has proved itself correct; for, if it has failed in virtue or aspect, the failure is owing, not to successive transmissions, but either to the virus having been badly selected, or to the constitution from which it was taken being disordered at the time. There is a proper time, as well as a proper state of health, in the progress of the vesicle, when the lymph is ripe and active; but in default of this, it proves effete or immature. Jenner stated the time for taking the lymph to be from the fifth to the eighth day, just before the areola forms; and what he stated is true. Dr. Bryce, of Edinburgh, advised testing the efficacy of each vaccination by a second, performed a few days after the first. This is a beautiful illustration of the secondary vaccination running through its stages with accelerated speed: it is called "*Bryce's test*". The vesicle from which lymph is taken ought to be a perfectly correct one; otherwise, failure is likely to ensue in propagating virus with it. A deviation in the character of the cow-pox may be perpetuated by vaccinating from a previous vesicle. It is to be regretted, that sufficient attention

is not always paid to a contingency so important as this. The presence of eruptive diseases modifies the true character of the vesicle; and of these cutaneous affections, herpes is said to be the worst. One vesicle ought never to be touched, but left to run its course unmolested. It serves as a criterion of the validity of the vaccine virus. The presence of a cicatrix cannot be relied on as a proof of the vaccination being protective, although its absence is very nearly proof positive against it. A second vaccination will sometimes take effect, close by an old cicatrix of the most approved appearance. Idiosyncracies are beyond our calculation, and there is no end to them. Some resist vaccination or inoculation at one time, and then take it at another; others take the natural small-pox a second time; some never take it at all; some take it after inoculation; and others, again, have taken it as often as three times or more in the course of their lives. In some persons, the protective power of vaccination is lost or weakened by age; in others, it is never lost; and in very few, it is not even the slightest protection. These anomalies form no ground of argument either for or against its efficacy as a protective agent, but remain to be considered apart as individual elements, the relative values of which are unknown.

We are now prepared to consider the importance of the experiments performed by Mr. Ceely, of Aylesbury, and Mr. Badcock, of Brighton, both of whom have given their minds to this inquiry. It does not appear that any others have done the same as they have, in this country.

Variola was long known in the Vale of Aylesbury, as a disease infesting the cows in the autumn, winter, and spring of the year. Sometimes it would be generally prevalent, but at other times there were only solitary cases. Forty years would elapse without its making its appearance in a particular dairy; while, in a neighbouring farm, it would break out as often as twice in the space of five years. A fresh cow might bring it, or it showed itself no one knew how. Milch cows alone were not the subjects of it, neither were the uplands or lowlands its favourite haunts. It was milder in some seasons than in others, and more severe in one animal than in another. The teats of a healthy cow would become tender and hot, and the milk would diminish. Vesicles formed on the udder, around the base of the nipple: their numbers would vary, but pendulous udders had the most. The dark-red and spotted cows suffered more than those of a lighter colour. The attack lasted four or five weeks. Some of the animals escaped the disease, though it was highly contagious. The vesicles rose up in size from that of a pea to a horse-bean. They were broken in milking, which left an irritable ulcer. Each vesicle had a central depression, with a hard margin, and, if it were opened or torn, a thin amber-coloured fluid oozed out. Then a dark brown oval crust formed. On the eighth day, an areola of inflammation appeared, chiefly discernible in the light cows. Lymph burst from under the crust on the eleventh day, and on the fourteenth there was a decidedly black scab. The peculiar odour of small-pox attended the last stages of the eruption. The black crusts hung about till the third or fourth week. Twenty-one days completed the disease; the last, or crusted stage, being the most protracted.

In cows, the malady is modified by circumstances not incidental to man. The rough handling of the milkers breaks the vesicles, and disturbs the natural order of the disease; while, by milking one cow after another, they go on vaccinating and re-vaccinating the whole stock, until the several phenomena, usually so distinct when left to themselves, are all mingled in one. Thus, the primary and secondary vaccination—Jenner's vesicle and Bryce's test—are coupled in the same animal; broken vesicles are blended with whole ones; the first stage is conjoined with the last; old crusts and fresh lymph are huddled together on a single udder. Besides, the cows are liable to spurious pocks, which are not a little puzzling; for the cow-pox is not so frequent an occurrence in the dairy as to render it an easy thing to be decided on at a glance, without running the risk of mistaking a

spurious eruption for the genuine disease. And, indeed, milkers catching the false pocks, fancy themselves vaccinated, and only discover their error by being unexpectedly seized with the small-pox, from which they had imagined themselves exempt.

Mr. Ceely considers mere contact sufficient for vaccination, without any visible abrasion of the skin. The milkers contract the disease simply from handling the teats while milking, and suffer from it on their hands and face: the men, between their fingers, on the back and palms of their hands, on their eyelids, cheeks, and foreheads; the women, wearing short sleeves, on their forearms and wrists, from contact with their own hands, or the animal's body. Abscesses and sinuses sometimes follow these eruptions, as well as axillary swellings. Occasionally, those who have already been vaccinated, re-vaccinate themselves from the cow; and the symptoms of the latter are sometimes more distressing than those which they remember of their former vaccination.

There is some difficulty in procuring the primary lymph, owing to the difficulty of finding a cow properly infected with a vaccine vesicle just ripe for transfer; for the vesicle must not have been broken, nor must the matter it contains be taken away earlier than the fifth, nor later than the ninth day. And when the primary lymph has been at length procured from the cow, it is not always quite so easy to vaccinate human beings with it; because it happens that morbid poisons do not easily pass from animals of one class to those of another, as from the cow to man, and the converse. Man, indeed, more readily receives the morbid poisons of the lower animals, than they do of him; but even this reciprocal susceptibility varies so much, and is open to so many exceptions, that nothing certain can be said about it.

Mr. Ceely owns (*Prov. Med. and Surg. Journ.* vol. viii, 1840, p. 343,) that one half of his attempts to vaccinate with primary lymph failed, although vaccination from the human subject succeeded in the same persons; or else, that, if he did succeed, his success did not prevent secondary vaccination from taking effect. A small number vaccinated with primary lymph, presented vesicles of the highest degree of beauty and correctness, after more or less delay; but even then not every one of the punctures took effect. Similar results ensued with lymph taken from the hands of the milkers, or from early removes of the primary lymph. The symptoms of primary vaccination direct from the cow, are more intense and protracted than in that from man to man. Some patients need preparation before being vaccinated with primary lymph, as they used to be for inoculation for small-pox. Vaccine lymph becomes milder by transmission from man to man: more *humanized*, though its generic character and properties remain the same. Constitutional disturbance is not necessary for the efficacy of the vaccine virus, for the finest vesicles arise with the smallest amount of disturbance to the general health.

Unlike man, the cow may be vaccinated (not *inoculated*, but *vaccinated*) without abrasion of the skin; contact alone being all that is requisite for effecting it.

It is a most singular property of the vaccine virus, that, by having passed through the economy of a lower animal, it comes out with nothing more of the small-pox pestilence in it than exactly so much as is innocuous as a morbid, and yet thoroughly efficient as a protective agent. This transmutation of an infectious into a contagious disease, is as remarkable as it is inexplicable, and stimulates our curiosity to the last degree of earnest inquiry and research.

There is a good deal of expense attendant on inoculating cows with the small-pox, as well as a great deal of difficulty and uncertainty in obtaining the required results. Obstacles such as these deter others from entering on experiments likely to clear up points that still are doubtful; but they enhance the value of the data already given, and reflect the greater credit on those who have alone stepped forward to explore the question.

Mr. Badcock, of Brighton, has gone over the same ground as Mr. Ceely. In his opinion, the cows used to suffer from

the small-pox much more frequently years ago than they do now, since vaccination has become general, and helped in diminishing the disease. His attention was first drawn to this subject by the frequent occurrence of small-pox after vaccination. He himself was attacked by it; and it was this misfortune which led him to doubt the efficacy of the vaccine lymph then in vogue. He looked out for cow-pox among the cows, but found the malady, such as Jenner described it, scarcely known in the dairies. He then inoculated a cow with the small-pox virus, in 1840. A pamphlet, published in 1807, by Mr. Pruen, entitled *A Comparative Sketch of the Variolous and Vaccine Virus*, first awakened his mind to this idea. He invited several medical men to inspect the vesicle which he had thus produced, on the animal, and they agreed as to its genuine character. By means of matter taken from this cow, he vaccinated one of his own children, and produced the true vaccine vesicle. His expectations were answered. Other children were next vaccinated with the matter taken from his own child, as well as with that from the cow; and the results were equally favourable. More than twenty medical men inspected his child's arm during the progress of the vaccine vesicle, and many of them requested supplies of lymph from it, in order to ascertain its effects on others under their care. It did not disappoint any one of them. It was beyond question, that Mr. Badcock had succeeded in engendering and propagating a fresh supply of primary vaccine virus.

Soon afterwards, Mr. Ceely's similar experiments became known to him, which encouraged him to persevere in his pursuit. Residing in a populous town, where the small-pox is not unfrequent, and possessing cows of his own, which he appropriated to this particular purpose, he was enabled to inoculate some of these animals; and, out of three hundred attempts, at different times, on two hundred cows, he succeeded in infecting about thirty of them with the small-pox virus. The result of the operation is very uncertain. The most susceptible are those with calf. He never succeeded on a barren cow: he was once successful on a cow-calf, three weeks old.

Mr. Badcock has vaccinated upwards of twelve thousand children himself, with matter drawn from this source. The medical men of Brighton have frequently used the same matter, as is very well known. During one month, Mr. Badcock furnished above eight hundred charges in this town alone, besides more which he distributed to the medical practitioners resident elsewhere. It does not appear that any of the medical men have ever doubted the genuineness and efficacy of the lymph thus obtained. Children, after being vaccinated with it, have slept in the same bed with those sick of the small-pox, without catching the disease. Mr. Ceely, of Aylesbury, submitted it to the very trying test of subsequent inoculation with the small-pox, but without effect. The parish surgeon of Brighton has continued his vaccination from a stock of lymph originally drawn from one of Mr. Badcock's cows a long time since, nor would he willingly give it up. From those competent to form a just estimate of its value, it would appear that there is good ground for believing this new vaccine, or modified small-pox, to be superior to the old in the intensity of its action as well as in its certainty as a protective agent.

Mr. Badcock, who has watched its progress and effects with the closest attention, is convinced of its superiority. As far as his observation has extended, he has not known of a single failure. But then he is a clever vaccinator, and never neglects any one of those rules so indispensable to success, and to the omission of which may be imputed most of the miscarriages alleged against vaccination. When revaccination is practised, the primary lymph, such as Mr. Badcock's, is of the utmost value, on account of the intensity with which it acts, and the certainty of its taking effect, supposing the constitution unprotected by previous vaccination.

Against vaccination with primary lymph, it has been charged that it causes extensive inflammation, sloughs, etc.: and cases are quoted in illustration. But the

same objections may be urged against vaccination with Jenner's lymph, and even against inoculation with the small-pox virus. The same matter which vaccinates one child in the best and safest manner, will, in the same family, give rise in another child to disagreeable, if not alarming symptoms. But these cases are rare, and may be regarded as exceptions depending on peculiarities of health, over which we have no control. The scrofulous habit is most obnoxious to penalties of this sort: and the presence of eruptive diseases, or of general ill-health, for the time being, contraindicate the propriety of vaccination, as all the world is aware of. No one ever maintains that the introduction of vaccine virus into the system is something to be desired; on the contrary, it is, at the best, but a matter of choice between two evils—the lesser one, or cow-pox, which is harmless, and the greater, or small-pox, which is always hideous, and sometimes fatal.

The old lymph of Jenner's is supposed to have become less potent, from the length of time it has been in use, and therefore the less to be relied on. A new lymph, producing the genuine vaccine vesicle, has been obtained from the cow afresh, by previously inoculating the animal with human small-pox; and this new lymph, thus procured, is believed to be more efficacious than that of Jenner's original stock. The question is not easily settled; but the amount of combined evidence and experience speak loudly, as far as they go, in favour of the new lymph thus recently obtained.

Mr. Badcock's experiments, next to those of Mr. Ceely's, are of the highest practical importance. In this country they stand alone. Not many are likely to start up as rivals in the same pursuit; for the task involves more trouble, time, expense, and disappointment, than most people are willing or able to incur. Remuneration there can be none. The love of science alone can be the motive: and yet it is evident that, in the execution of a work, costing the continual outlay of capital, something more substantial than the best individual zeal is clearly requisite. What yields a common advantage might be maintained at a common expense. It is an undertaking that merits the general attention of the nation, and is not only not beneath the serious consideration of the legislature, but is one of those chief items of sanitary reform that concern the millions of this vast empire.

Whatever may be the cause assigned, the decline of the old lymph is acknowledged. It has been pointed out by competent observers in every quarter of the globe. In a letter to Dr. Golding Bird, in the month of December 1851, Mr. Ceely remarks: "that vaccine lymph can be and has been deteriorated by a variety of causes, is indisputable. The fact is notorious in India (*Quarterly Journal of the Calcutta Medical and Physiological Society*, April 19th, 1837); it has been proved in Paris (*Notice sur le Cow-pox découvert à Passy*, par M. Bousquet, 1836); it has been demonstrated in London (*Report on Small-pox*, by (the late) Dr. Gregory, *Med. Gaz.* Feb. 24th, 1850). That it may be rendered weak and inefficient by accident or carelessness, by ignorance, or something worse, every experienced vaccinator will readily allow." The inefficiency of vaccine has manifested itself in America. Application was made to Mr. Badcock for a fresh supply, and his new lymph was introduced into the United States by Dr. Coale, of Boston, where it was so much approved of by Dr. Clarke and the other medical officers of the Massachusetts General Hospital, that it has entirely superseded the old lymph previously employed at that institution.

In the foregoing remarks, my object has been to bring the subject of vaccination before the notice of the medical profession. My materials have been drawn from various sources; and, though I have not quoted my authorities, yet, as I disclaim anything like originality on my part, every one will feel himself entitled to appropriate what is properly his own. I have neither the intention nor wish to be anything else than a copyist. The subject is deeply interesting one, and is becoming more and more so.

so every day. It is already attracting the attention of the legislature. In the army, it is an indispensable requisite; in private practice, it is of paramount importance, because the validity of vaccination depends on the skill and care of the vaccinator.

Brighton, March 16th, 1853.

SKETCH OF THE CHOLERA EPIDEMIC WHICH PREVAILED AT SOUTHAMPTON IN THE SUMMER OF 1849.

By W. S. OKE, M.D., Senior Physician of the Royal South Hants Infirmary.

(Read before the Southampton Medical Society, Feb. 1st, 1853.)

BEFORE entering upon the more immediate subject of this paper, I deem it right to make a few introductory remarks upon the town in which we live.

TOPOGRAPHY. Southampton is situated in 50 deg. 54 min. 34 sec. N. lat., and 37 min. 7 sec. W. long. It occupies a tongue of land, about a mile in breadth, abutting towards the S.W., upon a small inlet of the sea, called the Southampton Water, which flows and ebbs N.W. and S.E. It is bounded on the east by the Itchen river; on the west, by a bay of the inlet; and on the north, by a wooded common, gradually rising to an elevation of 234 feet. It is, for the most part, built upon a bed of gravel, beneath which is argillaceous deposit. The sea in its ebb, especially at spring tides, recedes to a considerable distance, exposing an extensive surface of muddy sand, the appearance of which has been considered by some metropolitan physicians to be a *prima facie* evidence against the salubrity of the town; but this charge is completely disproved by the fact, that the exhalations at low water by the solar rays have never been productive of any endemic febrile disease whatever, whether intermittent, remittent, or continued. Indeed, the flow of the tides, and the ventilation almost always accompanying it, will probably ever prevent such a result; in confirmation of which, there are not many towns in the United Kingdom, with an equal amount of population, where so few cases of such fevers are registered. It is true, that the registrar's books show a high rate of mortality in its crowded districts, especially in the parish of St. Mary; but it is clear that this has not been caused by malarious exhalation at ebb-tides, for the same registry shows that, in the less crowded districts, parts of which are also contiguous to the water, the rate of mortality is not higher than that of some of the most healthy towns in Great Britain. The cause, therefore, must be sought for elsewhere; and doubtless it may be found in the rapid increase of population which of late years has taken place, from the extensive establishments connected with railways, docks, and steam-navigation companies.

POPULATION.

Increase in decennial periods.

In 1801, the population was 7,629	
1811, 9,260	1631
1821, 12,913	3653
1831, 18,670	5757
1841, 27,103	8433
1851, 34,092	6989

It will thus be seen that, in a cycle of twenty years, the population of the town has been nearly doubled; and, taking the parish of St. Mary alone, the increase is still more remarkable; the amount in 1831 being 8,530, and 21,012 in 1851! These statistics of the population have been introduced to account also for the great difference betwixt the two choleric epidemics which invaded Southampton, as regards both their extent and mortality.

ORIGIN AND PROGRESS OF CHOLERA. The pestilential cholera of the nineteenth century* commenced at Jessore,

* That the very same disease was known as early as the first century, the following quotation from Celsus will clearly show:—"Primoque facienda mentio est cholerae; quia commune id stomachi atque intestinorum vitium videtur. Nam simul et dejectio et vomitus est: preterque hæc inflatio est, intestina torquentur, bilis supra infraque erumpit, primum aquæ similis, deinde ut in eâ recens caro lota esse videatur, interdum alba, nonnunquam

a populous town in the Delta of the Ganges, in 1818, from which point it spread in every direction throughout India and Asia, confining itself to that quarter of the globe till 1831, when it took a north-western course through Russia, Poland, Austria, and Prussia; ravaging Vienna, Berlin, and Hamburg, in its way to Great Britain, where it made its first appearance at Sunderland on the 26th of October, 1831; but no cases were reported in London till the middle of February 1832.* The disease first invaded Southampton in the summer of 1833. As it was ushered in by a case which terminated fatally in a few hours, a great panic was caused, especially as cholera prevailed in many parts of the kingdom. The patient was a poor girl of the age of puberty, residing in Russell Street, St. Mary's. Her friends attributed the attack to a meal of cockles, which might indeed have been an exciting cause; but the symptoms were too characteristic to be mistaken. Every attention was paid which the urgency of the case required; and her medical attendant remained at her bed-side till she sank from exhaustion under incessant vomiting and purging of rice-water evacuations. The bedding, bed-clothes, and everything that could be the means of propagating the disease, were burnt by the order of the municipal authorities: and the house was cleansed and whitewashed. Whether from these precautions or not, the disease did not spread; nor did it prevail to any extent in other parts of the town; so that the number of cases were not probably more than twelve, nor the deaths above four. The population at this period may be estimated at about 20,360. From this time the town was free from cholera till the year 1849, when it was again visited by the disease, and far more severely than before. The second epidemic commenced on the 17th of June, and terminated on the 21st of September, at which period the population had increased 25·78 per cent., and amounted to about 30,000.

METEOROLOGICAL REMARKS. During the prevalence of the disease, Dr. Drew's Meteorological Register gives the following results; and the public are much indebted to this gentleman for establishing and superintending a register at Southampton, which, for its accuracy and completeness, is probably equal to any in the kingdom.

Barometer.

	Date.	Highest.	Date.	Lowest.	Mean.	Monthly Range.
June	3rd	30·215	10th	29·633	29·988	·582
July	12th	30·344	24th	29·479	29·934	·865
August	20th	30·366	13th	29·629	29·997	·737
Sept.	19th	30·319	30th	29·198	29·886	1·121

Thermometer.

	Date.	Highest.	Date.	Lowest.	Adopted Mean.	Monthly Range.
June	24th	87·0	11th	42·5	60·1	45·1
July	16th	83·	1st	42·6	60·3	40·4
August	8th	77·6	17th	41·6	60·7	36·
Sept.	5th	76·6	19th	37·6	56·6	39·

N.B. On the 11th of July, the thermometer in the sun, at 2 P.M., was 120; in August, 104.

Hygrometer.

	Degree of Humidity.	Inches of Rain.
June	·731	0·992
July	·775	5·128
August	·820	0·451
Sept.	·852	4·531

Wind.

Force—6 signifying a Gale.

June	·1	4th and 8th. Thunder.
July	·3	26th. Thunder.
August	·2	11th and 12th. Lightning.
Sept.	·2	1st. Thunder and lightning for 2 hours

The principal points to be noticed in the foregoing results are, 1st, that the temperature of the atmosphere was

nigra vel varia. Ergo eo nomine morbum hunc *cholera* Græci nominant. Sepe etiam crura manusque contrahunt, urget sitis, anima deficit: quibus concurrentibus, non mirum est si subito quis moriatur. Si post suppressam cholerae febriam manet, alvum duci necessarium est: tum cibis vinoque utendum est."—Liber iv, ch. xi.

* Copland's Dictionary.

comparatively high; 2nd, that, as the epidemic declined, the thermometer fell in fourteen days from 76°6 to 37°6; and thirdly, that, from June to the end of September, the weather was remarkably still, not amounting to 1 of the above scale: but whether these facts had any influence over the epidemic, one way or another, it is difficult to determine.

MORTALITY. The registered number of deaths from this epidemic was 239; but to state with accuracy in what proportion the deaths were to the number of cases treated, is scarcely possible. I have, however, obtained from a gentleman who attended the largest amount of parochial patients, some statistical facts, which will enable me in some degree to make the attempt. He states that, including incipient or diarrhoeal cases, he noted down 1,500 as having been attended by himself, and that of these, 40 died, or 1 in 37: 37×239 will give 8,843, which is probably about the number of cases, of all grades, that were under treatment by the medical gentlemen of Southampton. His note-book furnishes also the following particulars: that the epidemic was most malignant from the 14th of July to the 14th of August, and that, during that period, he attended 360 cases, of which he considers the cases of diarrhoea and true cholera were about equally divided; that of the latter, viz., 180, 90 ran into collapse; that of these, 40 died, or 1 in 2·25; that of the whole of the cases of true cholera, the deaths were one in 4·5, and of all attacked, 1 in 9: but, in the approach and decline of the disease, the deaths were not more than 1 in 37.

It is important to remark that, whilst the disease fearfully prevailed amongst the inhabitants in crowded and ill-drained districts, it attacked but few of those who inhabited the less crowded localities. This fact greatly strengthens the opinion, that the extent and mortality of this epidemic was not the result of malaria from the bed of the river, but of an over-crowded state of the dwellings of the working classes; otherwise, the first epidemic must have been, in proportion to the population, as severe as the last.

DESCRIPTION OF THE DISEASE. The epidemic of 1849 began at a beer-shop in the middle and south side of Bridge Street, which was at that time a close, narrow, and ill-drained thoroughfare. The patient was a married female, of stout make, about forty years of age, and the mistress of the house. The attack was most severe and alarming, and came on after a supper from mackerel. She was promptly visited by her medical attendant, and, by his unremitting efforts, the judicious use of the hot-air bath, and decided doses of calomel and morphia, she was brought out of collapse, and the severity of the symptoms controlled. I was requested to see her early in the attack; and, as the house was extremely close and crowded, we advised her removal to an airy situation a short distance from the town, which was accomplished without delay. Fever of a low character followed the suppression of the cholera, which was complicated with gangrenous erysipelas of the inferior part of the abdomen, and upper and internal surface of both thighs, from which also she eventually recovered, although the suicide of her husband, in the midst of her illness, rendered her case still more critical.

Cholera was not communicated to any one who waited upon or nursed her at either house; but at the same time it broke out in many other parts of the town, till the disease, associated with diarrhoea, became very general.

At a meeting of the medical men, it was found convenient to divide the symptoms into four stages—the premonitory diarrhoea, the serous flux, the partial collapse, and the complete collapse.

1. *Premonitory Diarrhoea.* This was characterized by head-ache, loss of appetite, nausea, and oftentimes vomiting, relaxed bowels, with or without pain, and a discharge of a thin faecal matter, generally of a pale colour, occasionally mingled with bloody shreds, and remarkably fetid. This stage lasted for some days, or only a few hours.

2. *Serous Flux.* In this stage there was increased vomiting and purging; pumping out profuse liquid evacua-

tions, sometimes like dirty barley-water, but more commonly resembling water having a ground-rice sediment. These were without faecal smell. There was then also a diminished or suspended secretion of urine, intense thirst, especially for cold drinks, agonizing cramps, a failing pulse, and an anxious aspect. This condition, unless timely checked, did not last long before it ran into partial collapse.

3. *Partial Collapse.* This period of the disease was marked by a dark colour of the skin, but more commonly by a leaden or bluish tint, senile expression of the countenance; sinking of the eye-balls into the bottom of the orbits; atrophied and shrunken state of the body, especially of the fingers; imbecility of the voice; pulse at the wrist scarcely perceptible; diminished temperature; clammy sweats; laboured breathing; and constant changing of position from one side to the other.

4. *Complete Collapse.* There were withered aspect; eyes dim and half closed; the surface of the body, particularly of the face and extremities, as cold as marble, and covered with a damp sweat; no pulse at the wrist; gasping respiration, and a moribund condition; but the intellect was generally clear to the last.

It is not intended to be understood that the disease was generally found to observe such deliberate and distinct grades. In many cases the patient was at once brought into the second stage; and in some, whilst engaged in his ordinary concerns or employment, with scarce any warning he became pulseless, cold, and shrank into a fatal collapse.

The secondary fever of cholera was not constantly observed in this epidemic. Those who were exempt from it became speedily convalescent. In those affected by it, the febrile symptoms were of an asthenic character, requiring support and great attention to conduct them safely through the sequelæ.

CAUSES. The pathology of cholera, and, indeed, of pestilential diseases generally, is but imperfectly understood. They all appear to select different organs of the body for their respective development. Thus small-pox selects principally the external and internal surfaces; plague and yellow fever, the brain; influenza, the respiratory passages; cholera, the stomach and small intestines; and dysentery, the large intestines; and all, by such selection, assume distinctive characters.

Sporadic cholera is doubtless sometimes produced by accidental causes, such as unwholesome and poisonous food, etc.; but it is supposed that *pestilential cholera* is derived from some abnormal condition* of the atmosphere, and that a specific poison from this source enters the body through the air-cells of the lungs, where it corrupts or destroys the vitality of the blood, embarrasses the respiration, weakens the force of the heart's action, and rapidly diminishes the animal heat, at the same time relaxing the oscula of the mesenteric veins, and permitting the escape of the serum of the blood into the intestinal canal, and throwing into vehement spasm, and utter disorder, the ganglionic centres. This description, however, is merely theoretical, drawn from the evidence of symptoms, not based upon appearances observable after death; indeed, the facts presented by morbid anatomy go but little way in explaining the pathology of cholera. If death take place very early in the attack, scarcely any change is observable in the internal organs except as to their colour; and if later, the principal changes which present themselves are, a tar-like consistence of the blood; the surface of some portions of the mucous membranes, especially that of the small intestines, coated with a whitish, opaque, viscid substance, of a muco-albuminous character; and the mucous membrane of this part of the intestinal canal occasionally assuming an unnatural whiteness, and so soft and pulpy, as to be easily detached from the subjacent coat. The abdominal viscera are also congested with dark-coloured blood, which is sometimes also

* Sydenham has handed down to us the "epidemic constitution" of certain consecutive years, to show the diseases which prevailed during each period; and if such observations were made at the present time, with the instruments we possess, our knowledge of pathology in pestilential diseases would be greatly increased.

found in the left side of the heart. From these appearances, Dr. Turnbull Christie,† who has written a valuable treatise on this subject, was led to believe that cholera is a disease of the mucous membranes, and, in fact, a catarrh of the intestines; but as neither the symptoms nor the morbid appearances after death are at all analogous with catarrhal affections of other mucous membranes, such an opinion is not tenable. Both are doubtless the peculiar effects of a morbid aerial poison; but what are its essential elements, and from what pestiferous source it is primarily derived, will probably be long withheld from the grasp of human intellect.

CONTAGION. Much has been adduced as to cholera being a contagious disease, on both sides of the question, without arriving at any settled conclusion. This difference of opinion in medical men of equal talent and observation is somewhat remarkable; and yet, I think, it admits of an easy explanation, by assuming two examples. In the first, a physician is called to a member of a family, resident in a locality where the atmosphere is impregnated with choleric poison. His symptoms are those of cholera. In a few days a brother, whilst attending his relative, is attacked; and shortly afterwards, several other members of the family. A neighbour, also, who had called to inquire, becomes affected in the same way. Such a series of attacks would reasonably induce almost any medical attendant to infer that the disease was communicated from person to person, and to pronounce it fearfully contagious.

In the second example, another physician, practising in the same district, is called to attend several cases of cholera in the same day, which could have had no communication whatever with each other; he, therefore, sees the propagation of the disease in quite a different light, and pronounces it at once to be epidemic, and not contagious at all. It must be allowed that both opinions are based upon very strong, if not equal, grounds; and hence it is that the disputants defend their respective positions with so much obstinacy. There can be no doubt that contagionists may, in most epidemics, adduce proof of the morbid elements of cholera having been propagated from one patient to another, either by the vapour of dirty linen in the act of being washed, or by human exhalation in crowded, ill-ventilated apartments; for surely there is nothing unreasonable in asserting that cholera, like many other epidemics, may, under circumstances favourable to such a result, reproduce itself. In my own opinion, however, it ought not to be classed with diseases avowedly contagious, because, by sanitary precautions, such a result may be, in great measure, prevented; and this opinion is supported by the fact, that the Southampton epidemic could not be traced to any contagious source whatever; that it was not communicated to any persons who attended the incipient cases; and that, of all the medical gentlemen who were engaged in the thickest part of the epidemic, both day and night, for weeks together, and whose courage, energy, and attention could not be surpassed, not one of them was disabled by the pathognomonic symptoms of the disease.

SANITARY MEASURES. As soon as it was announced that pestilential cholera had invaded the town, a conference took place between the municipal authorities and the medical practitioners, with the view of carrying out the most approved sanitary measures. Districts were formed, and visitors appointed to each; the sewerage was made as effective as possible by as good a supply of water as could be spared from the reservoirs; the markets were vigilantly inspected, and the sale of everything likely to conduce to the disease, such as overkept or bad meat, stale fish, and every kind of shell-fish and unwholesome fruit, was strictly prohibited. Lodging-houses, crowded with vagrants, were inspected; their inmates dispersed; their rooms cleansed, whitewashed, and ventilated; and their privies disinfected and deodorized with quick lime. And as many of the lower classes were constantly found in a state of intoxication by

the free use of brandy to avoid the disease, but thereby became more disposed to it, hand-bills, printed in a plain type, were circulated, assuring them that, by observing temperance, a calm demeanour, and a plain nutritive diet; by keeping their dwellings clean, and well ventilated; by protecting the body with good and sufficient flannel whilst exposed to wet and cold weather; they would, in all probability, preserve their health, and stop the spread of the disease.

MEDICAL TREATMENT. With a view to prevent an increased development of cholera, every case of diarrhoea was regarded with suspicion, as being probably the incipient stage of the epidemic, and controlled, if possible, at once; carefully avoiding saline purgatives of every kind, fruit, vegetables, and fermented drinks; and restricting the diet to plain animal food and the farinaceæ. This was best effected by the cretaceous mixture, combined with the tincture of catechu, aromatics, and laudanum. Indeed, the early treatment of diarrhoea was considered so important, that a medicine of this kind was kept prepared at the Dispensary in the High Street, ready to be given to all who were attacked with these symptoms. A medical gentleman was also in constant attendance, to advise those who applied; and public notice was given to that effect.

Treatment of the Second Stage. If the means adopted failed to control the diarrhoea and vomiting, and profuse watery purging, without faecal smell, severe cramps, and inordinate thirst, clearly indicated the pathognomonic symptoms of cholera, the greatest attention was paid to the case, and the most decided treatment adopted, from the conviction that this was the last ground afforded for combating the disease upon equal terms. The patient was put to bed between blankets, his apartment kept airy, and his strength supported by clear animal jellies, rendered still more nutritious by some of the farinaceæ, to which spice and brandy were added. One grain of the acetate or hydrochlorate of morphia, and five grains of calomel, were given immediately. In two hours afterwards, two grains of calomel, with half a grain or a grain of opium, accompanied with a fluid-ounce of the subjoined mixture, were administered at shorter or longer intervals, according to circumstances:—

Rx.—Confect. aromat. 3ij,
Ætheris chlorici,
Tincturæ capsici, aa 3ij,
Sp. ammoniæ aromati,
Syrupi aurantii, aa 3ij,
Tincturæ opii 3iss,
Spiritus menthæ piperitæ 3j,
Mist. camphoræ ad 3vj. M.

If the symptoms did not yield to these means, a suppository of three grains of opium was introduced within the rectum, and repeated in four hours, if needed. At the same time, a fold of flannel, moistened with equal parts of the oil of turpentine and camphor spirit, was applied to the whole abdomen, and confined there by a flannel bandage.

This treatment appeared to be most entitled to confidence in this stage of the disease; but, as it often happened that one symptom more than others distressed the patient, and demanded especial attention, it was met by such means as were deemed most suitable to subdue it. If the serous flux continued to exhaust the strength, it was treated with three or four grains of the acetate of lead, and one of opium, every hour, or at even shorter intervals, if the urgency of the case required it. If the vomiting predominated, a large blister was applied to the epigastrium, and two drops of the dilute hydrocyanic acid were given in a drachm of water, after every copious vomiting. If severe cramps harassed and agonised the patient, the following pills were given every half hour:

Rx. Pulv. opii gr. ij,
Camphoræ gr. vj,
Mist. acaciæ q. s.

M. et divide in pilulas duas.

In the event of their failing to subdue the cramps, the inhalation of chloroform was used with the happiest effect, and re-

† Observations on the Nature and Treatment of Cholera, and of the Pathology of the Mucous Membranes. By Alex. Turnbull Christie, M.D.

peated again and again, if the return of the cramp required it.

Treatment of the third stage. In advanced stages of cholera, when life was fast ebbing under the force of the disease, the success of any mode of treatment was at best but very uncertain. Nevertheless, such cases were not despaired of: on the contrary, as a considerable number had recovered from a partial state of collapse, every possible resource and redoubled energies were called into operation. The temperature of the body was raised by the hot-air bath, if at hand; if not, by warm blankets, bottles of hot water, terebinthinate epithems, mustard poultices, and other convenient appliances; and the system was supported by stimulants and strong animal jellies. The method of medical treatment adopted in this stage by different practitioners were, one or two grains of calomel every ten minutes or quarter of an hour, which is a modification of Dr. Ayre's treatment; large doses of opium and camphor according to Dr. Hawthorn's plan; bleeding, after having raised the pulse by essential aromatics and æthereal stimulants; and cold water *ad libitum*.

Of these several methods of treatment, the calomel, where the strength could bear it, was found to be comparatively the most successful; but its therapeutic effects were limited for the most part to young persons. Beyond the adult age it generally failed. I saw it fairly tried in some cases of the latter, in which it had no power whatever to arrest the fatal progress of the disease. One medical gentleman was bold enough to adopt Hawthorn's huge doses of opium combined with camphor; and in two cases it was reported to have rescued the patients from a desperate state of collapse: but the practice was not continued, probably, from the dread of inducing a fatal narcotism; indeed, it is to be feared that in some instances such a result actually took place from the heroic doses of morphia and opium which were administered, and which the menacing character of the symptoms appeared fully to justify. The abstraction of blood from a patient in this stage of cholera seems to be wholly irreconcilable with the symptoms; yet I was informed by a gentleman actively employed in the epidemic, and assisted by an army-surgeon who had often attended cholera in India, that he saw several cases of collapse cured by this treatment. The only way of explaining the success of this desperate remedy is by the possibility of its relieving the venous congestions which are found to exist in this disease, and thereby allowing the arterial blood to pass through the capillary system with its vitalizing resources. With regard to cold water drank *ad libitum* in collapse, another gentleman, who was also in the midst of the pestilence, reported that, having several children under his care in this state, and having totally failed to benefit them by every other means in his power, he allowed them to slake their craving thirst for cold water with unlimited quantities, and that by this treatment alone they recovered.* The good effect of this remedy would mainly depend on the water being imbibed by the oscula of the mesenteric veins opening upon the villous coat of the intestinal canal. If it merely passed through the canal, the diarrhoea would probably be increased and a fatal issue accelerated: but, if imbibition took place, the water might become a floating medium and an oxygenating pabulum for the blood-corpuscles, and thus increase their vitality.

The saline treatment was but seldom adopted. I advised a trial of it, according to Stevens's plan, in the case of a gentleman, aged 55, the progress of which was not rapid, and where it appeared to be well suited to control an incessant vomiting that greatly distressed him. This symptom it certainly did relieve, and also improved the colour of the stools: but, on the other hand, it aggravated the diarrhoea, which brought on a fatal collapse.

Treatment of the fourth stage. It would be in vain for me to recommend any mode of treatment for this stage of the disease, as there was none that deserved the slightest confi-

dence: all alike failed. There were, doubtless, a few cases that recovered even from this extremity; but these were bare exceptions to the general rule of death. In some, the complete collapse was gradually brought on by a persistent diarrhoea as in the instance last mentioned; whilst in others the patient was at once blighted and killed by the intense power of the choleric poison. The following is an example of the latter.

A young man, in the prime of life, and in good health, during the height of the epidemic, brought into Southampton a load of grass from the borders of the New Forest. Soon after he had delivered his commodity in East Street he was attacked with cholera, and returned towards home: but he had not passed through Mill brook—a distance only of two miles—before he was found in a state of complete collapse. He was taken into a public house and immediately received the utmost attention from two medical gentlemen, who placed him under Ayre's treatment. Happening to be passing by, I was requested to visit him. His intellect was clear. The skin was of a darkish brown colour; his extremities cold; his pulse scarcely perceptible; he was shrunk up, and constantly changing his position from one side to the other. Everything failed to bring on reaction, and he sank in a very few hours. In this character, cholera may be emphatically termed "the pestilence that walketh in darkness and destroyeth at noon-day". Beneath its malignant power the physical strength of man is mysteriously brought to nought, and "fades away suddenly like the grass". "In the morning it is green, and groweth up: in the evening it is cut down, dried up and withered."

Southampton, February, 1853.

TREATMENT OF SIMPLE ERYSIPELAS AS A LOCAL ACUTE DISEASE.

By JOHN HIGGINBOTTOM, Esq., F.R.S.

(Read before the Midland Counties' Branch of the Provincial Medical and Surgical Association, at Nottingham, March 10th, 1853.)

I WISH to bring before my professional brethren the following questions.

1. Is simple acute Erysipelas a purely local, or a constitutional disease?
2. Is it sometimes a local, and sometimes a constitutional disease? or,
3. Is it simultaneously both, a local and a constitutional disease?

I am of opinion that it is in all cases purely local; and that the constitutional symptoms are a result of the local disturbance. This opinion I have formed from the following facts.

1. I have had a number of cases of erysipelas on the face and elsewhere, where there have been no constitutional symptoms; in these the disease has been directly arrested and subdued by the application of the nitrate of silver. Now, it is my opinion that, if the erysipelas had been allowed to proceed without the local application, severe constitutional disturbance would have been the result.

2. If from exposure to wet or cold, etc., a feverish attack should come on, and in several days erysipelatous inflammation should supervene; on a prompt application of the nitrate of silver, along with the use of common remedies for the cold, the patient becomes convalescent in a few days: but if the local application is neglected, the inflammation runs its usual course, the constitutional symptoms become more aggravated, and the illness is much prolonged.

3. If the erysipelas and constitutional symptoms are simultaneous, a prompt application of the nitrate of silver, and the use of active constitutional remedies, cut short the disease; and the patient is convalescent in a few days. But if the local application is neglected, the disease runs its usual and often destructive course, setting at naught the most active constitutional treatment.

* Vide Notes on Cholera, by Dr. Gilchrist, Inspector-General of Army Hospitals, etc.

In my *Further Observations on the Nitrate of Silver*, p. 31, is related the following case, which will illustrate what I have advanced.

CASE I. (Mrs. S., some years since, had a severe attack of erysipelas of the face and head, which ran its course under the old medical treatment; the effects of the disease were so severe as to confine her to her bed-room for six weeks.

In November 1845, she had another attack of erysipelas, which had progressed twenty-four hours before I saw her. A decided application of the nitrate of silver was made to the parts affected, and purgatives were given. She was convalescent in seven days.

The following year, in October, erysipelas again made its appearance on the face. She had taken a purgative before I saw her. One decided application of the nitrate of silver was sufficient, and she was not confined to her house a single day. No further remedies were required.

Mr. Nunneley, of Leeds, in his monograph on Erysipelas, says (contrary to his own opinion), that Dr. Smyth, Mr. Earl, Mr. Arnott, Mr. James, and Mr. Lawrence, consider that "erysipelas is essentially a *specific disease*, affecting one tissue alone, characterized by the local disorder, which forms the chief symptom and upon which the constitutional disturbance depends."

From the commencement of my treatment of erysipelas with the nitrate of silver, I have considered it a local specific disease; and this view appears to be supported by the speedy subsidence of the fever, as soon as the local disease has been subdued by the application of the nitrate of silver.

Erysipelas may be considered as the result of a poison, *sui generis*. It remains at first like a small patch on one side of the nose, cheek, or elsewhere, and makes often no progress for twelve or twenty-four hours, continuing so long as to generate its own poison, which is then carried into the system; and at this period, the constitutional symptoms commence.

The following are my reasons for believing that erysipelas is a local disease; which I wish to repeat.

1. If erysipelas makes its appearance on the face without constitutional disturbance, the prompt application of the nitrate of silver alone is sufficient to arrest and subdue the disease.

2. If fever and constitutional symptoms come on before the appearance of erysipelas, the simultaneous use of the nitrate of silver and constitutional remedies cut short the disease, and the patient is convalescent in three or four days. But, if constitutional remedies alone are used, and the nitrate of silver neglected, the disease will commonly run its usual course.

3. If the erysipelas and constitutional disturbance come on simultaneously, the prompt use of both the nitrate of silver and the constitutional remedies arrest and subdue the disease. If the nitrate of silver is omitted, the disease runs its usual course.

4. Whether the disease be idiopathic or traumatic, the erysipelas has the same characteristics. The inflammation spreads and produces the same dire effects; first, on the skin; second, on the cellular tissue; third, on the mucous and serous membranes. Both the idiopathic and the traumatic erysipelas are cured by the same means.

Of course, the disease is often mild or aggravated, according to the healthy or unhealthy state of the patient, whether temperate or intemperate. I have always found consumers of alcoholic drinks most difficult to cure, in erysipelas as well as in all other diseases; and if they were banished altogether from medical practice, acute disease would be sooner cured, and chronic disease would be more manageable.

I do not believe in the occurrence of metastasis in erysipelas. That distant parts are affected in erysipelas is true: but this appears to me to be caused by the extension of the disease, and by the specific poison of the erysipelas carried into the system.

I would make an observation here which I have often insisted upon; viz., that in all cases a strong solution of

nitrate of silver should be used—one scruple of the nitrate to one drachm of distilled water. I not only use this strong solution, but also rub the stick of the nitrate of silver on any particular part where I wish it to be well applied. I have attributed the failure of this excellent remedy in the hands of some surgeons to the use of a weak solution; and this I have named, with other causes of failure, in my *Additional Observations*, page 19. In an excellent paper, by Dr. W. S. Oke, published in the *ASSOCIATION MEDICAL JOURNAL* for January 21st, 1853, p. 53, "On Erysipelas, etc." he mentions a surgeon who has used the nitrate of silver successfully, with a solution of one scruple of the nitrate of silver, six drops of the nitric acid, and one ounce of water. I am sure such a weak solution cannot be depended upon. I never knew a very free application of the strong solution, or the stick of nitrate of silver, "produce the destruction of the cutis vera," or be attended with any ill consequences.

Dr. Oke says, "the Royal South Hants Infirmary, in common with other hospitals, has been occasionally invaded by erysipelas with an average result; but since the nitrate of silver has been employed, the unfavourable terminations have been comparatively very few; and, I am persuaded, that were this excellent remedy more frequently adopted, erysipelatous inflammation might be generally controlled."

From a late epidemic of erysipelas in Nottingham, I have selected six cases; four where the nitrate of silver was applied, and two where it was omitted; the results of which were in accordance with my experience for the last twenty years.

CASE II. Mr. M., a railway clerk, aged 26, had erysipelas on the left side of his face, not reaching the scalp. He was slightly indisposed. One decided application of the nitrate of silver was alone required. He took an ipecacuanha emetic, followed by a calomel pill and purgative draught, and a saline mixture. He only required visiting four days.

CASE III. Mr. F., a farmer, about 50, a free liver, called at my house to consult me, having an erysipelatous inflammation of the face upon the right ear. It was spreading near the scalp. He was so little indisposed, as to be able to ride five miles on horseback to visit me. I applied directly, and very freely, the nitrate of silver to the inflamed part close to the scalp, and on and beyond the inflamed ear, fearing much that the scalp would become affected. I thought proper to prescribe for him an emetic of ipecacuanha, a calomel and colocynth pill at bed-time, and the following morning an active purgative mixture. He returned home on horseback, and I heard nothing more of him for a week, when he sent for a repetition of the purgative mixture, with a message that the inflammation was quite gone.

CASE IV, v. In October 1852, two sisters, between 20 and 30 years of age, living together in the same house, had erysipelas. The eldest had been indisposed for several days before I saw her, and the disease was attended with much constitutional disturbance—the erysipelas having partially affected the scalp. I thought it necessary to have the whole head shaved (although it caused considerable pain), so that I might apply the solution of the nitrate of silver freely to the whole scalp. The usual constitutional remedies were used. In this case the recovery was more tardy, on account of the application of the nitrate of silver having been so long delayed. A troublesome inflammation of the eyes was produced in this case, by the neglect of applying the nitrate of silver on the inflamed eyelids, which should always be attended to, in order to prevent inflammation of the conjunctiva.

The younger sister, disliking the application of the nitrate of silver, was desirous of taking an emetic and purgatives, to check the inflammation; but finding the erysipelas to come near the scalp, she submitted to a very free application of the nitrate of silver, which extinguished the inflammation, and she was glad that her hair was preserved.

In the two following cases, the nitrate of silver was not applied.

CASE VI. Mr. G., aged 54, of a gross habit, a habitual

consumer of alcoholic drinks, and a smoker of tobacco (but not an intemperate man), had in October a catarrh, and felt generally indisposed. There was a slight blush of erysipelas on the left side of the face, but not sufficient to excite any particular attention. Remedies were employed for his catarrh, but no local application was used to the erysipelas. The inflammation progressed over the scalp, and produced cerebral disturbance, which, however, was not severe; the throat and the mucous membrane of the larynx became inflamed; the irritation and cough increased; the constitutional symptoms were now very severe; the mucous membranes generally were affected; the joints were affected with severe pain and inflammation (similar to rheumatism), and the secretions were diminished in quantity, and in a vitiated state. A general bad state of body was induced, and after suffering a number of weeks, he died.

In this case all the severe symptoms followed the increase of the erysipelatous inflammation, and I think would have been prevented by a prompt and early application of the nitrate of silver.

CASE VII. In November, Miss J., aged 35, was attacked with a slight erysipelas on the left side of the cheek and nose. No external application was used. An emetic, active purgative, saline draughts, and repeated doses of calomel and James's powder, were given. The erysipelas progressed over the scalp, down to the neck, and a little on the chest. A continued and severe indisposition was the consequence, attended with cerebral disturbance, producing delirium for several days; for which blisters were applied to the nape of the neck. Several large abscesses formed in the neck and chest; the last of which was opened in eight weeks from the commencement of the erysipelas.

The above two cases were all I had attended for some years, where the nitrate of silver was not applied. Both were mild in the commencement. The result showed the necessity of a prompt and decided application of the nitrate of silver, even in the slightest attacks of erysipelas, to prevent future evil consequences. In the last case, all the severe illness would have been prevented by a timely application of the nitrate of silver. I do not say it *might* have been prevented, for the continued experience of twenty years or more has assured me of the practical truth, that it *would* have been prevented. I have had no case where abscesses have formed, when the nitrate of silver has been early and well applied in erysipelas.

I have found that a very decided application of the nitrate of silver in PHLEGMONOUS ERYSIPELAS has the extraordinary power of preventing the destruction of the subcutaneous cellular tissue, by preserving the integrity of the cutis vera, and subduing the cuticular inflammation. Even in a patient, where the limb has been as large again as the other, in which it could be scarcely expected to be benefited, the application has so far modified the inflammation as to render it a case of simple phlegmonous abscess, which has been relieved by a free opening with the lancet, and where there has been no loss of cellular tissue.

CASE VIII. Mrs. B., aged 68, living in a low part of the town (Narrow Marsh), had phlegmonous erysipelas of the whole of the right leg, extending a little above the knee on the thigh; the leg was as large again as the natural size, and was very tense and painful; there were some vesications on the fore part of the leg; the patient had been neglected, till the state of the limb alarmed the friends. I directed an emetic, purgative, and saline mixture, and applied the strong solution of the nitrate of silver very freely on the whole of the leg, and on and above the inflamed part of the thigh. The following day, the nitrate of silver had had the desired effect of allaying all irritation and inflammation, in which state it remained for four days; on the second and third day, a considerable degree of vesication had taken place, from the free application of the nitrate of silver; but I found the limb did not at all diminish in size; on that account, I knew from former cases, that suppuration had taken place. On the sixth

day, I made a free opening about two inches in length at the most depending part, about the middle of the limb; a large quantity of pus was evacuated, but there was not the least appearance of any sloughing of the cellular substance. In a few days afterwards, I made a small opening above the outer ankle, from which some sero-purulent matter was evacuated; and in a few days, on the opposite side of the limb, from which issued only a little serous fluid. The limb quite recovered. No further application was required, beyond the black lint and nitrate of silver to the sores, and a common linseed poultice constantly applied, repeated every eight hours. I never knew a limb in the same state, under the common mode of treatment, which terminated so favourably.

Nottingham, March 10th, 1853.

ON THE IMPORTANCE OF AUSCULTATION.

By F. G. PROBART, M.D., Senior Physician to the Suffolk General Hospital.

THE epoch is not so remote but that it must be well remembered, when the stethoscope had not only to contend with a variety of prejudices against its adoption; but, in many quarters, where more liberality might have been expected, was even ridiculed and despised.

The period, however, gradually succeeded, when many of those practitioners who had been foremost in contemning this instrument, were compelled both to respect its adoption in the hands of others to thoracic diagnosis, and even themselves obliged, in order to maintain the countenance of their patients, to employ it in the investigation of disease.

At length, the stethoscope is the constant companion of almost all members, whatever their grade, of the medical profession. The majority of them are, no doubt, fully competent to its exercise; but not a few otherwise qualified practitioners, it cannot be denied, have, even now, either from an imperfect power of discrimination in sounds, a too limited practice, or reprehensible neglect, a very inferior knowledge of its diagnostic applicability—a fact that must occasionally be realized in the experience of all who have adequate opportunities for observation. Some excuse themselves for the neglect of auscultatory diagnosis, relying as they say upon the ordinary and sufficiently significant evidence, otherwise presented by the respective diseases of the thoracic viscera. But, as examples of the fallaciousness and danger of this unfortunate conclusion, I append the following cases, being two of frequent instances which I see of these lesions, so latent as to have been entirely ignored by intelligent and experienced men, unacquainted with stethoscopic phenomena.

CASE I. I was called into an adjoining county to see a gentleman, who had been ill six weeks, and whose case, his medical attendant informed me, had puzzled him, inasmuch as the symptoms continued without change, and he was unable to discover any organic disease capable of explaining them. I found the patient, a gentleman about fifty years of age, recumbent in his bed. His countenance was good, though rather suffused, and there was nothing in his general aspect to denote particular distress. When interrogated as to his feelings, he complained of a sense of fulness and uneasiness, referred to the stomach; of a frequent inclination to change his posture; of general restlessness; and, of course, absence of sleep. He said that he was quite free from pain, and had suffered none since the beginning of his illness, when he had "rheumatic pains" flying about his chest and shoulders. His pulse was under ninety; his tongue very red, glazed, and viscid: he had no inclination for food, although he took it; nor had he much thirst. There was cough now and then, but it was slight, and unattended by expectoration; and his breathing was so little disturbed as to have elicited no observation.

I immediately suspected the chest, because my hands failed to find disease elsewhere, and Mrs. A. had been

the employment of auscultation. My anticipations were soon realized, by the discovery of fluid in the left pleural cavity, which it nearly filled. Thus, by the interposition of the ear, an obscure case was in a few minutes made easily intelligible; and a treatment adapted to its exact pathology having been rigorously carried out, the patient was, in six weeks more, restored to health.

The pains felt by the patient, at the commencement of his illness, and which, he flattered himself, were only rheumatic, were, no doubt, those of inflammation, (chronic from the first), of the pleura. Taking, however, this simple view of their nature, he treated himself; and sent for medical aid only when he found that he was falling ill in other respects.

There do not appear to have been any of the ordinary prominent symptoms of thoracic disease, and, least of all, of effusion; for, though the patient lay for the most part on his back, he was not elevated on his bed; and was capable of lying equally on his right as on the left side.

By way of contrast with the foregoing case, but as equally illustrative of the value of auscultation, the succeeding history may prove not unacceptable.

CASE II. I was summoned in the night, with unusual importunity, to visit a respectable innkeeper, in Norfolk. I found him suffering exquisite pain in the left side of his chest, which, the patient insisted, more particularly involved the heart, and that he was dying in consequence. He was bolstered up in bed, and was breathing with the greatest difficulty, the inspirations, numerically, being much increased: his countenance was expressive of extreme anguish and alarm; and I counted a pulse of upwards of 120, very weak and small. The least motion, even speaking, aggravated his suffering; and I could obtain answers from him only in a whisper. My impression, upon the first glance, was as unfavourable as possible; but after examining him, as well as his pain would permit, by percussion and auscultation, I was agreeably surprised to find all the organs within the chest, as well as its lining membrane, free from disease.

Seeing, then, that I had a case simply of intercostal neuralgia, or possibly rheumatism, I was at once enabled to calm my patient's terror by the assurance that all would be well; and that I did not despair of obtaining him some relief even before I left the house. Two grains of opium with two of calomel were immediately administered; and large pieces of flannel, wrung out of water as hot as could be borne, were applied to the seat of pain; and, as he had been greatly reduced by venesection twice performed, and other measures of depletion, (for his case had been treated as inflammation of the pleura), I directed wine, and suitable nourishing diet. A grain of opium with one of the acetic extract of colchicum was to be given, as long as the persistence of any pain made it necessary, every eight hours; and five grains of quinine twice a day. In a fortnight from my seeing him, he was well enough to make a journey to Bury, for the purpose of calling upon me.

Bury St. Edmunds, Suffolk, March 1853.

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

THE OIL OF THE JATROPHA CURCAS OR PHYSIC NUT AS A PURGATIVE, AND THE OIL AND LEAVES AS A COUNTER-IRRITANT.

Various physicians have at different times made trials with the expressed oil of the *Jatropha curcas*, in the hope that they might be able to find in it a useful purgative; and recently the inquiry has been renewed. A brief summary of the information which we possess on this subject may, in these circumstances, prove interesting to our readers.

All experimenters agree in admitting the purgative properties of the oil; but a remarkable disparity of opinion exists as to the degree of potency, and the uniformity of the effects which it causes.

The *Jatropha curcas* belongs to the Euphorbiaceæ. In Jamaica, the tree, as well as the fruit, goes by the name of *physic nut*, by which name it is likewise described by Christison and others, in treating of the medicinal plants of the family. The fruit is also known as the *nux cathartica Americana*, and *nux Barbadosensis*. The fruit is a violent irritant poison, and numerous cases of accidental death occur in the countries where the tree grows, from children picking up and eating the seeds, as three or four are quite enough to prove fatal. "The oil (*Oleum Jatrophæ Curcadiæ, seu Oleum Infernale*)," says Pereira, "is analogous in its properties to croton oil. It is occasionally used as a drastic purgative. In India, it is used for lamps." Guibourt obtained a purgative oil from seeds described as often rancid; but he must have met with damaged specimens from South America. Seeds gathered at one of the Cape de Verd Islands, were examined by M. Leconet in 1850. Under pressure, they yielded twenty per cent. of a coloured oil, of which ten or twenty drops were enough for a dose. (*Arch. Gén.*, Jan. 1853.) A medicine of middle power, between castor oil and croton oil, seems thus to have been obtained. Dr. Christison, in his *Dispensatory* (third edition, 1848), says that he has found, from many experiments, that one sample, expressed from Barbadoes seeds, acted precisely like castor oil in the dose of ten, fifteen, or twenty drops; but that another, from Jamaica seeds, sometimes caused the same severe sickness and watery evacuations as croton oil; and, at other times, was inert in the dose of thirty drops. The explanation of the varying results is not easily given; but we are inclined to attribute the occasional weakness or absence of purgative properties to the oil having been prepared by heat, or from damaged seeds.

We have not found any particulars of the oil having been used as a counterirritant; but it possesses rubefacient or irritant properties more or less resembling those of croton oil. The leaves possess rubefacient powers. In connexion with the remarks upon this subject contained in our last number (p. 254, et seq.), we subjoin the following passage from *Gray's Sup. to Pharm.* by Redwood, p. 505, ed. 1847:—"The leaves are rubefacient and discutient: warmed and rubbed with castor-oil, they are applied by the natives of India to inflammations when suppuration is wished for."

ointment of MUCUNA PRURIENS AS A COUNTER-IRRITANT.

M. BLATIN proposes (*Revue Médico-Chirurgicale*, Jan. 1853) the substitution of *Mucuna pruriens* (cowhage) for tartar-emetic or croton-oil, as the active ingredient of ointments intended to act as cutaneous irritants. The proportions are, seven grains and a half of the hairs of cowhage to an ounce of lard. The ointment must be rubbed in from ten to twenty minutes; seven or eight grains are usually sufficient. The immediate effect is the production of a sensation resembling stinging with nettles; but the burning sensation and the itching diminish during the friction, and entirely pass off in less than half an hour. The skin generally becomes covered with white flat papule, which soon disappear, leaving a sensation of heat. The effect is due to the mechanical irritation of the hairs. This system of counterirritation has, we are told, produced no inconvenience: children bear it easily. The indications for its employment are the same as for the use of tartar-emetic or croton-oil ointment.

M. Blatin believes cowhage ointment to be a good medium for the endermic application of various substances, such as hydrochlorate of morphia.

ANTISEPTIC PROPERTIES OF IODOFORM: INHALATION OF ITS VAPOUR IN PHTHISIS.

IODOFORM, according to M. Righini (*Jour. de Chim. Méd.*, Feb. 1853), is possessed of remarkable antiseptic and antispasmodic properties. He tried it in a silk manufactory, by distributing vessels containing small quantities, either in powder or diffused in water, through different parts of the establishment; and he found it effectual, with the advantage, moreover, of not incommencing the work people. As a hygienic resource in hospitals, he recommends that it be employed in the following manner.

A soft paste is made, by moderately heating sixteen parts of starch in a sufficient quantity of distilled water, and stirring them with a wooden spatula. Eight parts of iodoform having been added, the mixture will be found to be readily absorbed by filtering paper. The paper prepared in this way is cut into strips three or four inches wide, and suspended in the wards. The iodoform slowly escapes without causing any inconvenience to the inmates. It is most freely liberated in moist states of

the atmosphere. M. Righini recommends iodoform-paper for the purpose of obviating the bad smells and noxious effluvia of slaughter-houses, and also for preserving meat from spoiling.

M. Righini states that the inhalation of iodoform dissolved in ether is of great service in retarding the progress of phthisis.

PEAT CHARCOAL AS A DEODORISER.

The Chemist (January 1853) quotes the following from a letter in the *Bucks Herald* :—

"The offensive drains at the end of the town of Aylesbury, on the Hartwell Road, which have so long been such a nuisance to the inhabitants residing in that part of it, are now rendered perfectly harmless, by the wonderful effects of the filtration of the drainage through a peat charcoal tank. Not only is all the poisonous effluvia arising from them perfectly deodorised, but the drainage, when mixed with the charcoal, becomes a most valuable manure, and pure water is drunk from it. The apparatus consists of a brick tank, sunk in the ground, at the level of the outlet of the sewer, containing a bed of peat charcoal, about two feet in thickness, through which the sewerage passes off, perfectly inodorous, leaving the ammonia, phosphites, and volatile salts with the charcoal.

"One ton of peat charcoal (costing 3*l.*) doubles its value by taking up the sewerage as a deodoriser, and thus becoming a most capital manure; and at the same time all its noxious properties are got rid of, it being without smell. The value of this manure I am now having tested in Buckinghamshire; and I hope, next year, to show some most beautiful crops raised by it. When I first began to persuade the Local Board of Health at Aylesbury to try a peat charcoal tank, they stated that they could not afford to do it, the sewerage not being of any value there, as no one would buy it, the land in that vale being so proverbially rich, that it did not require any manure. I live six miles from thence; but I said, that rather than the experiment should not be tried, I would give them the charcoal, if they allowed me to carry away the produce of the tank, whenever it required refilling, which has to be done there about every month. Another objection was then made as to the expense of the wood necessary for it: this I also gave.

"The result of the experiment has been the most complete success; and no sooner had I arranged to take away the sewerage, than I had two or three offers to take it off my hands. It has therefore ended in my only having the two first emptyings of the tank, the produce of which I have now lying under a shed at Chequer's-court; and we shall, I hope, next year prove its great value for agricultural purposes. I have seen very offensive water perfectly purified, and made drinkable, in five minutes, by being mixed with the charcoal, and passed once through blotting-paper. It is beginning to come into use in the hospitals, where its value will be immense. Bodies placed in it may be kept any time, it acting as a perfect preservative of all animal and vegetable substances. It will also be most important to the shipping interest, that it should be brought into use in the navy, as it immediately deodorises the bad effects of bilge-water, etc., and thus might often be the means of saving the lives of half a crew.—L. A. F. R."

DESTRUCTION OF THE PUERPERAL MIASMA BY HEATED DRY AIR.

Dr. Bush has directed attention to this subject; and the *Medical Times* of Feb. 10th gives (from a German Journal) the following account of his observations:—

"The means employed consist in heating the room to a high degree with dry air. This is effected by round iron stoves placed in the centre of the room, and connected with the chimney by metal tubes. The heat can be raised to 50-60° R. (about 155° F.) This must be kept up for two days, during which time all furniture and utensils are to remain in the room.

"In March 1851, puerperal fever invaded the Berlin Lying-in Hospital with remarkable severity; nearly all the patients suffered, and the Institution was closed for six weeks, during which time there was the most careful ventilation and purification. These means proved insufficient. Upon the re-opening of the hospital, all the new patients became attacked by the disease a few days after delivery. Then the author tried the plan here detailed in every room in the house. The effect was surprising; no fresh attack occurred during the whole summer. The same measures were adopted some time afterwards, and with the same success."

TOXICOLOGY.

POISONING WITH CARBONIC ACID.

In the *Monthly Journal of Med. Science* for March, Mr. J. Law gives the following account of two cases of poisoning with carbonic acid, which occurred under remarkable circumstances.

CASES. On Sunday, January 4th, 1852, Mr. Wright Wilson, of Sheffield, was summoned to the house of George Hall, in Park Hill Lane, called also, from its elevated position, "Sky Edge". Mrs. Hall was extended on her right side on the chamber-floor, close to the bed-side; while her husband was in an easy bent position, also on his right side, on the opposite side of the bed, his head and chest being under the bed. They were both dead, and quite cold. The woman's countenance was mild and placid; the man's bore a slightly uneasy expression. They were in their night dresses, and there was a plaster on the chest of each. With the exception of an abrasion (less than the nail of the little finger, and surrounded neither by redness nor swelling) on the crown of the man's head, no external trace of violence could, on a very careful examination, be discovered. There were slight suffusions on the man's back; but elsewhere the skin of every part of the two bodies was perfectly natural in colour and appearance. The mucous membranes of their mouths and pharynxes were healthy, and free from every kind of odour. The chamber was orderly, everything appearing to be in its place. There was a singular and intolerable smell in the house, strongest in the chamber. The woman had been in the habit of taking laudanum: of this drug two or three drachms were found in the house.

On Monday, January 5th, probably thirty hours after death, Mr. Wilson, by order of the coroner, examined the bodies.

There were no unnatural external appearances. There was congestion of the membranes and sinuses of the brain. Each lateral ventricle contained about 3*ss.* of clear serum. The lungs were gorged with dark blood; the bronchial mucous membrane was slightly inflamed; and there were extensive pleuritic adhesions. The left sides of the hearts were nearly empty; the right contained a quantity of dark half-coagulated blood. The stomachs were healthy; the woman's contained about 3*iv* of thick gruel-like fluid. This fluid, the stomachs, duodenum, portions of the jejunum, and portions of the colons, were given, at the request of the coroner, to Mr. Haywood, professional chemist, to be analysed.

On Tuesday, January 6th, Mr. Wilson, suspecting the drainage, again examined Hall's house, but again without finding any explanation of the catastrophe. In the adjoining yard, however, he perceived a small quantity of smoke issuing from a cesspool, filled with cinders and fecal matter, in a state of smouldering combustion. When the burning mass was disturbed, even slightly, with a spade, it yielded dense volumes of smoke, and a most disgusting smell, resembling that in the house. Knowing that the ground was loose, stony, and permeable, Mr. Wilson communicated his suspicion to the coroner and to Mr. Haywood, that the gaseous products of this combustion had found their way into Hall's house.

It was proved on the inquest, that, on the night of the 3rd January, Mrs. Hall perceived a very disagreeable smell in her house, and that she, assisted by a neighbour, carefully searched for the cause, but found nothing. At this time, the cinders in the cesspool were red hot; but it was not at all suspected that the fire in the cesspool was in any way connected with the impure state of the atmosphere in the house. A straw mattress had been burnt in the cesspool a few days previously. In this way the cinders had been set on fire; but Mr. Wilson could see no trace of the mattress.

MR. HAYWOOD'S STATEMENT. On Wednesday, January 7th, he examined Hall's house in Park Hill Lane, one of the highest and most airy situations in Sheffield. The house stands on a heap of stones, the remains of an extensive quarry; it consists of one sitting-room, with a small pantry on the ground floor, and a bed-room over them; it is about two feet below the level of the ground on the south-western side, on a level with the ground on the east, and somewhat above it on the north-west. In consequence of the loose nature of the ground, the south-west wall has deviated about one foot from the perpendicular, and, in order to make this wall look straight in the inside, boards, extending from the floor to the ceiling, have been placed near it, there being a space of some inches between the two. At a distance of twelve feet from this wall, and in the bed of loose stones on which the house is built, is excavated a cesspool for ashes and night-soil; this is six feet long, five feet broad, and four feet deep; its walls are lower than the surface

of the loose stones, and have little or no mortar; any gases, therefore, generated within the walls of the cesspool, would easily find their way into the bed of stones, and thence through the broken foundation into Hall's house. Mr. Haywood found the cesspool nearly full of *burning* cinders, mixed with faecal matter. The fire had not made much progress previously to the evening of the accident, when, as proved before the coroner, the contents of the cesspool were "one mass of fire". Ashes were thrown upon it, in the hope of extinguishing it; but under a heavy western gale, which sprang up towards the morning of the 4th January, the contents of the cesspool again became a mass of fire. The wind, pent up in the corner where the ash-pit is placed, forced the gases through the loose stones and broken foundation, into the space between the boards and wall of the lower room, thence into the space between the ceiling and bed-room floor, and thence through large holes and cracks into the bed-room itself. In consequence of the chimney and windows being on the eastern side of the house, the strong west wind produced a partial vacuum in the bed-room, and this vacuum drew, while the wind pushed, the gases from the ash-pit into the bed-room. The current of air through the bed-room floor blew out a candle; and, although the combustion had nearly ceased when the examination was made, yet the atmosphere of the room was intolerably offensive and oppressive.

By means of an aspirator, Mr. Haywood passed four cubic feet of air, as it entered by one of the openings in the floor, through a solution of acetate of lead; no discolouration being produced, it was inferred that neither sulphuretted hydrogen nor hydrosulphate of ammonia was present. Another portion was then passed through a solution of nitrate of silver, without producing anything but a brown tint, arising from a small quantity of organic matter; no cyanogen compounds were consequently present. The air in the aspirator contained 1.4 per cent. of carbonic acid gas, with a trace of sulphurous acid, pure air having only a twenty-fourth of this quantity of carbonic acid.

It is usually believed that an atmosphere containing five per cent. of carbonic acid may prove fatal to man. The bed-room and staircase of Hall's house contain 1283 cubic feet of space. As sixty-two cubic feet of carbonic acid, enough to have poisoned Hall and his wife, are produced by the burning of little more than two pounds of cinders, it may be readily understood that more than sufficient to explain the accident must have resulted from the burning of a heap of cinders measuring sixty or seventy cubic feet.

The communication between the burning cinder heap and the bed-room was more complete than between the former and the sitting-room, where a canary, favourably placed opposite the north-west window, was found uninjured. The space between the boards and wall acted as a flue; and, on the night in question, the larger part of the air, which entered the bed-room, passed through the burning cinder heap. The sitting-room had an open fire-place, and a window to the north-west, through which, on that boisterous night, a current of fresh air was driven. The boards were covered with paper, and the communication between the bed-room and sitting-room was cut off by a door at the bottom of the staircase. A little carbonic acid, however, was detected in the sitting-room, coming from behind a corner cupboard placed against the boards, where the paper did not extend.

Three causes prevented the descent of the carbonic acid from the bed-room to the sitting-room:—The door at the foot of the staircase; the rarefied state of the air in the bed-room produced by the west wind; and the condensed state of the air in the sitting-room produced by the wind blowing through the north-west window. If air passed from either of the rooms to the other, it would have passed from the lower to the upper; but this was probably prevented by the open chimney in the former.

A chimney-board in the bed-room was considered to have very much increased the evil; but as the chamber was part of the flue through which the poisonous gases discharged themselves, their current through the chamber, had the chimney been open, would have been more rapid; but there was space enough between the chimney-piece and chimney-board, and through the imperfectly-fitting windows, for the passage of air; and probably the less impure air of the room passed up the chimney to give place to the poisonous products of the cinder heap.

To trace the communication between the ash-pit and the house, the loose stones, with their covering of earth, were removed to a considerable depth. Mr. Haywood found the warm air from the burning cinder heap, passing through and below the broken foundation; and finding also that the oxide of iron on the stones was converted into a sulphuret, he concluded that the hydro-

sulphate of ammonia had, at the commencement of the burning, been driven in that direction, although he could not detect the presence of any of this substance, or any trace of its action on the metals in the house.

There was not the slightest indication of any vegetable or mineral poison in the parts which were analysed.

From the foregoing facts, Mr. Haywood concluded that George Hall and his wife died from inhaling carbonic acid, and other products of the combustion of the burning cinder heap above described.

DEATH FROM CHLOROFORM: INQUEST.

The *Lancet* for March 20th reports an inquest held by Mr. Wakley on March 22nd, at the Lord Wellington, University Street, St. Pancras, on Caroline Baker, an unmarried woman, aged 28, who died in University College Hospital from the effects of chloroform. The inquest-room was crowded by medical gentlemen and others, anxious to hear the result of the inquiry. Mr. J. H. Gould, physician's assistant, said, that on Friday night deceased was admitted to the hospital, suffering from sloughing ulceration of the labia and vagina. Mr. Erichsen directed Mr. White, the acting house-surgeon, to apply nitric acid to the sores. Accordingly, on Saturday morning, she was subjected to chloroform by Mr. White, the acting house-surgeon, who applied it on a piece of lint to the mouth and nose. Soon afterwards, deceased talked wildly and threw her arms about. Suddenly a partial relaxation of the limbs took place, and she became insensible and pulseless. Witness, fearing a fatal result, sent for Mr. Clover, the resident medical officer. Artificial respiration was kept up, galvanism applied, and everything done to resuscitate her, but in vain, as she gradually sank and died. Mr. Clover corroborated the previous witness, and stated that, although not a qualified practitioner, Mr. White was fully qualified to administer chloroform. During four years chloroform had been applied in 1,000 instances in University College Hospital, without one fatal case occurring. The quantity of chloroform administered was at the option of the operator, and generally averaged from half a drachm to a drachm. Professor Erichsen performed the autopsy, and found a fatty degeneration of the heart, and also that death was produced by a paralysis of the heart, consequent upon the application of chloroform. The unfortunate affair was a purely unforeseen accident, for which no one was to blame. Dr. R. Quain fully sustained Professor Erichsen's opinion; and added, that portions of the heart having been handed to him for examination under the microscope, he had found that organ, particularly on the right side, in a state of fatty degeneration. The coroner minutely summed up, commenting upon the great caution that should be observed in the administration of chloroform. The jury retired, and after a brief deliberation returned a verdict, "That the death was caused by paralysis of the heart, produced by the influence of the chloroform, casually, accidentally, and by misfortune": accompanied with the following observations:—"More precaution ought to be used when chloroform is administered, by a person of experience being present during its administration." The coroner fully agreed with the observation of the jury.

CASES OF POISONING WITH TARTAR EMETIC.

The recorded cases of poisoning by tartar emetic are not numerous, a circumstance which suggests the conclusion that this substance is by no means so generally fatal in large doses as many believe. It is a *common drug*—retailed by grocers in many country places, so that in all probability it has often been taken in mistake for Epsom and Rochelle salts.

CASE I. ACCIDENTAL POISONING WITH HALF-AN-OUNCE OF TARTAR EMETIC: SUCCESSFULLY TREATED BY GREEN TEA, TANNIN, ALBUMEN, AND MUCILAGINOUS INFUSIONS.

The following case (reported in the *Amer. Jour. of the Med. Sciences*, for Jan. 1853, by Dr. HARRIS), confirms the statement of toxicologists that recovery is not unlikely to occur even when a very large quantity of tartar emetic has been swallowed. Benefit in the present case may be fairly ascribed to the treatment adopted.

On the morning of 28th Sept. 1852, Dr. —, feeling a little indisposed, took twelve grains of blue pill mass. At half-past two p.m., he took on an empty stomach what he believed to be half-an-ounce of Rochelle salts, with forty grains of bicarbonate of soda, and as much tartaric acid. Immediately afterwards he dined sparingly on ham, the breast of chicken, and tomatoes; and after dinner he ate two ripe figs. In about thirty-five or forty minutes after taking the medicine, he experienced some nausea; but, attributing it to his indiscretion in having

eaten so soon after taking the powder, he resisted the disposition to vomit which every moment became more urgent. In the course of four or five minutes, however, he was obliged to yield to it, and vomited twice very freely, after which he felt relieved. In two or three minutes the nausea and vomiting returned, and he then began to suspect that he had taken the wrong medicine. Instant inquiry was made, and it was discovered that the person who had put it up had mistaken the *antimonii et potassæ tartras*, for the *sodæ et potassæ tartras*. Dr. T. Williamson saw the patient at twenty-five minutes past three p.m., and immediately ordered for him copious draughts of green tea and large doses of tannin. Albumen, infusion of flax seed, and infusion of the slippery elm, were also freely administered. The vomiting, which was very distressing, continued with little intermission till nine or ten p.m. There was, also, very severe purging with most violent cramps of the legs, and slighter ones of the wrists. The first evacuation from the bowels was purely serous: those which followed were of a bilious character, but very loose. There were no cramps of the stomach. When it was thought that the stomach and bowels had been cleared of the poison, an injection containing tincture of opium was given and repeated in a few moments. The injections not being retained, a full dose of the acetate of opium was administered by the mouth. Brandy mint-julep was also freely given, as the patient was very much prostrated. A large sinapism was applied over the epigastric region, and frictions were used to the extremities during the paroxysms of cramp. Iced tea and iced mucilaginous drinks were continued through the night.

29th Sept. The patient passed a better night than could have been expected; was still nauseated, and complained of great thirst, and of some headache. The tongue was moist; there was no abdominal pain or soreness, nor any burning sensation about the stomach. The bowels were twice moved. Iced tea, iced milk, and arrowroot diet were ordered.—30th. There were neither vomiting, nor purging, nor thirst. The same diet and drinks were continued.—Oct. 1st. He rested badly during the night. He had headache, and nausea; the tongue was coated with white fur: but there was no febrile excitement. The iced drinks were continued: toast, coffee, chicken broth, and oyster liquor were also allowed.—2nd. There was some slight irritation of the throat, some cough, but no pain in the chest, and no fever. The patient was allowed full diet. From this date he continued to improve; and on the 13th, he was able to resume his ordinary occupations.

CASE II. FATAL POISONING BY AN OVERDOSE OF TARTAR EMETIC SENT OUT BY A NON-PROFESSIONAL DISPENSER.

The following interesting case is little known. It was published by Dr. E. SKAE of Leven, Fifeshire, in Sept. 1844, in the *Northern Journal of Medicine*, a periodical which appeared monthly in Edinburgh during a short period. We abridge the author's narrative.

On Friday, the 21st Jan., 1842, at three p.m., Dr. E. Skae was hurriedly sent for to visit J. J. On his arrival a few minutes afterwards, he found that the patient had expired. The man was of short stature, of robust habit and body, of about forty-five years of age. From Dr. Skae's personal observation of the deceased during professional attendances, and from facts communicated by his family, the subjoined is made up.

For several years, at a previous period of his life, he had been much addicted to intemperance, and had in consequence been affected with several attacks of delirium tremens: but four years previous to his death he had joined the temperance society, and had, up to the last week of his life, maintained habits of the strictest sobriety. On "Old Hansel Monday" which is observed throughout Fife as a holiday, and which occurred that year upon the 17th January, being the Monday of the same week in which he died, he broke his pledge, and became intoxicated: on Tuesday and Wednesday he continued his debauch: and on Thursday morning with a view to relieve himself, (as he had done before in similar circumstances), he sent to a neighbouring grocer for an emetic which he took. The action of the vomit commenced eight or ten minutes after its exhibition, and was powerful: two or three hours afterwards, profuse diarrhoea followed, and this latter symptom continued with little intermission up to the moment of dissolution, which took place sixteen hours after the emetic had been administered. During the latter part of the day, he had complained very much of pain in his throat, and in the region of his stomach, and he appeared to labour under great general uneasiness and restlessness, with occasional sweating and great prostration of strength. He had been very fretful under his sufferings, and had incessantly importuned his wife and family to send for Dr. Skae, which they

had steadily evaded, from a belief that his complaints were of the same nature as he had formerly endured, and that like them they would gradually abate. At length his impatience became so strong, that he declared he would "go for the doctor himself"; and by an unexpected exertion of his own strength, he contrived to slip out of bed, when he almost instantly fell prostrate on the floor in a state of insensibility. Dr. Skae was then immediately sent for, and, as has been already stated, upon his arrival found the man dead.

As the family attached considerable suspicion to the violent action of the emetic, inquiry was made at the shop where it had been purchased, where the shopman at once admitted, in terms exhibiting no small degree of confidence in his own knowledge of such matters, that he had supplied them with "two drops", or about fifty-five grains, of tartar emetic, as a safe and proper vomit. The body was buried, but was exhumed by order of the authorities. The mucous membrane of the pharynx, œsophagus, stomach, and duodenum, exhibited a dark and injected appearance. The contents of the stomach were analysed, and a large quantity of tartar emetic was obtained from them. The grocer and his shopman were indicted for "culpable homicide". The case was tried at Perth, in the spring Circuit Court of that year; but, in consequence of technical objections, it was carried before the High Court of Justiciary in Edinburgh, by whom the objections were repelled, and the parties were again placed at the bar at Perth, at the autumn Circuit Court. When the case was called, however, the public prosecutor stated that, for various reasons, he did not intend to bring them to trial. Their excellent character, their deep regret for the unfortunate mistake, the entire absence of criminal intention, the probability of death having been accelerated by other causes than the tartar emetic, and the salutary effects of giving the case sufficient publicity being already gained, were stated as the principal grounds on which the prosecution was dropped. The accused were then dismissed, after a forcible admonition from the bench.

CASE III. RECOVERY AFTER SWALLOWING A TABLESPOONFUL OF TARTAR EMETIC. PUSTULAR ERUPTION OBSERVED.

The following case, related by Dr. GLEAVES, U.S., is thus given by Dr. Taylor, at p. 115 of his *Medical Jurisprudence*, ed. 1852:—"A young man swallowed by mistake a tablespoonful of tartar emetic. In an hour after, he was speechless, pulseless, and apparently dying. Although he drank freely of cold water, and irritated his fauces repeatedly with his finger, no vomiting had occurred. During the first three hours, he vomited only two or three times, and the matter ejected was chiefly the warm water taken to favour vomiting. After the lapse of two hours, there was the most violent purging. In seven hours this ceased, and there was great thirst, with a sense of burning pain in the fauces, œsophagus, stomach, and bowels. There was also great irritability of the stomach, and the vomited matters were tinged with blood. On the following day, the vomiting continued, but the purging was arrested. The surface was covered with pustules: there was pain in passing the urine, which was copious. On the third day, the whole of the body was covered with genuine tartar emetic pustules. These began to heal, and the patient to recover, in about two weeks." (*Med. Times*, Jan. 24th, 1846, p. 127.) This is the only case of poisoning by tartar emetic in which pustular eruptions have been observed. It is otherwise remarkable for recovery from so large a dose, considering that but little of the poison could have been expelled in the first instance by vomiting.

PRACTICE OF MEDICINE AND PATHOLOGY.

THE TREATMENT OF EPILEPSY.

There is perhaps no disease which has been more the victim of irrational empiricism, than epilepsy. In 1605, Henricus à Bra published at Arnheim an alphabetical collection of the medicines which had been used in this disease previously to his time. The list, including some substances of a most disgusting description, amounts to two hundred and thirty-five: and we have no doubt that at least as many more have been used since the time when it was compiled.

A few of the remedies which have been vaunted in our own days, merit some attention.

BLOOD-LETTING, both general and local, has been recommended by most writers. Of this, Portal, in his *Observations sur la Nature et le Traitement de l'Epilepsie*, Paris, 1804, says that it is proper in plethoric, hurtful in anæmic subjects; and

that the indications for use will be afforded by the pulse. It is, he says, sometimes necessary to employ depletion before giving tonics; as where the disease is connected with congestion of the cerebral vessels.

Dr. Watson, in his lectures on the *Principles and Practice of Physic*, third edition, vol. i., p. 560, deprecates general bleeding *during the fit*; but allows of moderate local depletion by cupping from the neck or temples, if there be strong evidence of cerebral plethora. In the intervals, it requires often great nicety to determine whether a depletory or a tonic plan of treatment is necessary; but, under the following circumstances, Dr. Watson counsels blood-letting:—"When the patient is young and strong, and full of blood, and not of a particularly moveable temperament; when he has a hard pulse, or any degree of feverishness; when the disorder has supervened upon the suspension of some customary discharge, so that there is an obvious cause of plethora; and when the disease is in its early stage, and the recurrence of the fits has not yet been established: in any or all of these circumstances, it will often be proper to abstract blood from the patient; and it will always be right to purge him actively, and to insist upon an abstinent regimen. When former paroxysms have been preceded by signs of fulness of the head—by headache, for instance, throbbing of the temporal arteries, distension of the superficial veins, a flushed or loaded countenance—you may sometimes, by a timely use of the lancet or the cupping-glass, avert an attack that was apparently impending."

PURGATIVES have been recommended by nearly all authors, from Hippocrates to the present day; and doubtless do good under certain conditions. Among the ancients, hellebore was the principal remedy; and Dr. Copland states it to be useful in the "verminous" or "uterine" varieties of the disease; the powder of the root, or the extract, being given in doses of gr. x, increased to gr. xxx; or the decoction of the leaves or root may be employed. Oil of turpentine, especially conjoined with castor-oil, is praised by Drs. Copland and Watson. The latter physician finds it especially useful in cases connected with the presence of worms: he recommends it in doses of from 3ss to 3i every six hours. It was first recommended by Dr Latham the elder; and, according to Dr. Copland, has been employed successfully by Young (*Trans. of Coll. of Phys.*, vol. v, p. 52), Percival (*Edin. Med. and Surg. Journal*, vol. ix, p. 271), Lithgow (*Ibid.*, vol. xi, p. 301), Prichard, and himself. Aloes was preferred by Galen and some more recent writers; and Dr. Copland thinks it a very useful remedy, in combination, according to circumstances, with chalybeate, stomachic, and cardiac medicines, or with ox-gall or sulphate of quinine, bitter extracts, etc.

BLISTERS have been recommended by various writers; and, according to Portal, are very useful, especially at the commencement of the disease. Successful cases of the treatment of epilepsy by blisters have been related by Charles Pison, Serrao, Morgagni, and Burserius. Sinapisms, cupping, dry-cupping, the cautery, setons, and the moxa, have also been employed.

VALERIAN has, from the days of Galen, enjoyed a high reputation; and Portal appears to place some degree of confidence in it. Its efficacy, however, as of other mere antispasmodics, is now considered very questionable.

NITRATE AND OXIDE OF SILVER have been much used; but a great objection to the use of the nitrate lay in the permanent discolouration of the skin produced by it. The dose is, at the commencement, half a grain in a pill three times a day: and it has sometimes been increased to fifteen grains. Both the nitrate and the oxide for a time retard the fits, and occasionally accomplish cures.

The salts of ZINC, especially the sulphate and valerianate, are, we believe, much used in the treatment of epilepsy. Dr. B. G. Babington, in *Guy's Hospital Reports* for April 1841, states that he sometimes gives thirty-six grains three times a day.

COTYLEDON UMBILICUS. The juice of the cotyledon umbilicus was brought under the notice of the profession by Mr. Salter, of Poole, Dorset, in a paper published in the *Medical Gazette* for March 2, 1849. The dose, as stated in a subsequent communication, was an ounce of the expressed juice, or half a drachm of the inspissated juice. Dr. Joseph Bullar, of Southampton, published in the same journal for May 18, 1849, the results of his experience in the use of this remedy; and adds some very judicious remarks on the necessity of attending to the general health. "It is too well known," he says, "that setting the general health to rights will not alone cure epilepsy; but no remedy can be available if this step is neglected."

Like many other remedies, the cotyledon has not succeeded in the manner evidently expected when it was introduced into practice.

OTHER SPECIFICS—the mere names of which would fill pages—have at various times had their enthusiastic prescribers. From INDIGO and some other medicines we have seen a long suspension of the fits, even in cases where, on dissection, there were found bony spiculae projecting from the inner surface of the skull.

TRACHEOTOMY. The most remarkable proposition for the treatment of epilepsy is that which has been brought forward by Dr. Marshall Hall in his Croonian Lectures for 1852, published in the *Lancet* for April 10th and 24th, and May 8th and 15th. Acknowledging that apoplexy and epilepsy may have their origin in organic disease of the nervous centres or of their vascular structure, he believes that they are mostly the effect of emotions, acting directly, or of irritations, acting diastaltically, on the neck or larynx. These conditions he designates *trachelismus* and *laryngismus*. *Trachelismus*, or compression of the veins by the contraction of the muscles of the neck, he states to be the cause of epilepsy and apoplexia mitior: but apoplexia or epilepsy gravior do not occur, unless *laryngismus* supervenes. "But if *laryngismus* be the essential link between the exciting causes and the apoplexia and epilepsy gravior, it is plain that tracheotomy, in superseding the effects of this condition, must supersede the graver form of those diseases, converting them into the milder respectively. But an essential part of the epilepsy gravior is *general convulsion*; *laryngismus* then is essential to this convulsion; and as tracheotomy supersedes the effect of *laryngismus*, it must supersede convulsion, with the further train of dire affections, in the epilepsy gravior." In support of his views, Dr. M. Hall relates some cases, the accounts of which have been furnished to him: one by Mr. Cane, of Uxbridge; the other by Mr. Mackarsie, of Clay Cross, near Chesterfield. In these, tracheotomy was performed on epileptic patients with alleged success. More lately, the operation has been performed in St. Mary's Hospital; we have heard, however, that the patient has since the operation had a severe epileptic fit.

Dr. Marshall Hall's plan of treatment is one which is not likely to find favour. From his own statement, it does not *cure* epilepsy; and the importance which he attributes to spasmodic contraction of the larynx is far from being proved. He has evidently been led away by exclusive ideas.

The treatment of epilepsy will never be satisfactory until its pathology has been discovered. In a great number of cases at least, we believe that it arises from *blood-disease*. A humoral theory of the affection is adopted by Dr. R. B. Todd, in his *Lumleian Lectures* for 1849 (*Medical Gazette*, May 18, 1849). He suggests that a connexion between this disease and imperfect eliminatory action of the kidneys will be found much more frequently than is now suspected. He believes that the blood-poison from this, from hereditary predisposition, or from other causes, acts by impairing the local nutrition of the encephalon. Other writers hold similar opinions.

We will conclude with briefly stating what appears to be a correct summary of existing knowledge regarding the pathology and treatment of epilepsy.

1. Epilepsy is an assemblage of symptoms dependent on disturbance of the nervous centres, and which may arise from different causes; some of which operate directly, as injuries, or morbid growths; others through the blood, in the form of hereditary or acquired toxæmia; and others again by reflex irritation. Of these, we believe toxæmia to be the most frequent cause of the disease. The relation to epilepsy of osteophytic or other morbid growths pressing on or irritating the brain, remains to be determined. In some cases they may be the direct cause of the epileptic fits: but they may also, with at least equal probability, be regarded as originally arising from the same blood-disease as that on which the epilepsy depends. After their development, they will doubtless render the case incurable, by renewing the irritation on the occurrence of the slightest cerebral congestion.

2. It is absurd to expect a remedy for epilepsy, which shall in all cases cure it. Acting on the view of its being a blood-disease, we may perhaps hope one day to become acquainted with a medicine which shall be as efficacious in its treatment as cod-liver oil is in the treatment of phthisis. In the mean time, attention to hygienic rules, the proper maintenance of the secretions, and the mineral tonics, especially the salts of zinc, with such occasional adjuncts as may be required by the circumstances of the case, must form our chief remedies.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, MARCH 19TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

GALACTAGOGUE AND EMMENAGOGUE EFFECTS OF MAMMARY IRRITATION. BY JOHN ROSE CORMACK, M.D.

This communication was an abstract of the paper published at p. 254 of last number.

Mr. HUNT had tried mammary irritation by means of sinapisms in amenorrhœa. It had occasionally succeeded; and it had occasionally failed.

Dr. MURPHY asked Dr. Cormack if he recommended mammary irritation in cases of acute suppression of the menses?

Dr. DRUITT had seen amenorrhœa treated by sinapisms in an hospital, a number of years ago; and he recollected that the practice was abandoned in consequence of a young woman having died of ovarian inflammation. On dissection, an abscess was discovered in one ovary; and this, as well as the fatal issue, had—rightly, or wrongly, he was not prepared to say—been imputed to excessive irritation of the mammae by sinapisms.

Dr. CORMACK admitted that the practice might easily be carried to a mischievous or even fatal excess. As regarded the question of Dr. Murphy, he remarked that he had often, with advantage, used mammary irritation in acute suppression of the menses; but in such cases the engorged condition of the uterus required caution, and a combination of measures.

ON SUBACUTE INFLAMMATION OF THE UTERUS IN VIRGIN FEMALES; ITS SYMPTOMS, DIAGNOSIS, AND TREATMENT.

BY T. SNOW BECK, M.D.

The author stated that the symptoms accompanying this disease were seldom referred to their real cause, in consequence of being seated in parts of the body apparently remote from the affection, and from the menstrual function not being otherwise affected than by the increased pain which attended it. The disease usually came on gradually, being indicated by pain in the lumbar region, sides of the abdomen, and inside of the thighs, which at first only existed during the presence of the catamenia. The pains then became more increased, and finally existed permanently in these situations, being greatly increased at the menstrual periods. The catamenia appeared regularly, and were not increased in quantity or in duration; nor were they preceded or followed by vaginal discharge. After a time, varying according to the individual constitution, the general health became affected. The patient became nervous and languid, with pain at the top of the head: had sleepless nights, frightful dreams, waywardness of temper, depressed spirits, impaired memory, great irritability, considerable derangement of the digestive organs, and frequent palpitations of the heart, whilst the pulse was not accelerated. The pains attending this disease were frequently considered to be "an attack of spasms", whilst at other times they simulated disease of some distant organ, and were then known by the name of the disease thus simulated, with the word "hysterical" prefixed. The simulated affections of the brain were especially referred to, and one marked case quoted.

The DIAGNOSIS was considered with regard to:—

Dysmenorrhœa. This, with other appellations, as amenorrhœa, menorrhagia, etc., was considered as only expressing a prominent symptom, and not as being a disease. For this reason, the author would gladly see these terms expunged from the nomenclature of uterine pathology.

Ulceration of the Virgin Uterus. The author was convinced that no such disease had ever been shown to exist; whilst the statements concerning it he believed to be simply a clever trick to gain notoriety. He considered it a painful instance, where the whole profession had been disgraced for individual advantage.

Ovarian Inflammation. The existence of this disease had been greatly overrated; the pain in the erroneously named ovarian region being seated in the walls of the abdomen, and not in that body. This was shown by gentle pressure increasing the pain, but when pressure was increased, so as to affect the ovary itself, this organ was found to be in a healthy state.

Inflammation of the Vagina. This was shown by contrasting the previously detailed symptoms with those indicative of inflammation of the vagina, which were stated to be—pains

in the sacral region, round the hips, down the outside of the thighs, behind the pubis, and in the groins; increase in the quantity, and prolonged duration, of the catamenia; vaginal discharge; fulness, throbbing, or shooting pains in the vagina; tenderness on sitting down; pain on passing the motions; and the sensation called "a bearing down".

The chief CAUSE was considered to depend upon the social habits of our females, who instead of separating from the world during the menstrual periods, enter into its gaieties as usual, and thus, by disturbing the balance of the circulation, laid the foundation for further disease.

In the TREATMENT, much stress was laid upon the importance of ascertaining (a) whether the uterine disturbance was the result of a derangement of the general health, or, (b) whether the general condition of the health was the sequence of an uterine affection which still persisted. In the former, nourishing diet, mild stimulants, gentle exercise, and preparations of iron would be beneficial; in the latter, these remedies would be detrimental by increasing the inflammation, and this remark applied especially to the preparations of iron, which appeared to exert a decidedly stimulant effect on the uterus itself. Mild cases might be treated by rest, absence from excitement, regulation of the bowels, and an alkali with hydrocyanic acid. But, in more severe cases, the application of leeches was indispensable. The leeches might be applied through a small tube, but it was of little practical importance whether they took on the uterus itself, or on the upper part of the vagina. The author had not found either calomel or bichloride of mercury of much service, but, after the acute stage was subdued, the preparations of gold, combined with Indian hemp and camphor, had proved of great advantage. Local applications he considered valueless, whilst nitrate of silver, or other escharotics, he believed, only created further disease instead of relieving what had previously existed.

Dr. MURPHY had listened with pleasure to the first part of Dr. Snow Beck's paper, in which he had very instructively explained many of the cases of so-called dysmenorrhœa. But he had been surprised and pained at hearing Dr. Beck so far forget himself, as to impute dishonourable motives to his medical brethren. The employment of such expressions as he had used was a scandal to the Society. They (the Fellows) did not meet to abuse and vilify each other; but by a candid exchange and collision of opinion to elicit truth. If they differed from each other on certain points—on the present occasion the difference was regarding the signification of the term ulceration—merely a dispute about a definition—they must learn to bear and to forbear, and to respect each other as fellow-labourers, as men equally engaged in the search for truth. He repeated that he had been surprised and grieved at hearing the expressions made use of by Dr. Beck; and trusted that such imputations of base conduct would never again be heard in the Society. He could not refrain from speaking out his mind plainly and warmly on this point, as he felt that the respectability of the Society was at stake, if such language did not elicit a strong protest. With regard to the treatment, he did not think iron likely to prove so injurious as Dr. Beck was inclined to believe. He had found it very useful, on account of the great nervous irritation, and the rapid progress of deterioration of the blood. Strictly antiphlogistic measures, he believed, would fail in the treatment of the disease.

Dr. TYLER SMITH inquired whether Dr. Beck's paper had been submitted to referees in accordance with the laws: for if it had been, he thought that part of the feeling of the Society should fall on the referees, as well as on the author of the paper.

The PRESIDENT. It was submitted.

Dr. TYLER SMITH was sorry to hear it. He could not see any evidence of subacute inflammation of the uterus, in the symptoms which Dr. Beck had detailed. There was a tendency in some to refer everything to the ovary, to the uterus, or to the vagina. He had seen, in the hands of persons thus led away by one idea, prolapsed uterus, and polypi, mistaken for ovaritis.

A somewhat desultory discussion followed, on various points connected with the diagnosis and treatment of uterine diseases, in which Drs. Crisp, Barnes, and Drutt, and Messrs. L. B. Brown, and Greenhalgh, and other Fellows, took part.

Dr. Beck having replied to the various speakers, the meeting adjourned.

EDITOR'S LETTER BOX.

DEPUTATION TO LORD PALMERSTON ON MEDICAL REFORM.

LETTER FROM GEORGE WEBSTER, M.D., TO THE EDITOR.

SIR,—I perceive that in your last number, in the report of the deputation to Lord Palmerston, it is stated that "Dr. Webster, as an old reformer, and one supposed to take rather extreme views, begged to express his entire concurrence in the Bill".

Truth and my own consistency require that this should be corrected. What I said, in addressing his Lordship, was (in effect), "that as the oldest reformer present, except Mr. Wakley, holding what some considered rather extreme opinions, and having presided over and acted with a large section of the profession, my presence there with so many other reformers of different shades of opinion showed a greater degree of unanimity than had prevailed at any former period. That I did not consider the measure which we were met to support as a perfect one; that there were some of its details open to objection, and doubtless there would be some opposition from different quarters; but I trusted his Lordship would take charge of the Bill, and that by his well known influence and his enlarged grasp of mind, he would be able to disarm opposition, by reconciling any conflicting interests, and removing the differences of opinion which might still exist. That though imperfect in some points, I would rather accept the Bill (with the improvements which it might receive in Parliament) as a *very large instalment* of what was due to the profession, and to the public interests, than see an agitation continued which would be detrimental to both."

I hope that Lord Palmerston, after due examination of so important a question, will be induced to recommend the Bill to his colleagues as a Government measure; and that the College of Surgeons will not show any ungracious opposition to the wishes of a large majority in the profession. There are details in the Bill which I trust will be still further modified. The most important of these appears to me to be—

I. The *composition*, election or appointment of the General or Superintending Council.

II. To give power to this Council to appoint a Body of Examiners, independently of the Medical Corporations, to test candidates for practice in *all departments* of medical science.

III. The age at which surgeons and physicians shall be licensed for general practice.

These points will, however, be duly discussed in meetings of the profession and of the Association, which will be called together to support the Bill, and I have no doubt they will also receive ample attention in both Houses of Parliament. In the mean time, I beg the attention of the profession to them.

I am, etc.,
GEORGE WEBSTER.

Dulwich, March 28th, 1853.

DIFFICULTY OF PREVENTING HOSPITAL ABUSES.

LETTER FROM WILLIAM DAVIES, M.D., TO THE EDITOR.

SIR,—In a leading article of the *ASSOCIATION JOURNAL* for March 11th, on "The Growing Abuses of Hospitals and Dispensaries", you mention the Bath United Hospital as an example of the evil system of indiscriminate advice to out-patients. I can assure you that the subject has been formerly, and again lately, under the careful consideration of the medical staff, and also of the committee of that hospital, and that there exists on the part of both those bodies an anxious desire to remedy the evil to the full extent of their power.

I have thought over the subject very carefully; I have discussed it with my professional brethren; and a few weeks since, I brought it under the notice of the committee. The furnishing of advice and medicine gratuitously, to those who are able to pay for them, is a clear and palpable wrong. There is no doubt about the existence of the disease, but there is great difficulty in devising a remedy. It is a wrong to the hospital by improperly applying its funds; it is a wrong to the medical staff by occupying more of their time than is necessary; it is a wrong to the surrounding practitioners, who are thus deprived of a portion of their patients; and it is a grievous wrong to the patients themselves, by tending to break down their feelings of independence and self-respect. About all this, I imagine, there can be no difference of opinion; but when we come to discuss the remedy, numerous

and great difficulties present themselves. I could suggest several modes of cure, either of which would appear feasible enough upon paper; but when you come to apply any of them practically in the out-patient room, their adaptability fails you. The problem is this:—*To furnish the greatest possible facilities for the medical relief of real objects of charity, and to exclude from it those who are in a position to pay for medical attendance.* I would rather that many unfit persons should be relieved at an hospital, than that any of the sick and indigent should be deterred by difficulties from seeking and obtaining admission. No modification of the ticket system that I have yet seen appears to me at all satisfactory—nor do I think that the plan which answers so well for the Destitute Sick Society, in Edinburgh, would be found available in this city as applied to hospital patients. The machinery does not exist.

I am very glad that you have invited attention to the subject, and hope it may be the means of some plan being suggested by which the difficulty shall be overcome. I am, etc.,

WILLIAM DAVIES, M.D.,
Physician to the Bath United Hospital.

Bath, March 1853.

PREVENTION OF HOSPITAL ABUSES.

LETTER FROM JAMES BLACK, M.D., TO THE EDITOR.

SIR,—Coinciding with the truthful remarks in your articles on the abuses and evils attending indiscriminate medical relief, I beg to enclose a copy of one of the Recommendation Papers, which are required to be presented by the applicants before admission at the Bolton Infirmary and Dispensary. As the paper requires the signature of a subscriber to the funds of the Institution or of other authorised persons, perhaps there is as much security taken against any abuse of the charity as can be obtained. The donor of the paper is presumed to be acquainted with, or to have made inquiries into, the circumstances of the applicant for relief.

I am, etc.,
J. BLACK, M.D.

Bolton, March 1853.

TO THE MEDICAL OFFICERS.

GENTLEMEN,—I recommend to your examination the bearer, of , whom I believe to be a proper object of the Charity.

No. of family,	
Weekly income of the patient when in health,	
Do. do. at present,	
Do. of the rest of the family,	
Age,	
How long ill,	

N.B. This recommendation must be delivered on TUESDAYS, THURSDAYS, or SATURDAYS, precisely at Ten o'clock in the Morning; and if the person requires visiting at home, by Nine o'clock.

It having been found that many persons have been admitted who were not proper objects of the Charity, it has been resolved by the Committee, that in future no recommendation shall be received, unless the particulars of this form be complied with.

WEST OF ENGLAND INSURANCE OFFICE, v. MEDICAL MEN.

Taunton, March 19th, 1853.

SIR,—On March 15th, I received a letter from the West of England Insurance Office, Exeter, signed "CHARLES LEWIS, Secretary", requesting an early reply to sixteen questions relative to the health of a patient of mine, who wished to insure his life.

It appears that companies do not assure lives without a medical report; and it remains for the profession to determine whether it will give gratuitous professional opinions to parties who are so well able to pay them, as insurance companies, if there be any truth in their reports of profits and bonuses.

The words in the sub-agent's letter which I have underlined, were underlined in the original; and I shall be obliged by your printing them in italics, as they show the animus of the writer.

I am, etc.,
C. H. CORNISH.

To Charles Lewis, Esq., Secretary, West of England Insurance Office, Exeter.

Taunton, March 16th, 1853.

SIR,—I have this day received from you a printed form containing many questions (to be answered by me) relative to the

health of my patient Mr. —. I shall feel much pleasure in replying to those questions, on being informed by you that the usual fee will be paid to me for so doing. I live by my profession: the information you require is wholly professional: therefore, I require remuneration for it. I am, etc.,

C. H. CORNISH, F.R.C.S.E.

Reply to the above, from the Sub-agent.

Taunton, March 18th, 1853.

MY DEAR SIR,—The West of England Insurance Office has written to me to get Mr. — examined at the expense of the office, before some surgeon, *but not before you*, and I am to pay him his fee. I am, etc.,

To C. H. CORNISH, Esq., Surgeon.

[At page 222 of our number for March 11th, we published the Manchester Medico-Ethical Society's List of Life Insurance Companies "which recognize the principle of remunerating the medical attendant of an applicant for assurance, should his opinion be sought." We are anxious to print a list of those which do not recognize this principle. Who will contribute to this proposed list? The names of non-paying offices ought to be familiar to medical men.—EDITOR.]

LEEDS AND YORKSHIRE ASSURANCE COMPANY.

LETTER FROM J. H. BYWATER, ESQ., TO THE EDITOR.

SIR,—In the ASSOCIATION JOURNAL for March 11th, there is a communication from the Manchester Medico-Ethical Association, in which is given, "for the benefit of the profession at large", a "list of Assurance Companies which recognize the principle of remunerating the medical attendants of applicants for insurance, should their professional opinion be sought by the office". There can be but one opinion as to the great value of such a list to the profession, provided it be correct; but I suspect that at least one company is inserted in this list which has no right to be there.

Some time during the year 1851, I was requested by a patient to fill up a schedule which had been supplied to him (for the purpose of being filled up by his regular medical attendant) by the agent of the Leeds and Yorkshire Assurance Company, in consequence of his having made a proposal to effect an assurance on his life in that office. I transmitted the needful information; and some time after, having seen the office mentioned as one which recognized the principle of remunerating medical attendants of applicants for insurance, I applied for my fee to the agent for this district. A week or more after having made my application, I received the letter which I enclose, from the office at Leeds. I am, etc.,

J. HALL BYWATER.

Knottingley, Yorkshire, March 24th, 1853.

The following is the letter enclosed by Mr. Bywater:—

Leeds and Yorkshire Assurance Office,
Leeds, 13th January, 1852.

SIR,—Mr. Walker, the agent for this Company at Pontefract, has forwarded to me your note of the 3rd instant, on the subject of a fee claimed of the Company by you for a certificate, in the case of Mr. Thomas Burton, whose life was proposed for insurance.

You state that the office is included in a "list of insurance offices, which recognize the principle of medical remuneration". If by this is meant that the office pays for the certificates of the private medical attendants of parties proposing, it is altogether incorrect; and in any case, the publication of the name of the office in any such list, is unauthorized.

The office requires the party proposing to provide, at his own cost, the medical evidence of his attendant, and (as it did in this case) remunerates only *its own medical referee* for the needful examination. I am, etc.,

B. F. SCOTT, Secretary.

J. H. BYWATER, Esq., Knottingley.

INCOME TAX.

LETTER TO THE EDITOR.

SIR,—I, with many others, members of this Branch* of the Association, have wished to have a meeting of the members, to take

* Lancashire and Cheshire Branch of the Provincial Medical and Surgical Association.

into consideration and petition against the Income Tax. Our Local Secretary at Liverpool, Mr. Jones, has written to his colleague, Mr. Hatton, who lives in Manchester, and this worthy functionary refuses to call a meeting; I therefore ask you to kindly inform us, what steps we may take legitimately to record our sentiments against this obnoxious and iniquitous impost, without troubling Mr. Hatton. I am, etc.,

A LIVERPOOL MEMBER.

Liverpool, March 29, 1853.

[In most Branches, upon receiving a requisition signed by a certain number of members, the President is by law obliged to call a meeting. If such a requisition cannot be got up, the presumption is, that a meeting is not generally desired by the members.—EDITOR.]

SPURIOUS TITLES.

LETTER FROM JAMES McBEAN, CLERK TO THE UNIVERSITY OF ST. ANDREWS, TO THE EDITOR.

SIR,—The senatus having ascertained that a Mr. Hugh Hastings, of Cheltenham, is described in the *Medical Directory* as M.D., B.A., St. Andrews; I am directed to request that you will intimate in the next number of your JOURNAL, that no person of that name is either a Doctor of Medicine, or a Bachelor of Arts of this University. I am, etc.,

JAMES McBEAN.

University of St. Andrews, March 28, 1853.

NEWS AND TOPICS OF THE DAY.

SURREY MEDICAL BENEVOLENT SOCIETY, AND THE MEDICAL BENEVOLENT COLLEGE. At a meeting of the Surrey Medical Benevolent Society, held at Reigate, on the 10th March, it was determined to subscribe from the funds of the Society £2,000, towards the endowment of the Medical Benevolent College, on condition that the Surrey Medical Society should have the perpetual right of nomination to certain exhibitions in the school. The Surrey Medical Society was originally established to relieve the wants of the widows and children of its members; and it has appeared to the promoters of the Society, that they could not more effectually secure the objects desired, than by obtaining for the children of members, at a cheap rate, the excellent education which they will receive in the Medical Benevolent College.

ROYAL COLLEGE OF PHYSICIANS. At the usual quarterly meeting of the *Comitia Majora*, held on Monday, the 21st March, the following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College:—Dr. Armitage, Upper Charlotte Street, Fitzroy Square; Dr. Bristowe, North Addington Street, Camberwell.

Dr. Holmes, Great Torrington, Devon; Dr. Somerville, Walsall, Stafford; Dr. Tuke, York; Dr. Bayes, Marine Square, Brighton; and Dr. Thompson, Newark-on-Trent, were admitted Extra-Licentiate.

MULLAR v. SYME. This case was tried last week before a jury in Edinburgh, when the verdict given was in favour of the defendant. We believe that the case was essentially the same as that of *Lizars v. Syme*, tried in July last, when Mr. Syme also obtained a verdict. In Scotland it is not so unusual as it is in England for professional men to wield, offensively and defensively, the expensive weapons of the law.

ADVERTISEMENTS.

Just Published, price 5s.,

On Rheumatism of the Head and EAR, and on SOME FORMS OF HEADACHE in CONNEXION with DEAFNESS. By WILLIAM HARVEY, F.R.C.S., Surgeon to the Royal Dispensary for Diseases of the Ear.

Also, by the same Author,

On the Enlarged Tonsil, and some Affections of the THROAT in RELATION to DEAFNESS. Price 3s. 6d.
London: HENRY RENSHAW, 356, Strand.

Now ready, PART I. 8vo, sewed, price 12s., to be completed in Two parts.

A Text Book of Physiology. By DR. G. VALENTIN, Professor of Physiology in the University of Berne. Translated and Edited from the Third German Edition, by WILLIAM BRINTON, M.D., Medical Tutor in King's College. Illustrated by upwards of 500 figures, on wood, copper, and stone.
London: HENRY RENSHAW 356, Strand.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

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NEW SERIES.

THE WING WOMAN; AND THE SUCCESS OF MEDICAL IMPOSTORS.

THE veteran practitioner generally reads without surprise, and with but slight emotion, such histories as that which Mr. RICHARDSON has so well written, and which appears in this day's number. The veteran practitioner has been taught in bygone years, by many events within his own sphere of observation, that the popular estimate of medical skill is quite as often erroneous as it is correct. He has, moreover, from a consideration of these events, rightly concluded that this state of matters, however much it may be deplored, is nevertheless not a subject for wonder, from the simple fact that even educated observers, if ignorant of physiology and pathology, are incapable of testing medical knowledge. On the other hand, the accomplished and well-informed aspirant to the responsibilities and emoluments of practice, who has merely tasted the social difficulties and trials of his adopted career, is not likely to think so little or so calmly of the doctress of Wing, and of the other medical impostors of the day who sail to wealth upon the tide of fashionable folly. In fresh, young minds, of refined and honourable mould, the contemplation of such phenomena can hardly fail to excite feelings of discouragement, despondency, and disgust; feelings, too, which, if embittered by the *res angusta domi*, painfully endanger honesty, or cause the ingenuous man, for the sake of his integrity, impetuously to rush out of a profession which he proclaims to astonished relatives to be one which can only keep him from starvation, provided he use it as a garment wherewith to conceal a systematic charlatanism.

Are years of industry and self-sacrifice, are the life-hazards which have been encountered from exposure to pestilential disease and poisoned wounds—are all these to count as little or nothing in the scale of fortune, when weighed against the tinsel glitter of superficial boasting, the artful courting of fashionable leaders or hospital governors, and the practice of the wildest excesses of modern quackery? If the acquisition of money be held as synonymous with good fortune in life, if gold be the only good which this world can offer, then, to answer truthfully the question proposed, we must admit that it is no rare occurrence for flimsy physicians, and medical swindlers of varied type, to reap golden harvests in fields wherein honest labourers of sterling skill can scarcely glean enough to keep the wolf from the door. But there is a brighter aspect of professional life, to which we are about to turn—an aspect which it is wholesome at all times to contemplate, but especially when the poor man sees the emoluments which he had fancied were the reward of a faithful and skilful discharge of duty, flowing past him, in full and rapid current, into the pockets of a Wing woman, a Holloway, or a Henderson. True it is, that we have ever present among us one or many reigning medical delusions, which command the influence and secure the spoils of various sections of the community—the dissipated sons and daughters

of fashion, with minds replete with nonsense, and devoid of sense—the banker, the merchant, and the city Cræsus, with their one idea—or the clergyman or the squire of mere University breeding, whose education has been such as they might have had in the same cloisters centuries ago, and whose training, so far as the acquisition of actual knowledge is concerned, might have admirably fitted them to move in the best circles of heathen Greece and Rome, but which is not sufficient for the Christian pulpit, the British Senate, and the Scientific World of the nineteenth century.

Stop! stop! some one cries; have not many excellent clergymen and many able statesmen come from the classic banks of Isis and of Cam? In truth and soberness, we answer, No, not one! The theology, the science, and the statesmanship of the Universities are sterile, sapless, monkish, and mouldy; and all that can be gained within their walls is—and it is much, we own—a rigid mental discipline. But mental discipline is no more knowledge, than the well-tilled glebe is the waving wheat. In both cases, good fruit can only follow the sowing of good seed, and the diligent weeding of the field. The faithful priest has learned his divinity and his parish economics, under the stimulus of a good conscience, in his own home; and ambition and patriotism have prompted many to educate themselves as statesmen. The prizemen of the public schools and Universities of England, it cannot be denied, take rank in the aristocracy of intellect simply as Mathematicians, Latinists, or Grecians; and, unless they are instructed carefully, by themselves or others, after leaving their scholastic gymnasia, they grow up to be men of deplorably unsound education. The Scottish schools and colleges have undoubtedly been far below those of England in point of scholarship, but they have infinitely surpassed those of England in the amount of available knowledge which they have imparted; and the result has been exactly what might have been expected—that quackeries, which flourish in England, find much less favour among the clergy and home-educated gentry of Scotland. We have not been led unawares into this episode. We have been desirous not to be misunderstood in the remarks already made, or when we now aver that, so long as Latin, Greek, and Mathematics, are the chief portals to University honours and church livings, the education of our clergy and upper classes will continue to be so unsound, as to make it no matter of surprise that many of them should become the partizans of strange doctrines in theology or therapeutics. A reformed system of University education would do more to elevate medicine in general estimation, than any other event which is likely to happen in this country; because it would enable the great body of our clergy, our gentry, our nobles, and our legislators, to appreciate in some degree at least, and through various media, the past progress and the present state of medical science.

In the mean time, it is the fate of the medical profession to be much depreciated and undervalued, and it is the lot of many able and in every way deserving men to be scarcely able to subsist in localities where the ignorant and the

charlatanic grow rich; but, as we said before, rays of purest sunshine may be thrown even upon this gloomy picture. Let it be remembered that when our ministrations are unrewarded by money, we often have the luxury of doing good. Mere wealth is incapable of yielding any substantial happiness during life, or any consolation at death. It is to his unhallowed gains that the deceiving practitioner can alone look for his pleasures; and when the fleeting breeze of popular applause shall have died away, or when he is dead, his kinsmen and his children will blush at the mention of his name. Again, notwithstanding all that has been said, and all that is daily passing before our eyes, we do not hesitate to declare, as the result of a careful survey of the position of an extensive circle of professional acquaintances, that, generally speaking, after a season of probation, the man who has had a competent education, is possessed of a good moral character, of devotion to medical science, and who waits upon the sick with unfeigned kindness of heart, rarely fails to live comfortably, though perhaps seldom affluently, on the rewards of his labours.

Should, however, misfortune overtake the honest medical practitioner, and starvation threaten his family, he must pause before he seek to repair his fortunes by turning aside to quackery. He must, through the thick clouds of all his misery, contemplate the tremendous weight of his responsibilities, and remember that it is a fearful sin to buy bread with the price of human life.

The real position of the medical practitioner as regards his patients, has been forcibly expressed by Sydenham, in the preface to the first edition of his *Observationes Medice*. He says:—

“Whoever takes up Medicine should seriously consider the following points. *Firstly*, that he must one day render to the Supreme Judge an account of the lives of those sick men who have been entrusted to his care. *Secondly*, that such skill and science, as by the blessing of Almighty God, he has attained, are to be especially directed towards the honour of his Maker, and the welfare of his fellow creatures; since it is a base thing for the great gifts of Heaven to become the servants of avarice or ambition. *Thirdly*, he must remember that it is no mean or ignoble animal that he deals with. We may ascertain the worth of the human race, since for its sake God's only-begotten Son became man, and thereby ennobled the nature that He took upon Him. *Lastly*, he must remember that he himself hath no exemption from the common lot, but that he is bound by the same laws of mortality, and liable to the same ailments and afflictions with his fellows.”*

A few words upon a kindred theme struggle for utterance ere we lay down the pen.

To our prosperous colleagues who, after satisfying the necessities of themselves and their households, have yet to spare, we desire to say that the moral integrity of a sorely tried brother may often be saved from temptation, and sometimes from shipwreck, by a little seasonable aid privately administered from the Medical Benevolent Fund of our Association; which, from the advertisement in this day's number, we rejoice to see is obtaining increased support. We may be also permitted to ask whether a man is entitled to preach a stern professional integrity, and at the same time refrain from relieving, as God may give him opportunity, those who suffer through its observance?

NEW MEDICAL JOURNALS NOT ALWAYS SIGNS OF SECTARIANISM.

A new quarterly medical periodical has appeared in Glasgow. In the words of the prospectus, it is intended to be “a medium for recording the many rare and interesting cases of disease, and the valuable practical observations which must necessarily arise from the superior opportunities for medical experience which the city of Glasgow and the surrounding country afford”. The proprietors likewise remark, that “the difficulty in such an undertaking must be, not in obtaining a sufficient number of able contributors, but in selecting what is at once useful, practical, and instructive”. This is probably quite true as regards the literary supplies; but the difficulty in maintaining a periodical intended for a limited class of persons, is to obtain a sale sufficient to pay the paper-maker, the printer, the editor, and the reviewers. Periodicals addressed to the general public, or which are known to be read by thousands of a particular class or profession, obtain, without an effort, a large auxiliary income from advertisements; but a restricted circulation is a fatal impediment to the influx of much revenue from such a source.

We have not made these remarks from a wish to depreciate this new undertaking, but rather that we might say that, notwithstanding the excellence of Number One now before us, and the apparent abundance of editorial resources, permanent success, in a commercial sense, may not be achieved. We hope, however, that our fears may be disappointed; for the tendency of such periodicals as the *Glasgow Medical Journal* is decidedly good. The character of the authors, the science of their contribution, and the spirit which the prospectus breathes, powerfully commend the work to professional patronage. Its quarterly periods of publication, and its moderate size, are such as to prevent its interfering with journals appearing at shorter intervals and of larger dimensions.

That the enterprise has not originated in any narrow sectarian rivalry, is sufficiently clear from the fact that three out of the ten authors of original contributions in the number before us, have joined our Association within the last three months, viz., Dr. J. A. Lawrie, Surgeon to the Royal Infirmary, and Professor of Surgery in the University of Glasgow; Dr. Eben Watson, Professor of the Institutes of Medicine in Anderson's University; and Dr. Robert Mac Gregor, Physician to the Royal Infirmary of Glasgow. And this leads us to remark, that the cordiality and catholic feeling with which the Association is supported in Scotland, is indicated by another striking fact in connexion with the medical literature of that division of the kingdom, viz., that of the six distinguished men whose names appear on the cover of the *Edinburgh Monthly Journal of Medical Science* as its conductors, four belong to the Association—Professor Simpson, an old member, and Professors Christison and Syme, and Dr. Douglas MacLagan, who have recently joined our ranks. These are encouraging features in the present aspect of the medical profession, for they point out that while the laudable ambition of different schools and colleges may support special literary organs, all these organs may work together in harmony, for the peace, prosperity, and unity of the profession.

* Sydenham Society's Edition. Dr. R. G. Latham's Translation, vol. i, p. 25. London: 1848.

ORIGINAL COMMUNICATIONS.

LETTSONIAN LECTURES FOR 1853.

By EDWARD WILLIAM MURPHY, M.D., Professor of Midwifery in University College, and Obstetric Physician to University College Hospital.

LECTURE SECOND.

SECOND AND THIRD STAGES OF LABOUR: ERRORS OF MANAGEMENT WHICH MAY BE COMMITTED.*

MR. PRESIDENT AND GENTLEMEN,

I WOULD wish this evening to direct your attention to the next stage of parturition: and, having briefly pointed out the manner in which the child is forced through the pelvis, and the difficulties which oppose themselves, I shall endeavour to prove to you the errors that may be and are committed in the management of this stage—mistakes which too often lead to the most disastrous results.

As soon as the mouth of the womb is completely dilated, or at least when the resistance of the cervix is overcome, a very remarkable change takes place in the expulsive efforts of the uterus. Hitherto nature has exercised the utmost caution in applying the force at her command; and every means has been used to control the power of the fundus uteri, so long as the tissues of the cervix were unfolded and unprepared to yield to it. But now that difficulty is overcome; and we not only find these expulsive muscles exerting a much greater force, but the whole of the respiratory muscles are called in to aid the expulsive effort. Hence the full inspiration which precedes the pain, and the prolonged deep-toned expiration, which has obtained for these pains the old-fashioned but well known appellation of "groanings". This increased power is fully required to effect the object now to be accomplished; the head of the child has to pass through an osseous cavity so irregular in its form, and so limited in its space, as to need it all. It is not easy for the practitioner, who attends an ordinary labour, to realize to the mind's eye the difficulty which is being overcome, or the force necessary to advance the head; but if, in the dissecting or the dead-room, he endeavoured to force the head of a still-born child through the pelvis, he would soon be convinced of it. It sometimes happens that women die suddenly in this the second stage of labour; and in the *post mortem* inspection, a very great effort is required to extract the head from the pelvic cavity. I have known it to require all the strength a person could use, before it was accomplished.

Such then being the case when, on the one side, there is great power called into action, and, on the other, great resistance, the utmost ingenuity is required so to regulate these opposing forces, that no injury may arise in the struggle that takes place. The power is still to a certain extent controlled; the liquor amnii may not yet have escaped; and if it has not, it resists, but to a much less extent, the force of the fundus; besides, the amount of force which is used is accurately measured by the resistance. In cases of disproportion, where the resistance is great, the contractions of the uterus, at first vigorous and powerful, become afterwards weaker, return at longer intervals, and sometimes cease altogether until the effects of the struggle have subsided: but if the resistance be only moderate, the pains continue of the same strength, return at equal intervals, and are never suspended. In order, however, to overcome the difficulties presented by the pelvis, an amount of mechanical contrivance is displayed, as necessary as it is beautiful.

To illustrate this, allow me to recal to your attention the peculiar form of the pelvic cavity. You are aware that the inlet and outlet of the pelvis are in planes which, if prolonged, would meet at an angle; or, in other words, that the axis of the brim and outlet intersect at a point within the

cavity. The widest space of the inlet is in the transverse, that of the outlet in the antero-posterior direction. The head of the child enters the pelvis in the axis of the brim, moving downwards and backwards; it emerges in that of the outlet, that is, downwards and forwards. So long as it is passing in the axis of the brim, the inequalities of the pelvic cavity oppose themselves; when entering that of the outlet, the soft tissues which close it are the chief points of resistance.

We find also, that the form of the pelvic cavity is such that the head in its transit must take a spiral direction. If, for instance, the pelvic cavity be considered as a series of planes, it will be found that the widest space in each plane, as we descend, changes from the transverse to the antero-posterior measurement: the head in its descent, therefore, must describe a spiral curve, and the pelvic cavity becomes a kind of female screw.

The advantage of this formation must be obvious; the very inequalities of the pelvis, which are designed to support the superincumbent viscera, are so arranged, that they also form a mechanic power to aid the passage of the child. It serves also another purpose—it obliges the head to assume that direction which is most favourable for its expulsion. The most common position which the head presents when it enters the pelvic cavity is that in which the occiput lies anterior to the transverse axis; this is also the most favourable for expulsion, because the back of the head has to glide only a short distance along the curve, in order to pass beneath the arch of the pubis, and afford room for the anterior part to complete its descent. It sometimes happens, however, that the head presents differently. The forehead, for instance, may be anterior, and take the place of the occiput: if the head continued to descend in that direction, it must be forced very much lower down before any portion could leave the pelvic cavity; and being still in the axis of the brim, would be strongly resisted by the coccyx and perineum, the coccyx especially, and the muscles attached to it, powerfully opposing themselves. But the screw-formation of the pelvis generally prevents this; because, as the head descends, the occiput, which lay posterior to the transverse axis at its entrance, is rotated forwards along the curve until it becomes anterior to it; thus securing the important advantage that, no matter what may be the direction of the head at the brim of the pelvis, it must assume, on its transit, that which is the most favourable for its expulsion.

The same rule applies to other presentations than that of the vertex. The face, for example, may present; and if so, the chin lies forwards, just as the occiput in the former instance; consequently, the chin has only a short distance to pass before it escapes under the arch of the pubis, in order to give room for the remainder of the head to emerge from the pelvis. The chin, however, may be directed backwards in the first instance; and if it continued so, the cranium, which is anterior, would pass along the arch like a wedge, the forehead first, then the parietal portion, which must greatly increase the difficulty of expulsion. The form of the pelvis, however, generally prevents this; because, even in this unfavourable position, the chin is often moved forward in its descent, just like the occiput in occipito-posterior positions.

In preternatural positions the same rule is applicable. If the breech present, the most favourable position for delivery is when the back of the child is anterior, corresponding to the abdomen of the mother; but if this be reversed, so that the back lies posterior to the transverse axis, the sacrum nearly corresponding to the sacro-iliac articulation, then the same rotation takes place as in the former instances; the back is rotated forwards, and the deviation is corrected. Thus it will be seen that the peculiar form of the pelvic cavity, limited in its space and irregular though it be, affords the most striking illustration of mechanical contrivance, and is a noble proof of the design of a master mind, who can make these very difficulties the most efficient means of accomplishing his purpose.

The manner in which the head of the child passes through the pelvis, also deserves attention. It not only seeks the

* This Lecture was delivered before the Medical Society of London, on March 16th, 1853.

widest space, but passes through on the principle of a wedge; its least measurement is first presented to the pelvic cavity, and is forced forward in advance of wider portions. For instance, the antero-posterior axis of the head is never parallel to or coincident with the oblique axis of the brim; it cuts it at an angle more or less acute; the occipital end descends, the frontal rises, and thus it passes through the brim. So also the longest transverse axis of the head does not coincide with the opposite oblique axis of the pelvis; the parietal extremity next the pubis descends lower than that corresponding to the sacrum. Thus the head, as a wedge, is forced into the pelvic cavity, which in many instances it expands to a greater or less extent.

In this brief outline of the mechanism by which the difficulties presented by the human pelvis are overcome, I have endeavoured to use the plainest language, and to address myself rather to those who have not made this subject their study, than to those of my professional brethren who are perfectly conversant with it. I trust, therefore, that they will pardon this superficial detail, as my wish is not so much to enter into the minutiae of this mechanism, as to point out with sufficient clearness where practical errors are too frequently committed.

In the description just given, it is assumed that the pelvis is perfectly well formed, and that no disproportion exists between it and the head. In such a case, assistance or interference is no more needed than in the first stage of a healthy labour. Nature is omnipotent, and therefore there is no occasion for superior skill: the highest sagacity is shown in doing nothing.

But, unfortunately, the pelvis is not always perfectly well formed, and the proportion between it and the head is too frequently deranged by many causes. In the consideration of this subject, it cannot be too strongly impressed upon the mind, that civilisation and its vices bring with them the same penalties here as in other instances; and if, in the study of disease, we can trace its causes to habits which are the result of our artificial existence, so in this natural process of parturition, we find the same causes in operation to deprive it of its proper character. The so-called "natural labour" is no longer natural, and must be viewed as a deviation from normal parturition, just as much as disease is a deviation from health: the one requires aid just as much as the other, and equally needs a sound scientific medical education.

I shall first direct your attention to the more trifling impediments to delivery, and then to those serious obstacles which depend upon disproportion.

The pelvis may be perfectly well formed, and yet the head may, through violence of the pains, be forced into the cavity in such a manner that the frontal or anterior part descends lower than it should. The consequence is, that the longitudinal axis of the head lies obliquely across, and becomes fixed in the pelvic cavity; the head makes no further advance; and, although the pains are quite adequate for the purpose, no progress is made in the labour. The educated practitioner at once recognises and corrects this displacement: nothing is more easy. But let us suppose the woman to be in the hands of an ignorant person, who knows nothing whatever about the positions or displacements of the head; who thinks that she knows a great deal, quite sufficient for all practical purposes, when she can distinguish the head from the breech. Under such circumstances, the case becomes one of difficult labour; the pains continue fruitlessly for hours, until at length, making no impression, they become weaker, return at longer intervals, and perhaps are suspended. The sagacious attendant then decides that assistance is necessary: possibly indulging in scientific language, she may call it a case of uterine inertia, or perhaps a distorted pelvis, requiring the forceps at least to effect the delivery. Assistance arrives; a vaginal examination is made; the position of the head is corrected; the labour rapidly proceeds to its conclusion without any instrumental aid, and exposes and puts to flight this most learned explanation of the cause of delay and the mode of removing it.

It would be well if all such blunders could be so easily and so safely corrected; but, unfortunately, it is otherwise. I shall quote another instance, where mismanagement leads to a very different result: for example, when the face presents. In such instances, when the position is favourable, the chin lying forwards, the delivery is generally easy: when unfavourable, the deviation will correct itself, *or may be corrected*; but if we suppose the case in the hands of the scientific individual before alluded to, the results are pretty nearly as follows. The presentation is unusual: it is not the head, nor the foot, nor the breech: what, then, is it? Frequent examinations are made to solve the mystery; the cheek and part of the face which present, already congested and swollen from the pressure of the pelvis, now become much more so; and if no further injury be done to the child, the presentation is arrested: it cannot alter its direction, and so it remains. Labour continues inefficiently for hours; examination after examination is made; and at length, deciding by the rule of time, the midwife comes to the same conclusion as in every other instance. "Everything that could be done was done; but the birth would not come; therefore, assistance must be obtained." Aid is demanded; the forceps are applied, and the child delivered still born; its face frightfully swollen and disfigured. Thus is one life unnecessarily sacrificed.

Let us suppose a different case—one where the breech descends in place of the head. There are certain cases of male infants where the scrotum has been so compressed as to become greatly swollen. I have known instances where, from constant examinations made to find out what this was, the scrotum has sloughed, and the child has been almost emasculated. Some years ago, a highly esteemed medical friend informed me of a case that had just occurred, which, at the time, I believed to be scarcely credible. A tumour of this kind was discovered by a midwife, who immediately sent for a practitioner. Not well understanding it, he obtained a second opinion: neither, however, were very clear as to its nature; but both were perfectly satisfied as to the delay of the labour. By a very simple process of reasoning, they arrived at the conclusion that this tumour must be the cause; and, therefore, that it should be removed. The operation was performed, and the tumour given to the midwife, who, being very curious to know what it was, closely examined it, and discovered the testes of the child!

Again, there are cases when the breech descends with the back towards the sacrum, in which it is driven down so far that it cannot rotate. An attempt is made to deliver without correcting this error; the limbs and body are brought down; but the great difficulty, the head, remains: this is pressed forwards over the brim of the pelvis, and, being there caught, cannot be moved: powerful but misdirected efforts are made to extract it, but all to no purpose; and assistance is sent for just when it is too late—the child has already ceased to exist.

Let us now turn to the difficulties presented by disproportion between the head and pelvis, constituting what may be truly called "morbid labour". The natural laws which govern parturition are too frequently deranged by morbid causes: for instance, the head may be so enlarged by disease as not to be able to enter the pelvic cavity. Cases have been reported, where the uterus was in action, not for hours, but for days, endeavouring to force the hydrocephalic head into the pelvic cavity; at length it was ruptured; yet, had the existence of this disease been ascertained in time, a trochar would have been sufficient to remove the difficulty, and to save the patient.

The disproportion, however, more commonly exists in the pelvis, because it is so frequently softened by disease. Our civilized habits here play an important part in destroying that beautiful mechanism which nature had contrived for the woman's safety. The osseous system is at birth only in the progress of its development. The supply of the elements of bone to the blood is constantly demanded in the infant and growing child; this is abundantly furnished by human milk, which contains casein in a large proportion. But when the infant receives no milk, or almost none,

reared artificially on starch and sugar, in a hundred forms, and under most high-sounding names—what is the result? The child may grow fat, thus deceiving the parent, and supporting the reputation of the boasted pabulum. Casein is not essential to the formation of fat, but of bone; and the osseous system pays the cost of this mistake; its development is arrested; the bones are softer than they should be, and yield to the forces which act upon them; hence the deformities in those bones which are under such influence. Take, for example, the bones of the limbs which support the body. How many instances of bent knees, curved shins, and crooked ankles, meet the eye of the experienced surgeon in these centres of civilization! So, also, the vertebral column constantly deviates from the correct curve. It was the remark of a very distinguished surgeon, who, in the full career of an extensive practice, had numerous cases brought before him of diseases in females, that, no matter what may have been the derangement for which his assistance was sought, they all agreed in one point—"none of them had straight backs". If, then, the long bones below, and the vertebral column above, give such constant evidence of this unhealthy condition, how can the pelvis escape—the common centre of their motions, acted upon by both, and depending for its strength on the integrity of the arches which the pelvic bones form? The deviations in the pelvis are just as frequent as those of the spine or the ankles; and it is just as liable to deformities.

In all such cases, then (and they are numerous), the argument, that "midwifery needs little education, because parturition is a natural process", totally fails. In the conduct of such labours, education and skill are just as much required as in the treatment of disease; and it is my duty to point out to you the consequences that arise from the neglect of this education.

The deformed pelvis may present difficulties in the brim, the cavity, or the outlet. In the child, the softened bones produce one kind of distortion; in the adult, another; and this, because the line of gravity in each is different. In the child, it falls anterior to the pelvic cavity; in the adult, within it: hence the child can never be said to walk erect: its motions resemble rather those of a man when running, and for the same reason: the runner, by throwing his body forwards, brings the line of gravity beyond the pelvis. The effect on the pelvis of the child is to give it the *ovate* form; because the sacrum is driven down between the thigh-bones, and these, as a counteracting force, press upwards behind rather than upon the pelvic cavity. If the softening take place in the adult, the sacrum is pressed towards the centre of the pelvic cavity, and the thigh-bones push the acetabula upwards and inwards. These combined forces, acting towards a common point within the pelvic cavity, produce that peculiar form called the *cordiform* pelvis. This latter variety is attributed, and in many instances justly, to the disease called "*mollities ossium*"; but I do not think that this is in all cases its cause. It is true, that the deviation in the infant pelvis arises from a want of earthy matter, which is not supplied; while that in the adult is produced by a disease which takes it away: but I believe that, even in the adult, the unhealthy character of the food, and its imperfect digestion, may be such, that the blood fails in its supply of earthy matter, and softening of the bone takes place just as in the child. The pelvis, in such cases, however, will be *cordiform*, and not *ovate*.

Either of these exceptions to the standard pelvis may exist, and yet the uterus may have sufficient power to overcome the difficulty, and to expel the child. A longer time may be required for the purpose; but still they may not demand assistance; all that is asked from the attendant is an extra supply of patience. There are cases, however, where the uterus cannot accomplish its purpose: the difficulty is caused by a distortion which varies with every case; and thus difficult labours form a series, from the slightest to the greatest. With some, the aid of the forceps is sufficient to relieve the mother, and save the child; with others, the difficulty, and consequent danger to

the mother, is so great, that it is necessary to sacrifice the child; and in a third class of cases, even this dreadful alternative fails in its object, and the question presents itself, whether, in such extreme cases, we are justified in destroying one life for the very equivocal chance of saving another? or, in other words, when the risk to the mother from any available operation is nearly equal, whether we should not select that which gives to the child its best chance of escape?

All such cases, which require an operation of any kind to be performed, are admitted to demand also skill and knowledge for its performance; they are considered to be the legitimate property of the educated accoucheur. But it never occurs to those who reason in this way, that these essentials are just as requisite, nay, even more so, to prevent assistance from being demanded, or, if such aid be really called for, to determine precisely the time and the mode of affording relief. In the management of difficult labours, education and skill are required from the moment that labour commences; not when, after days of protracted and useless suffering, ignorance resigns her pretensions. The cases of mismanagement that spring from this mistake, might be named "*legion*". Either inflammation is suffered to proceed to that extent, that it may terminate in very serious sloughs in the vagina, cause softening of the tissue of the uterus, or possibly extend to the peritoneum, and terminate in the death of the patient; or she becomes exhausted by the mere protraction of intense pain, the uterus loses its tone, and flooding is the result. In either case, a life may be sacrificed.

Let us now consider the important part that ignorance plays in promoting such results. The attendant, who knows nothing whatever of the true characters of the case in her charge, has only one rule to guide her as to its nature—the rule of time. It is assumed that the degree of difficulty is in direct proportion to the time which the labour occupies, and to the progress made within that time. In order, therefore, to decide by this rule, labour is suffered to proceed far beyond its ordinary length before it is considered difficult; if any progress happen to be made, a still further time is allowed to determine the degree of difficulty. Symptoms of inflammation or exhaustion are beginning to present themselves, but are unnoticed. One effect, however, cannot escape attention—the action of the uterus becomes feeble, or ceases. It is fortunate if aid is then called for, because the patient may be yet saved; but it may be far otherwise. Stimulants given perhaps to increase the pains, only increase the inflammation; or it may be that ignorance assumes the garb of science, administers ergot of rye, and ruptures the uterus. Thus, before the true degree of difficulty is decided upon, the woman may expire.

It is possible, however, that no advance of the child takes place, although the pains have continued incessantly, not for hours, but for days. This is considered a proof of the greatest disproportion, and assistance is consequently required; but when the consultant arrives, it is just possible that he may find no disproportion at all; that the patient has been suffering all this time from what are called "*false pains*"; and that to remove the cause which produced them, his assistance was needed at the commencement, not at the termination of her sufferings. The case, however, may be most difficult, and the diagnosis so far correct; but under what a combination of risks is he now called upon to interfere. Inflammation may have made such progress, that any operation for delivery becomes most dangerous; he has, therefore, to weigh in the balance this risk against the equal and opposing risk of further delay. It may be that no inflammation is present, but the woman is exhausted from her extreme suffering, and gives every evidence of constitutional shock; the action of the uterus is growing feeble, it is losing its tone; and consequently the practitioner is haunted by the apprehension of a fatal flooding the moment that the placenta separates. Thus it is that those labours which the educated practitioner would at once recognize as needing assistance, the moment it could

be afforded with safety, are suffered to proceed without relief so long, that when it arrives it is useless.

This general outline of the serious consequences which follow the mismanagement of difficult labours, is, I trust, sufficient to convince you of the importance of removing the obvious cause—a deficient education. If time permitted me to examine this question more in detail, the proofs would so accumulate as to become irresistible. I shall only refer to two examples, which will be sufficient for my purpose.

Let us suppose that the impediment exists at the brim of the ovate pelvis: the head has just entered, but cannot pass through it. The moment this difficulty is ascertained, as soon as it is found that the uterus fails in advancing the birth, the intelligent practitioner at once uses means to aid the uterus, because, if the head of the child be suffered to remain long wedged between the promontory of the sacrum and the pubis, the soft parts which are interposed may slough. If this occur, a fistula may be established between the urethra and vagina on the pubic side, rendering the patient's life miserable from the constant dropping of urine; or the slough may be on the sacral side, penetrating the tissues as far as the peritoneum, and giving rise to all the symptoms of ruptured uterus. Such are the consequences that may arise from this neglect. The intelligent being, however, to whom I have alluded, thinks otherwise; sufficient time has not been given to ascertain what Nature can do; she waits and waits. "*Rusticus expectat, dum defuat amnis*". At length she calls for aid, just when it is too late. The injury has been done; and if it should happen that the child is delivered safely by the long forceps, nevertheless the patient does not escape, and the case is very probably quoted as an instance of the injury which this dreadful instrument can do.

If we pass from a difficulty in the brim to one in the cavity of the pelvis, it may arise from two very different causes. The pelvis may be slightly cordiniform, the planes of the ischia being pressed too much inwards, and the ischio-pubic rami too closely approximating. In such a case, time may do much, because the head may be gradually so compressed as to adapt itself to this peculiar form, and the pelvis may expand to a certain degree, so as to allow it to pass. So long, therefore, as the action of the uterus is strong, and any progress is made, there is no occasion to interfere; but if the head cease to advance, if the pains become feeble, and still more, if there be the slightest indication of inflammation or exhaustion, interference becomes immediately necessary, because the constitution of such patients is generally feeble, and will not support the pains of labour when greatly protracted. There is, however, a pelvis of a very different kind, which may equally interrupt and prevent the progress of the child; a pelvis which I have elsewhere described as the *masculine* pelvis. This variety is not often observed amongst the inhabitants of large towns, but is common in a hardy peasantry. Women who have been from their childhood accustomed to masculine exercises, as digging, carrying burdens, lifting weights, etc., are necessarily stronger and more muscular than women generally are. The bones, in their growth, adapt themselves to the difference; they are larger and more ossified, hence the large bony wrists, and the stout but most unpoetic ankles, of these rustics. The pelvis is under precisely the same influence; hence it is much more ossified, and assumes the masculine characters; the pelvic cavity is deeper and more conical than the standard pelvis. In addition to this, the articulations are as firm and unyielding as sutures. It may happen that the large ossified head of a male child is forced into such a pelvis; and, if so, it becomes, in the strictest sense of the term, "*impacted*". The ossification of the cranium being almost completed, it cannot yield sufficiently. The constitution of these patients is always vigorous; the action of the uterus is powerful; the pelvis is like a vice. Hence the great risk to be avoided, is inflammation and its consequences. The cautious practitioner will not interfere too promptly in such cases; his object is to use every means to subdue inflammation, to allow time

for the head to mould itself to this peculiar form, and thus hope for delivery. Should he not succeed, he must perforate.

These two cases are apparently alike cases of impaction. In the former, a successful delivery is accomplished by the forceps; in the latter, it cannot be done. But how is an ignorant person to decide such a question as this? She has but one rule to guide her, which is applied indifferently to all cases; that is, to wait as long as she can, and to do nothing. In either case, therefore, mischief must ensue.

I must now beg your attention to the conclusion of this stage of labour. The expulsive power of the uterus has overcome two of its opposing forces—the fibro-elastic tissue of the neck of the womb, and the osseous cavity of the pelvis: there yet remains a third—the perinæum. The tissues which fill up the pelvic outlet, together with the coccyx, form the chief support of the pelvic viscera: these must now be expanded sufficiently to allow the head to pass. The power that may be called into action for this purpose is very great; because, as the head passes down between the pillars of the pubic arch, they become a fulcrum against which the occipital portion rests, while the frontal descends upon the perinæum; the head thus forms a lever of the third order. Such a power as this would be extremely dangerous, if called into full and uncontrolled action. Lacerations of the perinæum would be the rule, not the exception. Some provision is therefore necessary to avoid such an accident; and here we find nature exercising the same caution, and just as provident in securing a favourable dilatation of the perinæum, as we have already seen in the dilatation of the mouth of the womb. The mucous discharge is greatly increased in the vagina; the perinæum is much more extensible; and a kind of act of dilatation takes place. Such a provision as this would seem sufficient to prevent accidents; nevertheless, we observe a further provision in the manner in which the action of the uterus is controlled. Previously, when the head was passing the pelvic cavity, the full power of the uterus was exerted; but now that it presses on the perinæum, the pains become weaker at first, and do not resume their previous force until the perinæum is completely expanded, and prepared to yield. Then, indeed, the most powerful expulsive efforts of the uterus take place, and the severest and most agonizing pains are experienced by the patient. The head of the child, also, for a long time oscillates, descending and retreating before it presses fully on the perinæum; thus, by diminishing irritation as much as possible, the risk of inflammation is avoided. If, however, inflammation commence in these tissues, we have here, also, an illustration of the agency of the reflex nervous function. The irritated nerves are the messengers to convey the intelligence to their common centre. The action of the uterus is instantly controlled, and sometimes completely suspended. The irritation being thus removed, inflammation subsides; the mucous discharge returns; the perinæum relaxes; the pains resume their original force, and the head is expelled. This is sometimes accomplished completely, more frequently in part; the occiput remaining protruded for some time before it is quite expelled.

This brief outline is sufficient to point out how and where errors are committed. They are errors either from carelessness or from precipitancy. The perinæum may be ruptured because it is not properly supported; or it may be torn because the head is brought too rapidly over it. The former error, carelessness, certainly cannot be charged against the respectable individual to whom I have so often alluded; because, however the midwife—be she man or woman—may err in other respects, she never fails to give the perinæum her most sedulous care. The whole of her obstetric duties are concentrated upon this one point; and her reputation mainly depends upon her efficiency in this respect. She will support the perinæum patiently for hours. When it becomes inflamed, or, in her own language, "*hot and dry*", she greases it with lard, and generally succeeds in saving it in an ordinary natural labour; if the labour become difficult, she generally sends for some one else to lacerate it. The perinæum may be sometimes torn from want of attention; but

it is far more frequently lacerated from precipitancy. On this point, I fear that I cannot confine my strictures to those who have no knowledge of midwifery. It is an old observation, that "a little knowledge is a dangerous thing", and in the case which I am now supposing, a little knowledge is worse than none. When the pains are suspended the cause may be misunderstood; ergot of rye is given, powerful expulsive efforts are excited, and the perinæum gives way. Or perhaps the practitioner may have some skill in the use of the forceps or vectis; he believes faithfully that a great deal of time is lost in waiting for the return of pains which can be so easily assisted: the instrument is applied, and the head brought down upon the perinæum, which, being unprepared, of course gives way. This risk becomes a certainty, if unhappily the accoucheur should imagine that the merit of an obstetric, as of a surgical operation, consists in the quickness with which it is done. To remove a stone from the bladder in a few minutes, is a great proof of surgical skill; to remove the head from the pelvis in the same space of time, is equally an evidence of obstetric rashness; the perinæum is torn to a considerable extent, and a serious injury to the patient is the consequence.

To proceed, however, with the phenomena which we are observing, let us suppose that the head and shoulders of the child have safely passed over the perinæum. The greatest difficulty is overcome; the expulsion of the body and limbs gives no trouble, and consequently receives but little attention. Yet I know no stage in this process which requires more. In order to render this intelligible, permit me briefly to review what takes place. The womb is partially, but not completely emptied of its contents; and that contraction of the fundal muscles now commences, which terminates in a state of permanent contraction. Hitherto the contractions and relaxations have been equal; now the degree of contraction greatly exceeds the subsequent relaxation. As the body of the child passes out, this contraction steadily continues, the lower portion of the womb and cervix closing in successively toward the centre, according as it is emptied. Thus, the order in which these fibres contract is clearly seen; the fundus first, then the body, lastly the cervix. *Pari passu* with these changes in the uterus, a corresponding change is observed in the abdominal muscles. They also contract on the retreating uterus, compress the intestines closely upon it, and by these means the uterus maintains its state of contraction.

If nature were left quite to herself, the body and limbs would, by successive pains, be slowly extruded; and those final efforts which expel the child, would also detach the placenta.

The after-birth might remain loosely in the uterine cavity, or in the vagina, or be expelled with the child; but in any case the risk of hæmorrhage is removed, because, the separation from the uterus being completed, its source is cut off. No draining can occur through its spongy structure; and the more perfect contraction of the uterine fibres prevents any hæmorrhage from the sinuses.

These facts are sufficient to point out the causes of failure, as well as the errors which may be committed in the management of this stage. Some of these causes depend on the constitution of the patient. The contractile force of the uterus may be diminished; hence its relaxations are greater than they should be, and hæmorrhage is the consequence. Or it may happen that the correspondence between the contractions of the uterus, and those of the abdominal muscles, is lost: the latter may continue in a state of contraction, when the former is relaxing; hence the superincumbent viscera are pressed down upon the yielding fundus, a cup-shaped depression is produced, an inverted action is set up, and invagination follows, which may terminate in complete inversion, as sometimes happens in very rapid labours.

Another, and much more frequent cause depending upon the constitution, exists in the abdominal parietes. In the explanation given, it was assumed that these muscles retained their natural strength; and when they do so, they

are quite sufficient of themselves to support the uterus. But far too commonly they are in a perfectly opposite condition: they are almost atrophied: the constant use of stays weakens the tone of these muscles. The intestines are deprived of their proper support, and the natural healthy action of the uterus is deranged: the final contraction of the fundus (a contraction which reduces it to one-tenth of its previous size) is not supported; consequently its relaxation is far too great; hæmorrhage follows; and thus a very obvious cause, easily provided against, may, if neglected, produce the most serious consequences.

The attention of the intelligent practitioner is directed to the expulsion of the body and limbs of the child, just as much as to any other part of the delivery. He is anxious to secure uniform contraction of the uterus; to give it artificially that support which the abdominal muscles cannot afford; and thus to render the expulsion of the placenta as easy a matter as the expulsion of the child. But if the parturient woman fall into the hands of a person without education, without any knowledge of the phenomena of which she is a witness, what takes place? No attention is paid to the contractions of the uterus; the child is, perhaps, drawn suddenly away from the passages, while the fundus is left to itself. The contractions are consequently deranged; the cervix and body may contract first, and the placenta be of course retained. To remedy this, the funis is pulled from time to time, at first gently, then more strongly, until at length, one of two results follow: either hæmorrhage takes place, because the placenta is partially but not completely separated; or the fundus uteri is drawn down and inversion is produced. Thus, by mere ignorance, retention of the placenta may be most unnecessarily produced; by further mismanagement it may be followed by hæmorrhage; and even by violence the uterus may be inverted, and the life of the unfortunate patient be the penalty of misplaced confidence.

Time will not permit me to quote examples to illustrate my argument; but this is the less necessary, because I know that the intelligent practitioners whom I address can call to mind in the range of their experience, sufficient instances to support my statements. I trust, however, that in this account of what takes place in labour, from the opening of the womb to the expulsion of the placenta, I have shown sufficiently that it is not everybody that may practise midwifery; and that a most serious and unnecessary sacrifice of human life may be the consequence of entrusting this natural process to ignorant persons. In my next and last lecture, I shall endeavour to point out the remedy for this abuse; and this will lead to the consideration of the new regulations for obstetric education.

Henrietta Street, Cavendish Square, April 1853.

CASES OF CARDIAC AND ARTERIAL DISEASE.

By FREDERICK J. BROWN, M.D.

CASE I. DILATATION OF THE AORTA COMMUNICATING WITH A FALSE ANEURISM EXTERNAL TO THE THORACIC PARIETES.

ALEXANDER FRAZER, aged 46, a fish-hawker, residing in Chatham, applied to me on 29th August, 1852. His habits were reported to be temperate, and he stated that he never used raw spirits. I learned from him that, during the hopping season of 1850 (which is in September), he was engaged in drawing out a pole, when it suddenly parted from the ground, and he fell flat on his back. He immediately experienced severe pain through the thorax, extending from the middle dorsal vertebrae to the sternum. On returning to his home, directly after the accident, he suffered from a burning "red-hot" sensation within the chest, and a cord-like tightness around the body, on a level with the nipples: cough and dyspnoea supervened. The poor man attributed the dorsal pain, which continued severe, to rheumatism, and did not apply to a surgeon until February 1851, nearly six months after the accident.

Frazer was first seen by Mr. Dulvey, of Brompton next Chatham, on Feb. 19. The report for that date states, that there was an aneurism situated high in the thorax, just below the right sterno-clavicular articulation; and that there was great irritation of the bronchial tubes, with very distressing cough, dyspnoea, and difficult expectoration. He had at this time pain down both arms, and pain in the right breast; and the pain in the vertebral region, the "red-hot" sensation within the chest, and the tightness around the thorax, continued. The prescriptions were, a blister to the chest, and pills of tartar emetic, henbane, and blue pill.

February 26th. The bronchitic symptoms were very much subdued; the action of the heart was greatly increased. The prescriptions were—four leeches to be applied once a week to the aneurismal tumour; tartar emetic ointment to be rubbed beneath the clavicles: and the following pills and mixture:—

Rx.—Pillul. hydrarg. gr. v,
Pulveris digitalis gr. ss,
" scillæ gr. ij,
Extract. hyoscyami gr. v. Misce.
Fiant pilulæ duæ omni nocte sumendæ.

Rx.—Infusi digitalis 3iv,
Tinctur. hyoscyami 3iss,
Liquoris ammoniæ acet. 3iss,
Liquoris antimon. tart. 3ij,
Spir. ætheris nitrosi 3iij,
Mistur. camphoræ 3iv. Misce.

Sumat 3j quartis horis.

March 27th. He was so much relieved, that he could walk to Mr. Dulvey's house (nearly a mile, and mostly up hill) without much trouble. The directions had been fully carried out. The aneurism had not increased in size, but there was still considerable difficulty of breathing. The prescription was the following:—

Rx.—Pilulæ scillæ comp. 3iss,
Antimon. tartatis gr. j,
Pilulæ saponis cum opio gr. x,
Pulveris digitalis gr. ij. Misce.

Fiant pilulæ xxiv, quarum sumat duas ter die.

These pills relieved him very much; and in four or five weeks afterwards, the patient resumed his occupation of a fish-hawker, for the first time since his fall on the back. He continued the pills for about a month, and then Mr. Dulvey lost sight of him until March 1852, when he came to him, begging for a supply of the pills.

Frazer applied to me on August 29th, 1852. I learned that he had attended at the Rochester and Chatham Dispensary for some time. He informed me that a convulsive jumping of his whole body first appeared during the winter of 1851-2; also that his voice had become altered in character; and that he had felt a strong pulsation in the dorsal region. He further stated that a swelling had appeared four months since (about April 30th) in the situation of the third intercostal space on the right side, and that it had increased, and had changed its position. This was probably the tumour, which is described by Mr. Dulvey as being situated about the second intercostal space in February 1851, and which the patient termed "a kernel". It is evident that the tumour had been visible since February 1851, and that its augmentation and change of position occurred after April 30th, 1852. The patient stated that he had spat streaks of blood, but denied that he had ever experienced dysphagia. He had suffered from a sensation of tightness in the throat.

PRESENT STATE. The countenance was pale and anxious, and the muscles of expression were greatly developed. The tongue was bare, red, and dry; the pulse 108, locomotive, and vibratory. Respiration was tranquil, but wheezing. He was not subject to attacks of dyspnoea. The voice was husky. He lay on the affected side when in bed, because of a dragging sensation in the tumour, produced by lying on the sound side. He had pain in both arms, especially the right. There was no œdema of the chest or the arms, nor enlargement of the veins of the thorax. He had no headache or giddiness, nor flatulence. He had cough, with

mucous expectoration. He slept for several hours in the night, but then rose, on account of pain in the tumour and in the right scapula and dorsal spine. He ate and drank fairly, but felt weak. He was not disturbed by dreams.

PHYSICAL SIGNS. There was a conical pulsating tumour, involving the nipple on the right side, of the size of a lemon, and exactly resembling the breast of a virgin. Impulse was felt through the tumour in every direction, synchronous with the heart's action. The pulsation was forcible, and the first and second cardiac sounds were heard in the tumour, with the stethoscope placed over the right half and over the centre; but when the instrument was placed over the portion of the tumour nearest to the mesial line of the body, a deeply seated diastolic murmur was heard at a distance from the ear. The cardiac dullness exceeded four inches square. Cardiac pulsation was plainly visible at the lower border of the sixth rib, and to the left of the nipple. The impulse was heaving and forcible; the rhythm irregular. An occasional systolic murmur was heard at the apex; a double harsh murmur at the lower sternum, principally affecting the second sound; a single sawing diastolic murmur in the proper course of the aorta; a single diastolic murmur in the course of the pulmonary artery, of a harsher character than that heard over the aorta; a double harsh murmur at the top of the sternum, and at each sterno-clavicular articulation; and in the right side of the neck a single, systolic, very rough murmur. There was strong visible pulsation and confused murmur in the left side of the neck (the side opposite to that on which was the aneurism). The loudest systolic murmur was that in the right neck, whilst the loudest diastolic murmur was seated over the second costal cartilage, on the right side, as if this were the aperture of the aneurism.

October 1st. The tumour was noted as being very painful, and increasing in size.

October 13th. He was seized at seven A.M. with sudden swelling and distension of the right breast, as high as the shoulder. The aneurism appeared to have burst beneath the pectoralis muscle. The pulse was weak and irritable. The patient had violent perspiration, succeeded by coldness; and severe pain in the breast. The pulsation continued. The skin became warm in the evening.

October 15th. The upper part of the breast was of a greenish-yellow, and the arm, as low as the elbow, of a violet colour, showing the extent of the extravasation. The pain had been relieved by laudanum. Respiration was sibilant.

October 18th. Œdema of the legs had been present for two days past; and this day there was œdema of the right hand and forearm. The radial pulse was distinct. He suffered pain in the breast, also in the left arm.

October 25th. The countenance was haggard. Large clear vesicles were scattered over the right breast. The distension caused much pain, both in the breast and the right arm.

October 28th. Thin crusts existed in the situation of the vesicles.

November 3rd. The lower extremities were much swollen. There was a dusky redness over the aneurismal tumour, and an ichorous discharge from the surface of the breast. Apprehension was felt lest gangrene should occur.

November 4th. He felt severe pain in the tumour. No relief was afforded by drugs.

November 5th. The tumour was quite black: and there was a mahogany-coloured discharge from the abraded surface.

November 8th. The right hand was livid, as well as œdematous. The pulse was perceptible at the wrist. The patient was occasionally delirious. He perspired. He lay forwards over a pillow placed on a table.

November 9th. He died at two A.M. The attendants heard a sudden noise, and perceived blood rushing out of the right arm. The patient observed that "he was done", laid his head on his folded arms upon the table, and quietly expired. It is said that half a pailful of blood was poured out.

EXAMINATION OF THE BODY, thirty-two hours and a half after death. Rigor mortis was present. There was oedema of the lower extremities, of the right forearm, and of the thoracic parietes. The right breast was prominent and black, but not sloughy. There was a sloughy aperture in the axilla, capable of admitting the little finger, which led to a cavernous space beneath the pectoral muscles.

Heart and Aorta. The thorax was opened on the left side, to permit the heart and aorta to be examined previously to an incision being made through the right breast. The pericardium was totally adherent to the heart. The heart was considerably enlarged, flaccid, and thin; and its parietes were degenerated by greasy change of texture. Soft clots were found in the left ventricle; the right ventricle was empty. Blood was present in the inferior vena cava. The valves on the right side were healthy. There was mahogany staining of pulmonary artery. The mitral valve was much stretched by long, thin chordæ tendinæ; it was not thickened. The aortic valves were destroyed by ossiform changes. Ossiform plates commenced at the orifice, and extended throughout the whole thoracic aorta. The abdominal aorta was not examined. The whole of the ascending aorta and the arch were dilated into a great fusiform aneurism, capable of receiving a very large closed fist. The dilatation stopped at the commencement of the descending aorta; but the coats of this part of the vessel were so brittle as to tear on traction. The arteries arising from the arch were sound. The pneumogastric nerve and the recurrent, on the right side, were found to be in their natural position, and not compressed. The nerves on the left side were not carefully examined.

The lining of the fusiform aneurism consisted of a membrane stiffened by calcareous change, and broken into small plates in various places. The valves had nearly disappeared: they formed low ridges. No rent or ulceration was discovered; but a large-sized finger could readily pass through a smoothly lined channel, about two inches in length, into an aneurism external to the ribs. The opening in the aorta was circular, prolonged, and without any edges: it appeared to lead out through the second intercostal space, on the right side of the sternum.

External Tumour. On making an incision through the right breast, it was found that the nipple constituted the apex of a false aneurism, situated externally to the ribs, and extending from the second to the sixth rib. The second, third, fourth, and fifth ribs, were driven inwards (apparently by the force of the pulsation during life), so as to present a concave surface to the integument, with their convexity towards the lung. The second and fifth ribs were necrosed; and the third and fourth were softened like young pork-bone.

The false aneurism was divided into three loculi by firm fibrinous laminae. Superficial to the loculi was a large quantity of laminated fibrine, which, when removed, permitted of communication between the cells. Laminae, two inches in thickness, occupied the apex of the aneurism (which was situated at the nipple, as before stated). The loculi contained red-coloured serum and recent clots. The loculus seated lowest on the chest was the smallest. The false aneurism had become diffused (see history, Oct. 13th) by an aperture in the superior loculus. The blood had extended up beneath the pectoralis major muscle, and had forcibly thrown upwards the clavicle. Some of the blood had found passage, by a devious course, to the wrist. When the whole of the diffused aneurism, and the proper false aneurism, had been emptied of fibrine and clots, the appearance was that of the cavity of the thorax, on one side, inasmuch as the ribs were concave outwards. The difference between the proper false aneurism and the diffused aneurism was striking: the latter contained no laminated fibrine. The blackness of the nipple was due to discoloration only, and not to gangrene.

Lungs. On removing the ribs, the right lung was found to be considerably wasted; it was emphysematous and oedematous. Moderately firm adhesions existed at the apex, and over the lower lobe. The lung adhered to the

dilated aorta. Some serum was found in the cavity of the right pleura. There was no tubercle. The left lung was emphysematous. Black colouring matter was found in both lungs.

Abdomen. The liver was cinnamon-coloured and fatty. The gall-bladder contained bright yellow bile. The spleen was lake-coloured and firm. The kidneys were enlarged; the capsule was morbidly adherent in parts in the right kidney. The left kidney was much enlarged, indurated, and granular. It contained one large superficial cyst, and numerous minute cysts in one tubular bundle. The descending colon was large, and distended with flatus.

CASE II. DILATATION OF THE LEFT SIDE OF THE HEART, WITH ULCERATION OF THE AORTA.

George Cox, aged nearly 36, a bargeman, residing in Rochester, applied to Dr. John D. Brown, of Strood, on April 29th, 1852. His statement was, that he had been ill only two months, and that he had continued at his occupation up to the date of his application. His habits were not reputed intemperate, and he was not particularly subject to rheumatism; but he had had pains in his arms occasionally.

The symptoms present were dyspnoea, greatly increased by exertion; flushed countenance; and vibratory, large, loose pulse, 104 in number. The physical signs were tumultuous movement of the subclavian arteries, and locomotive, radial, and carotid pulse; extended cardiac dulness, with distant impulse and irregular rhythm; double sawing murmur over the heart, generally loudest at the aortic orifice, and extending up the carotid arteries; the second sound over the pulmonary artery exceedingly strong, and thumping in character, closely resembling a murmur; and a crispy emphysema-sound over the heart, on deep inspiration.

The patient was so much relieved by leeching and the exhibition of blue pill and opium, that he imprudently went away in his barge (though incapable of labour); but he returned to his home on May 12th, when he was again visited.

His condition was found to be greatly deteriorated. The urine was albuminous, and the eyelids were oedematous. The pulse was frequent, and the respiration embarrassed. The murmur at the apex was double, as at the previous examination; but it was single and systolic over the aorta.

May 14th. Oedema pulmonum was detected, and symptoms of uræmia were present on the 19th, but subsided in twenty-four hours, under the use of calomel, with leeching over the kidneys, and blistering at the nucha.

May 21st. The patient's extremities were cold, and his respiration much embarrassed.

May 25th. He died at 4 A.M., having been conscious to the last.

EXAMINATION OF THE BODY, thirty-eight hours after death. There was no loss of flesh or of fat. There was general anasarca, and some serous fluid in the peritoneal cavity; but no hydrothorax.

Thorax. The pericardium contained four or five ounces of sanguineous serum. Old adhesions of the pleura existed on the right side; also on the left side, causing the lung to adhere over the pericardium. There was emphysema of the anterior border of the left lung. Both lungs were oedematous, and easily lacerable. The heart was nearly equal in size to that of a calf: when placed on the table, it sank down like a bladder. The left auricle and ventricle were greatly dilated, and they constituted the whole of the heart that was visible; for the right auricle and ventricle were involuted in the septum and left ventricle, and completely concealed. The parietes of the left ventricle did not exceed half an inch in thickness. The mitral valve was very large, and stained purple, but not diseased. The aorta was the seat of extensive disorganization, viz., granular ulceration beneath the valves, and at their line of junction; ulceration in the pouches; separation of the attachment common to the middle and left segments, so that these segments formed one great valve; dilatation of

the sinus for the left coronary artery, equal to the size of a walnut: augmented calibre of the aorta; two ulcers in the ascending aorta—one situated an inch and a half above the valves, extending in the long axis of the artery, and capable of lodging two ordinary thimbles—the other commencing about two and a half inches above the valves, and capable of lodging one thimble (each ulcer being three times as long as its width). The edges of the ulcers were distinct to the touch; but red granulations nearly filled the cavities. The lining membrane of the aorta was smooth. The aortic valves were incompetent when tested by water. Blood was found in only one cavity of the heart, viz., the left auricle, in which it was liquid. The right auricle was empty, and very small. The right ventricle was small, and enclosed as before stated. The columnæ carneæ were very strong, and the little finger could be inserted its whole length into a diverticulum in the septum, between two such columnæ. The total weight of the heart was probably not more than twelve ounces. The muscular tissue was not visibly degenerated.

Abdomen. The liver was not enlarged. The spleen was turgid. Both kidneys were very weighty, probably four times as much so as natural. The capsules separated easily, leaving smooth surfaces. A large amount of sanguineous serum escaped on slicing the organs. The cortical structure was packed with greyish-white deposit.

Chatham, Kent, March 24th, 1853.

THE CLIMATES OF THE WORLD, IN REFERENCE TO THEIR EFFECTS ON MAN'S GENERAL WELFARE AND DESTINY.

By T. G. HAKE, M.D., Physician to the Suffolk General Hospital.

(Continued from p. 125 of No. for Feb. 11.)

THE continent of America, stretching as it does from pole almost to pole, and embracing an immense breadth of land, offers a striking example of a series of natural climates; while that of Europe, chiefly if not wholly owing to the influence of the Gulph Stream, enjoys a climate which is strictly exceptional. The parallelism of latitude then, so generally indicative of similar inland climates, fails to unite the opposite shores of America and Europe under the same zones. The countries of New York and Spain (situated in 40° north latitude), of the Canadas and France (in 50° north latitude), of Labrador and Great Britain (in 55° north latitude), lie in the same parallels; but the mean temperature of New York (50° F.) equals only that of north Germany and the midland counties; of the Canadas (40° F.) that of Norway, Sweden, and St. Petersburg; and of Labrador (32°) that of the North Cape. Indeed, such is the interference of circumstances, local as well as general, with the climate of a country or even district, that the isothermal line of mean annual temperatures has only a qualified value, and might be extended to the seasons and even months, without fully reducing all the differences which exist to a uniform scale.

It is in vain then to seek for isogenetic zones in the same parallels, or old divisions of the globe into frigid, temperate, and torrid zones; and even the isothermal line, as above stated, is not a strict guide in the inquiry. Countries lying within the tropics present every variety of climate; but though the mean annual temperatures of Europe are individually repeated among the mountain ranges and table lands of Mexico, it does not therefore follow that these two remote regions contain the same isogenetic zones. Experience proves the contrary to hold true. It is the boast of some travellers that man is enabled to live in every quarter of the world, and that in this he stands alone in the animal kingdom; but the physiologist corrects this error.

The native of Europe attains longevity, and his race becomes acclimated in Canada; but his life is shortened, and his race is cut off, in Mexico, and the tropical regions around. On the other hand, the African finds a congenial

climate in these latter countries; he is easily acclimated too in temperate, but perishes in frigid zones. In order, therefore, to map out the habitable globe into isogenetic zones, it would be necessary to institute a series of physiological inquiries, in reference, first, to the welfare of individuals who have migrated from one country to another; and next, to the physical and mental characteristics of their descendants. No other course is competent to determine that this or that climate has its duplicate elsewhere; and that man has a home in which the features of his race, and the productions of his native soil, can be preserved.

The influence of the Gulph Stream, which has made Europe an exceptional climate, blends a group of countries of very different latitudes into one isogenetic zone. The Danes, the Saxons, and the Normans, judging of them in a physical sense, have found a congenial climate in Great Britain, as well as the Celts, who cannot be said to have deteriorated in health during the many centuries they have inhabited this country and Ireland. Therefore, in mapping out an isogenetic zone for England, the countries of Europe, whose shores are washed by the Gulph Stream, and those lying along the coast line from Spain to the North Cape, should be included, besides such others, situated inland, as have from time to time supplied our population, and whose descendants embrace the same hardy races as still flourish in these islands; races with whom an interchange of region might be further made without material alteration in the physiological characteristics of their people. That the native of Great Britain, and his descendants, can live in even the more remote parts of Europe, in the south and east, there is little doubt—though not without change of temperament: but this subject will be illustrated hereafter, when the effects of climates, situated beyond our zone, on the Anglo-Saxon constitution, are examined.

Experience shows that the isogenetic zone of these islands is not confined to the limits thus marked out in Europe, but that it stretches across the ocean to Canada and her dependencies, and that it includes some of the northern states of America, to be specified presently. It is stated by eye-witnesses, that throughout the countries which extend from Newfoundland to the lakes of the American continent—Cape Breton, Prince Edward Island, New Brunswick, Nova Scotia, and the Canadas—the natives of British origin preserve their characteristic features; not acquiring the atrabilious aspect, dark hair and eyes, of the United Statesman, nor his emaciated look, but retaining the fair complexion, blue eyes, and other traits of an Anglo-Saxon descent. Nor is the climate of these countries less favourable to the agriculture than to the man of Great Britain. If the cattle is smaller on the whole than at home, this must not be put to the account of climate, but rather to breed. The beef, unlike that of the States, is usually fine and tender. The horse, if not yet bred equal to the English, is of a good kind, and capable of bearing great fatigue; it is often ridden thirty or forty, or even sixty miles without being fed; and will return in the same manner the next day without injury. The sheep thrive remarkably; and if tended with care, they maintain a rivalry with English flocks; and the same may be said of swine—but these, if not attended to, become long snouted, and tall, more like greyhounds, and if left to range through the woods acquire great swiftness. All kinds of grain cultivated in the mother country thrive and ripen perfectly in these dependencies, and produce heavy crops, which are equal in quality to any in the world. Legumes, bulbous roots, above all the potato, indeed every kind of culinary vegetable, arrive at great perfection; while every sort of fruit known in this country ripens equally well there, and is of excellent quality.

In no country do the inhabitants retain health and vigour to a later period of life than in British America; but the bloom of youth is, generally speaking, sooner lost than in England; a circumstance attributable in some measure to the hard life led in the colony, compared with that of the mother country. And the young arrive at maturity at an earlier period than in England—a physiological fact not to

be disregarded; it is attributable to the forcing character of the climate, and is found to be cognate with a similar phenomenon in the vegetable kingdom. It has been observed already, that the more southern portions of Europe, being outside our isogenetic zone, alter the temperament of the Anglo-Saxon; a change which may be induced in the constitution of a family without any encroachment on type: and more than this, their climates produce the forcing effect alluded to, leading to early puberty in the human species, and in the vegetable kingdom producing a more rapid growth and maturity.

This is true of South Italy in relation to England; and yet more so of Calabria, where vegetation especially exceeds in luxuriance of growth that of adjacent and less southern regions of the same peninsula. In Canada the oldest trees do not appear to have exceeded a growth of two hundred years, judging from the number of rings; and the woodsman buries his axe in them at a blow: while in our own country a thousand years is supposed to be the age of many a tough and venerable oak. This, however, may be fallacious; the influence of a primeval forest on its individual productions has to be learnt. Still, the fact that Canada is more forcing in its climate than this country is indisputable; and it shews that a zone, though practically speaking isogenetic, does not preserve a precisely similar character throughout, but that one zone runs into another gradually.

The most genial climate in British America is that of Prince Edward Island. Fever is unknown there; and those who arrive with ague recover in a few days, often in forty-eight hours, without the aid of medication. Pulmonary consumption is so rare as to be seldom met with; in a word, there are few places where health is enjoyed with so few interruptions as there, a large proportion of the inhabitants dying from the gradual decay of nature. The average mortality is scarcely one in fifty; and large families are almost universal. The atmosphere is free from damp; a foggy day does not occur often throughout the year, the morning sun quickly dispersing the dews.

The climate of Cape Breton is somewhat similar to that of Prince Edward Island, but is visited with heavy fogs, which interfere greatly with its excellence. In New Brunswick and Nova Scotia the winters are severe; as likewise in Lower Canada; but they are milder on advancing further to the south-west, where the country takes a turn towards the lakes. As a general expression, the winter of the Canadas may be said to last about four months. Though the cold is intense for nine or ten weeks, the air, dry and elastic, is free from the chilling moisture of a British winter. It is a season of hilarity to the Canadian: during its continuance he enjoys the exercise of skating, hunting, and driving over the frozen snows; for the air, which is a non-conductor of heat, being frequently without motion, the cold is unfelt. The summer is hot to excess, the thermometer standing at 100 F.; but showers from the south-west, sometimes with thunder and lightning, occur once in seven or ten days, and the wind shifts to the north-west, producing a delicious coolness. At night the air is clear; and the unruffled waters reflecting every visible object in the heavens, the moon, shining with a soft and silver-like brilliancy, exhibits a panoramic scene of the utmost beauty. In autumn the days continue warm, the evenings cool, attended sometimes by slight frosts at night; and there is but little rain. After a time, sunshine, frost, and rain, succeed each other, and the leaves of the forest assume every tint and shade of colour. The Indian summer follows—a brief season of frosts at night and sunshine by day.

It would be out of place to enter here upon the characteristic beauties of these vast regions, but not so to express the hope that they may not be separated from this country to which they naturally belong; forming, as they do, beyond all doubt, a part of one and the same isogenetic zone, and affording a legitimate outlet for our population. There exist other countries to the westward, Wisconsin, Iowa, and parts of Michigan, which, as far as is yet ascertained, belong to the same zone. In these the Englishman retains his fresh complexion, and enjoys the rudest health. Ague oc-

curs in the last, as in Canada, among the newly settled districts, but in the two former fever is unknown.

In the north-east, the states of Maine, and probably New Hampshire and Vermont, ought to be included in our zone, but this is doubtful ground; since in those of Massachusetts and New York, which adjoin, those peculiar features of the United Statesman, or Yankee, which are the effects of a totally different zone upon the organization, are observable in a conspicuous degree, and will be notified hereafter.

It would be useless to enter on the discussion of climates within our own territory in the far west, those of the Oregon and Vancouver's Island. These countries are well known; they have been the seats of commercial enterprise from the establishment of Astoria to the present time, and have been described by the trapper, as well as by the United States expedition: but the tide of emigration has not flowed in that direction; therefore little is to be gained by opening the question of their fitness for British settlers.

Such then is the extent of a zone of like productiveness, of which the British isles form the centre; it stretches over a large portion of Western Europe on the one hand; of British America, including portions of the United States, on the other: in all probability it encircles the northern hemisphere, though in a zig-zag direction, and in a belt of varying breadth.

But the zone here mapped out is continuous. It includes none of those temperate climates between which and itself there is a break; climates attained by elevation above the sea-level, such as exist in the table-lands of those high mountain ranges which are found in torrid zones. The claims of such to be considered as detached portions of our zone will be noticed in another paper.

But the great question for Europeans, especially for the colonizing race, the Anglo-Saxon, is this: Is it possible for the native of our temperate northern zone to cross the equator, and find a zone of like geniality and productiveness, one in every sense isogenetic, in the southern hemisphere? This inquiry has to await a practical solution, for now thousands are annually passing from this country to our antipodes in quest of a new home. Meanwhile, they are utterly ignorant of the grounds on which they proceed, and their fate is to become subjects of a great experiment. I shall show in a concluding paper, that as respects a large portion of the Australasian continent, the question has already in a great measure settled itself; sixty years have sufficed to determine the point, and that with a significance scarcely less emphatic than the solution of a similar question has proved, as to whether the territory of the United States of America is strictly isogenetic with our own zone.

The inquiry into the character of the southern hemisphere will be limited to the more promising countries, and especially to the temperate portions of New Zealand.

After perusing the works of naturalists like Dieffenbach, and the observations of Dr. A. S. Thomson, on the climate of New Zealand, not to mention the important remarks of Cook, and the numerous voyagers, resident missionaries, emigrants, and others, who have uniformly afforded the same testimony in its favour, the general reader, probably, is satisfied that all further inquiry as to its suitability to the English constitution is uncalled for.

The observations of Dr. Thomson on the influence of the North Island, in the production and prevention of disease among emigrants from this country, refer to the nature of the climate, and to the health and mortality among the troops of New Zealand, compared with England and her other colonies. The climate he reports to be unexceptionable; the mean temperature higher, the range of the thermometer less than in England; the atmosphere more moist; its pressure very similar to what has been observed in London; indeed, it appears from him, and the concurrent testimony of many, to have nearly all the excellences, and few, if any, of the defects of the climate of England.

In one year, 1848-9, out of nearly two thousand troops, one per cent. died of disease, and in the following year a still smaller number—giving an average mortality, during

the two years, of $8\frac{1}{2}$ per 1,000; while among the soldiers stationed in Great Britain, the mean annual mortality from disease is 14 per 1,000. Some part of the reduced mortality may be attributed, says Dr. Thomson, to New Zealand being an open country, with no large and densely peopled towns to generate disease. The annual ratio of mortality from fever in New Zealand was 0.3 per 1,000; in Great Britain, 1.4: the number attacked in the former country was 13; in the latter, 75.

But New Zealand enjoys a remarkable exemption, according to the same authority, from febrile diseases; such, when they exist, being generated by filth, and not by the climate or soil. The only fatal case among the troops appears to have been accompanied by internal organic disease. Ague, even in the swamps and low banks of rivers, is unknown. Scarlet fever has appeared in the town of Auckland, but no other eruptive fever. Those affected with pulmonary complaints have been one-third less than among the same class in Great Britain. The number of deaths from the same cause is very low, of which the following table affords a striking proof:—

Stations.	Annual ratio of mortality per 1000 among the troops, from all diseases.	Number of men, out of 1000, attacked annually by pectoral complaints.	Average number of deaths out of 1000 men, during a year, from pectoral diseases.
Malta	18	120	6.0
Ionian Islands	28	90	4.8
Bermuda	30	126	8.7
Canada	20	148	6.7
Gibraltar	22	141	5.3
Cape of Good Hope	15	98	3.0
Mauritius	30	84	5.6
United Kingdom	14	148	8.0
Australian Continent	11	138	5.8
New Zealand	$8\frac{1}{2}$	60	2.7

Not merely the troops, but the sons of missionaries who have been brought up in New Zealand, enjoy a remarkable exemption from consumption—a result which can be attributed, says Dr. Thomson, to no other cause than the climate: an opinion in which he is confirmed by the surgeon of the 65th regiment, Mr. Prendergast.

Diseases of the brain and liver are not more frequent than in England; those of the stomach and bowels are less so; but dropsical effusions are more common; the mild nature of the climate leading to chronic, while that of England, in the same cases, would have led to acute inflammation. Rheumatism is but slightly known; abscesses are less common; but ophthalmia is more frequent than in England.

In the report in question is the following remarkable passage:—"In a memoir which has no other object than simply to record the facts, it may appear out of place to enter into any speculation; but having seen that disease and death are less frequent in New Zealand than in England, the question naturally arises, Is the duration of man's life more extended? I should certainly say that it was, not only from the results adduced in this paper, but also from the circumstance that the mortality among children under five years of age has been found to be very low, and from the genial nature of the climate giving to old men an ease and comfort which no wealth nor artifice can produce in England.

"There is a question which time only can determine: Will the European population, born and brought up in New Zealand, possess the mental and bodily energy of those reared during their childhood in Great Britain? Will not the genial climate, and the ease with which the soil yields its fruits, produce a population similar to that found under the cloudless skies and tropical temperature of the shores of the Mediterranean?"

A climate productive of the advantages thus described, appears almost to exceed the standard sought after; and if one were in search of perfection, of the ideal of a climate, such might no doubt be found in New Zealand.

But, in seeking an isogenetic zone of Great Britain at the antipodes, it is not a question of perfect climate, but of summer and winter like our own; of seasons in which cer-

tain fruits of the earth just ripen, and in which ice and snow lie on the ground. In the northern island of New Zealand, the mean of the coldest month is from 47° to 54° $5'$, while that of London is only 36° $F.$; that of the warmest, 70° $5'$ to 73° $5'$, while that of London is 62° ; that of the year, 57° $5'$ to 64° , while that of London is 50° $F.$: in fact, the climate is rather that of Madeira than that of England—with one great exception, that the wind blows with almost unabating violence, over all the islands of New Zealand, throughout the year: a natural phenomenon which renders the air fresh, and is necessarily productive of health.

The middle island of the New Zealand group approximates much more in its climate to that of England. Perpetual snow covers the vast mountain range which runs along its western coast, and is known to lie on the ground occasionally in the plains; so that, while the summer heat is temperate, as in the west of England, there is also a winter characterized by frost. The southern island, though occupying a higher latitude, enjoys a milder climate than the middle, but has the same characteristics as its neighbour. In these, then, far more than in the northern, are to be found the characters corresponding to our zone; and, as far as human foresight can determine, it does appear probable that an isogenetic zone in the southern hemisphere offers itself to our population—a zone in which the features of the Anglo-Saxon race, at the end of five centuries, might, if the race were preserved pure, be the same as should continue to exist in the parent country.

But to the curious inquirer there are problems of a grave kind yet to be considered on this subject, some of which will be determined in the course of three or four generations, while others must remain unsolved until a far remoter period. I am prepared to show, that the low mortality among children as well as adults, and the extended duration of man's life, are circumstances which, however favourable in themselves, afford no more ground for the conclusion that the northern island of New Zealand is isogenetic with the British Isles, than are Madeira, or Alexandria, or Rio Janeiro, in all which life may be more secure, both in childhood and age, than in this country. At present, as far as observation has found opportunity to penetrate, it is found that the offspring of Anglo-Saxon parents, born in New Zealand, resemble the parent stock, and do not, as in the vast regions of Australia and the United States, degenerate on reaching the age of puberty, but go on to acquire that full development which belongs to the youth of England.

This, then, is satisfactory; the race can be reared and preserved; but is not its purity endangered? is it not certain that it will be extensively blended with the Maori? On the shores of Cook's Straits, this admixture has largely taken place already, from intermarriage with the sailors and the daughters of the soil, and the result is said to be a race superior in beauty to the parents on either side; but such is often the result of a new cross at first, and three or four generations must elapse before the question can be solved, as to whether improvement or deterioration is to be the effect of this intermixture. This, however, may apply only to the states of the northern island, in which the natives abound, and where possession of the soil may give rise to such admixture of the two races. In the middle island, the aborigines are few; they are in the position of labourers, and the land is in the hands of the Anglo-Saxon. In this island, then, perhaps above all other localities in the world, provided such exist beyond the equator, is found an isogenetic zone for the English population.

But here follows a question of a more speculative, but scarcely less interesting description. In the southern hemisphere, though there are certain outward resemblances of climate, at least among its general elements, to the countries of the northern; though the atmospheric, the electrical, and the solar influences are the same apparently, and subject to the same laws of action in both,—it is a curious fact, that isogenetic influences, if such exist in both hemispheres, should have given rise to a flora and fauna so opposite. The islands of New Zealand have been, and are,

explored, yet the number of plants discovered, including marine, scarcely exceeds six hundred species—a scantiness which corresponds with that of the animal kingdom, of which, however, the deficiency is far more striking. The greater number of plants, too, both species and genera, are peculiar to the country; and, although lists of marine mammals, birds, reptiles, insects, fishes, shells recent and fossil, and annulose animals, have been furnished, as yet no terrestrial mammal, except bats, has been found in these islands.

The question, then, which arises, is this: Are the flora and fauna of New Zealand—so different to those of its antipodes—to be viewed as the development of a southern region, which is co-ordinate with an opposite state of the earth's magnetism to that of the northern? and if so, will its effects, so far as they affect organization, prove congenial to the system of living beings deriving their origin within the polar influence of a northern hemisphere? Should this inquiry, aided by science and experience, receive a favourable solution, there is no reason left to doubt the isogenetic character of the middle and south island of New Zealand, in reference to our zone, or that they will prove the most suitable home for the Anglo-Saxon that has yet been colonized by his race.

Bury St. Edmunds, Suffolk, April 1853.

BROW PRESENTATION AS A CAUSE OF DIFFICULT LABOUR.

By J. G. SWAYNE, M.D., Lecturer on Midwifery at the Bristol Medical School.

(Read before the Bath and Bristol Branch, March 24th, 1853.)

CASES of brow presentation are by no means frequent, and on this account, perhaps, have not been much noticed in connexion with difficult labour. In the two following instances, which occurred consecutively in my own practice, the severity and duration of the labour were both much augmented from this malposition. In one, delivery was effected by art, and in the other by the powers of nature.

CASE I was attended, in October last, by one of my pupils, who informed me, when I arrived at the house, that the membranes had ruptured the preceding evening, and that he had been in attendance upon the patient ever since, but that no progress had been made, although the pains were very frequent and severe. I found the right frontal eminence presenting, the head being fully engaged in the brim of the pelvis. The anterior fontanelle was towards the left acetabulum, and the face towards the right sacro-iliac synchondrosis. The finger easily reached the eyes and nose, and also the mouth, which was wide open; the chin, however, was above the brim, and could not be reached. As the head was in this position, notwithstanding that the os uteri had been dilated for some hours, and the pains had been very violent, I proceeded to alter the presentation without delay. Using a blade of a forceps as a vectis, I applied it over the chin; and by co-operating with the pains, brought the chin downwards and forwards, beneath the arch of the pubes, so as to convert it into a complete presentation of the face. The delivery was soon accomplished; but the child was still-born, probably in consequence of pressure made by the instrument upon the funis, which was twice coiled round the child's neck. In this case, the woman suffered for some months from loss of power in the right leg, produced, no doubt, by pressure of the chin upon the nerves of the sacral plexus.

CASE II. The next case I saw a few days afterwards, in consultation with my friend Mr. Leonard, who told me on my arrival, about five A.M., that he had been with his patient all night; that the membranes had ruptured the evening before, but that the labour was very tedious, although the pains were constant and powerful. I found the head rather low in the pelvis, with the face directly behind the symphysis pubis. The head was so firmly fixed in the pelvis that it was impossible to pass the finger sufficiently high to reach the chin, or in any way to alter the position of the head.

We therefore allowed the labour to go on naturally, as the head was forced perceptibly lower by each pain. At last the forehead presented at the os externum, the root of the nose being pressed against the sub-public ligament, and the anterior fontanelle against the border of the perineum. The nose now remained stationary in that position, forming, as it were, the centre of the semicircle described by the rest of the head, whilst more and more of the vertex protruded with each pain. At last the whole was expelled, the vertex first, and then the face. The child was still-born, in consequence, no doubt, of the extreme pressure on the anterior part of the head, as the forehead was enormously swollen, and the whole face much distorted. In this case, the mother recovered without any bad symptom.

REMARKS. Presentations of the brow are intermediate between those of the vertex and those of the face, approaching, however, more nearly to the latter than the former. When the vertex presents, the head is said to be flexed upon the body, so that the chin is close to the chest; when the face presents, the head is extended completely, and the chin is as far removed from the chest as the neck will admit of. In a brow presentation, the head is partially extended, so that one of the frontal bones presents, most commonly either the right or left frontal eminence. At the commencement of labour, the presenting part might be included in a circle, the circumference of which touches the root of the nose on one side, and the great fontanelle on the other. On examining at this stage of the labour, the face would be found usually looking towards one sacro-iliac synchondrosis, and the great fontanelle towards the acetabulum of the opposite side, or *vice versa*. As the head descends lower, and becomes more fully engaged in the pelvis, the mento-occipital diameter will correspond with one of the oblique diameters of the pelvis, and thus will take a position at right angles to that which it occupies in an ordinary case; for then it is parallel to the axis of the pelvic brim, and is perpendicular to these diameters. In a brow presentation, the head is placed in the most unfavourable manner possible for traversing the brim of the pelvis; for the longest diameter of the head (the occipito-mental, which measures five inches) corresponds with the oblique diameter of the pelvic brim, measuring only four inches and a half. It is, therefore, scarcely possible for the head to traverse the pelvis in this position; and if it remains unchanged, the chin may be arrested for some hours at the brim of the pelvis, as in Case I. Nature, however, frequently remedies the difficulty, by causing complete extension of the head, as was done artificially in Case I. The chin descends, and the vertex recedes, so that the face, which before presented itself imperfectly, now occupies in full the superior strait: the case is thus converted into one of ordinary face presentation, which, as a general rule, requires no further artificial assistance, the diameters which face presentations offer being scarcely less favourable than the ordinary ones. In some rare cases, a still more favourable change is effected; the face, instead of becoming completely extended, flexes, and thus a presentation of the vertex is substituted spontaneously for one of the face; but in other instances the chin is arrested at the brim of the pelvis, whilst the posterior part of the head is forced down lower and lower with each pain, as in Case II: this is, however, effected with great difficulty and after much suffering, for a long diameter of the head, namely, the occipito-frontal, comes into relation with the principal diameters of the cavity and outlet of the pelvis; the result is, that compression of the anterior part of the child's head takes place to such an extent as to be, in all probability, incompatible with life.

In the treatment of these cases, it will be found, as a general rule, that manual interference is necessary, provided the malposition is not corrected by nature very soon after the rupture of the membranes. If this does not take place, and the labour is allowed to proceed, the risk incurred by both mother and child will be great; it is therefore necessary not to delay interference, otherwise the head becomes so firmly wedged in the pelvis (as in Case II) that it is scarcely possible to move it in any way; it may even be-

come impacted, and no other resource be left but craniotomy.

Two methods have been recommended for altering the position; the first consists in flexing the head, with a view to bring down the vertex. To do this, it is advised to make steady pressure with the finger upon the forehead, so that it may be arrested, whilst the back part of the head is pressed down by the uterine efforts, and the chin caused to ascend towards the chest. This mode seems very easy in theory, but will be found very difficult in practice; and I agree with M. Chailly in considering it as next to impossible. By pressing on the forehead, we act on the centre, and not upon either extremity of the lever represented by the head, and thus have little or no power. The second method is much more feasible, and will generally prove successful; it consists in bringing down the chin (provided it can be reached) by two fingers in the form of a crotchet; but if it cannot be reached by the fingers, it may be drawn down by means of a vectis. The object of these manipulations is to place the chin beneath the arch of the pubes, and thus to convert the case into an ordinary face presentation.

Clifton, Bristol, March 1853.

CAN EXCESS OR A DEPRAVED STATE OF THE GASTRIC AND PANCREATIC JUICES DECOLORIZE THE BILE, AND SIMULATE FUNCTIONAL DERANGEMENT OF THE LIVER?

By CONWAY T. EDWARDS, Esq., Surgeon.

[Read before the Bath and Bristol Branch of the Provincial Medical and Surgical Association, March 24th, 1853.]

THIS is an important question, in reference to the treatment of persons, who, having resided many years in India, return to England suffering from derangement of the whole digestive apparatus. Under a belief that the liver is the one source of all their sufferings, they naturally seek the advice of medical men who have practised in India, and whom they suppose to be more conversant with the nature and treatment of diseases of that organ, than practitioners whose sphere of occupation has been limited to this country.

"I do not" (observed a practitioner in London, to an officer who had seen an extensive service in India), "I do not give it as an opinion that your liver is affected; I state it as a fact." This gentleman had suffered much from dysentery, and from the "heroic" treatment used to subdue it. He had been invalided for several months, from a casualty produced by a cannon-shot, and had returned to England for his health. The clay-coloured alvine dejections, their want of solidity, and the repeated calls to evacuate the bowels in the day, led him to consult a gentleman whom he had known as a practitioner in India, but who was now established in London.

He was put on a treatment of blue pill, tonics, acids, and alkalies; and with returning summer, came his convalescence. Towards the latter end of last autumn the symptoms reappeared. He consulted a physician nearer home, who pronounced the cause of all these symptoms to be liver.

On this, he communicated with his medical friend in town, who recommended a recurrence to the treatment of the previous spring. But a severe winter was before him; a condition of atmosphere existed inimical to healthy life, and which was incessantly draining the electricity from the system. The treatment which had proved so successful in the spring, failed to produce a single favourable change in the disease. His friend advised him to have his liver examined, and to report the result of the examination.

As he resided in my neighbourhood, he came to me.

There was no tenderness nor fulness in the region of the liver; no tangible hardness of that organ; and no external evidences in the colour of the skin, of the tunica albuginea, or beneath the nails, that any functional, or organic disease of that organ existed. The intestines were filled with flatus;

the motions were loose, frothy, and colourless; and the inclination to pass them frequent, and very urgent. The renal secretion was scanty, and high coloured, and its transit irritated the neck of the bladder; the eyes were bright; the heart's action was healthy; the tongue clean, but rather too red; the function of the skin greatly at fault; the appetite good; but the sleep disturbed and unequal. He dwelt strongly on an intense acidity of the stomach; and believed it to be the cause of his sufferings.

The report was, that there was no organic disease, but functional derangement of the liver, and general debility of the organs of digestion.

The order came to take blue pill until the liver gave evidence of its proper function being restored, and to use the alkaline mixture (which was composed of liquor potassæ and infusion of gentian), as the acidity demanded. The blue pill treatment was continued for nearly two months; and his altered expression, and loss of flesh and spirits, told at once how great had been the failure of the treatment. Not a symptom had been removed, not a suffering mitigated. I advised him again to communicate with his friend; who, in addition to his former prescription, urged the use of the nitro-muriatic acid bath twice a day for two months.

During the whole of this treatment, I never interfered; and as each letter assured the sufferer that the disease must ultimately give way to the plan, he was content to follow it. I think, however, he said to me one day, "You are all wrong about my liver; I begin to doubt if it is liver at all."

An accident at once put an end to the further pursuance of this treatment. It was no less than a dinner party: "I must," said my patient, for so I may now call him, "have these urgent calls to stool arrested. I cannot attempt to visit my friend, with the horrible fear of an urgent call before me!" I could not give him positive assurance that he should not be so troubled; but I deemed it highly probable that he would not, if he could abstain from all food, except bread and chicken, and be content with cold brandy and water, in place of a variety of wines. To this he consented; and I gave him two doses of medicine composed of chalk, chloroform, tincture of opium and cinnamon water; one to be taken directly, and repeated before dinner.

On the following day, he expressed himself greatly indebted for the relief he had experienced from all his symptoms. He had had no stool, had slept better than he had done for many months; and the only troublesome symptom was the immense distension from which he at first suffered, and the consequent dispersion of the flatus. I advised him at once to cease taking the blue pill, and continue the nitro-muriatic acid baths, and those only three times a week; to take the chalk medicine twice a day; to live plainly on roast and boiled meat, eggs, toast, milk, rice, and such simple diet; to walk regularly; and not to give himself a moment's uneasiness about his liver or his stools.

From that hour to this time, he has had no return of his sufferings; the acidity has entirely left him, and the stools are gradually assuming a natural hue.

The question which naturally arises from this case, is this:—To what can the colourless condition of the motions be attributed? If to impaired function, or total arrest of the biliary secretion, are such states compatible with healthy life? Is it possible that an organ of such magnitude as the liver could suffer from arrest of its peculiar function for many months, without producing more serious results than clay-coloured stools? Is it out of the range of probability that the real source of the suffering in this instance may be looked for in an increase of the gastric and pancreatic juices? and that these secretions might be endowed with such an increase of intensity, as to be capable of decolorizing the bile?

It certainly is remarkable, that a long course of judicious treatment failed to produce any beneficial results; and that a treatment which had for its object the neutralization of the acid, and subduing nervous irritability, should be attended in a few days with production of bile of a proper colour.

Bathaston, Bath, March 1853.

LIVING LARVÆ PASSED FROM THE BOWELS OF A MAN.

By JOHN LLOYD, Esq.

It can hardly be doubted that larvæ of various insects are occasionally passed from the human bowels, the ova or the larvæ themselves having been received into the body by the mouth along with water or food. A case of this kind has recently come under my notice, in which I have no reason to doubt the veracity of the statements.

The annexed woodcut* represents a living creature which was brought to me by a man living in this town, who stated that he had passed it from his bowels; and that previously he had passed others of exactly the same description. The man's wife confirmed the statement of her husband. They both ascribed to the "worms" severe abdominal pains to which the man is subject.



The animal lived for several days in water. In general, it was torpid; but at other times it was quite lively, frequently bending itself into a circle, as if trying the game of putting its curious long tail into its mouth. Through the kindness of Professor Owen, I am enabled to state that it is the larva of the *helophilus pendulus*—an aquatic larva.

Dr. Cormack has directed my attention to notices of an analogous case, which he brought before the Medico-Chirurgical Society of Edinburgh, on two separate occasions; viz., on the 2nd of June 1841, and the 8th of March 1843. He informs me that Dr. T. R. Scott, of Musselburgh, near Edinburgh, in whose practice the case occurred, thoroughly investigated it, and was convinced that no deception had been attempted.

The following are the brief notices referred to. "2nd June 1841. At the period for medical news, Dr. Cormack exhibited an animal which had been passed, about ten days ago, from the bowels of a young child, a patient of Dr. Thomas R. Scott, of Musselburgh. The animal was still alive. It appeared to be the larva of a beetle, probably *blaps mortisaga*." (*Edin. Monthly Journal* for 1841, p. 538.) The following notice refers to the same patient. "8th March 1843. Dr. Cormack exhibited two specimens of the larva of the *blaps mortisaga*, which had been discharged *per anum* by a patient of Dr. Scott, of Musselburgh, whom he had lately seen."

Dr. Mason Good tells us that leeches have lived in the stomach; and various reputable authors aver that different non-parasitical reptiles and larvæ of insects resist the action of the stomach, as completely as any of the true intestinal parasites.

Llangefni, Anglesey, March 1853.

ARSENIC IN CHRONIC SCABIES.

By PHILIP HENRY WILLIAMS, M.D.

CASE. I WAS consulted, in February 1852, by H. B., aged 22, who stated that she had been suffering from an eruption during nine successive months. The description clearly indicated scabies; and the appearances on the arms, wrists, fingers, legs, ankles, and toes, left no doubt as to the nature of the disease. There were a few scratched spots on the face, which, although a comparatively rare seat of scabies, appears in chronic cases liable to be affected. The itching was, and had been, commensurate with the extent of the malady. Various applications had been tried without benefit. On the hands and toes several distinct pustules had recently occurred, which, in the words of Dr. Bateman, were "moderately inflamed round their bases, and matured and broke in two or three days; then ulcerated, with increasing pain and inflammation". Hence it would seem that the decidedly purulent species (scabies purulenta) was supervening on the ordinary development. The pustules subsequently appeared on other parts, especially on

the arms and thighs, and remained after the simple eruption had died away. The constitution, at the commencement of the attack, was stated to be good; and at the time the patient came under my notice, the health was not impaired. The catamenia were quite regular. I prescribed sulphur ointment, giving iodide of potassium and sarsaparilla in the usual doses, and compound rhubarb pills at proper intervals. This treatment was continued for a month, with very little success. I then ordered three minims of the liquor potassæ arsenitis to be taken three times daily, in camphor mixture. At the end of three weeks the face became quite free from all traces of the eruption, and at the end of the fourth week the disease was declining over the body generally. The mixture was omitted for a few days, in consequence of slight headache, and was then resumed in the same dose, twice daily. In three weeks from that date, the patient was cured, with the exception of some of the larger pustules, which were not healed until a fortnight afterwards. Poultices of linseed meal were applied to them.

Up to the present time, there has been no return of the malady.

A younger sister of the patient suffered at the same time from simple scabies, which yielded at an early period to sulphur ointment and tonics. A companion of Harriet B. also contracted the disease, which became chronic, and required the same arsenical treatment for its removal.

Worcester, March 30th, 1853.

BIBLIOGRAPHICAL NOTICES.

TREATISE ON OPERATIVE OPHTHALMIC SURGERY. By H. HAYNES WALTON. pp. 628. London: 1853.

THIS—the author's *débat*—is a thoroughly good book and bespeaks him an excellent writer and an able surgeon. Here and there we may have wished for something more; but there is hardly anything which we could desire to omit. In the firmness and simplicity of his instruments, in the skilful selection of his cases for the different operations, and in his judicious medical treatment, we trace the characteristics of a good surgeon. We have no absurd proposals for sucking a fluid cataract out of the eye, or the like wonderful performances which we owe to the ingenuity of our Gallic neighbours; and in several chapters we find an accurate appreciation of those circumstances in the general health of the patient, without attention to which the best planned and most skilfully executed operations will so often fail. In the space at our disposal, a complete review of such a work is impossible; a brief epitome of its chapters is all we shall attempt to give.

The not very necessary historical introduction is followed by a brief chapter on the use of chloroform. In all operations accompanied with much pain, by all means let it be employed; but we agree with Mr. WALTON that it is not advisable to use chloroform in the extraction of cataract; and we would merely remark that a surgeon with a sharp eye, a cool head, and a steady hand, will usually prefer to have the command of his patient's voluntary motions, and to avoid the danger which may arise from his restlessness on awaking from his drunken sleep.

Chapter third, on Ophthalmic Instruments in General, is, as we have said, from the pen of a good surgeon, who knows the value of simple and well made tools, and who takes care to see that his very sponges are in order.

The chapter on Injuries from Mechanical or Chemical Agents contains much sound observation. In the treatment of these cases there is, as our author well remarks, "a wide field open for the exercise of practical skill"; not that of the mere operating surgeon, for the difficulty mainly consists in discriminating the cases which must be treated by depletion from those in which an opposite plan is necessary; those

* The woodcut was done from the larva, which was forwarded to us some weeks ago by Mr. Lloyd.—EDITOR.

in which mercurialization will save, from those in which it will destroy the eye. Rules far too exclusive have been laid down in this matter; here, as elsewhere, each case must be studied for itself; and in our own hands blistering and cinchona (as Mr. Wilde recommends) have been found suitable at one time, calomel and opium at another. Mr. Walton strongly advises the exhibition of mercury *in very small doses*, and of hyd. c. creta in doses of gr. ij to gr. iij thrice a day; he says that "the potency and manageableness of this form of the drug cannot be imagined by those who have not used it". He agrees in what we believe is the general opinion, that evacuation of the aqueous humour is always dangerous and generally useless; but we must take leave most decidedly to differ from him when he says, "I have not been able to satisfy myself of the efficacy of blisters in ophthalmic diseases". If we are sure of anything in practice, it is that in many chronic cases of ophthalmia, of cornitis, and of amaurosis, they have done great good.

Chapter sixth treats of Affections of the Eyelids and Diseases of the Lachrymal Passages. Although our author records two successful cases of his own, he judiciously advises that symblepharon should in general be let alone. Of ptosis he gives some interesting cases; and in describing the operation does not omit the caution, that we should remove the skin as near the brow as may be, lest eversion should ensue. Trichiasis next obtains that full consideration which its importance demands; and we may take this opportunity of expressing our concurrence with Mr. Walton's doctrine, that the so-called distichiasis has no existence; and that the hairs, which seem new, are in reality but misplaced. When these displaced cilia are very numerous, or when chronic disease of their bulbs has rendered them abortive and unnatural, so that the forceps are unavailing, an operation is our only resource; and if the excision of a narrow strip of skin close to their roots is not enough to carry them back from chafing on the eyeball, their follicles must be dissected off. Mr. Walton has, in a number of cases, first reflected the skin upwards, and then, after removing the hair-bulbs, re-united the skin by sutures to the edge of the lid. This very ingenious operation may be performed upon the whole edge of the lid, or confined to a single bunch of offending cilia.

Our author next enters very minutely into the cause of entropium, which he finds to be habitual overaction of the strip of the orbicularis muscle, which lies close to the edge of the lid. His treatment is to dissect this off, along with the corresponding strip of skin, taking care, of course, not to injure the cilia. He has operated in this way with success in about fifty cases.

For the slighter cases of ectropium, excision of the conjunctiva, or of a wedge-shaped piece of the lid, may suffice; for those graver cases which depend on previous disease of the bones we must adopt various plastic operations, which, however, can be explained only by the aid of diagrams and the relation of individual cases.

The chapters on Affections of the Puncta and the Canaliculi, and on Caries of the Orbit, are, like the others, good, but require no special remark. We agree with our author as to the impracticability of making anything like a regular use of the nasal sound.

Chapter ninth contains the very best synopsis we have met with of the various treatments of Nævus Maternus and Aneurism by Anastomosis. The surgeon who has a case for which to select an operation, cannot do better than refresh his memory here. As, however, the matter belongs to general rather than to ophthalmic surgery, we shall not do more than just mention a most interesting case of orbital aneurism by anastomosis, in an infant *two months* old, in which Mr. Walton tied the common carotid with complete success.

A short chapter is next devoted to Mr. Tyrrell's Operation of Dividing the Conjunctiva to prevent its strangling the cornea in purulent ophthalmia. The instrument employed by Mr. Walton for this purpose is a narrow curved bistoury, which is better adapted than a cataract knife for incising the chemosed membrane.

Chapter eleventh treats of Squint. Our author thinks that in ordinary strabismus convergens, only one eye is usually affected; and he argues elaborately that the seeming participation of both eyes is but apparent. This we cannot see that he has proved; and we think, moreover, that the test which he proposes in p. 279, and which we always employ, will disprove his own opinion. Let the patient look at the surgeon with each eye in turn, while the other eye is first covered, and then suddenly exposed, and the obliquity of both eyes will, we venture to think, generally become manifest. Mr. Walton's mode of operating is to introduce the hook through a small opening made close to the lower edge of the tendon, and, raising tendon and conjunctiva on the hook, to divide them both together with one stroke of the scissors. Now and then the operation appears at the time to have failed completely, while in a few days the eyes assume the correct position. If eversion should unfortunately follow, the case ought to be left to itself, as further interference is pretty sure to make matters worse.

In chapter twelfth are discussed Tumours of the Lids, Pterygium, and Growths from the Fibrous Tunic of the Ball. There is a curious case recorded of syphilitic tumours around the orbits; and a very successful and creditable operation for the removal of a large orbital exostosis. A description of the *ocular sheath* prepares the way for the interesting subject of exophthalmos from rheumatic disease of that fibrous funnel, and of the diagnostic marks between this and protrusion of the eyeball from periostitis of the orbit. In the latter case the action of the muscles of the protruded eye will be often quite free, and the swelling will affect chiefly the upper portion of the lids; in the former the ball is more usually fixed, and the tarsal part of the lids principally affected. Rheumatism of the ocular sheath is a most interesting disease, whether it end favourably by gradual subsidence of the severe pain, and retraction of the protruded eye, or unfortunately, by suppuration around the ball, and loss of sight. Chapter thirteenth, which discusses this subject, contains, also, some interesting remarks on the curious cases of protrusion of the eyeball in connexion with anæmia and disease of the thyroid gland.

In chapter fourteenth, our author agrees with Mr. Bowman, that in complete Staphyloma the sooner the protrusion is excised the better; the ball is the more likely to remain of a size well fitted for an artificial eye, and the less risk is there of sympathetic disease of the other eye. An interesting case shows the benefit which may result from the operation in removing such sympathetic inflammation already lighted up. We are of Mr. Walton's mind, that in sclerotic staphyloma excision must be practised, and that tapping the eye is not only useless but dangerous.

Conical Cornea is the subject of chapter fifteenth. Mr. Walton's figure is excellent: that in Mr. Dalrymple's work is one of the few failures in that beautiful book. The only means of relief in this disease, and a very uncertain one it is, is the employment of a concave lens behind a pierced diaphragm. Surgical interference is to be eschewed.

Now and then the surgeon has succeeded in removing Opaque Deposits from the Cornea; but the most important point to notice is what our author justly enforces in chapter sixteenth, the astonishing way in which the cornea often cleans, especially in young people, by the efforts of nature alone.

Chapter seventeenth treats of Cataract. A very good account is given of the different kinds of cataract and of their diagnostic marks. These are not always very certain:—

"The following anecdote illustrates the practical bearing of the matter. Some years since, a clergyman, forty years of age, consulted the late Mr. Tyrrell for cataract. Mr. Tyrrell, who never used the knife when he could employ the needle for solution, determined in this instance to extract; his sudden death, however, prevented the operation. The patient then applied to a surgeon, who always extracts when it is admissible, and he operated by solution."

There are in this chapter some very excellent remarks upon the deficiency of the catoptric test, in deciding upon the condition of the lens in aged people.

"The value of the candle test is to be found chiefly in its application to the eye prior to the amber change (from age) in the lens; for then, if amaurosis (only) be present, the three images will be seen clear, and not blurred; if incipient cataract, the images within the eye must be affected according to the degree and seat of the existing opacity. In the aged, it may enable us to compare the degree of opacity with the imperfection of vision; but in them, in consequence of the amber change, the detection of incipient cataract is beyond its power."

In these observations we fully concur. It was but the other day that an aged relative of our own was pronounced to be cataractous of one eye, by an eminent surgeon, who found the vision very dim, and the deep images obscure; but to the surprise of all concerned, vision returned in a few days, the dimness of sight having been sympathetic amaurosis, and the supposed cataract the amber lens of the aged.

An eye is not to be operated on while it retains useful vision; and our author would not operate on one eye while the other retains its usual powers. In this we differ from him, and now and then operate in such cases, with subsequent assurance from the patient of the material benefit he has received.

We much admire Mr. Walton's judicious remarks on the constitutional treatment and regimen proper for cataractous patients before and after the operation. Much greater evil has, in our experience, arisen from debility than from plethora. Good food, cinchona, and ammonia, are often the best antiphlogistic remedies; bleeding, purging, and starvation, the most inflammatory treatment.

We are not quite so sure about his instruments for extraction. The knife we use is longer and more acute than his; and we still prefer to scratch the capsule with the needle bent rectangularly at the point, which we think less likely to catch upon the iris, and more likely to divide the capsule effectually, than the nearly straight curette he employs. Various accidents have happened to us while extracting; but, by introducing the needle with the angle forwards, and withdrawing it in the same way, it has never occurred to us to catch the iris. We are glad that Mr. Walton ignores the cornea scissors and Mr. Scott's sickle, and that he disapproves of chloroform. He uses the excellent contrivance of a very large stiff shade after operating, so as to avoid the necessity of tying down the patient's hands at night.

Mr. Walton, like all good surgeons, looks upon "displacement" as a "do-no-better" in the way of operation for cataract. "Solution" he prefers to effect by operating through the cornea, and urges the necessity of opening the centre only of the capsule, and of leaving the lens as undisturbed as possible in a first operation.

The canula capsule-forceps of late invention comes in for its due meed of praise in the treatment of *capsular cataract*; but we would decidedly include among truly useful ophthalmic instruments one of which our author makes no mention, the beautiful guarded hook of Schlagintweit, with which we have several times operated with complete success. It is small and smooth when closed, seizes the capsule very firmly, and, as it does not expand like forceps, can be worked in a much narrower space. The operation with this instrument, *through the sclerotic*, has prospered very well in our hands, the capsule coming away entire, and no inflammation or amaurosis following.

This chapter concludes with a notice of the operation of "drilling"; and the next gives a very good synopsis of the recorded cases of Intra-ocular Entozoa and Cysts.

Chapter nineteenth treats of Artificial Eyes; chapter twentieth of Malignant Diseases of the Eye; and here, as in the section upon *nævus*, we are presented with a masterly summary of the present state of our knowledge of the pathology of cancer, as introductory to the author's more immediate subject. The different species of ocular cancer are well expounded; and the practical conclusion as to surgical treatment is, that the operation should not be resorted to save in cases of melanotic and of epithelial cancer, in which it has now and then been followed by a radical

cure. Of course, in certain cases, it may be advisable to remove a diseased mass for mere temporary relief.

Chapter twenty-first treats of Artificial Pupil. This chapter, on one of the most interesting subjects in ophthalmic surgery, is, like the rest of the book, well written and complete. It is of course desirable that the new pupil should be as near the centre of the iris as may be; but when, as often happens, this is impossible, our author gives the preference to the *inferior margin* of the iris; and next, to its outer and inferior margin.

As our limits will not permit us to follow Mr. Walton in his excellent account of the various states of the eye admitting of the formation of an artificial pupil, and of the operation generally appropriate to each, we shall just briefly indicate the operations which he describes:—1. Incision with the double-edged knife through the cornea. 2. Incision with extension of the aperture by means of a blunt hook. 3. Division of the iris with Maunoir's or canula scissors, through the cornea. 4. Excision of a portion of the iris, drawn with a hook, or a pair of fine forceps, through an opening in the cornea. 5. Separation of the circumference of the iris by means of a sharp hook,—this last a *pis aller*.

The last chapter briefly explains the surgery of Extirpation of the Eyeball.

In conclusion, we have again to express our very high opinion of a work of which we have been compelled, by want of space, to give a very imperfect abstract, and to recommend it very much to the careful study of all who mean to operate on the eye. Mr. Walton is a safe and judicious guide, and his book is a really scientific professional treatise. The illustrations are excellent, and the index is good.

ON THE LOCAL APPLICATION OF A BENUMBING OR CONGEALING TEMPERATURE, IN INFLAMMATORY, PAINFUL, AND MALIGNANT DISEASES. By JAMES ARNOTT, M.D. 8vo. London: 1852.

THE local application of cold has existed amongst therapeutic agents from time immemorial; but, so far as we are aware, the temperature of melting ice has always been thought sufficiently low to answer every indication, until recently, when Dr. JAMES ARNOTT, thinking that there was no particular virtue in cold of just 32°, has ventured on making applications to the skin in erysipelas, neuralgia, and some other affections, at a temperature below zero of Fahrenheit. Various frigorific mixtures can be used for this purpose; but the one generally employed by Dr. Arnott is a mixture of pounded ice and salt, the preparation and effects of which he describes as follows.

"A bit of ice—the size of a large orange—is put into a canvas bag or a towel, in order that it may be pounded or pulverized, by beating it with a flat iron. The finer this powder is, the better. This is then thoroughly mixed, on a large sheet of paper, with about half the quantity of well-pounded common salt, by means of a paper folder. The mixture is then put into a net of silk-gauze tied to a ring of gutta percha, and is ready for use when beginning to melt. If superficial *anæsthesia* only is intended, this is immediately produced, even before the cutaneous circulation is stopped, or the skin becomes blanched. This stage continued a few minutes will often be sufficient; but I more frequently, when using congelation remedially, continue the process until the adipose matter becomes congealed, and the part becomes hard to some depth as well as white. If this greater effect is produced, there is considerable smarting at the time, and (if not prevented by the application of cold water), for some minutes afterwards, and the skin remains tender for several days. If the process is carried no further than blanching the skin, the smarting is little, and the redness continues only a few hours. After the more efficient application, there is redness and swelling, but evidently not symptomatic of inflammation, as the condition of the part appears to be the very opposite to this. The vessels appear to have lost their tone, and to be insusceptible of inflammation for some time afterwards."

According to the cases related, the benefits resulting from this practice are most striking; erysipelas, neuralgia, and

inflammation of the eyes being permanently removed by one or two applications of the freezing mixture. The following case shows a most heroic use of the remedy.

"A mixture of finely pounded ice and common salt was applied for five minutes over the whole of the bare scalp of a young man, labouring under severe affection of the brain or its membranes. To the usual symptoms of inflammation, including delirium, there were added *risus sardonius*, and a tendency to opisthotonos. He had already been largely bled; but as this and the other usual remedies had produced no amendment, his recovery was despaired of. A few minutes after the removal of the frigorific, he fell into a sound sleep of several hours continuance; and, on his awakening, it was found that the delirium and every other serious symptom had ceased. He speedily and perfectly recovered."

The application of benumbing cold has been applied with success to prevent pain in a few superficial surgical operations. Dr. Arnott has applied it himself in dissecting off a piece of skin in order to form an issue; it has been applied preparatory to introducing setons; and M. Velpeau has also used it in Paris, in the operation of removing the toenail. It is evident, however, that its applicability in operative surgery is very limited; for Dr. Arnott says that, when employed at the bend of the arm before venesection, by pressing a bit of ice dipped in salt on the vein, the incision must be made instantly, otherwise the flow of blood through the vein restores the sensibility of its coats, before the operation is performed.

The following remarks of the author show that the remedy which he advocates requires great care:

"The period of congelation must, of course, to be appropriate, differ in almost every case, and be dependent on the disease and a variety of other circumstances; and the extent to which congelation can be carried with safety is also equally variable."

"In estimating the effect of the application of frigorific mixtures to the animal tissues, it is highly necessary to take into account the condition of the part subjected to them, in respect to its own vascularity, and the vascularity of the neighbouring parts, and as to whether it be in a state of inflammation or not."

"How long the circulation of the blood in the part could be suspended with safety, while, as is usually the case in the remedial employment of congelation, it continues vigorous in other parts of the system, it is difficult to determine; but there can be no hesitation in saying, that not the slightest risk can be incurred by any such short continuance (about five minutes) as is then (in neuralgia) required."

No ill results have followed the application of freezing mixtures in the author's own practice—as we can easily believe; but he relates a case in which a practitioner kept on a not intensely cold application for twenty minutes, and vesication was produced. It will be easily understood that much worse disasters might follow the incautious use of so powerful an agent; and therefore, whilst we recommend its trial, we would advise that it should be employed at first with extreme care.

PRACTICAL AND DESCRIPTIVE ANATOMY OF THE HUMAN BODY. By THOMAS H. LEDWICH, F.R.C.S.I., and EDWARD LEDWICH, F.R.C.S.I., Lecturers on Anatomy in the Original School of Medicine, Dublin. 8vo., pp. 923. Dublin: 1852.

THE words *good* and *bad*, like *little* and *great*, are but relative terms. Spain was once the greatest nation in the world; Spain is now one of the least powerful nations in Europe; yet Spain, as a country, never before was so rich in national resources and in learning as she is at the present hour. She is only a powerless country now, because other countries more powerful have arisen around and before her. She was the *great* country in the days of Ferdinand and Isabella, because all other countries were then less important, and were in her rear.

In the world of literature, this principle has its analogue. A book is good or bad, in proportion as it advances before or lags behind its fellows in the amount of new information which it contains, or in the improvement in literary arrangement which it offers. A book deficient in these respects is, to say the best of it, an useless thing, adding weight to the

library shelf, and giving unrequited trouble to the librarian. The Messrs. LEDWICH, in publishing the volume before us, have either ignored or forgotten these truths; for their book presents no scientific novelties, nor is the information it contains more accurately or more concisely given than is the same information in the works of Wilson or Ellis, Goodsir or Knox. Moreover, the absence of drawings renders it much less useful and readable than most other modern manuals of anatomy. The authors, there can be no doubt, are both excellent anatomists, and excellent anatomical teachers; but they are, as anatomists, in the general body, and not in the van, of their corps.

According to custom, the Messrs. Ledwich commence their labours with a description of the bones—an old custom, by the way, and only commendable in that it makes the cannibal the antipode of the anatomist, in a double sense. They then describe the ligaments; and afterwards, in succession, the muscles, cavities, nerves, arteries, veins, and absorbents.

To illustrate the style of the authors, we shall make two extracts: the one passage is on an anatomical, and the other is on a physiological subject. At page 688 the writers thus describe the anatomical relations of the spinal accessory nerve:—

"Intermediate in size between the pneumogastric and glossopharyngeal, it escapes from the jugular foramen, and dividing into an internal and anastomotic branch which joins the pneumogastric, and an external, which communicating with the glossopharyngeal, ninth and sympathetic, passes downwards and outwards, lying in front of (sometimes behind) the jugular vein, where it is crossed by the occipital artery; then lies on the rectus capitis lateralis, beneath the posterior belly of the digastric, and continuing its course, it pierces the upper third of the sterno-mastoid, communicating with the third and fourth cervical nerves in the posterior superior triangle of the neck; and arriving at the anterior margin of the trapezius, it divides into two branches, one of which ascends to the cervical portion of that muscle, whilst the second descends in its dorsal division. Occasionally the nerve passes beneath the sterno-mastoid, without piercing its fibres, but always sending one or two small filaments to it."

At page 579, the authors offer a physiological description of the pancreas:—

"In structure, the pancreas closely resembles the salivary glands, which have already been fully described; having, like them, its lobules separated by fine fibrous tissue, each containing its follicles of secretion, with its accompanying cell apparatus for the elimination of its peculiar fluid, which is derived from its proper vessels, the splenic, superior mesenteric, and hepatic. An evident analogy likewise exists in the secretions of the pancreatic and salivary glands; but the former contains more solid ingredients, as albumen and casein; has an acid reaction, and no sulpho-cyanate of potassa; while, on the contrary, the saliva possesses the latter, as well as an abundance of saliv and mucus, which is sparingly found in the pancreas. It is extremely difficult to assign a decided use to the pancreatic secretion. It has been said to be of service in diluting the bile, in saponifying the fat globules found in the chyle, and neutralizing the acidity of the gastric juice in the duodenum. The quantity secreted in about twelve hours, by a large dog, amounted to about eight drachms (Tiedemann)."

These extracts will serve to confirm, we think, the general opinion we have given as to the merits of the book.

The descriptions of the anatomy of parts and organs are brief enough, but are often very obscurely worded. The physiological descriptions are commonplace, and may be found in any manual on physiology.

But perhaps it may be urged, that it is impossible for writers on anatomy to advance novelties in their works: it may be said that certain facts have to be stated, that the hands of the anatomist are bound, and that he can only tread on tracks already trodden bare. We do not admit the truth of such a supposition; there is, in our opinion, a wide field for improvement.

The pages of these authors, like those of other anatomists, are loaded with words and expressions so meaningless, so insane, so repulsive, that the eye closes instinctively on looking at them, as though struck with a summer grout.

Will writers on anatomy never shake themselves free from the dust of the dark ages? Not very soon, we fear, if the book now on our desk is to be taken as a sign of advancement. It can hardly be credited, yet it is true, that in this day gentlemen, well acquainted with the whole mechanism of the human body, have spent their precious time, and spoiled their paper, in repeating such terms as Hippocampus Major, Valley of Haller, Valve of Vieussens, Iter a tertio ad quartum Ventriculum, Septum Lucidum, and other verbal abominations.

PERISCOPIC REVIEW.

SURGERY.

ACUTE HYPERTROPHY OF BOTH MAMMÆ: EXPLORATORY PUNCTURES: DEATH: DISEASE OF OVARIES, BROAD LIGAMENTS, & UTERUS.

THE above title is a summary of a very interesting case, instructively described and commented upon in No. 1 of the *Glasgow Medical Journal* (April 1853), by Dr. J. A. LAWRIE, Professor of Surgery in the University of Glasgow. Mammary enlargement is a well known consequence of sexual excitement, or of ovarian disease; and in the present case, hypertrophy of the mammae probably proceeded from the ovarian disease which was found on dissection. This disease may have been either the cause or the result of sexual excitement, or both. The immediate cause of death was undoubtedly toxæmia; and the symptoms place the case along with those of what are termed surgical fever; cases which the researches of recent good observers incline us to believe, to be either identical with, or similar in its nature to, puerperal fever and erysipelas. The differences which exist between them we regard as accidental, and not as essential. We quote Dr. Lawrie's remarkable case in his own words, and with hardly any omission; so that our readers may for themselves judge of its character.

CASE. Mary D., aged 30, called upon me about the 9th April 1852, complaining of general pyrexia. She made no complaint of her mammae; but two days afterwards, she said they were painful. I found them very slightly enlarged, painful to the touch, the areola I thought darker, and the papillæ more prominent than natural, the integument otherwise normal. Suspecting sexual uterine excitement, I questioned her very closely. The girl, being from the Highlands, and speaking English imperfectly, did not give very satisfactory or intelligent answers; but the impression left on my mind was, that she might be, and probably was in a very early stage of pregnancy. I accordingly prescribed some gentle diaphoretic medicine, and waited the result. The only cause that she could assign for the enlargement of her breasts, was sudden transitions from heat to cold, from her employment as a cook.

As the breasts continued to increase rapidly, I sent her to the Infirmary on the 19th April. She proved a very discontented patient, and twice left the hospital without permission, so that the treatment employed had not very fair play. From whatever cause, none of the means prescribed had the slightest beneficial effect. They consisted, in the early stage, locally of frictions and fomentations, followed by cold and gentle pressure, leeches, and acupuncture; internally, mercury to the extent of gentle salivation, and iodine freely.

On her admission into hospital, 19th April, the breasts are described as enlarged to double their natural size, firm, elastic, resistant to the feel, but very irritating and inconvenient from their weight and size. The integuments were not discoloured, and slightly painful. She left the house on the 28th, and returned on May 7th. The mammae are then reported "to have increased very much in size, to be affected with acute stinging pain, and to have assumed a bluish colour". These symptoms continued to increase, the suffering became very great, and the colour of both breasts was a deep purple before her death. They were firmly bound to the chest; and, from their tension, caused not only pain, but considerable difficulty of breathing. The lobulated form of the glands was very distinctly felt. That their vascularity was great, was shown by the jets of blood which flowed from the puncture of a common-sized grooved needle. In a few minutes, I collected six or eight ounces, and, to all appearance, I could have bled her as freely from this small aperture, as if I had opened a vein in her arm. About

the 10th or 12th of May, her general health began to give way rapidly: typhoid symptoms set in, she became partially hemiplegic, and her tongue was much drawn to the left side. She died on the 17th. I showed her twice to my colleagues in consultation; none of them had ever seen a similar case. Surgical interference was considered quite inadmissible, and no means beyond those already employed were suggested.

Autopsy. I entrusted the *post mortem* examination to my friend, Dr. Wm. Aitken, Demonstrator of Anatomy to the University, and Pathologist to the Infirmary, who has most kindly sent me the following report:—

"*Mamma.* A cast having been taken of the external form of the breasts immediately after death, the mammary glands were removed from the body for inspection and preservation. The right gland was larger than the left, but each preserved the characteristic lobulated form and arrangement of the gland substance. Along with the skin and a small portion of pectoral muscle which accompanied each gland, they weighed six pounds fourteen ounces; and it was observed that the skin covering them was less tense than before death, probably from the gravitation of the blood towards the dorsal regions of the body. The right, and larger gland of the two, when freed of all its accessory parts and hardened in spirit, so as to remove a considerable portion of water from its substance, weighed two pounds two ounces. The hypertrophy appeared to depend upon the following conditions of the gland substance, and its accessory parts:—1. The acini were distended to about twice their size, compared with those of a mamma which had never secreted milk. This distension appeared to be due, partly to a granular exudation, and partly to a very large amount of epithelial cells, mingled in some places with globules of oil. The ducts of the acini were also in some places irregularly distended with this epithelial secretion. 2. On examining a section of the gland, harder portions could be observed, which, when isolated from the rest of the gland, varied in size from a millet seed to a pea, or a bean; and microscopic observation showed that these harder portions were the seat of an abundant exudation and secretion. 3. Immediately below the skin, a layer of exudation filled up the space between the lobules, making the surface of the gland assume a rounded aspect. This exudation was of a granular appearance, similar to fibrine in its first stage of organization; and it was found abundantly exuded into the interspaces between the tubes and ultimate lobules of the gland, apparently taking the place of the fat usually found there, and which had probably disappeared by absorption, the result of pressure. In each axilla the lymphatic glands were much enlarged, and infiltrated with a granular exudation.

"*Liver.* Circumscribed deposits were irregularly and sparsely scattered throughout the whole substance of the liver, projecting in some places from its surface. They varied in size from a pea to a plum, presented a granular appearance microscopically, and no liver cells could be distinguished among the substance of these deposits; and while they were perfectly circumscribed by the capsule of Glisson, the secreting substance of the gland was condensed round their periphery.

"*Uterus and Ovaries.* The ovaries and broad ligaments of the uterus were morbidly adherent to the walls of the pelvis, and appeared to be infiltrated with a serous exudation. The ovaries, on removal (and more especially the right one), were found to be in a state of inflammatory softening, and much enlarged. The Fallopian tubes also were unequally distended, especially near their fimbriae, which adhered firmly to the ovaries. The softening was so great, that the substance of the right ovary was easily broken down under the finger, and no appearance of extravasated blood, or of corpora lutea, could be detected in either. The uterus was somewhat larger than one whose cavity had never been distended by conception. Its neck was more especially elongated, and did not terminate in an anterior and posterior lip separated by a transverse slit, as in the normal uterus. A pointed sugar-loaf-like apex projected into the vagina, through which an opening with an irregular border led into the cavity of the uterus; but so contracted, that a probe about two lines in diameter was all that could be passed through it. The whole aspect of this part of the uterus perfectly resembled what is described as the result of ulceration and cicatrization of the neck and mouth of the uterus. The substance of the organ, more especially near its fundus, enclosed condensed white portions, like the commencement of fibrous tumours in its substance."

REMARKS. 1. This case was to me one of very great interest. I had an opportunity of watching it from its commencement to its close, and had the great mortification to see a case, which I at first was inclined to consider "natural", or if disease, trivial,

steadily go on from bad to worse, resist every remedy employed, and prove fatal in thirty-eight or forty days.

II. No one who saw the patient had ever seen a disease at all resembling it. I believe that any form of hypertrophy of the mamma is rare, but this peculiar form especially so; indeed, I am not aware of any recorded case exactly similar to it. Hypertrophy of the mamma has been divided into the false and the true. In the false, the gland is either not increased in size, or is atrophied, while the reticular adipose and other tissues are inordinately augmented. This form is chronic, and is usually met with in females from forty to sixty years of age. The true has been variously subdivided into—that occurring at puberty; in the adult; the acute; and the chronic. The first is very often vicarious of menstruation. Of its chronic form, examples are given by Sir A. Cooper, under the name of "large and pendulous breast"; and by Mr. Hey, of Leeds. Of the acute, terminating fatally, an instance is given in the *American Journal of Medical Science* for August 1834, p. 374. That case resembles the one now detailed in this, that the ovaries were enlarged, and apparently diseased, and that the uterus gave evidence of recent acute inflammation; but it differs from it essentially in this, that the cause of death was superficial sphacelation of the left breast, the result of a recent injury. In the fourth volume of the *British and Foreign Medical Review*, is a notice of a paper by Dr. Fingerhuth, of Esch, on hypertrophy of the mammary gland. This paper (I have not seen the original) seems to contain valuable information on the history, symptoms, and pathology of the disease. So far as I can gather, however, it contains no case similar to the present; and although Mr. Birkett, in his treatise on *Diseases of the Breast*, quotes Dr. Fingerhuth's cases, as examples of "true hypertrophy in the adult", it is expressly stated in the *Review*, that "the disease always makes its appearance at the period of puberty, and is contemporary with the development of the mammae; either the patient has never menstruated, or the catamenia are scanty, and soon disappear". All the cases quoted, are at or about the age of puberty. Dr. Rasi, an Italian physician, gives a case in which hypertrophy seems to have taken the place of lactation in a woman aged 10. The disease was resolved, but recurred in several successive confinements, proving fatal in the sixth, on the fourteenth day.

The case now detailed seems to be unique in the following respects:—It occurred in a woman, aged 30, without any ascertained cause; it affected both mammae; it ran a rapidly acute course, resisting all remedies, and terminating fatally in forty days; and it presented appearances in the ovaries and liver, not hitherto observed in any case of hypertrophy of the mammae.

III. The dilated acini seem to have contained an unusual excess of epithelial cells, and granular exudation, especially the former. The large amount of exudation under the skin, and between the tubes and ultimate lobules of the gland, and the absence of fat, appear also to be uncommon; at least, they differ essentially from Dr. Fingerhuth's observations, in which it is stated, "the cellular tissue is loose, the cells larger than natural, and containing a remarkable quantity of fat".

IV. The state of the liver and ovaries is certainly not the least interesting point in this remarkable case. Dr. Aitken, in some valuable notes which he kindly sent me, considers the epithelial deposits in the mammary acini as "degenerate". I am rather disposed to consider them as analogous to, or possibly the second stage towards the formation of, those circumscribed abscesses which are so frequent a cause of death in surgical and obstetrical practice. I am one of those who deny that these secondary abscesses are always connected with phlebitis, and uniformly depend on purulent infection. I think I have met with them where there was no wound of the skin. Certainly, I have found them connected with wounds of all sizes, and in all states or stages. In the case before us, the substance of the mammae was penetrated with an exploring needle three times. Were these deposits in the liver, and softening of the ovaries, an instance of that rare form of secondary disease (or surgical fever, as some style it), in which there is no lesion of the surface, or were they examples of its common form, and caused by the exploratory punctures? That they were one or other of these appears to me but too probable.

V. The causation of the disease is obscure. The state of the uterus rather confirms my suspicions that sexual excitement was its starting point. But why so rare a consequence from so common an antecedent?

CASE OF CIRROID ANEURISM.

In No. I. of the *Glasgow Medical Journal* (April 1853), Dr. J. A. LAWRIE completes the history of a case of cirroid aneurism,

which he contributed to the 31st vol. of the *Medical Gazette*. The patient first presented himself in 1841; was then cured by ligature of the brachial artery in the lower third of the arm; and in 1852, eleven years afterwards, dangerous hæmorrhage having occurred, he entered the Royal Infirmary of Glasgow, where Dr. Lawrie, after consultation with his colleagues, tied the brachial artery at the bend of the arm, but had at last to perform amputation at the lower part of the forearm.

The wrist and hand were dissected by Dr. Aitken; and the following is his report:—

"Two large sloughs existed in the palm of the hand, having an external opening to each about the size of a shilling, from which the injection freely flowed, when propelled either from the trunk of an artery or a vein. On dissecting the hand, the blood-vessels presented a peculiar convoluted appearance, more marked at two situations; namely, in front of the pronator quadratus muscle, immediately above the position of the annular ligament of the wrist, the remains of which existed in the shape of a fibrous cord, and towards the ball of the thumb on the external and lateral aspect of the wrist. The veins were very much enlarged in calibre, and irregularly dilated, communicating, by long tortuous vessels round the wrist, with the arterial plexus of vessels, chiefly from the radial and interosseous arteries.

"The arterial tubes presented all the characters peculiar to that condition of the vessels known as cirroid aneurism; namely, irregular widening of the calibre; tortuosity of route, presenting an appearance, when the binding tissue was separated from them, resembling small coils of intestines attached to a mesentery; protuberances and elevations along their course; irregular thickening of the coats at some parts, and thinning at others; the walls of the larger arteries were soft and flabby, and in the flesh condition; the inner and middle coats (where they could be seen) were of a pale colour, and did not exhibit that soft yellow hue, so characteristic of healthy arterial tissue. By a careful comparative examination with the microscope, the more dilated portions presented the following characters:—

"I. Their walls were so thin, that they approached the condition of veins.

"II. A very small amount of the characteristic yellow elastic tissue could be distinguished, and the elongated pale contractile cells peculiar to the middle coat of the arteries, and to involuntary muscle, could not be seen.

"III. The thickened portions of the arteries seemed to depend upon an increase in the amount, and subsequent condensation of the binding tissue enveloping their walls, while the thinning of the coats seemed to be partly the result of morbid deficiency of the arterial tissue, and partly of pressure by contiguous distended vessels.

"On making a section through the ball of the thumb and palm of the hand, the tissue was condensed in its general aspect, but very porous from numerous openings, varying in size from a point visible to the naked eye, to the size of a small bean. It presented all the characters of very vascular erectile tissue; and all the openings were observed to give out fluid simultaneously with the slightest pressure upon the large vascular swellings situated in front of the arm. The sloughs on the palm of the hand had numerous openings into them, and one very large opening, partly filled by coagula, communicated with the large tortuous caverns of the blood-vessels in front of the arm."

Dr. Lawrie's remarks are worthy of attention. He says:—

"This is unquestionably a rare disease. So far as I know, few, if any, examples of it have been recorded since I gave an account of this case in 1843. I then alluded to cases related by Breschet, Cloquet, and Dupuytren, and to two in the temporal artery which occurred in the Glasgow Infirmary.* I divided the diseases into two forms: first, when it occurs uncomplicated; and second, in combination with erectile tissue. Of the former, Breschet's, Cloquet's, and the Glasgow cases are examples; to the latter belong Dupuytren's case, and that now detailed. The pathology, prognosis, and treatment of the two forms are different. The first consists of dilatation, and thinning of the arterial coats, with tortuosity of the vessel at certain points of its course, so great as to form a tumour composed solely of arterial coils. If deeply seated, as in Breschet's cases, it may not be discovered during the patient's life, causing little annoyance, and rarely giving rise to hæmorrhage. Surgical interference is not essential, and when demanded, consists of ligature of the dilated vessel, at the point where the coiled tumour commences. I endeavoured to show that there is no risk in tying the dilated

* Glasgow Medical Journal, vol. 4, p. 82.

artery, and that ligature of a distant healthy arterial trunk is not justifiable; as, for example, ligature of the carotid in cirroid aneurism of the temporal artery. In the second form, we have the same pathological condition of the arterial trunks, with the addition of erectile tissue. The prognosis is more serious, because dangerous hæmorrhage is a common consequence of a wound or ulcer, and because it is much less amenable to treatment. The treatment is more complicated; ligature of the diseased or sound artery is not sufficient, and measures must at the same time be employed for the obliteration or removal of the erectile tissue.

"These opinions are fully borne out by the sequel of M'Lellan's case, as now detailed. Ligature of the arterial trunks, in 1842, arrested, but did not cure the disease; and at the end of eleven years, an injury caused ulceration, ending in hæmorrhage to a most dangerous extent. On his admission into hospital, in March 1852, I endeavoured to carry these views into practical operation, but unsuccessfully. The cause of failure was probably the great progress which the erectile disease in the hand had made, the large size of the ulcerated openings, and the consequent enormous hæmorrhage. Be this as it may, all attempts to cure the disease in the hand by cautery and ligature, and to arrest the bleeding by deligation of the arterial trunks, proved abortive. After the hæmorrhage on the 14th March, two modes of procedure were discussed in consultation—ligature of the subclavian, and amputation. Had the hand been less mutilated, the former of these might have been adopted; but I did not think myself justified in incurring so serious a risk, for the doubtful preservation of a comparatively useless limb. One other procedure was not thought of, which, on further consideration, I think ought to have been tried before having recourse to amputation; viz., ligature of the radial and ulnar arteries as near to the wrist as the erectile tissue would have allowed. We overlooked the fact, that in 1842, deligation of the ulnar artery succeeding in arresting the bleeding after that of the brachial had failed. Possibly the same might have happened again; and should a similar case present itself to me, I certainly would tie the arteries leading to the diseased and bleeding tissue, as near to that tissue as possible.

"The further experience of this case shows, that arteries affected with cirroid aneurism, may be tied as safely as a sound vessel, whether the ligature be applied as in the ordinary operation for aneurism, or to the open mouths of vessels after amputation.

"The patient continues well, and has returned to his occupation as steamboat engineer."

UMBILICATED ACNE TUBERCULOSA.

The following observations were made by M. PROGEY at a meeting of the Société du Biologie in Paris, as reported in the *Gazette Médicale* for January 29th.

The subject of these remarks was a young girl, who had on her face eleven prominent convex tubercles, paler than the surrounding skin, and each possessing a central or lateral depression: they varied from the size of a pin's head to that of a pea. One of them, redder and larger than the rest, and formed by the aggregation of several follicles, resembled a wart. They all contained sebaceous matter, which could be squeezed out by pressure. The diseases described under the names of molluscum contagiosum, molluscum pendulum, adermoptosis, follicular elevations, varioliform acne, molluscoid acne, all bore a relation to the affection now described. Previously to the judicious memoir of M. Caillaud, each author believed that he was describing a new or unknown disease. But they agree as to the anatomical situation, the course, duration, and termination. The error arises from their having founded their nomenclature on the external appearances, without taking into account the situation of the swellings.

In describing the disease under the name of follicular elevations, (*élevures folliculaires*), M. Rayer has approached nearest to the truth. He says that acne is a change in the cutaneous follicles, characterized by hypertrophy, or the development of a pustule. But, as the term "varioliform acne" gives rise to the idea of a pustule more resembling that of small-pox than that of simple acne, it should be replaced by the name of *umbilicated acne tuberculosa*.

The diagnosis is easy. Acne sebacea or punctata is not accompanied by elevations of the dermis. Syphilitic tubercles, and the tubercles of lupus, have a special colour, and their limits are not clearly defined. Warts are irregular and more coloured, and prolongations of the epidermis are flaccid, and less dense and more coloured than the skin. Besides, none of these contain

sebaceous matter, the distinguishing mark of umbilicated acne tuberculosa.

The disease terminates either by spontaneous evacuation of the sebaceous matter, or by falling off of the tubercle after strangulation of its base.

The treatment should be confined to the use of alkaline lotions, and to pressure on the tumour with the object of promoting the exit of the contained matter: it is only in exceptional cases that recourse should be had to operation.

REPORTS OF SOCIETIES.

ROYAL MEDICAL SOCIETY OF EDINBURGH.

The ANNUAL DINNER of this Society, now in the hundred and sixteenth year of its existence, took place in the Waterloo Hotel, on Thursday the 10th March. Dr. W. Murray Dobie, Senior President, occupied the chair, and Doyle M. Shaw, Esq., Pres. Ann., officiated as croupier.

In addition to a very large attendance of ordinary members, there were present the Presidents of the Royal Colleges of Physicians and Surgeons, several of the Medical Professors of the University, and other distinguished members of the profession in Edinburgh. The chairman stated that he had received letters from the Very Rev. Principal Lee, the Rev. Geo. Coventry, and other gentlemen, expressing regret at being unable to attend the dinner.

The CHAIRMAN, after the loyal and usual toasts, proposed the toast of the evening—"The Prosperity of the Royal Medical Society"—a toast to which every one present would, he was sure, most heartily and affectionately respond. (Cheers.) The present annual dinner marked an era of no ordinary interest in the annals of the Society. For some years past, it had been gradually rising from the mists which, for a time, surrounded it; and this session it had burst forth with unexpected brilliancy and life. The old hall, which had been so reluctantly parted with, was now deserted, and the Society had reared its head in a splendid edifice, with accommodation in every way suited to the dignity of the institution, and the necessities of its members. A change still more notable had come over its internal life: an influx of intelligent members had taken place almost unprecedented in the history of its most palmy days; papers of the highest excellence had been read at every meeting, and discussed with a spirit and acuteness, of late years quite unusual. (Loud cheers.) Who could doubt that these were the presages of still better times—the dawn of a more glorious day than it had ever yet been the lot of the Society to witness? The dinner of the Society was always looked forward to by its members with pleasing anticipation; their annual meeting was always a peculiarly delightful one. Here the professor and the student, the teacher and the taught, threw aside for awhile their mutual relations, and sat down together at a common board, to spend an evening in conviviality and harmony; differences of age and position were for a time forgotten; the professorial dignity in the one case was merged in fraternal familiarity, and in the other reverential awe gave place to filial affection. (Cheers.) Many who had attained the highest pinnacle of renown—many who now stood on the proudest pedestal of science, confessed with gratitude that the foundation of their fame had been laid by the Medical Society: but for its stimulus, their intellects might have lain dormant; but for its tutoring and discipline their energies might have been expended on vain projects or useless trifles. It was impossible to estimate how many young men had been first imbued, at the meetings of the Society, with that love of science, the strength of which had been so fully proved by their subsequent fame, fortune, and success. The Medical Society had always been regarded as a great feature of the Edinburgh Medical School, and as the most powerful auxiliary which our University possessed. They had gone hand in hand in their mutual endeavour to advance in science. What had been the case in former times would continue to be so in future. The Medical Society would never be dazzled by the specious and arrogant pretensions of some who, in this age of quackery and imposture, offered to its notice principles as unsound as they were dangerous, and theories whose tinsel glitter served only to mask their utter worthlessness. If the Medical Society was to continue its hitherto unsullied and glorious career, it was to those members who had recently been added to its ranks that it must look—by them must it be upheld. As years rolled over the time-honoured head of their noble institution, he trusted that,

at many a future meeting like the present, the toast he now proposed would be hailed with an ardour as fervent, with an enthusiasm as sincere, as he was sure it would now receive. (Enthusiastic cheering.)

The CROUPIER proposed, "Their venerable Alma Mater—the University of Edinburgh and its Professors." Professor Traill responded to the toast.

F. O. B. DE CHAUMONT (Curator of the Library) proposed "The College of Physicians, and its President, Professor Traill." Dr. Traill returned thanks.

A. M. ADAM, Esq., (Honorary Secretary,) proposed "The College of Surgeons and Dr. Combe." In the absence of Dr. Combe, who had been obliged to leave, Professor Syme replied.

Mr. HUTCHINSON (Honorary Secretary) proposed "Prosperity to the Medico-Chirurgical Society of Edinburgh, and its President, Dr. Simpson." To the many honours conferred on Dr. Simpson, a fresh one had recently been added, by his election as a member of the Imperial Academy of Medicine of Paris. Professor Simpson acknowledged the compliment in an eloquent speech.

Mr. SYME proposed the health of Sir James Grant, a gentleman who had rendered to the medical department of the army important services, during an arduous career of sixty years. He was the principal medical officer present at the glorious battle of Waterloo; was one of the only three surviving veterans who were engaged during the whole of the Peninsular campaign; and was also the oldest living member of the Royal Medical Society. (Cheers.)

Sir JAMES GRANT, in replying, said, it was true that his period of active service had been a very long one; that Sir Thomas Brisbane, Lord Gifford, and himself, were the only officers now alive who had served in the Duke of York's campaign; they were, he might say, the alpha and omega of the British army. He joined the Medical Society in 1791; and the benefits he had received during his membership had proved of the greatest use to him. (Cheers.)

Dr. COBBOLD proposed "The Extra Academical School, and Dr. George Wilson." Dr. Wilson replied. Dr. Broadbent proposed "The Royal Infirmary, and Professor Syme"; to which toast that gentleman responded. Dr. Dewar proposed "The Physiological Society of Edinburgh, and its President, Professor Bennett." Dr. Bennett replied. The Croupier then gave, "Mr. G. F. Macfarlan, the Society's Treasurer, and all absent friends." "The health of the Chairman," by Professor Simpson; "Dr. Alexander Struthers, an absent President," by Dr. Matthews Duncan; and various other toasts followed.

(Abridged from *Edinburgh Courant*.)

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

The QUARTERLY GENERAL MEETING was held on the 24th March, at the York House, Bath: the President, GEORGE NORMAN, Esq., in the chair.

The following gentlemen were present:—John Barrett, Esq. (Bath); J. S. Bartrum, Esq. (Bath); Charles Bayliffe, Esq. (Chippenham); William Colborne, Esq. (Chippenham); John Colthurst, Esq. (Bristol); James Crang, Esq. (Tisbury); W. Davies, M.D. (Bath); Conway Edwards, Esq. (Bath); Farnham Flower, Esq. (Chilcompton); James Godfrey, Esq. (Bristol); Henry Hensley, Esq. (Bath); Joseph Hinton, Esq. (Blaina Iron Works, Newport); Joseph C. S. Jennings, Esq. (Malmesbury); George King, Esq. (Bath); George King, Esq. (Melksham); Joseph Lawrence, Esq. (Bath); Crosby Leonard, Esq. (Bristol); Frederick Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); J. J. Mitchell, Esq. (Bath); G. S. Ogilvie, Esq. (Bristol); George Plimmer, Esq. (Melksham); W. Y. Sheppard, Esq. (Bristol); Charles Smerdon, Esq. (Bristol); John Soden, Esq. (Bath); John Kent Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); J. G. Swayne, M.D. (Bristol); S. H. Swayne, M.D. (Bristol); E. Swete, Esq. (Bristol); James Tunstall, M.D., (Bath); G. T. Vicary, Esq. (Warminster); etc.

MEDICAL REFORM BILL.

The PRESIDENT read a letter from Sir Charles Hastings upon this subject, stating that a deputation from the Association had had a most satisfactory interview with Lord Palmerston; that

he was in hopes that government would adopt and carry the bill which had been drawn up for the Association; that the neighbouring members of Parliament had promised their active support to the measure; and that there was every probability of the present attempt at legislation being successful.

INCOME-TAX.

The PRESIDENT called the attention of the meeting to this subject, with special reference to the petition lying for signature in Bath, which is similar in its prayer to that adopted at Worcester, and published in the Journal. We understand that this petition has been signed by upwards of seventy practitioners of Bath and its vicinity, and is to be presented to the House of Commons by the Bath city members.

INTERNAL STRANGULATION OF THE BOWELS.

Mr. HINTON read a paper on this subject, in which he detailed an illustrative case, and advocated early recourse to operation. He likewise laid on the table an abstract of 123 cases, in which the causes, treatment, and results, were given. [We have received Mr. Hinton's manuscript for publication.]

Dr. DAVIES observed that, in cases of this description, opium was the sheet-anchor: croton oil and tartar emetic only added to the irritation already existing. In many cases, enemata were useful by exciting the intestines below the stricture to throw off the flatus distending them. Depressing remedies were to be avoided, while antispasmodics, especially assafoetida and turpentine injections, were serviceable. Dr. Davies could not quite agree with Mr. Hinton as to the desirableness of an early operation; for, under the most favourable circumstances, the operation was a most fearful alternative. Cases might be mistaken for ileus, which occasionally comes on as suddenly; and we could seldom with any certainty place our finger on the spot where lay the source of danger.

Mr. JOHN BARRETT had some confidence in the early use of tartar emetic, which, by inducing collapse, might tend to relax the restraining cause of stricture, while it did not permanently depress the powers of the patient. The great objection to the operation was the fact, that often cases of the worst appearance got well of themselves, and that sometimes we find cases presenting during life no symptoms that would justify operation, which would have been at once relieved by surgical interference; while, on the other hand, in some of those promising the best result while alive, after death no adequate cause of the symptoms could be discovered.

Mr. LAWRENCE narrated two cases favourable to Mr. Hinton's views, in which, had the abdomen been explored, the lives might probably have been saved; one being a case of obturator hernia; the other, strangulation by a band of adventitious membrane. In a third case, where the symptoms were referable to a small spot, the child recovered speedily when salivation was induced. [These cases we hope to receive for publication.]

Mr. NORMAN observed that the diagnosis was so obscure, that Mr. Hinton's analysis of so large a number of cases was very valuable. In the majority of such cases, the doubt as to the exact or probable cause of the symptoms was so great, that the surgeon would not be justified in operating at once: by this necessary delay, time was lost when it was of most value. Such cases resembled strangulated hernia, where, having failed to reduce the hernia, the operation should at once be resorted to: in this latter case, the incision was small, and so of less moment; whereas, in these cases of obscure internal strangulation, a large incision was required, adding much to the danger of the case, besides the handling the intestines, and shock to the nervous system; so that altogether the surgeon must be careful not to give an encouraging prognosis.

While on the subject, he mentioned the results of an operation, upwards of two years ago, on a young woman, for ovarian tumour, which, on opening the abdomen, could not be removed. The tumour, however, had disappeared; she had perfectly recovered her size and her health; she menstruated regularly; had married, but had not been pregnant. (See *Provincial Journal* for 1851, p. 5.)

Mr. GODFREY, in such cases, had felt, in common with others, the anxiety produced by finding, on dissection, that the case might have been relieved by operation, and detailed the following case. A young man was admitted into the hospital with a simple fracture of the leg. There came on suddenly symptoms depending evidently on internal mischief. On *post mortem examination*, there was found a simple serous cyst, attached by a pedicle to the colon, which had embraced a portion of the gut, and might have been at once relieved by placing the patient in the *decubitus*

* Vide ASSOCIATION JOURNAL for March 25th, p. 263.

position, which, however, from his fractured leg, was not thought of.

Mr. HINTON, in answer to an inquiry, stated that he had not used chloroform, nor had he much hope from it in cases where the obstruction was beyond our reach. He recalled the attention of the meeting to the experience of Mr. B. Phillips, who, in his paper published in the *Medico-Chirurgical Transactions*, had recorded that, in 300 cases of opening the abdominal cavity, only 44 had died. In all operations requiring the abdomen to be opened, the room ought to be of blood-heat, as removing one source of irritation to the peritoneum, by warming the air impinging upon the exposed surface. In cases of this character, he had derived benefit from the use of tartar emetic.

CONGENITAL OCCLUSION OF THE DUODENUM.

Mr. MASON read the history of a case of congenital occlusion of the duodenum in a child which lived eighteen days, and during that time passed an excretion resembling meconium. The preparation was exhibited. [We have received Mr. Mason's manuscript for publication.]

Mr. NORMAN mentioned a case in which the subject had lived for twenty-one days, with imperforate anus. On dissection, it was found that the rectum terminated in the bladder.

Mr. HINTON called attention to a reported case where a child with imperforate anus on whom an operation was refused lived for upwards of one hundred days.

Mr. MASON suggested that the reason why some of these cases could exist so long was, that the system of the patients was supported by the food, when retained for any time, being partially digested and absorbed. Where, on the other hand, the obstruction was high in the intestinal tube, no such absorption could take place. In his case the singularity was, that with such perfect occlusion of the canal, meconium, or a liquid exactly like it, should have passed for so long a time after birth, and when there was no apparent communication with the liver or its ducts.

HOT BATH IN SUSPENDED ANIMATION.

Mr. JENNINGS brought before the meeting the question of the usefulness of the hot bath in cases of suspended animation from drowning, and further illustrated it by two cases of asphyxia from carbonic acid in an ice house. [We have received Mr. Jennings' paper for publication.]

Dr. SWAYNE said that the hot bath as a remedy was most unscientific, as from the increased temperature more air was needed for the decarbonization of the blood, which went on more slowly under a cold temperature, as in hibernating animals.

Dr. TUNSTALL had found that the time for using the hot bath in such cases was immediately after leaving the water; if it were used at a subsequent period it was only adding another shock to the enfeebled system, the whole principle of treatment being to excite vital reaction while respiration was gradually induced.

Mr. JENNINGS had used the galvanic battery only at intervals. As soon as he found the heart's action languishing and respiration becoming more feeble, he reapplied the wires with the most marked result and benefit. The recovery of the case of poisoning by carbonic acid was like that of recovery from extreme drunkenness. In his cases he vainly endeavoured to restore circulation in the limbs, and then with this view only, had used the hot bath, but it was almost immediately fatal.

FRONTAL PRESENTATION.

Dr. SWAYNE read the history of two cases of frontal presentation, and illustrated the subject by diagrams. [We have received this paper for publication.]

In answer to an inquiry by Mr. Edwards, Dr. Swayne stated that in the first case the head was too high up for the forceps, and the treatment was equivalent by his use of one blade as a vectis; and in the second case the natural powers were effecting the desired object.

CEREBRAL AND SPINAL APOPLEXY.

Dr. DAVIES read an unique case of hæmorrhage into the brain and spinal canal, unmarked by the usual physiological symptoms. He exhibited the preparation.

CAN EXCESS OR A DEPRAVED STATE OF THE GASTRIC OR PANCREATIC JUICES DECOLORIZE THE BILE, AND SIMULATE FUNCTIONAL DISEASE OF THE LIVER? By CONWAY EDWARDS, Esq.

[This paper is published at p. 300 of this number.]

EXTENSIVE PROSTATIC DISEASE.

Mr. NORMAN read the following letter, which he had received from a medical friend:—

"My dear Sir,—Perhaps you may have heard, or seen in the papers, that my father is now dead. You attended him about

two years ago, when very ill with retention of urine from diseased prostate; and at that time no instrument could be introduced. My late father called with me on you in Bath, about a year afterwards, when you passed two sounds into the bladder; no calculus could be detected. He has, since that time, gone on constantly drawing his own urine every two hours by night and day; generally with tolerable ease, sometimes with difficulty, and many repeated trials: occasionally he was obliged to send for me to relieve him. He was obliged always to make most violent efforts, as if evacuating the bladder, previous to each introduction of the catheter—sometimes a drop or two of ropy mucous urine exuded from the urethra by the effort, sometimes not—and he then passed the instrument.

"About a year ago he passed a great many small, and some larger, phosphatic calculi of irregular shape. The urine was always more or less ropy and mucous; sometimes bloody, particularly when the instrument was passed in too far, and in every introduction the catheter was passed completely into the passage up to the bows of the instrument. My father took nitro-muriatic acid constantly; and, as a common drink, barley water: these barely kept the urine acid, and sometimes it would be quite alkaline and ammoniacal. Thus he went on, and at the time of his death had introduced the catheter for himself 6,802 times; for he kept a regular account.

"My father had for several years been subject to irregular action of the heart on exertion; and six years ago I was called to attend him in a sudden attack of failure of action, which occurred in the night; his pulse was, when I got over to him, 30. Ever since this he had been unequal to much exertion or walking up hill, and the striving efforts he made every time previous to passing the catheter, and in defecation, much increased the mischief.

"I called and saw him, February 25th, when he complained slightly of pain in his sternum; his pulse was quick, and he looked rather pale, otherwise much the same. This was 4 P.M. At 1 A.M. he relieved his bladder, as usual; and at 2 got up feeling uncomfortable; was putting on some clothes, when he staggered, sunk down by the bedside, and died, at 2,15 A.M., February 26th.

"By his own expressed wish, the body was opened. The following were the appearances, 8½ hours p.m. Body very thin; adipose tissue almost entirely absorbed. The prostate gland was of the size of a large orange; the lateral lobes were the parts enlarged. The consistence was moderately hard, white, with granular and gland-like bodies interspersed. The prostatic portion of the urethra was pervious, and terminated in an echymosed spot, where, no doubt, the point of the catheter touched: hanging over this spot was a body the size of a walnut, attached by a pedicle to the right lobe. The section of it presented the appearance of a salivary gland altered by scrofulous disease. The vesical surface of the prostate was nodulated by the projection of the above gland-like bodies. There were no calculi in the prostate.

"The coats of the bladder were much thickened. The mucous membrane was also thickened, falling into pouch-like folds at its posterior part, in which three calculi, as large as pigeon's eggs, were found, partially adherent to the mucous membrane; and that so firmly, that portions of the membrane came away with the calculi when removed. There were two other calculi unattached to the mucous membrane: these were of small size, as large as a pea, rough, and dark, like mulberry calculi of irregular shape. Those of large size were round in shape, sandy in external consistence, apparently phosphatic; for many days after their removal they smelt putrid and ammoniacal. There were about 3ij of mucous, dark, turbid, and fetid urine in the bladder. The ureters were much dilated. The right enormously so. An inch from the bladder it was cut through, and would admit the index finger readily. The pelvis of the right kidney was very much dilated; the cortical and tubular portions being absorbed and thinned; so that though not materially altered in external appearance it was almost a shell. Its lining membrane was whitened and thickened. The left kidney was dark in colour, containing more blood, but the same process of dilatation had commenced in this also.

"There was about 3j of serum in the pericardium. The heart was flabby and dilated. The aorta very much dilated and studded with patches of atheromatous deposit, particularly near the valves, which, though not diseased in their texture, were loaded round their insertions into the coats of the vessel with the same deposit, which was here cartilaginous to the feel, and must very seriously have interfered with their functions. The left ventricle was large, the walls very thin, the columnæ carneæ much attenuated, hard, and pale. The chordæ tendinæ more

rigid than usual. The right ventricle presented the same appearances, but in a much less degree.

"There was no rupture of any part of the organs; which, from the suddenness of the death, I had expected would have been found. Thinking that this account might be interesting to you, I send it, with apologies for my prolixity."

After thanks had been voted to the authors of the different papers, and to the Chairman, the Meeting broke up.

METROPOLITAN COUNTIES BRANCH.

MEETING TO BE HELD ON 10TH MAY, 1853.

At a meeting of the Council of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association, held in London on Tuesday, April 5th, it was moved by Dr. CORMACK, seconded by Dr. SEMPLE, and carried unanimously:—

"That a General Meeting of the Metropolitan Counties Branch be called by this Council, to be held on Tuesday May 10th, 1853, at four p.m., at 37, Great Queen Street, Lincoln's Inn Fields, for the purpose of considering a proposition to hold three General Meetings annually, besides the Annual Meeting; and also for the transaction of general business."

JOHN FORBES, M.D., *Chairman.*
T. OGIER WARD, M.D., *Hon. Sec.*

EDITOR'S LETTER BOX.

A NEW CHARLATAN.

LETTER FROM B. W. RICHARDSON, ESQ., TO THE EDITOR.

SIR,—During a visit which I lately had the pleasure of paying to the Midland counties, my ears were constantly assailed with accounts of the fame of a wonderful woman who has, in these last months, assumed to herself Esculapian duties, honours, and emoluments, in the little shire of Rutland.

That some of the statements made to me concerning this woman were absurd exaggerations, I have no doubt; but sufficient remains to be told, which, I am sure, strictly true, to astonish your readers and to form a record well worthy of being preserved. Had I, sir, at command, the inimitable pen of our immortal countryman Charles Dickens, I could, I doubt not, out of the materials in my possession, frame a letter, the perusal of which would produce a temporary ague fit in the sides of the gravest of all your grave readers. The heroine of my story, holds in fact, just the same position in the domain of medicine, as the Brother Goose Trap Witness of Mr. Dickens holds in the domain of theology.

A few miles from the town of Stamford there is a little village called Wing. In the neighbouring villages Wing can never have been highly esteemed for its wisdom, as it has long been the custom to speak of its worthy inhabitants as "the Wing fools". This title has its origin in a legend, which says that, in the first days of the Wing history, the primitive natives made a bold but unavailing effort to imprison a cuckoo by encircling it with a staked fence—a preposterous libel of course, and a libel which was once commented on in a manner highly gratifying to the libelled parties. It is said that an aged woman of the place, who possessed in a modest and moderate degree the sybilline virtue, the power to prophesy—a mother Shipton in miniature—on being once touched on the sensitive point of her Wing, replied in memorable words, "that the day would come when more fools should enter Wing, than there ever had been fools in it". This prophecy, which, as a matter of course was only laughed at by profane and uninterested persons, has been a source of untold consolation to the stigmatized villagers, many of whom have believed in its fulfilment with an obstinacy of faith that would have done infinite credit to a Mussulman, and have transmitted the belief to their children, and their children's children.

There is often a truth rolled up in these old prophecies. In the present instance there was a *great* truth undoubtedly, a truth which in these last days has shown itself visibly, and the appearance of which has added another confirmation to the proverb, "Time brings all things to the light".

"The Wing Woman", for such is the popular title of the lady whose fame I relate, was born at the village of Hambleton, near Oakham. Her mother was an amateur professor of the healing art; but with supreme modesty she followed the example of Podalirius and Machaon, and treated wounds and sores only.

No record exists as to the degree of success with which this excellent matron followed her self-imposed labours; but it would seem probable that pecuniarily the avocation was unprofitable, for certain it is, that her daughter was brought up in the lowest state of indigence and ignorance. To the daughter herself, these unfortunate circumstances have in the end proved no hindrances to prosperity. After living many years in great destitution, bodily and mentally, she became connected as nurse, or as some other servant, with the Stamford Infirmary, where the idea of becoming a doctress in her own right in all probability broke upon her. After leaving the Infirmary, she, in the course of time, became located at Wing; and having been warned one night in a dream that it was her mission to cure her fellow creatures of their diseases, she slighted not the inspiration, but commenced after breakfast on the following morning. The poor of the village whom the legitimate professors of medicine in those parts failed to cure, were the first on whom she tried "her prentice hand". Cures, the most marvellous, soon crowned her first, and had she not been a married woman, I should have said her maiden efforts. In true illustration of the Shakespearean philosophy, the circle of her glory enlarged itself; and last summer a second Sir Astley Cooper might have looked with a jealous eye on the crowd of patients who from all quarters sought her advice and assistance. If, indeed, a history of charlatanry were ever to be written (and a most interesting history on that subject might be written by the way), there could not, I believe be found a single instance in which any charlatan had in the short space of eighteen months or two years obtained such a celebrity.

I heard from the mouths of numerous persons who had consulted "the Wing woman" so many accounts concerning her, that I took the trouble to obtain as much information on the subject as was possible. One gentleman, whose word, I am sure is most trustworthy, and who, in a low desponding state of health, was led, in opposition to his better judgment, to consult this medical oracle, has kindly given me an account of his visit, which I shall transcribe in his own words; merely premising, that his statements are quite in accordance with those of other persons well informed on the subject, that his visit took place in the latter part of last summer, and that he derived no benefit whatever from it.

"Having many miles to ride," says my informant, "I left my own home at four o'clock in the morning, and arrived at Wing at six. There were two hundred people there before me, on the same errand, and the place was like a fair: booths were erected in the village for the sale of provisions, and a vehicle ran from the house of the doctress to the Manton Railway Station, a mile and a half distant, to convey back passengers who might be coming as patients. There was a book-keeper at the door of the doctress' house, who was issuing tickets of admission in order to avoid confusion. On applying at the house I found that ninety-seven tickets had been issued already, and that sixty-eight were remaining from the previous day. By paying an extra fee I got the ninety-eighth ticket; but it was seven o'clock in the evening before I could gain admission. The reports I heard in the meantime were of the most curious description. The doctors, I was told, were all fiercely enraged against 'the Wing woman, because she spoiled their trade,' and one worthy Esculapian, who lives not a hundred miles from Oakham, was accused of having wickedly misdirected, and turned ten miles out of their way, a van of sufferers who had inquired of him if they were on the right road to Wing? I was also told of a man who, in conveying to his master a bottle of the doctress' health-giving potion, tasted of it by the way, and found it to give him so much of inward comfort that he partook of the whole, and suffered for several hours afterwards from palsy of the lower limbs, difficult articulation, and obscuration of the senses.

"In conversing with the numerous persons who were there to consult this famous woman, I was surprised to hear from what great distances many had come. There were people from various parts of Northamptonshire, Leicestershire, Nottinghamshire, Lincolnshire, and even out of Surrey. I heard, also, many particulars about the woman herself; was assured on all sides, that she could neither read nor write; that she claimed inspiration; and that she fanned the flame of inspiration by absorbing the pages of old Buchan, which were read to her regularly. I ascertained, moreover, to my great joy of course, that her fees were small, and that, like many practitioners really in the profession, she commenced by practising *gratis*. When her fame widened, however, she begun to take small fees, one, two, three, and four shillings per patient, according to circumstances. She has thus been enabled to have her house enlarged, and to take a run to the sea-side occasionally.

"My admission to the presence of the doctress took place, as I before said, at 7 p.m. In a room on the ground floor of her house her medicines were preparing. Herbs and other things were boiled in a copper, the decoction was then strained through a wicker basket, and transferred to tubs, in which it was fermented with yeast. When ready for use it was conveyed up stairs in wooden pails. The sight of this medicine making was rendered as imposing as possible. On ascending the stairs I was ushered into the presence of the doctress. She received me with great gravity. She was stained all over with medicines, and she and all her friends were dirty beyond description. Her nails were especially filthy. I should take her to be about 30 years of age. She did not like me to describe any symptom, but tried to say what I felt without assistance from me. She struck me as being a shrewd observant woman; and one particularly cautious in what she said. She told me that I should have come to her sooner, and that the liver was diseased. She ordered me to be careful in diet, and so on. Surrounding her were twenty jars containing her various remedies, and these she dispensed by means of a ladle into large bottles. The medicines were of two kinds; the one warm and stimulating, the other containing quinine in considerable quantities. She gave me quinine. In one corner of the room I observed a very filthy old woman rolling pills, with a most disgusting pair of hands; but since my visit a London patient has presented them with a silver pill machine, so that the pills are probably less dirty now—days, if they are not dirt altogether. I left the house greatly disgusted, and wondering how I could ever have allowed myself to be so imposed upon."

I have thus, Mr. Editor, given you a narration of one of the most singular kinds of quackery which has ever flourished, even in this age of quackery. Some of your readers may be inclined to opine that I had done better to let the subject alone—to let it die out of itself, without record. With all deference, I think otherwise; believing that in the history of all such impositions as the one just related, a great lesson is embodied. The success of the "Wing Woman" offers another proof of the gullibility of human nature; and affords reason why other medical frauds, practised by persons much better educated, and far more guilty in point of morality than this miserable, self-deceived woman at Wing, are so successful, for brief periods of time, in the opposition they offer to the progress of true and scientific medicine. In another place, I once endeavoured to show that one great cause of the success of quackery lies in the fact that the science of medicine has advanced so far, and the information of medical men has become so great, that the general public are lost in attempting to follow the scientific physician; but that, being at the same time anxious not to feel ignorant in a matter that so greatly concerns themselves—the cure of disease—they are ready to turn their attention to any medical system which they think they can comprehend, however absurd, or however dangerous, that system may be. I regret that further thought on these matters only confirms me in this opinion; and I imagine that no better proof of its correctness could be offered than the history of the "Wing woman".

Ignorance, Humbug, Impudence, potent three! what wonderful tricks can be played by your agency on simple, marvel-loving, bluff John Bull! Louis Napoleon, standing on the opposite coast, and turning a tenpenny telescope in the direction of Threadneedle Street, makes John open his eyes, gird up his loins, and declare his determination to resist the invader to the death, though he should have all the soldiers of the continent at the call of his trumpet. But there rise up incessantly, under the very nose of John, a hundred arch enemies, who, with the three weapons named above, play with him as with a shuttlecock, and obtain costs for their exertions. Now, the health of John is ever a weak point with him, and hence the quack is at all times ready to offer him battle, and at all times conquers. Unfortunate, credulous John! yesterday, to be cured of a hoarseness, he stared, for three-quarters of an hour, with the most ludicrous expression of countenance, at the slim paws of a Mesmerist; to-day, for a depression of spirits, he is induced to swallow one-millionth part of the trillionth of a grain of natron muriaticum, forgetting altogether that he took two drams of the same remedy with his last potato; tomorrow he will suffer from bile, and, Sampson like, will deliver over his locks, and the delicate balance of his life, to the modern Delilah, the "Wing woman".

With many apologies for this long intrusion on your space,

I am, etc.,

BENJAMIN W. RICHARDSON.

Mortlake, April 4th, 1853.

INDISCRIMINATE HOSPITAL RELIEF.

LETTER TO THE EDITOR.

SIR,—I was very much pleased with Dr. Davies's letter, for I assure you that the Bath United Hospital will speedily ruin us all. All sorts and conditions of people resort thither for advice without question. I have often wished to get a poor patient admitted into the house, but this cannot be done without a ticket from a subscriber; and many of these tickets are given away in *blank* to any person who calls at a subscriber's door, while we practitioners cannot send in a real object of charity. Yet out-patients have merely to take their seats without question; and on a market-day you may see the gigs of the farmers of the district waiting in the next street, while their owners are getting their physic at the hospital. In fact it is only necessary to ask and to have; and the ticket, when given, merely certifies that the person applying is a resident in Bath. The farmers do not want to go in, so no ticket is needed. If you saw the numbers of well-dressed people who go there, you would be surprised. I do not blame them: everything is quite free, and no questions are asked; indeed, with the hospitals and dispensaries, a number equal to half our population are annually the recipients of gratuitous medicine and advice. How can we, who have to support appearances and struggle with the world, live, if our physicians and surgeons attached to these places doctor all who come for nothing? I cannot but see that you are doing a great deal of good by exposing these abuses: and I wish you success. The profession here are all with you,—at least we who live by our profession.

I am, etc.,

A YOUNG SURGEON.

Bath, April 2nd, 1853.

INCOME TAX:—LANCASHIRE AND CHESHIRE BRANCH.

LETTER FROM JOHN HATTON, ESQ., HONORARY SECRETARY FOR MANCHESTER, TO THE EDITOR.

SIR,—Under ordinary circumstances, I should take no notice of anonymous communications; but "a Liverpool member" has brought my name forward in the *JOURNAL* of yesterday, in a manner that certainly requires explanation.

"A Liverpool member" cannot be aware of the correspondence which has taken place between Mr. Jones and myself upon the subject, or he would have known that I was not only willing to call a meeting of our Branch, "to take into consideration, and petition against the Income-tax", if I received a requisition, but was desirous of doing so *on my own responsibility*, if Mr. Jones could hold out any hope of procuring even a moderate attendance of members.

Your correspondent is little aware of the difficulty of bringing together even a *few* associates upon any special occasion, or he would not jump at the conclusion, that "this worthy functionary" refused to call a meeting when required; and if he had taken the trouble to peruse the laws, instead of finding fault, he would have seen that Rule 9 orders "That a special meeting of this Branch may be called at any time during the year, on request of ten members addressed to the General Secretary".

I am, etc.,

JOHN HATTON, Hon. Sec.

Oxford Street, Manchester, April 2nd, 1853.

[The Law seems ambiguous. Is the calling of the meeting optional? The word "may" indicates that the "General Secretary" has the power of calling a meeting upon receipt of a requisition signed by ten members; but it does not express anything more. "General Secretary" is a designation which specially belongs to the General Secretary of the PARENT ASSOCIATION: but perhaps in this case the term refers to the chief Secretary of the Branch.

As regards the not calling of a meeting of the Lancashire and Cheshire Branch, it is very clear that, in the circumstances, the course adopted was that which was supposed to be, and which we believe was, most in accordance with the general wish of the members. Throughout the limits of the Branch, petitions have been extensively signed against the present method of assessing the Income-tax: so that without a meeting the great object in view has been accomplished.—EDITOR.]

NEWS AND TOPICS OF THE DAY.

LORD LYTTLETON'S VACCINATION BILL.

[House of Lords, April 4.]

On the motion of Lord LYTTLETON, the Vaccination Bill was read a second time.

Earl GRANVILLE said, that as the provisions were stringent, he must reserve to the Government the right to consider the details at a future stage, and to introduce amendments.

The Earl of ELLENBOROUGH observed that a fine was inflicted for neglect in vaccinating children; but the bill provided no facilities for the people doing so, and he knew, from his own experience, that such facilities could be afforded with little trouble.

Lord LYTTLETON expressed his willingness to adopt any amendments their lordships might suggest.

The bill was ordered to be committed on Monday the 11th instant.

[From the above it appears, that when we penned our remarks upon this rash and ill-digested measure, it had been read a first and not a second time.]

DEATH FROM FLOODING AFTER DELIVERY, THROUGH THE IGNORANCE OF THE MIDWIFE.

An inquest was held on the body of Mary Squires, aged 41 years, at Wiveliscombe, Somerset, before William W. Munceton, Esq., deputy coroner, on the 17th March. Elizabeth Besley stated, that the deceased was delivered of her seventh child on the 10th March, after being in labour about ten hours. When the midwife, Sarah Gibbs, had separated the child, she attempted the extraction of the placenta, by pulling at the cord. In a short time a portion of the placenta came away; the patient was then undressed and put to bed, when she became sick and faint; there was a slight *flooding*, but *not more than usual*; she continued fainting, and Mr. Edwards, a surgeon, was sent for.

Mr. Henry Leopold Nazer stated that he attended deceased for Mr. Edwards; he found her in bed recently delivered. Sarah Gibbs showed him the part of the afterbirth which she had removed; it was about a third part of the placenta. He examined deceased, and found a profuse flooding going on, which had rendered her faint. He removed the rest of the afterbirth as quickly as he could; he found it high up in the uterus, and partially, but not strongly attached: the flooding ceased on its removal. Finding her sinking, he gave her stimulants, but in the act of swallowing them, she died: he considered that she died from flooding, by a retention of a portion of the afterbirth.

The coroner, in summing up, observed that there could not be any doubt that the poor woman lost her life through the ignorance of the midwife; and he was sorry to say, that too many such cases occurred in this country annually. He thought it was high time that the legislature should interfere, and prevent these ignorant midwives and others from practising. He understood, from good authority, that in many unions the guardians employed them to attend the pauper women instead of qualified medical men—a practice fraught with great danger, and which could not be too highly deprecated.

The Jury returned a verdict in accordance with the medical testimony, and added the following rider—

"We consider that midwives are in general very ignorant of the duties required of them; and that the legislature ought to pass a law to prevent them, as well as other persons, from practising midwifery, without first having undergone an examination before a competent Board of Examiners. And we deprecate the practice of Boards of Guardians employing such unqualified persons to attend for poor women during their confinements, a practice which not only leads to loss of life, but thereby frustrates the economical object of those who hold the purse-strings of the rate-payers."

GLASGOW MEDICO-CHIRURGICAL SOCIETY. The first meeting of the session took place on Tuesday, the 18th March, at 8 p.m.; Dr. Andrew Buchanan, President, in the chair. The Treasurer read a statement of the accounts for the past year. The following gentlemen were then elected office-bearers for the ensuing year:—Dr. Andrew Buchanan, President; Dr. Pagan, Dr. Ritchie, Vice-Presidents; Dr. James Adams, Dr. A. Mackie, Dr. P. Stewart, Dr. E. Watson, Dr. Kirk, Dr. Corbett, Council; William Lyon, Esq., Dr. Thomas Watson, Secretaries; Dr. John Coats, Treasurer.

GLASGOW MEDICAL SOCIETY. At the last annual meeting, the following gentlemen were elected office-bearers:—Dr. James Wilson, President; Dr. James Adams and William Lyon, Esq., Vice-Presidents; Dr. George Robertson, Treasurer; James Fraser, Esq., Secretary.

APOTHECARIES' HALL. PASS-LIST. The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 31st, 1853:—

Samuel Lob Martin, Bawtry, Yorkshire; David Conway Evans, London; Thomas Tomlinson, Maldon, Essex; Joseph Barker, Dunham; Henry William Alexander Coleman, London; Richard Thomason Hobner, Hereford; Augustine Batt, Bampton, Oxon; William Brown Pepler, Tinehead, Wilts; Richard Henry Thomas, Ibstock, Leicestershire; Alfred James Dale, Bransby Roberts, William James Shone, London.

MUNIFICENT BEQUEST TO THE CITY OF LONDON MEDICAL CHARITIES. A munificent bequest has just been distributed among the City charities by the trustees of the will of Miss Hardwick, late of Chesterfield, in Derbyshire. This lady's father was, in early life, a surgeon in the mercantile navy, and, for some years before his decease, carried on business in Bishopsgate Street as a wholesale chemist. Miss Hardwick, his only daughter, at his death, withdrew herself entirely from the world, and lived an eccentric life in a small cottage, where her property was permitted to accumulate, as she did not expend upon her establishment a hundred a-year. She died about a year ago, in the mayoralty of Alderman Hunter, leaving the bulk of her property to the Lord Mayor of London, and the Chamberlain for the time being, to act with her executor, Joseph Shipton, Esq., an eminent solicitor at Chesterfield, as trustees, to be distributed among such of the charities of the City of London as they might, in their discretion, select for the purpose. The executor immediately placed at the disposal of the trustees the sum of £18,000, the apparent amount of the residue, after the satisfaction of trifling debts and legacies left by the testator, and the following is a list of the medical charities:—Hospital for Diseases of the Chest, £550; St. Bartholomew's Hospital, £1,100; ditto, Samaritan Fund, £300; ditto, ditto, Maternity Charity, £220; Royal Maternity Charity, £330; City Truss Society, £330; Royal General Dispensary, £330; Western City Dispensary, £220; City Dispensary, Queen Street, £330; Hospital for Diseases of the Skin, £550; Farringdon General Dispensary, £330; Metropolitan Free Hospital, £550; Metropolitan Dispensary, £330; London Ophthalmic Hospital, £550.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

CHAPMAN, Henry T. THE TREATMENT OF OBSTINATE ULCERS. Second Edition. pp. 256. London: 1853.

*CULLEN, William Henry, M.D. CLIMATE OF SIDMOUTH. pp. 16. Sidmouth: 1852.

DE MERIC, Victor. ON SYPHILIZATION. Pamphlet, pp. 24. London: 1853.

HANNOVER, Adolphe, M.D. CONSTRUCTION AND USE OF THE MICROSCOPE. Edited by John GOODSIR, F.R.S.E. 8vo. pp. 100. Edinburgh: 1853.

NUNN, Thomas William. INFLAMMATION OF THE BREASTS AND MILK ABSCESS. 12mo. pp. 52. London: 1853.

*SIMPSON, James Y., M.D. HOMOEOPATHY: its Tenets and Tendencies. Third Edition. 8vo. pp. 292. Edinburgh: 1853.

THE ASSOCIATION MEDICAL JOURNAL is published at its own office every Friday evening.

N.B.—Members of the Association receive the Journal, *free by post*, as a matter of right. To others, the terms of subscription are—For one year, unstamped, £1:6:0; ditto, stamped, £1:10:4.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XV.

LONDON: FRIDAY EVENING, APRIL 15, 1853.

NEW SERIES.

THE WING WOMAN. Mr. Richardson's letter, and the leading article on the Success of Medical Impostors, have been reprinted by request in the form of a small pamphlet, which may be had, postage free, for 4d., sent in stamps to the publisher of the Journal. The proceeds of the sale will be given to the Medical Benevolent Fund of the Provincial Medical and Surgical Association.

HOSPITAL ABUSES. May we request the Surgeon who forwarded to us five or six days ago a communication on this subject, to favour us (in confidence) with his name and address? We expect every correspondent to communicate his name, not necessarily for publication, but for our own security against error.

COMPULSORY VACCINATION NOT NECESSARILY EFFICIENT VACCINATION.

IN our remarks upon Lord LYTTLTON'S Vaccination Bill in our number for March 25th, we said that the profession would do well to petition Parliament to reject the measure. We argued against the bill, because on the very face of it were stamped crudity, impolicy, and injustice. We admitted that enlightened legislation upon the subject of small-pox and vaccination was required; but we at the same time affirmed that nothing could be more hurtful to the interests of the profession and of society at large, than the over-hasty and random legislation at present attempted by a nobleman, of the philanthropy of whose intentions no one can entertain any doubt. Three weeks have elapsed since we expressed these sentiments. During that period we have had opportunities of conversing and corresponding upon the subject with many persons who are practically acquainted with the present system of vaccination; and we find that the only exception taken to our former article has been, that it did not urge with sufficient vehemence an uncompromising opposition to Lord Lyttelton's bill. If our protest were deficient in earnestness, the reader who takes the trouble to re-peruse our remarks, will perceive that there was at least no want of distinctness in the verdict which we pronounced against the measure. However, we can remove all misapprehension by now stating that our objections to it are as strong as those entertained by any of our correspondents, or as can be entertained by any one—that, in fact, we consider the bill to be unsound in its principle, unworkable in its machinery, and incapable of diminishing by one iota the spread of small-pox.

The bill is unsound in principle; because it seeks to enforce by legal compulsion that which it ought to offer as a boon—that, too, which, if kindly tendered, and accompanied with a truthful warrant of efficiency, would, we are inclined to think, be generally received as a great blessing. Should exceptional cases, in which ignorance resists the boon, still be found, it may then be right to think of a compulsory enactment; but till an efficient system of voluntary vaccination be attractively placed within the reach of all,

it would be monstrous to inflict upon the community compulsory submission to poor-law vaccination, a system which, from its unpopularity and meanness, can exercise only a very limited protective power. We do not require an extension of the present worthless system, but the maintenance of a supply of good lymph, and the careful and repeated examination, by skilful, conscientious, and remunerated medical officers, of each case operated upon. Let public vaccination, under these conditions, be offered to the public; and when vaccination under these conditions has been rejected, it will be time enough to discuss the necessity of a compulsory bill. The remark of Mr. HINGSTON is strictly correct:—

“If his lordship would inquire into the circumstances of the case, he would learn that the chief want among medical men is that of genuine lymph. During the present week, I have received two letters, one from Mr. Wilson, of Runcorn, Cheshire, and the other from Dr. John Grigor, Nairn, N. B., both complaining of the inefficiency of the lymph they use, and begging for a more effective supply of it from Mr. Badcock's stock. These cases are not solitary, and they exclude the idea of any advantage being derived from compulsory vaccination.” [Vide p. 335 of this number.]

The bill is unworkable in its machinery; because it attempts tyrannically to impose onerous gratuitous services upon the medical profession. The poverty of some and the thoughtlessness of others make many of our body accept poor-law appointments at non-remunerative rates; and the mad scramble of an overstocked profession tempts too many of our young physicians and surgeons to go cap in hand to hospital governors, beseeching to be nominated to perform an amount of gratuitous duty which, if not fabulously described in the printed reports of our hospitals, is so vast as to require for its even tolerable performance almost superhuman physical powers, as well as the entire surrender of every other professional occupation. It is not remarkable that Lord Lyttelton, cognizant of these facts as the chairman of a rural board of poor-law guardians, and as a peer of Parliament, should think it kind to impose any amount of unpaid work upon “medical officers and practitioners”, and believe that he is giving them that which they most ardently desire, because it is that which they are always most clamorously seeking to obtain. We must, however, for the sake of truth, declare that medical gratuitous services, like all other gratuitous services, are of comparatively small value. Parliament may, in the magnitude of its power and wisdom, decree that “medical officers and practitioners” are to perform certain work “without fee or reward”; they cannot, however, secure the efficient performance of that work, unless it be adequately paid for. Lord Lyttelton must be profoundly ignorant of human nature, and of the practical working of the present system of poor-law vaccination, if he fancy that such a clause as the following can supply any part of a machinery calculated to diminish the spread of small-pox. The following is an extract from the bill, which will be found *in extenso* at p. 264 of our number for March 25th:—

"That in the event of a child becoming sick or indisposed in consequence of having been vaccinated as aforesaid, then and in such case it shall be the duty of the medical officer or practitioner who vaccinated the said child, to attend upon and prescribe for the said child during such sickness or indisposition, and to furnish it with such medicines as may be necessary for its recovery, without fee or reward other than is provided for by the above-mentioned act."

The "fee or reward" here referred to is the EIGHTEEN-PENCE which at present "the guardians of the poor" are legally obliged to give to their vaccinators for each successful case—the paltry amount of which sum, as any man of reflection must perceive, is in itself an explanation of much of the worthlessness of the existing system.

We trust that none of our brethren, rendered impatient by the apathy of the poor and the prejudices of the ignorant, will stand aside with folded arms whilst Lord Lyttelton's Bill is being hurried through Parliament; for assuredly they will be among the very first to regret and condemn its enactment, and to discover that they have allowed a rod to be put in pickle for their own backs. It will then be too late to deplore "great injustice to the profession".

To our colleagues who hold appointments as vaccinators under the existing acts, we would say: Arise, shake off your torpor, emancipate yourselves from the fear of "the Guardians", and, like honest men and members of an honourable profession, declare in the face of the world that which you feel in your hearts to be too true: that the public safety from small-pox can in no degree be promoted by Parliament rendering your remuneration—already inadequate—still more inadequate by an increased burden of repulsive duty.

To men who, like Mr. Ceely, of Aylesbury, have devoted a lifetime to the enlightened study of the vaccination question in its hygienic, pathological, and political bearings, we would say: Give the profession and Parliament the benefit of your opinions without delay.

And to Parliament we would say, with respectful earnestness: Attempt not to legislate upon this momentous subject till you have examined witnesses, and till the evidence collected by the Epidemiological Society has been published and deliberately discussed by the Provincial Medical and Surgical Association throughout its Branches and in its General Assembly. Be thankful that there exists a society of two thousand medical men able and willing to assist in your deliberations. But remember that without their co-operation and sympathy, your most stringent or theoretically perfect Vaccination Act must only prove impotent and delusive.

THE MEDICAL REFORM BILL.

FROM among the numerous letters which we receive every day upon the subject of the Medical Reform Bill, we could select a mass of opposing opinions, such as would startle many who have not discovered the difficulty of the subject by studying it for themselves. Notwithstanding, however, the variety of sentiments entertained by different individuals and different classes of practitioners, there is one point on which there seems to be complete unity of opinion; viz., that the time has now arrived when all sections of medical reformers ought to join together in endeavouring to carry such a measure as may be an improvement upon the present condition of medical affairs, even though it

should fall short of their own standard of that which is required. In other words, the prevailing opinion seems to be that, considering the mixed constitution of the Committee of the Association entrusted with the Bill, and considering the promise which Lord Palmerston has given, that if the profession can arrange their differences, he will bring it forward as a Government measure—in consideration of these two points, all seem inclined to merge individual bias, when they find that it militates against the success of a measure which all may fairly accept as a boon, even though they look upon it as a mere instalment of reform. We believe that we are echoing the wishes of all our colleagues when we say with Dr. G. Webster—

"I would rather accept the Bill (with the improvements which it might receive in Parliament), as a very large instalment of what is due to the profession, and to the public interests, than see an agitation continued which is detrimental to both."—ASSOCIATION JOURNAL, 1st April, p. 285.

We regret to observe that the *Medical Times* is assuming that the Bill to be brought into the House of Commons is to embrace certain unpopular provisions, which there is no evidence that it is to contain. For example, we read as follows:—

"The Bill of the Medical and Surgical Association, while professing to be founded upon large and liberal principles, sweeps away every vestige of representative government from the ranks of the profession; and while the Colleges are to be strengthened in their privileges, and confirmed in their rights, the general practitioners will be deprived at once of any rights or privileges whatever. They are to be handed over wholesale to the regius professors of Oxford and Cambridge, to the College of Physicians and the College of Surgeons, and to other parties, none of whom, so far as we have learned, has ever evinced the slightest regard for the scattered multitude of homeless wanderers, who are thus unceremoniously to be thrust upon them."—*Medical Times*, 2nd April.

So far as we understand the present position of affairs, our esteemed cotemporary has, in this passage, created a man of straw, that he might have a tangible enemy against whom he might discharge his rhetoric. He has ventured to criticise a Bill, regarding the exact provisions of which he is ignorant, and regarding which we are also in the same predicament. It will be quite time enough to join issue upon the merits of the Bill, when we know exactly what alterations are made by Lord Palmerston previous to his presenting it to the House of Commons. It will then likewise be quite early enough for the *Medical Times* to seek a shelter for the "homeless wanderers". This seems to have occurred to our cotemporary himself, for in last week's number we observe less about opposition to the Bill, and find hopes expressed that it may be improved before it is presented to the House of Commons. The following passage warrants this observation.

"From the contents of Dr. Webster's communication, it appears that the Bill is still open to amendment, and that its authors are by no means agreed among themselves as to the propriety or expediency of many of its clauses; we may therefore hope to see many very important alterations made in the measure before it is presented to the House of Commons.

"We cannot but take credit to ourselves in having been the first, and, indeed, the only medical journal which exposed the defects of this measure; and, if we shall succeed in retarding its progress until very sweeping changes are effected in its provisions, we conceive that we shall be doing a great service to the general practitioners of this country."—*Medical Times*, 9th April.

We are not disposed to take any other ground than that occupied by the writer of this passage. By all means, let all do their best to get the Bill framed according to their own fancy; but let there be, at the same time, a distinct understanding that we are to settle all our disputes within our own camp, and are then to go forward with unbroken phalanx to the gates of Parliament.

THE NEW CHARTER OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

To-day we publish, *in extenso*, the Charter which the College of Physicians wish to obtain, and also the official report of an interview, on the 6th instant, between a deputation from that body and Lord Palmerston, the Home Secretary. In connexion with the general measure of Medical Reform, these documents are of great importance, and well deserve to be carefully considered by the members of the Association.

The Charter is conceived in a liberal spirit. If it were possible to judge of it as a distinct measure, we would unhesitatingly join with Dr. Hawkins in submitting,

"That as the object which the College has in view is one in respect of which no opposition is to be anticipated, it might be as well if the Government would direct their attention to it before they took in hand any other matter relating to medical affairs, which might give rise to diversity of opinion."

But the proposed Charter cannot be contemplated apart from the new Bye-Laws of the College of Physicians or the proposed measure of Medical Reform, adopted by our Association and the great body of the profession, as the result of the deliberations and mutual concessions of parties hitherto unable to co-operate. Although there is nothing in the Charter which we have much inclination to cavil at, yet we may be allowed to remark that some of its provisions seem to be inconvenient and unnecessary. For example, may we ask why the President is to be chosen from among the fifty senior Fellows? * And why is it deemed expedient or necessary to give to the College of Physicians the power of conferring degrees in medicine? † The bodies which exercise this right are already, in the opinion of many, too numerous.

As membership of the College of Physicians, under the proposed Medical Bill of the Association, is to be stringently enforced upon all those who practise medicine, it behoves us to take care that, through inadvertency, the details of one measure do not clash with those of the other, or operate with unintended harshness in certain quarters. We would also suggest that, if the great mass of the profession who are to be compulsorily attached to the College are not to be granted any share in the management of the College affairs, great injustice will be committed, and great dissatisfaction will be felt. Unless a more secure representation of the profession be provided for within the College than is necessarily involved in the new Charter, the College will not be able to place itself in its legitimate position at the head of the profession. A difficulty will also arise regarding that part of the Bill of the Association which

obliges practitioners to belong to the College of Surgeons or the College of Physicians. The safety of this provision may be endangered by legislation being cramped by an inelastic charter, previously granted to the College of Physicians. This is a point to which, in compliance with the wishes of many correspondents, we have thought it right to direct attention.

Again, so much will depend upon the new Bye-Laws of the College, that it would be well that the proposed alterations of the existing code were laid before the profession. For it is here that the question arises in all its magnitude, What is to become of the general practitioner? Is he to be extinguished for the benefit of the College of Physicians and the Pharmaceutical Society? Or is the College of Physicians so to modify its Bye-Laws as to allow physicians, when convenient to themselves and their patients, to use their own medicinal instruments, as Sir Benjamin Brodie and Mr. Syme are peacefully permitted to employ their own surgical instruments. We are no advocates for medical or surgical practitioners retailing jalap or bougies; but we are quite sure that it is equally for the advantage of the public and the profession that there should be no badge of inferiority affixed to those who, while they charge only for attendance, think it best, from motives of conscience or convenience, to administer their own drugs. The universal discontinuance of charging for medicine, and the substituting of the more professional system of the practitioner being remunerated only for his advice and attendance, would meet with no opposition from the profession (as the inquiries instituted by the Medico-Ethical Society of Manchester incontestably prove, so far as that populous town is concerned). But any attempt to prohibit non-commercial pharmacy would be strenuously opposed, because, in the present state of society, it would ruin the majority of the medical practitioners of England, and at once complete the elevation of the druggists to the position occupied by their predecessors before 1815, when they were the physicians and surgeons of nineteen-twentieths of the whole population.

HOSPITAL ABUSES:—A GLANCE AT NOTTINGHAM, BATH, AND BOLTON.

It is a source of extreme gratification to us, that the remarks we have felt it our duty to the Association to make upon the above subject, should have received so prompt and hearty a response, as our daily correspondence shews.

The evil is certainly one which, from its magnitude, requires the calmest feelings to deal with it—the promptest and kindest treatment. The profession, as a body, have so long permitted themselves to be grossly imposed on by an unthankful public, and the difficulties surrounding the discussion of the subject are so numerous, that a fear naturally arises on the part of those who are prepared to cope with the difficulty, as to how they shall proceed without transgressing the limits of medical benevolence, and thus appear to their patrons and benefactors anxious to restrict those acts of disinterested kindness which it is equally the privilege and the duty of our profession to render. There can be little doubt, that our bounden duty to ourselves, our neighbours, and our profession, requires that we, who see the imposition practised in the out-patients' rooms, should, on every occasion, point out this imposition to the committees

* Chapter XIV.

† Chapter XXXI:—"And such person shall, after his admission as a member of the said corporation, be entitled to have and use the degree or designation of Doctor of Medicine."

of those institutions which come more immediately under our notice. Let us begin by taking a case in point from a pamphlet which has been sent to us, entitled a *Report of the Nottingham Dispensary*.

What can be a greater abuse than the plan of drawing teeth practised at the Nottingham Dispensary? "Out of 3,634 cases paraded in the report, 1,445 are cases of tooth drawing; which class of cases," we are quoting this year's report, "though very numerous, has not been noticed by this institution until last year." Why, we would ask, should the surgical staff of the Nottingham Dispensary be called upon to deprive themselves, or their neighbours, of the small fee charged by dentists and general practitioners for this operation? or why should they, if the patients are really poor, act as gratuitous assistants of the poor law medical officers?

Dr. Davies, of Bath, in his letter, inserted at p. 285, admits the evil of the present system, and hopes that a remedy may be found. We would suggest one: let the medical staff represent to the committee the necessity of appointing a clerk to register all the applicants and furnish them with numbered papers, containing such particulars as that in use at the Bolton Infirmary, kindly forwarded to us by Dr. Black, and published at p. 285 of our number for 1st of April. In cases where imposition is suspected, let it be that clerk's especial duty to make inquiries at the applicant's residence: for as long as no recommendation is necessary, and the patient waiting his turn has merely to see the physician or surgeon and obtain his medicines, deceptions will be practised, which it is the duty of the medical officer to point out to the committee, although he is not able to suggest a remedy.

Gentlemen seek a place upon these committees, with ardour. Let them remember that their duty embraces something more than merely seeing if the patients are orderly in their seats. They should examine for themselves such persons as the physician, surgeon, or clerk, may invite attention to; and consider it as much their duty to see that the funds of the charity are not improperly expended upon those who can pay, as it is that of the medical officers to attend to the sick. One member of the committee should always visit the waiting-rooms daily during the out-patients' attendance. Look at the vast amount of needless labour imposed on the physician and surgeon who, by the parsimony of a committee, are called on to register indiscriminately all who apply for advice at a large public hospital.

Once more, let us call upon our colleagues to unite with us in exposing the present state of our public charities; let them take every opportunity of pointing out the abuses of the system, so that by a firm cooperating movement hospitals and dispensaries may be placed on a proper footing, both as regards the profession, and the really deserving poor. So long as committees look only to numbers admitted, and the professional attendants prescribe indiscriminately for all who present themselves, it is idle and futile to expect amendment: it is a cause which concerns all our interests; a cause in which those attached to public charities should unite with their non-official brethren before the whole profession is involved in one common ruin.

We intend again and again to return to this subject. In the mean time, we sincerely thank those who have so willingly cooperated with us in bringing the evils of the present system under the notice of those who have the power to mitigate them. We particularly thank the editors of

provincial newspapers, who have republished our articles and called attention to the abuses which were being allowed to grow luxuriantly without an effort being made to check them.

DR. GOLDING BIRD AND PULVERMACH'S ELECTRIC CHAIN.

DR. M'INTYRE has addressed to us a letter regarding certain advertisements of Mr. Meinig, the proprietor of Pulvermacher's Electric Chain, which have repeatedly appeared in this Journal, and one of which was inserted on March 25th; and was also received for repetition in to-day's publication. In the advertisements referred to, Mr. Meinig prints a testimonial from Dr. Golding Bird, in favour of Pulvermacher's Electric Chain, and announces that he does so by the "kind permission" of that gentleman. Dr. M'Intyre impeached the authenticity of the testimonial, and protested against its admission into our advertising columns.

In these circumstances, we lost no time in communicating with Dr. Bird upon the subject; and we now feel that the character of this Journal, and of various individuals, is so much involved in the disclosures which have resulted from our investigations, as to render it necessary to lay the whole particulars before our readers.

The following is the letter which we received from Dr. M'Intyre.

I. DR. M'INTYRE TO THE EDITOR.

SIR,—I am sorry to be under the necessity of drawing your attention to the advertisement of "Pulvermacher's Hydro-Electric Chain Batteries", which has been appearing very frequently in the pages of the JOURNAL.

In it is given the extract of a letter, purporting to be from Dr. Golding Bird, and which, professing to come from so high an authority in such matters, is calculated very much to mislead the members of the Association and profession at large.

A short time ago, through the kindness of my friend Dr. Cowan of Reading, I had the opportunity of seeing Dr. Golding Bird's disavowal of ever having written such a letter, or having in any way given his approval of the instrument.

As the JOURNAL is not a commercial speculation, but the organ of communication betwixt the members—having the dissemination of truth and the advancement of science for its primary objects—I think myself justified in protesting against the admission of that into its pages, which is calculated to destroy, instead of promote, such laudable purposes.

I am, etc.,
JOHN M'INTYRE, M.D.

Odiham, March 31st, 1853.

In consequence of this letter, we communicated with Dr. Bird, who promptly put us in possession of the whole facts of the case. We have permission to print his letter, though it was originally addressed to the editor in his private and not in his official capacity.

II. DR. GOLDING BIRD TO THE EDITOR.

MY DEAR DOCTOR,—I feel bound to reply immediately to your inquiry—how far I have "sanctioned the advertisement of Pulvermacher's Chain"? I can best do so by giving you a brief history of this "chain" so far as I am mixed up with it.

In 1851, Pulvermacher, a man of great scientific attainments called on me with a letter of introduction from a German physician settled in London. He had but recently arrived from Vienna, and scarcely understood a word of English. I examined his apparatus, and submitted it to experiment. The one I used, the only one, indeed, that I

was then acquainted with, was composed of one hundred links ; and I subsequently described it in the *Lancet*, (Oct. 1851, p. 388.) Some time afterwards a person whose name I never knew, but who described himself as a friend of Pulvermacher's, called upon me and requested a letter of introduction to Dr. Christison and other eminent physicians at Edinburgh, as he was anxious to introduce the apparatus to their notice. I accordingly gave him a written opinion of its value as a source of electricity, in the form of an introductory testimonial. Two or three lines have been selected from this for the purpose of appearing in the advertisements of Mr. Meinig, not only without my authority, (as I would never have sanctioned its appearing in an advertisement in the public papers,) but as you will see by the accompanying letter, it now continues to appear in opposition to my expressed prohibition. Indeed, I wrote to Mr. Meinig, to threaten legal proceedings with the view of obtaining an injunction, to prevent this public use of my name. I need hardly say how much vexation has been occasioned me by seeing my name employed to support the pretensions of what is now a quack remedy—for surely that term is not too strong for an apparatus which is declared to cure a large proportion of the diseases in our nosology, and many of them instantaneously.

The "chains" usually sold are too feeble to afford a sensible shock or even any physiological sensation ; they are, moreover, often directed to be worn round the body, in which case, as every link would come in contact with the skin, no concentration of force, no current, would be developed at the poles.

The battery of Pulvermacher is an ingenious and useful source of electricity, but nothing more. It can only be of use in those ailments where electricity itself is indicated ; and must fail, as a necessary consequence, in cases unfitted for electrical treatment.

I never before paid so heavy a penalty for giving a certificate to any one. In one week, shortly after the first appearance of the advertisement, I had nearly one hundred letters of inquiry. Even now, a week never elapses without my receiving one or two. These became such a source of trouble and expense, that I have long since declined answering them, except when sent by medical men.

I can only deeply regret that a certificate given in good faith to recommend a scientific instrument to the notice of our profession, should have been employed to advocate it as a quack remedy. As I stated in the *Lancet*, in 1851, "It must be recollected that the current evolved has no peculiar properties, and that it will effect nothing more than that evolved by any other means. It is, indeed, deeply to be regretted that so convenient a source of electricity runs the risk of losing favour in the sight of educated men generally, and of our profession in particular, by being injudiciously puffed in the public prints, by advertisements claiming for it a medical influence it in no wise possesses."

I am, etc.,

GOLDING BIRD.

4R, Russell Square, April 4th, 1853.

The whole affair is made very plain by the following letter from Mr. Meinig to Dr. Golding Bird, in reply to one from him, prohibiting the use of his name in advertisements.

III. MR. MEINIG TO DR. BIRD.

SIR,—When you had the kindness to give my agent your highly favourable testimonial on Pulvermacher's chain, you expressly authorised its publication "*whenever and in what manner I might find it useful*". I need hardly observe that a testimonial of this description, from a man of so high standing in the scientific world, is a great acquisition to any remedy, however excellent in itself, and particularly in deciding its rapid extension and acknowledgment ; and, in striving towards this end, I have used it freely, according to the understanding on which I received it. Should I now at once cease to publish such a testimony, I would be in a very different and unfavourable position to what I was before I got it ; for, say what we may, no one would believe

that consulting letters would be disagreeable to a practising physician, and all would attribute your withdrawal to a discovered inferiority in the remedy. I have, besides, every reason to believe that many other highly gifted men would have been glad at the time to introduce and associate their names with an invention like this—an advantage that I renounced when I received your testimonial with unqualified permission to use it.

Anxious, therefore, as I am to oblige, I cannot withdraw the copy of your words from the advertisement, which I am sorry to find you consider of a puffing description, but for which, of course, no other is responsible than myself. Should you wish it, I shall send to your house for the letters as often as you like, and answer them ; or shall have answers printed according to your directions, and shall of course pay any postage incurred.

I feel very grateful for your kind advice not to recommend the chain in diseases which it would be sure not to relieve ; but to my knowledge I have never done such a thing. On the other hand, to deny or withhold facts, passed a hundred times under my own eyes, because they may not correspond with theories founded on the observed effects of other forms of electricity, would be neither fair nor manly. That the chain acts only by electricity, is acknowledged on all parts ; but it cannot surely have escaped your notice, that the mode in which the chain, when wound, for instance, round a limb, affects the same electrically, is without a parallel in former apparatus ; and if the old machines and apparatus have been found to stimulate highly, and have therefore not been considered indicated in diseases depending on an irritated state of the nerves, it does not therefore follow that the mild, continuous, and combined currents, evolved from the chains for almost any length of time, may not have a different effect ; so that I cannot see any reason, even theoretically, to dispute what have to me, and to several medical men already, for some length of time, been established facts, when such negation is not supported by an overwhelming number of experiments showing it to be justified.

I beg to apologize for the length of this note ; but I would not let this opportunity pass without expressing, in a private way, what many considerations have prevented me from publishing in regard to some remarks in the *Lancet*.

I am, etc.,

C. MEINIG.

P.S. I received your note only yesterday evening, on my return from the country.—C. M.

108, Leadenhall Street, City,
London, December 1, 1851,

The documents now published make it plain that the advertisement, which has been appearing in our columns, is calculated to mislead the profession into the belief that Dr. Golding Bird's testimonial has a much wider meaning than it legitimately bears, and that it is paraded with his sanction ; whereas it is actually printed in opposition to, and in daring defiance of, his remonstrances. In these circumstances, the duty which we owe to Dr. Golding Bird, to ourselves, and to our colleagues, is very plain : it is, to interdict the repetition of Mr. Meinig's advertisements in the *ASSOCIATION MEDICAL JOURNAL*.

While candid readers will readily concur with us in acquitting Dr. Golding Bird of all moral blame, we do not think that he will be generally pronounced altogether faultless in this affair. The certificate was granted on far too easy terms, and without due precautions having been taken against the possibility of its being used for the puffing purposes of an artful speculator. Although intended only as a testimonial of the value of the apparatus as a source of electricity, without the slightest reference to its supposed curative powers, it has, by being ingeniously connected with lay certificates, been used to bolster up a claim to special remedial efficacy.

Medical practitioners would do well, as a matter of principle and uniform practice, to refuse all written testimonials in favour of new remedies, medicinal or mechanical. Many, we fear, sign certificates for the use of advertising parties, simply that they—the certificate givers—may have their names constantly placed before the public eye. It therefore behoves respectable persons, who wish to avoid the imputation of resorting to this modern system of gratuitous second-hand advertising, to abstain from all testimonial giving. It is impossible to exercise too much caution in this respect. Quackery is eagle-eyed, and ever on the alert cunningly to convert the names and the written opinions of professional men into trading capital, to be used in pillaging the public by various devices. Mr. Meinig, in attempting to appease Dr. Golding Bird by means of a sop, lets out—apparently quite unintentionally—the very mean estimate which he has formed of testimonial-giving doctors, and he also states the cheap advantages which he imagines may flow to physicians from being advertised second-hand. According to Mr. Meinig, to be incessantly advertised in connexion with an invention like the chain, is a privilege “which many gifted men would have been glad of”. Our own observation of the newspaper press—especially of the London Sunday papers, the provincial papers, and the colonial papers—convinces us that this system of being advertised second-hand, and for nothing, has grown into a regular system. Though not perhaps resorted to by very “gifted men”, it is, nevertheless, adopted by persons who ought, from their talents and their education, to soar above practices so mean and so unprofessional.

HER MAJESTY'S ACCOUCHEMENT: CHLOROFORM.

ON Thursday, the 7th instant, at half-past one P.M., the Queen was safely delivered of a prince. This announcement has, we feel assured, inspired among all classes feelings of interest and sincere gladness; but there are circumstances connected with the event which have likewise imparted to it no small degree of medical importance. We refer to the employment of chloroform having been sanctioned by Her Majesty's Physician in Ordinary, Sir James Clark, Her Majesty's First Physician Accoucheur, Dr. Locock, and Her Majesty's other Physician Accoucheur, Dr. Ferguson; to its having been administered by Dr. Snow; and to the fact of the Queen and the infant prince having gone on favourably from the first.

The following appeared in the *Court Circular*.

“Buckingham Palace, April 7.

“At ten minutes past one o'clock, this day the Queen was safely delivered of a prince.

“There were present on the occasion in Her Majesty's room—His Royal Highness Prince Albert, Dr. Locock, Dr. Snow, and Mrs. Lilly, the monthly nurse. In the adjoining apartments, besides the other medical attendants (Sir James Clark and Dr. Ferguson) were Her Royal Highness the Duchess of Kent, the Lady in waiting on the Queen, and the following Officers of State and Lords of the Privy Council, viz., the Earl of Aberdeen, First Lord of the Treasury; Earl Granville, Lord President of Council; the Duke of Norfolk, Lord Steward; the Duke of Wellington, Master of the Horse; the Duke of Newcastle, Secretary of State for the Colonies; the Marquis of Lansdowne; the Marquis of Breadalbane, Lord Chamberlain; the Duke of Argyll, Lord Privy Seal; Viscount Palmerston, Secretary

of State for the Home Department; and the Lord Chancellor.

“As half-past two o'clock the following bulletin was issued:—

“Buckingham Palace, April 7, half-past two o'clock, P.M.

“The Queen was safely delivered of a prince at ten minutes past one o'clock this afternoon.

“Her Majesty and the infant prince are well.

“JAMES CLARK, M.D.

“CHARLES LOCOCK, M.D.

“ROBERT FERGUSON, M.D.”

The following bulletin of the Queen's health was issued next morning:—

“Buckingham Palace, April 8, nine o'clock, A.M.

“The Queen has passed an excellent night.

“Her Majesty and the infant prince are going on favourably.

“JAMES CLARK, M.D.

“CHARLES LOCOCK, M.D.

“ROBERT FERGUSON, M.D.”

Subsequent bulletins have been equally favourable.

We understand that chloroform was administered by Dr. Snow during the latter part of the labour, with very satisfactory effect; and that the Queen expressed herself as grateful for the discovery of this means of alleviating and preventing pain.

The responsible position, and the acknowledged skill of the physicians who sanctioned the inhalation of the chloroform, the Royal Majesty of the patient, and the excellence of her recovery, are circumstances which will probably remove much of the lingering professional and popular prejudice against the use of anaesthesia in midwifery, even when sanctioned by competent authority, and induced with requisite precaution. It is for this reason that we chronicle the recent accouchement of Her Majesty as an event of unquestionable medical importance.

THE INCOME TAX PETITIONS FROM YORK AND LEEDS.

As some misconception has arisen regarding the Income Tax proceedings at York and Leeds, we insert the following official statement, kindly furnished at our request.

“At a Meeting of the York Members of the Council of the Yorkshire Branch, called by the Secretary, on the 1st of March, to take into consideration the subject of the Income Tax, it was recommended that the chief towns of the Branch should be requested to petition the House of Commons. A Petition, similar to that in the Journal of January 28th, was agreed to, and has received the signatures of nearly all the members of the medical profession in York. It will be presented to the House of Commons, and supported by the members for the city. Through the exertions of Dr. Chadwick, of Leeds, President of the Yorkshire Branch, a similar Petition, signed by sixty medical practitioners will be presented by the members for that town.”

WILLIAM MATTERSON, JUN.,

Secretary to the Yorkshire Branch.

ORIGINAL COMMUNICATIONS.

CASES OF ABSCESS OF THE SPLEEN,
WITH REMARKS ON THE PATHO-
LOGY OF THAT ORGAN.

By EDMUND LYON, M.D., Consulting Physician to the Manchester Royal Infirmary.*

OUR knowledge of the functions of the spleen, or of the purpose which this organ serves in the animal economy, is so extremely imperfect, and our diagnosis of its diseases consequently so uncertain, that it is desirable to record every fact which may contribute to throw a little light upon either: and it seems probable that through the pathology we shall find the most trustworthy way of exploring the physiology of this organ. With this view, I have thought it not unprofitable to draw attention to the subject, by shortly describing a case which appears to be of rare occurrence, and adding a notice of some similar cases, with a few remarks suggested by a consideration of the facts brought forward.

I regret that my memoranda do not enable me to give a more complete history of the following case.

CASE I. The subject was a married woman, aged 36, who was delivered of a first child, in April 1833, by a practitioner with whom I was not acquainted.

On July 17th, I saw the patient for the first time, in conjunction with Mr. Jordan, and learned the following particulars:—Since the birth of her child, she had never been well, having suffered much pain in the left side, and having seldom been able to quit her bed. There was felt at this time, below the ribs of the left side, a tumour, having an obscure degree of fluctuation. There were frequent shiverings, occasional vomiting, rapid pulse, thirst, and cough. She was very helpless, lying best on her back, suffering dyspnoea when laid on either side, or when sitting up for any length of time. The countenance had a very peculiar expression—a kind of smile mingled with anxiety. The complexion was of that appearance which Darwin likened to that of a full-grown silk-worm, and John Bell to modelled wax.

Palliatives only were thought advisable under these circumstances; and I did not see the patient again till September 3rd, from which time till her death, on October 8th, she continued to decline. During the last eight days of her life, she had a discharge, *per anum*, of very offensive matter, mingled with small blood-coloured vesicles; and after the commencement of this discharge, the tumour in the side disappeared.

Examination of the Body on October 10th, forty-four hours after death, by Mr. Jordan and myself. When the abdomen was laid open, a superficial view of its contents presented no marks of inflammation. The stomach was situated low down; and, on a close examination, its large end was found to have contracted adhesions to the adjoining textures. The small intestine was removed, and nothing remarkable observed in it. The adhesions of the stomach being torn up, a large cavity was exposed, bounded by the stomach, diaphragm, left kidney, and colon. There were no remains of the spleen, except its capsule, and two fungoid bodies, of the size of walnuts, lying over the kidney. The diaphragm was pushed far upwards, so as to diminish considerably the left cavity of the thorax. The sac contained a small quantity of turbid and very foetid matter; it communicated with the descending colon by a circular aperture, with smooth edges, capable of admitting the tip of the forefinger. The liver was pale; the gall-bladder contained a small quantity of light-yellow bile.

The substance of the lungs was healthy. The left lung was reduced in volume, occupying only the upper portion of the chest. The vertebrae did not appear diseased.

The obscurely fluctuating tumour, accompanied by hectic,

and preceded by acute pain, rendered the existence of an abscess almost certain; and the situation of the tumour led us to suspect the spleen to be the seat of disease. The evidence for both these suppositions was much strengthened by the nature of the discharge from the bowels during the latter days of life, and the simultaneous subsidence of the tumour. Yet, as neither of us had ever seen a similar case, it required the further evidence of anatomy fully to satisfy our minds as to the actual state of things.

The following case of suppurated spleen is related by Dr. Raikem, in the seventh volume of the *Repertoire d'Anatomie*; the leading points I quote from the *Medico-Chirurgical Review* for December 1829.

CASE II. A young man, aged 20, of a sedentary occupation, and a spirit-drinker, had inflammatory fever, with pain in the left hypochondrium, nausea, and vomiting, followed by a tumour and lancinating pain in the left hypochondrium, with yellow complexion, and evening exacerbations. The tumour extended till it reached the umbilicus, and at the same time became softer. It then diminished, and the pain was mitigated; "but the patient began to suffer from a sense of intolerable dragging, and constant lancinating pains in the left lumbar region, where oedematous swelling and deep fluctuation were discovered". These pains shortly ceased to be severe; "but the fever and other symptoms grew rapidly worse; the belly was blown up, and painful on the left side, from the hypochondrium to the groin. A hard, very painful, and circumscribed tumour appeared in the latter situation. The breathing became hurried, laborious, and attended with pain on inspiration. There was frequent dry cough; difficulty of lying on either side; rapid and weak pulse; diarrhoea"; and the patient died at the end of two months.

Examination of the Body. In the left cavity of the thorax were found more than two pints of yellow serum, with flakes of lymph; and the pleura was covered with false membrane.

In the abdomen "the superior portion of the descending colon, and the great end of the stomach, were closely united to the spleen. This latter viscus was double its ordinary size, and of vermilion colour on its borders. The peritoneum, opposite its posterior surface, was raised by a whitish, thick, purulent, and very foetid fluid, which was found to have issued from the cavity of a vast abscess in the substance of the spleen. From this it had extended between the peritoneum and the abdominal muscles as far as the kidney, the spine, and even as low as the crural ring".

CASE III. In the same volume of the *Medico-Chirurgical Review*, is quoted a case from Fantoni, of an abscess of the spleen discharging itself at the umbilicus. The patient recovered, bore a child, and lived five years afterwards. On opening the body, no vestige of the spleen remained; and the neighbouring parts were united by cicatrices in the usual situation of the missing organ.

CASE IV. Mr. Hickman, in the sixteenth volume of the *Medical Repository* (1821), relates a case, of which the following is an epitome.

A girl, of a scrofulous habit, at the age of thirteen, complained of pain in the left hypochondrium, which was soon removed under the care of Dr. Thorp. In little more than a year, she again applied to him, labouring under the symptoms of general dropsy. She was again relieved, but not cured. At length an ulceration appeared at the umbilicus, which discharged abundantly a thin glairy fluid, and some particles of undigested food. Three days before death, which occurred at the age of fifteen, Mr. Hickman saw her in excessive agony, arising from complete obstruction of the intestines.

Examination of the Body. Inspection of the abdomen discovered strong adhesions between the peritoneum and its contents. The transverse arch of the colon—callous and obliterated so as not to admit the smallest probe—adhered to the lower edge of the liver, which was the only organ having the slightest appearance of health. The stomach was in a state of universal ulceration, "adhering to, and communicating with the spleen, which was a mere sac, con-

* This paper was read before the Medical Society of Manchester several years ago; and is now communicated, with some additions, by Samuel Crompton, Esq.

taining pus and undigested food ; out of this sac it passed through the layers of the muscles to the umbilicus, so that all the food was either rejected, or took this course". The small intestines were a complete mass of disease, and reduced to very small dimensions. The blood-vessels of the abdomen were greatly enlarged, particularly the renal ; and in the left renal artery was found an aneurism. The heart was unusually large.

I will next advert briefly to some of the cases of like nature, collected by Dr. Abercrombie, in his *Contributions to the Pathology of the Spleen*.

CASE V. The first case came under his observation in the person of a gentleman, aged 52, who died after an illness of six months, during which there were no prominent symptoms, but progressive emaciation and weakness, with frequent pulse, and sometimes feverish nights. He had never complained of pain ; but, on being closely questioned, mentioned an occasional feeling of undefined uneasiness in the epigastrium. Three days before death, he was affected with diarrhoea.

Examination of the Body. The spleen was found enlarged, and in its centre was an irregular cavity, containing several ounces of pus ; the surrounding substance being soft and easily torn. The liver was pale, but otherwise healthy.

CASE VI. His next case is taken from the *History of the French Academy of Sciences* for 1753. A young man, aged 18, several months after his recovery from a quartan intermittent, was affected with slight fever and violent colic pains. He had then loss of appetite and sleep, laborious breathing, œdema of the legs, scanty urine, and enlargement of the abdomen. He was twice tapped, and each time four pints of pus were drawn off. He died the day after the second puncture. On dissection, the spleen was found enormously distended, extensively adherent, and forming a sac, which still contained seven pounds of purulent matter : the other viscera lay compressed behind it.

CASE VII. Another remarkable case, related by M. Coze, in the *Journal de Médecine*, tome lxxiii, p. 225, occurred in a man who had for several years endured pain, sometimes acute and sometimes obtuse, in the epigastric region, along with a feeling of pulsation at the stomach, which was increased by exercise, or by any excess in diet. He was easily fatigued, and a sense of suffocation was induced by any exertion ; and he had occasional vomiting. Nothing more than a slight tension across the epigastrium could be discovered by manual examination. Towards the close of his life, there was a slight yellow tinge of the skin. At length, he was seized with a vomiting of blood, mingled with pus ; and, for a fortnight felt better than he had been for years. The vomiting then returned ; and at the end of another week a third attack proved fatal.

Examination of the Body. The spleen was found adhering closely to the stomach, and forming a bag filled with pus and clotted blood. It communicated with the cavity of the stomach by a large opening at the point of adhesion.

CASE VIII is related by M. Jacquinelle, in the *Journal de Médecine*, tome lxxviii, p. 360. A youth, aged 17, after several injuries from falls, and a state of general disorder, complained of pain and fulness in the left hypochondrium, along with palpitation, faintings, and emaciation, and died about a year after the commencement of his disease. Before death, the pain ceased, and a quantity of dark foetid matter was discharged by stool.

Examination of the Body. The spleen was found much enlarged, adherent to the colon, and containing in its substance an abscess, which had burst into the colon at the place of the adhesion. The heart was also enlarged, and there was dilatation of the aorta.

CASE IX and X. Grottanelli records a case, in a girl of 12 years, in which an abscess of the spleen burst into the peritoneal cavity, and proved fatal in three days. In another singular case, mentioned by the same writer, a man who, after several attacks of ague, was supposed to have abscess of the spleen, received a violent blow on the

left side ; after which the tumour, previously existing there, subsided, and he discharged thick and foetid matter along with his urine for three weeks. He then recovered good health, and continued well seven years afterwards, when the account was published.

The following case, erroneously referred to in Dr. Monro's *Outlines of Anatomy*, as a case of abscess of the spleen, is recorded by Dr. Nathan Drake in the second volume of the *Edinburgh Medical and Surgical Journal*.

CASE XI. Mrs Newman, a widow, aged 49, of corpulent habit, and long subject to dyspepsia, on the 29th of October, 1805, soon after dining heartily on roasted pig, was seized with violent epigastric pain, sickness, and vomiting ; which, though mitigated for a time by the emptying of the stomach, returned in a few hours with aggravation, accompanied by severe lancinating pain under the left false ribs, and continued with few intervals until the next day, when Dr. Drake saw her. At this time the pain and vomiting continued, with a hot and harsh skin, thirst, white and moist tongue ; pulse 130, neither full nor hard. The bowels had been rather constipated for several days, and had not been moved at all since the commencement of the attack, notwithstanding the employment of powerful means for that purpose. The abdomen was distended, but no hardness or tumour could be felt. The urine deposited a copious lateritious sediment. There had been no rigor, ; and there was neither pain nor difficulty in breathing.

Various means of allaying the irritability of stomach, and opening a passage through the bowels were tried during the 30th and 31st of October. On November 1st, blood was taken from the arm, in quantity not exceeding six ounces, which, on standing, "exhibited a thin, concave, buffy surface" ; but the crassamentum was so dark and loose, and the pulse (130) so very weak, that the consultants* dared not carry the abstraction of blood any farther. On the evening of Nov. 1st, a small evacuation of the bowels took place, which during the next twenty-four hours was followed by fifteen more ; "and a prodigious quantity of black, knotty, and hardened feces" was evacuated. "The relief obtained was great ; the pain was removed ; the irritation of the stomach subsided : and the pulse sank to 80."

On Nov. 3rd, the pulse had again risen to 100 ; there was a little vomiting, but an extreme degree of acidity in the stomach. The pain of the left side was little felt whilst the patient lay upon her back ; but she could not lie upon her left side, even for five minutes, without an insupportable sensation of weight and dragging. The following week, pain and vomiting came on again in a severe form, and again subsided under the use of brisk purgatives ; which throughout the whole course of the disease afforded more relief than any other remedy that was tried.

The case proceeded with alternate aggravation and remission of the symptoms ; the stomach could receive only small quantities of food ; emaciation made rapid progress ; the skin was continually dry and harsh ; the tongue foul, with foetid breath, much flatulence, and great acidity in the *prima via*.

In the middle of January, the left ankle and knee were successively affected with severe pain, followed by œdema of the whole limb ; and during this time little pain was felt in the stomach or side.

In February the œdema had disappeared ; the pain in left side was occasionally, but not permanently severe ; distension and vomiting certainly returning with violence, if the purgative was deferred beyond the third day. The patient slept some hours every night, but could never lie on the left side ; emaciation and debility increased, but there was no hectic ; no tumour could be felt in the abdomen ; nor was there any discoloration of the skin ; tongue cleaner ; urine natural.

On April 8th, Mrs. Newman suddenly complained of a swelling at her stomach, with a sense of great fulness. On examination two days after, a considerable tumour was found reaching from the ensiform cartilage to the umbili-

* Drs. Clubbe and Drake, and Mr. Bunn.

cus : it was circular, prominent, and well defined, and had distinct fluctuation. On the following day, the tumour had subsided to half its former bulk, and therefore no operation was performed until the 17th ; when—the tumour having risen even beyond its former dimensions, and pressing upon the stomach so that not a teaspoonful of any thing could be retained, even for a minute—a trocar was introduced, and there were drawn off two pints of a fluid, free from fœtor, resembling thin diluted coffee in colour, and partially coagulable by heat.

After the operation, the patient was able to retain the usual quantity of food upon the stomach ; she passed the evening nearly free from pain, and had some sleep. But the following morning she began to sink, and early on the 19th she expired.

Examination of the Body a few hours after Death. The omentum was greatly thickened by the deposit of a granulated caseous matter, extending lower down than usual, and strongly adherent to the peritoneum generally. The stomach was nearly three times its ordinary thickness, and its capacity was reduced in the same proportion. The organization of the spleen was destroyed ; its peritoneal coat was dilated into a large cyst, with bloodvessels of enormous size ramifying on its fundus. "The upper part of the cyst strongly adhered to the whole under surface of the stomach, and the lower part to the upper edge of the great arch of the colon. The diameter of the cyst was full six inches, and it contained more than a pound and a half of dark, dense, coagulated blood, several portions of which, nearly as large as a man's fist, floated in a brown-coloured serum, of which there was better than a pint." "The bottom and sides of this bag were covered about an inch deep with a black tenacious matter, of the consistence of congealed honey ; which when examined with the fingers, was found interspersed with masses of the same caseous substance which covered the omentum."

The stomach and liver were both pressed upwards, and the arch of the colon thrust several inches below its natural situation, and so contracted in diameter, "that when the body was opened it projected like a chain of very small bladders". The blood-vessels on the arch of the colon were turgid ; and the mesocolon was diseased like the omentum.

There was no communication between the splenic cyst and any of the adjacent viscera ; its contents were not fœtid ; nor was any pus discovered there, or elsewhere.

It may be remarked that, in all the cases of suppuration in the spleen now produced, the progress of the disease was slow. In fact, acute *splenitis* has been so seldom noticed, that we may fairly infer, either that it is very uncommon, or that its diagnosis is difficult. Hence Dr. Abercrombie was led to conjecture that abscess of the spleen was necessarily preceded by a state of induration and enlargement, or by tubercular disease ; whilst the more rapid and acute forms of disease involving this organ appeared to terminate in a state of *softening*, in which the substance of the spleen is broken down into a semi-fluid resembling melted pitch, or black-currant jelly, contained within its peritoneal covering as in a bag ; such as is frequently observed in fatal cases of typhus, and other fevers. This opinion of Dr. Abercrombie's may or may not be well founded ; but it derives no great degree of support from his own case, in which a central abscess was found, and the surrounding substance soft and lacerable ; and in other cases we have every degree of variety, from entire destruction of the organ, to the existence of many or few small suppurated tubercles.

Our diagnosis of this disease must still be considered imperfect ; but its presence may be strongly suspected when the following symptoms concur in any individual : pain in the left hypochondrium, accompanied or followed by a tumour in which any degree of fluctuation can be detected ; tension in the epigastrium ; dyspnoea ; vomiting ; hectic fever ; emaciation ; and debility. Hackman* mentions as a constant symptom of enlarged spleen, a sense of distressing fulness in the præcordia, with dyspnoea, which is

sometimes so intense as to amount to orthopnoea. Mr. Twining* has remarked that in engorgement of the spleen, as observed in Bengal, "the respiration is low, languid, and imperfect, the lungs being but partially filled with air".

To the above symptoms I was at first inclined to add the peculiar change of complexion noticed in the case which occurred to Mr. Jordan and myself ; but I cannot, on the strength of a single case, venture to do more than recommend attention to this point by future observers of diseases of the spleen. This caution, in drawing inferences from isolated facts, is more especially necessary on the present occasion, as Abercrombie, from his own experience, was disposed to attribute a similar appearance to disease of the pancreas ; and perhaps it may be found that this complexion accompanies a state of anæmia, from whatever cause, not at all dependent on disease of any particular viscus. Nevertheless, it is worthy of being mentioned, in corroboration of an opinion that the spleen has more to do with the change in question than any other organ, that Mr. Twining, in the paper already referred to, speaking of *congestive engorgement* of the spleen, describes the face as being "of a pallid and lurid colour", and "the skin cool, with a peculiar dry feel, like a thin satin loosely laid over the soft cellular structure". Dr. Vetch† also, in his account of enlargement of the spleen succeeding the Walcheren fever, after saying that the "features have a peculiar dark, bilious, or mahogany hue" (which does not serve our present purpose), proceeds to observe, that "perspiration is in time wholly suspended, and the skin acquires the appearance and feel of satin" ; an appearance which Jackson likewise noticed in convalescents from the remittent fever of warm climates, in which we know that the spleen is apt to suffer vascular engorgement, or more serious derangement of its structure. Lastly, Dr. Crane has remarked, that the inhabitants of Lincolnshire are often affected with enlargement of the spleen for many years, without exhibiting much appearance of disease beyond a pale or yellowish aspect. These remarks, however, apply more to congestion of the spleen accompanying intermittent and other fevers, than to splenitis or abscess of the spleen.

The following case presents some interest with regard to this subject.

CASE XII. A female of delicate constitution, aged 25, had been subject to rheumatic affections ; and in the spring of 1835 underwent a good deal of fatigue and hurry, at a time when she had not completely recovered from an attack. She was never entirely well afterwards : she became languid and pale ; lost her appetite ; ceased to menstruate ; and the heart's action was accelerated by the least exertion.

When I first saw her, about the middle of November, she had been confined to bed, on account of feebleness, a few weeks. The pulse at the wrist was 120, and the impulse of the heart rather strong. There was no difficulty of breathing, very little cough, and scarcely any pain ; but the stomach with difficulty retained the lightest kind of food. There were profuse perspirations ; and the complexion was remarkably pale, with some tendency to œdema. Pretty large doses of an opiate were required to procure sleep.

The perspirations were checked, but the pulse never fell below 100, though the heart's impulse was diminished in force. The stomach became so irritable, that vomiting was excited by everything that was taken, except the opiate ; and for some time the only nourishment was administered in the form of clysters : perhaps a small portion of toast-water might also be retained.

A seton was inserted below the left breast, and various medicines were tried in succession : effervescent salines, acidulated drink, hydrocyanic acid, a blister to the epigastrium, dressed with acetate of morphia, and chalybeates cautiously administered. The saline draughts and the opiate seemed to be most useful ; and latterly the oxide of bismuth, in the form of lozenge, seemed to have the effect of putting a stop to the vomiting for a longer time than anything else had done.

* Med. and Phys. Journal, 1832.

* Transactions of the Medical and Physical Society of Calcutta, 1829.
† Medical and Physical Journal, 1824.

The patient died, exhausted, on January 1st, 1836.

Examination of the Body, Jan. 4th. There was effusion of serum, on both sides of the chest, to the amount of more than a pint, and in the pericardium three ounces. A large part of the fluid probably exuded after death. The lungs were crepitant and healthy, with the exception of some inflammation in the bronchial tubes. The heart was of natural size, rather pale and flabby. The lining of the right auricle, at the base of the tricuspid valve, was roughened and red, and covered with a loose kind of substance, which could be scraped off. A slight degree of the same appearance was noticed on the valves of the aorta. The spleen was enlarged, redder and harder than natural; at the upper end, just under the capsule, was a body of the size of a small nut, consisting of a soft curdy matter contained in a cyst, which might be considered as a softened tubercle; at the lower end were several similar bodies, in a less advanced state. A section through the spleen showed the whole viscus to be diseased, presenting a surface of various degrees of redness; the lighter red being softest, and the darker minutely speckled with whitish spots. The liver was very pale; the gall-bladder filled with dark green bile. The stomach was pale externally; internally it exhibited some redness at the cardiac end. The rugæ were nearly obliterated; here and there were a few black lines, as if traced with Indian ink. The kidneys were perfectly healthy. The pancreas was perhaps a little harder than usual.

I have twice met with tubercles in the spleen.

CASE XIII. A girl of nineteen died in the Manchester Infirmary, under a complication of disease. I am indebted to Mr. Gaskell* for some short notes of the case, and for the rest have trusted to my own recollection. She had always been a delicate child, of stunted growth, and had never menstruated. She did not, in fact, appear to be more than fourteen years old. Two or three years ago, she complained of a tickling cough, and pain at the stomach, especially if hurried; and, eighteen months before admission, her abdomen had become swollen. She was much emaciated, and the skin had a deep yellow tinge. The abdomen was greatly distended with fluid; the legs were œdematous; and the liver was felt as low as the umbilicus. In the left hypochondrium, also, a tumour of considerable firmness was perceptible. Her voice was husky, and she had cough, attended by expectoration of a transparent, jelly-like mucus, generally tinged equally throughout with red particles. The pulse was frequent, and epistaxis and hæmatemesis occasionally took place; there was constant nausea, and frequent vomiting; the bowels were sometimes affected with diarrhoea, and always loose, the feces being light-coloured. After being in the infirmary about six weeks, she expired in a fit of dyspnoea.

Examination of the Body. There was increased vascularity of the lungs, but no structural disease in them, nor in the heart. The liver was of a remarkable green colour, greatly enlarged, indurated, and presenting an irregular knotted appearance on the convex surface: a section exhibited a mottled appearance. The stomach was enlarged, and the softened mucous membrane furnished a good example of the brown discoloration from stagnant blood affected by the gastric juice. The spleen was five times its natural size; externally and internally, it was of a rather bright red colour, and was studded throughout with small yellowish white and softened tubercles.

CASE XIV. The other case occurred in the person of a boy named Henry Sunderland, seven years old, who, in the month of March 1818, received a cut on his head, and in April passed through the measles, after which he was never quite well, and died of hydrocephalus in July.

Examination of the Body. Messrs. Darnell and Boutflower assisted in the examination of the corpse, the general results of which it is not necessary here to specify. It will be sufficient to observe, that the spleen was studded throughout with granular bodies, somewhat resembling those in

currants, and consisting of a curdy matter contained in a cyst. If there had been time to examine the contents of the thorax, the lungs would probably have been found to contain similar tubercles. The kidneys were healthy; and so was the liver, with the exception of a portion on the convex surface, about the size of a shilling, and three lines in thickness, which was of a pale yellow colour, and a little indurated. The gall-bladder contained green bile.

In the treatment of diseases of the spleen, practical writers pretty generally concur in deprecating the use of mercury; and Mr. Twining, in particular, says that, in the state of constitution attending vascular engorgement of the spleen, the action of mercury is apt to induce alarming debility, with a tendency to sloughing of the lips, cheeks, and gums, which, when once commenced, has frequently, or rather generally, a fatal termination. This state of constitution, he says, is often seen in children, as a consequence of "damp climate, want of exercise, bad clothing and feeding, etc." It might be deserving of inquiry, whether the sloughing of the cheeks, and other soft parts, in some children of this country, is in any degree connected with a similar state of the spleen.

I do not mean to dwell at great length on the subject of the physiology of the spleen; since the best opinions on the subject amount to little more than plausible conjectures. The doctrine which has been most commonly taught is, that the spleen acts as a sponge, serving the purpose of a reservoir for any occasional superabundance of blood, so as to preserve other important organs from over-distension; and that it likewise serves to regulate the supply of blood to the stomach and liver, according to the necessities of these organs in the different stages of digestion. This, I believe, was Dr. Haighton's opinion; and it is supported by the experiments of which Mr. Dobson published an account.

He observed that, four hours after a full meal, the spleen in a dog is much enlarged, and attains its maximum in five hours.

The spleen of a dog was removed. On the following day, the animal was allowed to eat voraciously. For three hours afterwards, no inconvenience was manifest; but in four hours the dog became restless, and then sank into a nearly torpid state. "It was often moaning; the pupils were dilated; the heart labouring; there was frequent micturition; the respiration was exceedingly laborious; and, in short, there was every mark of plethora, or overfulness of the vascular system." A full meal was taken twice or thrice every twenty-four hours, and each was followed by similar effects. In a month after the operation, the dog died.

In a second dog, whose spleen was removed, the plan of giving small quantities of food every hour or two was pursued for three weeks, at the end of which time the animal appeared quite well, and had become fat. The same mode of feeding as in the first case was then adopted, and the effects were similar, but not so severe. The dog died in a month from the commencement of this plan of feeding.

It may here be mentioned (though a little out of place), that Mr. Dobson had an opportunity of examining the spleens of two great ale-bibbers, and found them very much enlarged: in one case so enormously as to give the idea of "a bladder half filled with oil".

The above-cited doctrine seems to me too mechanical to be received as a full and satisfactory explanation of the use of the spleen; though we may readily admit its regulating power to be one of the useful purposes that it fulfils in the animal economy.

Pemberton, in his work on *Diseases of the Abdominal Viscera*, states his belief that the spleen is a gland of supply. Among the testimonies in favour of this view, may be mentioned the observations of Mr. Twining, and more especially those of Dr. Vetch. The former gentleman says that, in the state of disease described by him, the appetite for food is not deficient, "but assimilation is imperfectly performed, and nutritious food does not restore the strength". Dr. Vetch says that a patient affected with

* Now one of the Commissioners of Lunacy.

enlarged spleen has generally a good appetite, "yet his powers of assimilation are obviously deficient; he loses flesh, and is incapable of any muscular exertion"; "the lips are pale, and there is generally much wasting of the gums; the urine is limpid, and secreted very rapidly, but contains little or no *urea*". This is a state of the system often observed in connexion with amenorrhœa. Dr. Vetch further observes that, "without the co-operation of the spleen, the blood ceases to acquire its recrementitious properties, none of the secretions possess their natural constituent parts, and—what is also worthy of notice—external injuries do not produce the secretion of what is called healthy pus". This is in accordance with a favourite hypothesis of Hewson's, that the red globules of the blood are formed by the spleen and its appendages. Dr. Hewson's view has in late years been revived by Dr. Hughes Bennett, of Edinburgh, in a paper published in the *Monthly Journal of Medical Science* for March 1852. He believes, with Hewson, that the lymphatic glandular system consists of the spleen, the thymus, and lymphatic glands; and adds to these the thyroid gland, the supra-renal capsules, the pituitary and the pineal glands; all which he believes to have for their office the formation of the blood. The following are his conclusions:—

"1. That the blood-corpuscles of vertebrate animals are originally formed in the lymphatic glandular system; and that the great majority of them, on joining the circulation, become coloured in a manner that is as yet unexplained.

"2. That in mammalia, the lymphatic glandular system is composed of the spleen, thymus, thyroid, supra-renal, pituitary, pineal, and lymphatic glands.

"3. That in fishes, reptiles, and birds, the coloured blood-corpuscles are nucleated cells, originating in these glands; but that, in mammalia, they are free nuclei, sometimes derived as such from the glands; at others, developed within colourless cells.

"4. That, in certain hypertrophies of the lymphatic glands, their cell-elements are multiplied to an unusual extent; and, under such circumstances, find their way into the blood, and constitute an increase in the number of its colourless cells. This is leucocythæmia."

Professor Kölliker, on the other hand, in his article on the Spleen in the *Cyclopædia of Anatomy and Physiology*, part xxxvi, advances an entirely different view, namely, that the spleen is a destroyer, not a regenerator, of blood. He believes that the blood-corpuscles "undergo solution in the spleen, and that their colouring matter is employed in preparing the colouring matter of the bile". He grounds this theory on the circumstances, that the blood-corpuscles must be dissolved to make room for the new ones, and that not the least trace of this process has been seen in any other organ; that in no other way can any reasonable account be given of the changes which the blood undergoes in the spleen; that the author's hypothesis elucidates the relation of the spleen to the portal system of veins—the dissolved blood-corpuscles being subservient to the formation of bile; and that the diseased conditions of the spleen, and their operation on the organism, are thus better explained.

The correctness of this view of Kölliker's is denied by Dr. Hughes Bennett in the paper to which I have referred.

While, then, we find physiologists of such eminence so totally disagreeing as to the functions of the spleen, we must receive all opinions on the subject with caution. This organ has always been the puzzle of physiologists; and I do not think that it will yet lose that character. The subject, however, should be prosecuted with a zeal proportionate to the difficulties with which it is surrounded.

Manchester, April 1853.

LETTSOMIAN LECTURES FOR 1853.

By EDWARD WILLIAM MURPHY, M.D., Professor of Midwifery in University College, and Obstetric Physician to University College Hospital.

LECTURE THIRD.

THE IMPORTANCE OF A SCIENTIFIC MEDICAL EDUCATION TO PRACTITIONERS IN MIDWIFERY.*

MR. PRESIDENT AND GENTLEMEN,

IN the two preceding lectures, I have placed in review before you the phenomena of parturition, the difficulties that present themselves, and the manner in which labours are too frequently mismanaged. I have done so, in order to show you the irreparable mischief which an incompetent person can do, and to prove that a sound, nay, a high standard of medical education is too often necessary to counteract those sources of danger to which the parturient woman is liable. I have endeavoured to expose the convenient, but most mischievous sophism, "that parturition is a natural process, therefore education is not essential for the safe delivery of the parturient woman". I trust that I have convinced you what a frightful sacrifice of human life may be the consequence of this error; and if any doubt should exist, I hope, before I conclude this lecture, to remove it by the evidence of facts.

It now remains for me to direct your attention to the present state of obstetric education, which, I regret to be obliged to confess, is deficient in the extreme; so imperfect, so inadequate, that if some expansive and efficient means be not taken to improve it, the accidents will become so frequent; the public so indignant; the coroner so often called upon; the doctor, who parades a diploma, so often exposed, that I fear our whole profession may be dragged down from the honourable pedestal on which it ought to rest, into the deepest abyss of degradation—public contempt.

The history of midwifery in these countries proves that the public are gradually becoming more and more alive to the importance of education amongst those who profess to practise it. Formerly, the universal rule was to separate the practice of midwifery altogether from the medical profession. Medical education was not thought, for the reason I have stated, essential for security; and if such were true, there was the strongest, the most obvious reason, for discarding men altogether from obstetric practice. The charge of the parturient woman was therefore committed exclusively to the midwife. However, her incompetency to meet all the difficulties and accidents that presented themselves soon became manifest; medical men were called upon in emergencies; and those who, by close study and observation, prepared themselves to meet these contingencies—the Fathers of Obstetric Medicine—were called by no medical title whatever; they were neither doctors nor surgeons, but simply "men-midwives"—a kind of professional hermaphrodites—most convenient for the purpose, because they were supposed to have sufficient knowledge to assist the midwife, without making a claim to be admitted among the scions of medicine. Thus it was that William Hunter, that Denman, that Merriman, were successively "men-midwives" to the Middlesex Hospital—a distinction which I believe still wreathes the brow of the obstetric physician to that institution. Man-midwife was the general term to include all obstetric practitioners of the masculine gender. In process of time, however, the public found out the truth, that the midwives knew little or nothing, and that it was essential for their security that the person in whom they confided should be educated: they acted, therefore, quite in opposition to their natural inclinations, and called in the aid of the physician or surgeon, not only in difficult, but in ordinary labours. The obstetric physician and the accoucheur superseded the midwife; the term "man-midwife" became obsolete, and is now only preserved in some institutions as

* This Lecture was delivered before the Medical Society of London, on March 23rd, 1853.

a kind of antiquarian curiosity. Midwives are now but rarely met with, except amongst the lowest classes; and even there, I know by experience, they are received with reluctance. The poor certainly employ them; but "'tis not their will, their poverty consents".

To what, then, are we to attribute this remarkable and most important change in the practice of midwifery? Why should the public silence their natural objections, and demand the accoucheur? Because they have learned, by bitter and most painful experience, the falsehood of the assertion that anybody may practise midwifery. They have found that, on this principle, the safety of all that is dearest to them has been too often entrusted to incompetent persons; and that education is just as essential to deliver a woman safely, as it is to cure a fever, or to cut off a leg. They require that the person who undertakes such a charge shall give proof that he possesses an obstetric education; and they accept the diploma which is presented to them from one or other of the medical corporations, as testimony of the fact.

But is this evidence adequate? Is the Licence of the College of Physicians, or the Diploma of the College of Surgeons, or the Licence of the Apothecaries' Society, a proof that the obstetric education of the possessor has been tested and approved of, in the same manner as his knowledge of medicine or surgery? There is but one answer to this question, and that is in the negative. The College of Physicians do not examine in midwifery: the College of Surgeons have only just now established a court for that purpose, the working of which has yet to be tested: the Apothecaries' Society alone have given the subject their attention. In their zeal to improve the education of those who come before them, they have laid down an excellent curriculum of study; and I believe that they examine candidates frequently upon their knowledge of obstetrics. *But they are not obliged to do so.* They are authorised to examine in medicine, but they may accept the definition of the College of Physicians, and say that midwifery is not medicine; consequently, they are *not obliged* to ask their candidate a single question in obstetrics; and they can, with a clear conscience, sign a certificate of competency, although the successful candidate may be thoroughly ignorant of that subject. I do not say that such is their practice; I believe that it is quite the reverse. I only assert that such may be at any time their rule, without any departure from their duty; and in this consists the objection.

At present, therefore, there is no certain test of competency to practise midwifery; the accoucheur is in a great degree self-taught, acquiring knowledge from lectures on the subject, and from attendance upon a few cases, but never having that stimulus which acts so powerfully on the pupil of medicine or surgery—the fear of his examination to entitle him to practise. Nevertheless, even with this imperfect education, he is more successful than the midwife, and proves trumpet-tongued the importance, nay, the necessity, of meeting the public want by insuring to them practitioners proved by examination competent to fulfil the duties required of them.

Why the Colleges at the head of our profession have been so tardy in the race of improvement—perhaps I should say, so blind to its necessity—it is not my purpose to inquire; more especially, because they form in this respect no exception to corporate bodies in general. If the question relate to reform in the legislature—reform in the law—improvement in our sanitary system, or in the working of the poor-law,—all corporate bodies, from the first assembly in the kingdom, from the House of Commons itself, down to the humblest board of poor-law guardians, however they may differ in other respects, are found unanimous on one point: *they never initiate a reform.* The public first feel the necessity of the change; then speak of it; and ultimately demand it. The corporation then yields to the pressure from without, with a good grace or a bad grace, as the case may be. The Colleges of Physicians and Surgeons would be much more remarkable if they were exceptions to this rule, than they are in so strictly following

it. It certainly should not excite surprise that, when midwifery was the property of midwives, these learned bodies should be reluctant to admit the man-midwife among them: but when this individual has totally disappeared; when we find, in the College of Physicians, gentlemen practising midwifery, whose attainments are fully equal to those of their *confrères*; when we meet, at the corner of every street, "Surgeon and Accoucheur", glittering in well-polished labels,—the time has arrived when that title must be a reality; when the public must be protected just as much from ignorant pretenders to midwifery, as they now are secured from unqualified practitioners in surgery.

If what has been stated be granted; if we admit that it is the business of those corporate bodies which regulate our profession, and are entrusted by the public with most responsible duties, to secure competent practitioners, whether in medicine, midwifery, or surgery, the question at once presents itself—To which of these bodies properly belongs the duty of qualifying the future practitioner in midwifery? This branch of practice is allied to medicine and to surgery; it has nothing whatever to do with *matéria medica* or pharmacy; yet, strange to say, the only corporate body which hitherto has endeavoured to fulfil this duty has been the Apothecaries' Society. The public are much indebted to them for their voluntary exertions; because, if it had not been for them, matters would be much worse now than they are. We must, however, always bear in mind that they are only volunteers: the onus of this responsibility does not properly belong to them. With whom, then, should it rest?

Let us first examine this question in reference to the College of Physicians. Midwifery and medicine are certainly allied to each other; and it is remarkable that nearly all our most distinguished obstetricians have been also physicians. A bond of union exists, sufficient to authorise that distinguished body to open its doors freely to practitioners in midwifery. Obstetric physicians have earned for themselves a sufficiently high reputation to reflect honour on their College, and to remove from those who may please to practise midwifery, the stigma which old and obsolete prejudice had fixed upon them. When the records of that College bear such names as Harvey, Hunter, Denman, and Haighton, to say nothing of living examples, I think that they need not be ashamed of the obstetric physician.

There is an undoubted alliance between medicine and midwifery; but it is not so intimate as to render it necessary that a physician must learn obstetrics in order to practise medicine. The duty of the College of Physicians seems to me to be limited to this—that if any of their body profess to practise midwifery, they should ascertain his fitness to do so, in order that the public, who do not understand distinctions very clearly, may not be deceived. I do not perceive that they are called upon to do more.

With regard to the College of Surgeons, it has been objected, that "midwifery is not surgery"; and I have been given to understand that examiners have felt that a candidate for their diploma might object to be examined on obstetrics; and yet, if he were qualified in other respects, they could not refuse it to him.

It is the more important to examine this proposition, because, if it were true, it must lead to this most serious evil: the public, who do not perceive this distinction, would be deceived when a surgeon practises midwifery on the strength of the diploma which he has received from that College. A little reflection will, however, convince any one that this is only a convenient sophism. If midwifery and surgery be not identical, I do not know what surgery is. Both differ from medicine in being arts: there is the art of midwifery, as well as the art of surgery. The skill consists in the readiness of manipulation, by which necessary operations may be successfully performed. The knowledge necessary for this purpose is similar; it requires just as careful a study of relations to remove a child from the womb, as it does to remove a stone from the bladder; and if ignorance in the latter case may lead to a false incision and death, in the former an error in delivery may rupture the vagina.

If it be said, that surgery means much more than merely skill in performing operations, that it implies a general knowledge of external diseases—a knowledge which is often as necessary to prevent an operation being performed, as to point out when it is really required—I would reply, that midwifery is just the same; it implies not alone the delivery by operation of the woman in labour, but also a perfect knowledge of all those disorders to which the womb is liable. If to surgery belong the treatment of ulcers on the leg, midwifery includes the management of ulcers of the neck of the womb—if I may be allowed to use such an expression. If the surgeon have a difficulty in deciding upon the propriety of removing a cancerous breast, the very same difficulty presents itself to the accoucheur in reference to carcinoma engaging the neck of the womb. In fact, the alliance is so intimate, as to lead to practical absurdities when we endeavour to separate them. What essential difference is there between the operation by which a child is torn piecemeal from the distorted pelvis, and that by which it is taken out of the womb opened through the abdomen? The former is a most difficult, a most disgusting, a most tedious operation, which may occupy hours in its performance; the latter is comparatively easy and rapid: both, however, are equally surgical operations. The accoucheur is permitted to mangle the child, if he will; but surgery claims her right to perform the Cæsarean section.

So, also, with respect to other operations—the removal of diseased ovaries—of polypi—of the inverted uterus—all these fall within the range of the accoucheur's practice; but they are essentially surgical diseases; and to treat them correctly, he must possess the operative skill of the surgeon. The obstetric physician who, as a physician, cannot use the knife, and must ask the surgeon's aid when it is required, may be embarrassed by these distinctions; but the surgeon-accoucheur can have no difficulty whatever. He is only following out the principle of his profession in performing any operation, from the smallest to the greatest, that may be required of him; and all operations connected with the womb, whether gravid or not, differ in no respect from operations in any other part of the body.

I hold, therefore, *that midwifery is a branch of surgery; and that every candidate for the diploma of a surgeon is bound to show that he is competent to practise it.*

So far, therefore, from a candidate having the right to refuse obstetric questions, his examiners, it appears to me, are bound to ascertain his competency in this respect.

I have the less difficulty in laying down this proposition, because it is not founded upon a mere abstract principle, which, though true in itself, is in opposition to experience. I assert, on the contrary, that the truth of the theory is proved by the practical working of it. The great majority of those who practise surgery also practise midwifery; and I affirm that they do so in right of their surgical diploma. If any man were to practise midwifery without such an authority; if he were to place "man-midwife" on his door, and expect practice, would he obtain it? Would the public place the same confidence in him as they do in the surgeon? Most decidedly they would not; and, therefore, the inference clearly is, that the diploma of the College of Surgeons is by them considered as the security that its possessor's knowledge of midwifery has been ascertained by those who gave it to him.

Now, if the list of the members of the College of Surgeons were examined, and the names of those who practise midwifery were separated from those who do not, what would be the proportion? I believe it would be found that the accoucheurs are more than ten to one. Those who are called "pure surgeons", who have been distilled from the impurities of obstetrics, form a very small minority—a most distinguished minority certainly, whose brilliancy sheds a lustre over the whole profession of surgery, but still a minority. Is it, then, to be said that the College of Surgeons is intended only to educate that small minority, and to leave the great majority of their diplomatists imperfectly qualified, incompetent to fulfil the duties which the public require of them? I do not think that any, the

most distinguished member of that body, would undertake to say that this alone is its duty. I am persuaded that, on reflection, they would acknowledge that the examination for their diploma should be perfect in itself; that it should be adapted to meet the obvious change which has taken place in surgical practice; and that care should be taken that the future surgeon-accoucheur be really what he calls himself.

I am the more earnest in urging this point, because I feel assured that the neglect of midwifery on the part of the College of Surgeons has been an error of judgment from ignorance, not from intention. The very fact that, in their new charter, they have sought for and have obtained powers to qualify practitioners in midwifery, is in itself a proof of their desire to improve this branch of practice. If, hitherto, they have felt a difficulty in examining candidates for their diploma upon midwifery, or if now they should err as to the best mode of carrying out their wishes for its improvement, the cause of this mistake may be very easily explained. The Council and the Court of Examiners are composed of gentlemen who do not practise midwifery; who are eminent as operating surgeons; who do not, who cannot, know what midwifery is, nor what it requires; consequently, they fall into the very natural error of leaving "midwifery to midwives". Their idea of obstetrics is something like Falstaff's notion of honour—

"It hath no skill in surgery, therefore they'll none of it."

The time has now arrived to correct this mistake; and this, I am persuaded, will soon be done, because the College of Surgeons must perceive the importance of adapting their examinations so as to meet the wants of the public.

If I have satisfied you that the duty of providing not only qualified surgeons, but qualified accoucheurs, rests with the College of Surgeons, it remains for me to point out to you and to them the errors that have been committed, and the effects that must spring out of their present regulations for an obstetric qualification.

An Obstetric Board of Examiners has been appointed, of a most efficient character. The College could not have been more happy in their selection, nor could they have abler assistants to carry out any plan for the improvement of midwifery than these gentlemen. No objection, therefore, can be raised against the Board of Examiners: the error lies in the "Regulations of the Council respecting the Professional Education of Candidates for the Certificate of Qualification in Midwifery". These regulations have been founded upon a false principle—a voluntary principle; and, consequently, there is a danger that they will have an effect precisely the reverse of what is intended.

First let us consider the effect upon the future candidate for the surgical diploma. This gentleman knows perfectly well that he will not be examined in midwifery; the fact that a board has been especially appointed for that purpose, convinces him of this. He is not obliged to go before the board; consequently, he takes very little pains to improve himself on the subject of midwifery. This gentleman may be an excellent anatomist; he may be able to display great acumen in discussing the merits of curing aneurism by compression; he may even have obtained the highest prize the College can give; but he knows nothing whatever about the mode of turning the child, of using obstetric instruments, or even of removing a placenta. This neglect is further encouraged by the very small amount of obstetric knowledge which is required by the curriculum of the College. He need only attend a single course of lectures on midwifery. This course must be delivered in the summer session; and, consequently, cannot exceed sixty lectures. Now, all the teachers of midwifery, in every school in London, have been unanimous in declaring that they could not give a complete course of midwifery in sixty lessons. The College of Surgeons have been informed of this by deputation; yet no change has been made. Nay, even in their new regulations for the licentiate in midwifery, they still adhere to one short summer course of sixty lectures,

which they have been already informed is totally inadequate for the purpose.

At present, therefore, a candidate for the surgical diploma is not examined in midwifery. He is only required to attend this short and necessarily most imperfect course of lectures; and, therefore, may leave the College, even with credit, his brows crowned with laurels, yet totally unfit for the duties of an accoucheur.

Let us follow this gentleman in his entrance upon his career of practice. He selects a neighbourhood which seems to offer a favourable opportunity for his wishes; he has "surgeon-accoucheur" on a conspicuous label, or perhaps simply "surgeon", but beside it the equally significant "night bell". No doubt he is looking out for fractures or dislocations; for opportunities to tie or compress the femoral artery; he is anxious to cut for the stone; or at least to perform amputation. No such opportunities, however, present themselves. There is always in the same locality some surgeon of established reputation, to whom the public fly in such difficulties. The young aspirant is left to himself, so far as pure surgery is concerned. He has, however, acquired some distinction as a student; he has also a good general education and address. Those most interested in him are very anxious to obtain for him some practice, and a lady prevails upon her friend to permit him to attend her in her next confinement. "He has obtained his diploma at the College of Surgeons with the highest honour; and, therefore, must be a safe accoucheur." This gentleman succeeds, or rather nature succeeds for him. He obtains thereby an introduction to the family, and makes his *début* in practice. But that practice is midwifery, not surgery; and thus the very first duty which he is called upon to perform is precisely that about which he knows the least.

If, however, this picture were reversed; if it were a labour of difficulty—of danger; if the life of a child—perhaps a first-born, most anxiously looked for—or if the still more important life of a mother be the sacrifice, on whom falls the responsibility of this most unpardonable ignorance? Is it any answer to say, that the public must know that midwifery is not surgery; and that if they employ a surgeon, they do so on their own responsibility? The public know nothing of the kind; they make no such distinctions; and they employ a surgeon, because they believe that he is a surgeon in all its branches, and in every sense of the term.

I trust, therefore, that the College will perceive the necessity of correcting this mistake; of improving their curriculum; and recognize the importance of requiring that all candidates who present themselves for a surgical diploma shall have given proof to the Obstetric Board that they are competent to practise midwifery.

This knowledge cannot be an incumbrance to the minority who would confine their attention to pure surgery; while to the great majority, who purpose taking obstetric practice, it is essential. I feel it the more my duty to press this necessity upon the attention of the College of Surgeons, because the position which I have the honour to hold, as a teacher of midwifery, gives me, as well as my colleagues, the opportunity of knowing how indifferent pupils are with regard to anything that concerns midwifery. Anatomy, physiology, the theatre where they witness the great operations in surgery—operations which they may never be called upon to perform—the dead-room, and the microscope, all receive their best attention; but that knowledge which is necessary to fulfil the very first duty that may be required of them in their entrance on practice; that which may be their only means of obtaining practice, holds no place in their estimation; nor will it do so until it is forced upon their attention by more stringent regulations than at present exist.

Another effect which springs from the false principle upon which the duties of the Obstetric Board are established, is that an injustice is committed against the student who obtains every qualification which will really make him what he professes himself to be—a surgeon-accoucheur. He has obtained his diploma to practise surgery, and his license to practise midwifery; but whether his future opponent may

do so is quite a matter of taste. Let us suppose this rival to be a gentleman not particularly desirous to burden his mind with too many duties or too many examinations. He will do nothing which he is not obliged to do; consequently he neglects obstetrics altogether, and is perfectly satisfied if, by the aid of a grinder, he is triturated sufficiently fine to be sifted through the surgical examination. No doubt he thinks it a great blessing that he has only one examination to go through, and laughs at his competitor for taking so much pains to go through another which is not required of him. He obtains his diploma from the College; but the moment it is in his possession, he will not hesitate to practise midwifery on the strength of it. The document will be, perhaps, displayed in a gilt frame, to give the public confidence, and to prove to them that he is qualified in every respect. There is no certainty that his incapacity will be exposed, because Nature is his hand-maid. Sooner or later, however, the moment may come when his knowledge is put to the test; a difficulty may suddenly arise to which he is unequal; and a life may be sacrificed to his incompetency. But is it just to allow the prospects of his more industrious competitor to depend upon such a contingency? Is the inattentive and incompetent student to make the practice of midwifery, because it is easy, a means of accomplishing what he never could hope to do without its aid? Is he thus to defeat his better educated rival? And yet, according to the present regulations, this may be done. An evil greater even than this results from them, because a serious injury is also committed against the public.

The diligent student is not satisfied unless he has every qualification necessary to his practice. He will go before the Obstetric Board. Even members of the College, who have already obtained their surgical diploma, are now hastening to it. There is no doubt that those, who are devoted to their profession, will embrace every opportunity of giving proofs of their intelligence; consequently, they avail themselves of this examination. But the public are in no danger from them; they are injured by the idle and the ignorant: and there is no branch of medical science which shelters these defects more than midwifery; there is none which requires more protection.

So far, therefore, as the student in surgery is concerned, an obstetric examination which is voluntary is mischievous, because an encouragement is given to the most unsafe class—to the careless—to neglect midwifery altogether; and a serious injury is done to the industrious student when he finds himself opposed in practice, even successfully, by this very idler, who, like him, practises midwifery, and has had the good fortune to escape exposure. The public only know both equally as surgeons.

This examination, however, is not only voluntary to the student in surgery, but is open to the whole world. The chemist or the greengrocer, the laundress, or any other old woman, may go up to be examined. It is true that the curriculum required, although not very severe, would be quite too much for these sagacious individuals; neither do I think that they would so easily escape the present Board of Examiners. But where is the security that such will always be the case? Curricula are frequently altered; examiners are changed; and I think that I can appeal to experience how unequal the examinations at the College have been, sometimes enabling candidates to pass with the utmost facility, and again becoming a most respectable test. Now, it is just possible that at some future time it may be argued, that midwifery is practised by a great many old women, and other similar characters. They seem quite competent for the purpose, but are manifestly unequal to the present regulations. "It is a pity not to encourage them to come forward and prove their knowledge"; and consequently it would be most advisable to suit the curriculum and examination to their comprehensions. Such may be the argument for admitting these, and for dubbing, by the authority of the College, some future Mrs. Gamp a "Licentiate in Midwifery".

Another, and a far more important objection—

while the former is prospective, this is immediate—is that which has been already very strongly urged. A new and much easier course of study is laid down for the obstetric examination than for the diploma of the College; hence it must lead to the constitution of a new and inferior class of practitioners. The student may obtain from the Society of Apothecaries his license to practise medicine and pharmacy. He gains a license to practise midwifery from the College of Surgeons. He wants nothing more. He calls himself a general practitioner, or perhaps a "Surgeon-Accoucheur"; but is quite content to send all the broken bones, all the aneurisms, all the lithotomy cases, to some Teale, or Hodgson, or Fergusson, in his neighbourhood. He confines himself to a very lucrative general practice. In order to accomplish this, he can finish his education in three years (the surgical student requires four); he can exhibit certificates of having attended within that time the practice of a medical and surgical hospital, and lectures on the practice of physic and practice of surgery; he can prove to the public that he has attended to medicine and surgery just as much as any surgeon, and knows midwifery besides, which they know nothing about. If this be not an argument in favour of the licentiate in midwifery, that will tell in due time with powerful effect, I should be greatly surprised.

In fact, by the present regulations, students are at once separated into two classes; into the future surgeons, who know nothing in the world of midwifery; and the future accoucheurs, who are equally ignorant of pure surgery. Now, it would be a curious question to determine which of these classes would predominate; nor do I think there would be much difficulty in arriving at a correct conclusion. We need only examine the curriculum appointed for each, to decide.

The College requires that the surgical student be engaged four years in his professional education. He must attend a surgical hospital for three years, and two winter courses of lectures on the principles and practice of surgery; a medical hospital for one year, and one course of lectures on the principles and practice of medicine. Besides this, anatomy, physiology, demonstrations, and dissections, must occupy his attention for three winter and two summer sessions. *Materia medica* and midwifery are disposed of in one summer session, and chemistry in one winter session.

The candidate for the certificate of qualification in midwifery can complete his education in three years; his anatomy and physiology may be finished in two winters; he has one course of lectures on surgery, and one on medicine to attend; a surgical hospital for one year; and a medical hospital for one year. He need not trouble himself about *materia medica* or chemistry; and in midwifery, the leading subject of his study, he is not asked to attend more than one short course of instruction. He is certainly obliged to attend thirty labours; but it is not said *when or how*; and, consequently, he finds no difficulty in this. Many students come up from the country, having attended thirty, forty, or even fifty labours, before they have attended a single lecture on midwifery. The cases are attended haphazard, and the education is that of the midwife. They learn nothing but patience and to support the perineum.

It is only necessary to compare these curricula, to determine which the majority of the students will select. They have only to decide whether they will study surgery in its higher branches, so as to become skilful operators, or content themselves with a more modest education for a quiet, comfortable, money-making general practice. I fear that they might be inclined rather to the latter than the former course; that the licentiates in midwifery would greatly exceed the licentiates in surgery, and the College become rather a College of Accoucheurs than a College of Surgeons. I do not think that the Council could have contrived a more ingenious method of relieving themselves from the perhaps too onerous duties of the Examining Board, than by establishing licentiates in midwifery.

The objections to this clause,* then, may be briefly

summed up in this—that it is founded upon a false principle. It assumes a distinction between midwifery and surgery which does not exist: there is no essential difference between them. Hence, if *any one* present himself to the College of Surgeons for examination, he demands an authority to practise as a surgeon. It is the duty of the College to ascertain that he is a surgeon, not only as regards the practice of midwifery, but every other branch connected with it, just in the same manner as it is their duty to know whether the candidate for a surgical diploma is competent to practise midwifery. There is no necessity, therefore, for framing an easy curriculum for the former, and a more difficult one for the latter. The curriculum should be uniform, but so adapted as to meet the requirements of the obstetric examination.

I press this point the more decidedly, because nothing is so easy as to effect this adaptation. The College requires that the student be engaged four years in the acquirement of professional knowledge. Let them only specify what is to be done in each year, and they will find an abundance of time for a perfect curriculum of education. All that is required by the Obstetric Board, by the Society of Apothecaries, and by the College of Surgeons, can be accomplished within that time. The pupil may, if he please, pass each examination in succession; and it is only necessary for the College to provide that he receive, at the same time, his license to practise midwifery and his diploma for surgery.

I have now, I fear at the risk of exhausting your patience, endeavoured to demonstrate the following propositions.

1. That a great sacrifice of human life may be the consequence of neglecting the education of the accoucheur; and that it is not true that, because parturition is a natural process, any one may practise midwifery.
2. That midwifery is essentially a branch of surgery, and is constantly practised in alliance with it. The title "Surgeon-Accoucheur" is universal.
3. That it becomes the duty of the College of Surgeons to ascertain that *all* those who receive from them authority to practise surgery, are also competent to practise midwifery.
4. That a certificate of qualification to practise midwifery should not be given to any student, until it has been ascertained that he is also qualified to practise surgery.
5. That there is no occasion for an easy course of study for midwifery and a more difficult one for surgery; and where no necessity exists, the distinction leads to the establishment of an inferior class of practitioners, which would be most injurious to diligent students, to the profession, and to the public.

It only remains for me to prove by facts what I have stated to be the probable results of neglect of the education of the accoucheur, and to convince you what ignorance may do in the practice of midwifery. Time will only permit to quote extreme cases; which however, will be sufficient for the *a fortiori* argument which they illustrate.

On August 15th, 1846, a coroner's inquest was held at Towcester, to inquire into the circumstances attending the death of Anne Smith. "It appeared from the evidence of the witnesses, that the woman was taken in labour of her first child about the middle of the day on Friday. Mr. G., (M.R.C.S.Eng.) was sent for, and arrived in about an hour. He told them she was going on well, and that he would return in a short time: he did so in about three quarters of an hour, and remained within call (but not in the patient's room). He was several times requested to go up 'to help the woman', but did not, until immediately before the birth

required to produce the following certificates:—Of being 21 years of age—of having been engaged for three years in the acquirement of professional knowledge—of having studied practical pharmacy for six months—of having attended lectures on anatomy and physiology, with demonstrations and dissections, during two winter sessions—of having attended one course of lectures on the practice of surgery—of having attended the medical practice of a hospital during twelve months—of having attended the surgical practice of a recognized hospital during twelve months—of having attended one course of lectures on Midwifery and the Diseases of Women and Children—of having personally conducted thirty labours."

* "All other persons [except qualified surgeons and physicians] will be

of the child, which took place about six o'clock. He tied and cut the cord in the usual manner; and shortly afterwards in making traction broke it off at its attachment to the placenta: a gush of blood followed, but the nurse could not speak with confidence as to the quantity. Mr. G. then gave the patient a dose of tincture of opium, telling her friends there was something more to come, and left promising to return between eight and nine o'clock. A short time after Mr. G. left, the patient became very faint; and one of the women noticed a pool of blood on the floor under the bed. A message was dispatched for Mr. Collier, surgeon, who attended without delay, and found the patient exsanguineous, and in a state of syncope. He immediately removed the placenta, and ordered wine and brandy to be administered. The hæmorrhage ceased after the extraction of the placenta. Mr. Collier sent home for ammonia and other stimulants; but death took place before the return of the messenger.*

This M.R.C.S.E. not only by violence broke off the funis, but did not even know the amount of danger to which he exposed his patient. Her life was sacrificed to his ignorance of midwifery.

In March 1845, a coroner's inquest was held in Norfolk. Considerable excitement prevailed in consequence of the death of a married woman named Jane Mary Lovett; the melancholy event being attributed to grossly ignorant treatment on the part of the medical man who attended her: and so it was, as will be seen. The woman was safely delivered of a female child, without any more difficulty than on former occasions. Ann Cassel, a midwife, was examined and gave the following evidence. She stated "the after-birth did not come. Mr. Gaches tried to get at it. Mrs. Lovett (the patient), said to him 'I cannot stand it'. I made answer and said, 'It must be got'. I then asked Mr. Gaches if he did not want further help. He said he did not think any doctor could do more than he was doing for her. I said to him 'Let her rest a little time'. The poor woman exclaimed 'Let me lie and die, don't let me be meddled with any more'. Mr. Gaches at length removed a round substance, unlike anything the midwife had seen before, which Mr. Gaches had taken away with him. After Mr. Gaches left the woman, I said to her husband, 'For God's sake go for Mr. Gaches, I think your wife is dying'. The husband went, and he (Mr. G.), came directly; but the woman died before he arrived."† The substance which the midwife never saw before, proved on the *post mortem* examination to be the inverted uterus, which Mr. G. actually tore out of this unfortunate woman's body, and carried home for a more careful examination.

On August 5, 1848, at the Staffordshire Summer Assizes, William Harding Flint, of Longnor, described in the *Provincial Medical Directory* as M.R.C.S.E., (which, however, was questioned,) was accused of killing and slaying Elizabeth Riley, at Sheen, in Staffordshire.

"It appears that Mrs. Riley, the wife of a respectable farmer at High Sheen in Staffordshire, was taken in labour, and sent for the accused party, who arrived between two and three o'clock on the morning of March 29. It appears that he made an examination, and then went to bed, where he remained until between seven and eight o'clock. On making an examination at this time, he is said to have pronounced it a preternatural presentation, and to have sent the husband to Longnor for his instruments. He appears to have been impressed with the necessity of turning; and he performed some manipulations, during which he told the women about him that he had turned."‡ The manipulations were as follows. Sarah Mellon, a midwife, stated "He was pulling a hand and foot", and asked Sarah (the midwife), to help him. He was asked if he wanted more help; but he said "I have brought one, and shall have another in four minutes, nay two; I shall want no more help". The woman was, however, so obviously dying, that the friends insisted, contrary to his wishes, lest he should

expose his patient, (or rather himself,) on throwing back the clothes, and seeing what was the matter.

Elizabeth Hirobin, a neighbour of the deceased woman, being ordered to state what she really saw, shaking her head and holding up her hands, said "Oh such a sight!! I saw a leg and a foot, an arm and a hand, and something like intestines hanging out nearly a foot; but I walked away to another part of the room: I could not stay". The midwife was curious to know about the child he professed to take away, and she said "Dr. Flint, tell me one thing; you said you brought forth a child and put it away. It is no such thing; you have not". Dr. Flint replied, "What was that substance then?" The midwife very properly retorts, "You are a doctor and ought to know better than me; but if you don't know, I'll tell you to the best of my knowledge. I never saw anything like it in my life; but I think it was part of her womb and her bowel-skin".* This unfortunate woman died in ten minutes afterwards. A pen-knife was found lying on the bed; so that this gentleman—calling himself a surgeon—in attempting to turn a child, brings down a foot; but he is so thoroughly ignorant of midwifery that he pulls at the arm and foot together; the uterus is ruptured, and the intestines descend. He mistakes the coil of intestines for a child; and to assist the delivery evidently cuts the bowel across with the pen-knife, and removes it; saying (very truly) that more was to come. A life is thus sacrificed to the grossest ignorance.

I have, in these details, confined your attention to those instances, and only a few of them, which have come before a public jury; but that such are not the only evidences of malapraxis, I shall quote one from many proofs that are noted in the secret records of practice. It is only by accident that such facts become known; and I am persuaded, that if we had all the mismanaged cases, all the deaths of children and of mothers from mere ignorance, that fall under the observation of distinguished practitioners who are consulted in such cases, they would fill a volume. One of these eminent men was the late Dr. John Greene Crosse, of Norwich, who relates the following extraordinary case. His words are these:—

"The most extraordinary and anomalous case which I have hitherto met with in the whole course of my practice is the following. Some of the circumstances appear so monstrous, that credit would not be given to the narrator, except by those to whom he was known, by the station which he held, or the correct statements which he had offered to the public on other subjects. Yet, were I to publish this case, I could scarcely refer by name to other parties—fellow-witnesses of the dissection—for delicate reasons that must occur to every one." Such is the reason why this case remained quietly in Dr. Crosse's case-book until after his death, when it was published in Dr. Copeman's collection. He proceeds: "I was called up at two o'clock this morning by Mr. —, to go to H., a distance of seven miles, to a case of midwifery, attended by some unaccountable circumstances; and though the woman was dead, the three surgeons, who had been with her, wished me to go for their satisfaction, as they did not like to quit the house, leaving the woman undelivered, unless they could explain what happened. They, moreover, wished to inspect the body, which they feared would not be allowed if they quitted the house." The woman, aged 40, had borne seven children, and thought herself again pregnant and near her full time. She was feeble and jaundiced. Labour commenced the day before Dr. Crosse was sent for. Mr. H., who was engaged to attend the patient, when he arrived, and made an examination, found "a soft tumour in the vagina, reaching nearly to the external labia, which he supposed was the liquor amnii distending the membranes. Soon afterwards, Mr. — (another surgeon, who had been sent for on its being found that Mr. H. was from home), arrived, and on examining, thought the placenta was presenting, and that it was a case for turning. Mr. H. ruptured the presenting part, or the part low in the vagina,

* *Lancet*, 1846, vol. ii, p. 302.

† *Lancet*, 1845, vol. i, p. 341.

‡ *Lancet*, 1848, vol. ii, p. 160.

* *Lancet*, p. 161.

expecting the waters to escape; but only a little blood flowed. He brought away several portions of a solid substance, not unlike placenta after being well washed in water." Having acted thus far under the impression that the case was a placental presentation, the same belief was entertained by both gentlemen present, and turning was agreed upon. "So Mr. H., having removed his coat and bared his arm, introduced it through the mass into the vagina; and believing he must reach the uterus, could not explain why he did not distinctly feel the child, but thought, at one time, he got the foot of the child: he, however, could not retain it; he got hold of something else, and no doubt used some force with his hand. On withdrawing his hand, he brought away a firm, whitish substance, which appeared like a bean. Mr. H. likened it to a bile stone. Mr. — next introduced his hand; he could not detect a fœtus. He, however, felt the spine; and said he could feel a bag of such stones as the one brought away by his more active and more experienced companion. Neither of them suspected that the hand had been introduced anywhere but into the uterus. Numerous portions of the whitish soft mass, resembling, by candle-light, well washed placenta, were brought away. The woman died half an hour after these attempts, though there had not been much loss of blood: there had been a gradual loss, but no rapid flooding."

The third gentleman arrived (like Dr. Crosse) after the woman's death had taken place; and in the presence of the four, a *post mortem* inspection was made. "The corpse was lying on the bed doubled up, in the usual position for examining during labour, with her clothes on. I (Dr. Crosse) introduced my hand into the vagina, and felt lacerated parts, but could not distinguish fœtus or os uteri. On withdrawing the hand, portions of a substance twice as big as a walnut escaped, of precisely the same appearance and consistence as what had been removed during life. Placing the corpse on the back, I made an incision in the course of the linea alba into the abdomen, extending from the sternum to the pubes; and as soon as the peritoneal cavity was opened I discovered a quantity of coagulated blood, as much as eight or ten ounces, spread in a thin layer over the intestines. The uterus immediately presented itself: it contained an acephalous fœtus, plump and full grown in its limbs and body, and apparently not less than eight months old. The placenta was cut through. The membranes were entire; the os uteri was open to the extent of a shilling; but it had never been dilated nor meddled with in all the examinations which had taken place during the supposed labour; for the uterus lay high above the pubes and forwards, pressing immediately behind the anterior parietes of the abdomen. Pulling aside the uterus, and also the intestines, so as to examine the cavity of the pelvis, I found the whole cavity filled with a morbid mass. Through the most compact part of this morbid mass, in the centre of the pelvis, anterior to the rectum, was a lacerated opening leading into the vagina; and it was clear that the hand of the accoucheur had made its way through this passage into the peritoneum. One inexplicable circumstance was now explained: the gall bladder was ruptured at its larger end; several small white biliary calculi were amongst the viscera near it, and numerous others in the cavity; one big as a nut, others varying in size from a pea to a bean. Altogether I collected fifty-six of these calculi; not including two or three removed per vaginam during life."* Such a case as this, where the hand was forced through a morbid mass—through the vagina into the peritoneum—up to the gall-bladder—with the result of bursting it and delivering gall-stones, requires no comment.

I have now, sir, to apologize for having so long occupied your attention. I can only plead the vast importance of my subject. I have brought before you a branch of medical science which embraces within the range of its studies the physiology of generation, the laws of our organization,

the development of tissues, the pathology of the ovum (as yet among the arcana of medical science), and the pathology of the uterus: a branch of practice which includes not merely the phenomena of parturition and the management of labour, but also the important but as yet imperfectly understood class of diseases which affect the female generative organs, as well as the disorders of infancy and childhood, scarcely better known. I trust that it will be admitted that midwifery is worthy to be considered one of the medical sciences, and that in a practical point of view it equals in importance general medicine and surgery. I have endeavoured to prove how completely it has been neglected, and to demonstrate the melancholy sacrifice of human life that may be, that has been, the consequence. When such is the case, when an absolute necessity exists for its improvement and protection, I cannot forbear raising my voice against the present system of obstetric education, convinced that it leads to its still further degradation.

I trust that I may be pardoned for so great a trespass on your attention, in my effort to prove the danger to which the public must be exposed, when an obstetric education is totally neglected: and in my desire to show that the very attempt to supply this deficiency will produce precisely opposite results, give encouragement to presumptuous ignorance, and thus become only a delusion and a snare.

Henrietta Street, Cavendish Square, April 1853.

THE RESULTS OF RE-VACCINATION, AS OBSERVED IN 257 CASES.

By W. BIRD HERAPATH, M.D., Surgeon to St. Peter's Hospital, Bristol, etc.

It may be interesting to the readers of the ASSOCIATION MEDICAL JOURNAL, and to the profession generally, if I communicate the results of re-vaccinating the inmates of two large public schools, with which I am professionally connected—the Red Maids' School, and Queen Elizabeth's Hospital. The former establishment contained, at the time of the experiment, 101 girls, and the latter, 158 boys.

The occasion of this extensive re-vaccination was the occurrence of small-pox. One case having shown itself in each establishment, it was thought desirable to prevent the extension of the disease by isolating the infected children, and to simultaneously destroy or remove the pabulum of the disease, by at once submitting the whole of the inmates to the process of vaccination.

The success of the experiment was perfect: not a single fresh case occurred. The two patients suffering from the disease passed through the stages safely and satisfactorily, without a single bad symptom, although they were both thickly covered with pustules. However, it is but fair to state that from the modified form of the pustules, the slightness of the accessory and secondary fever, and the subsequent progress of the cases, there is no doubt that they were cases of varioloid, rather than of variola: the disease in the girl being varicella umbilicalis; and in the boy varicella coniformis, two varieties of varioloid, described by Erasmus Wilson in his work on *Skin Diseases*. Both these children had been vaccinated previous to their admission into the school; and their arms bore the evidence of two distinctly foveolated moderately large cicatrices.

It is a wise regulation of the trustees, that evidence of vaccination, or of having had small-pox, shall be shown by each candidate for admission to these excellent institutions before their election: and it is part of my duty, as their medical officer, to examine each applicant and to report thereon; and to exclude all who do not satisfactorily prove to have had the small-pox or to have been effectually vaccinated. Of the two hundred and fifty-nine inmates, only one admitted of any doubt on this point. This one case was reported to have been vaccinated, and was admitted by my predecessor; but upon re-examination, at the date of

* Copeman's "Cases of Midwifery". By the late John Green Crosse, M.D. pp. 49-52.

this experiment, no mark or cicatrix was apparent. Seventeen had had small-pox without previous vaccination; and twelve are reported to have had small-pox subsequently to vaccination.

Of the two hundred and forty who had been vaccinated, there were three cases in whom four cicatrices were apparent; twenty-one in whom three cicatrices, more

or less perfect, were present; one hundred and sixty-three had two cicatrices; and in fifty-two one vaccine mark only was perceptible.

These cases have been arranged in a tabular form, more clearly showing these appearances, and more minutely describing the characters of the cicatrices and the results of re-vaccination. (Vide Table I.)

TABLE I.—Results of Re-Vaccination of 257 Cases, Inmates of the Red Maids' School, and of Queen Elizabeth's Hospital.

CLASS I. VACCINATED, 240.—A. Vaccinated, 230.

						Failures in toto.	Imperfect results.				Successful.	
No. of Cases.	No. of Cica- trices.	State of Cicatrix.	Cases.	Totals.	Failures in both points.	Failures in single points.	Vesicles slight and abor- tive.	Vesicles irregu- lar in figure.	Vesicles double and perfect.	Vesicles single and perfect.		
a	48	1	{ a 30 Distinctly foveolated { Large Small b 18 Faintly foveolated { Large Small	23	48	8	7	3	1	3	9	
				7		0	2	1	2	1		
				6		2	2	0	0	2		
				12		2	2	3	1	5	4	
b	158	2	{ a 112 Distinctly foveolated { a Large β 1 Large, 1 small γ Both small a Both large b 46 Faintly foveolated { β 1 Large, 1 small γ Both small	64	158	12	13	7	3	10	16	
				20		14	19	8	3	27	17	
				28		5	3	4	1	10	3	
				14		6	9	4	2	8	4	
				5		2	2	3	1	2	4	
				27		1	3	1	0	1	0	
				6		12	2	4	10	8		
				c		20	3	{ a 3 Large β 2 Large, 1 small γ 3 Small δ 2 Small, 1 large b 1 Faintly foveolated a 3 Faint and large	10	20	34	48	22	9	58	36
3	3	2	2		2				2		5	
3		1			1						2	
3	2	2							2		2	
1	5	5	3		3				5		10	
d	3	4	{ a 2 Distinctly foveolated and large b 1 Faintly foveolated and large		2				3		1	
				1	1					1	1	
					2					1	2	
				e	1	0	1 No cicatrix apparent	1		1		

B. Varioloid and Variola after Vaccination, 10.

a	4	1	a 2 Distinctly foveolated	2	1				2	
			b 2 Faintly foveolated	2					1	
b	5	2	a 3 Distinctly foveolated and large	3			1		1	1
			b 2 Faintly foveolated and small	2			1		1	1
c	1	3	a 1 Distinct, 1 large, 2 small	1					1	
				10					6	2
						1		2		

CLASS II. UNVACCINATED, 17.—C. Variola, 17.

a	10		a 10 Very much marked by Small-pox	10		2	2	1	5	2
b	7		b 7 Slightly marked by Small-pox	7	17	2	3	1	2	2
						4	5	2	7	4

CLASS III. ILL IN VARIOLA, 2.

	2	2	2 Ill with Variola, and the occasion of the Experimental Investigation	2	2					
	259			259	259	56	78	36	17	56

With respect to the ages of the patients, it should be premised that they all ranged between eight and seventeen and a half years; the one being the age at which the

girls are admissible to the school; the other at which they are discharged. The boys are admitted at from eight to ten years, and go out at from fourteen to fifteen years of age.

The following table shews their ages more clearly :—

2 cases from 8 to 9 years.		
27	"	9 " 10 "
39	"	10 " 11 "
37	"	11 " 12 "
61	"	12 " 13 "
53	"	13 " 14 "
11	"	14 " 15 "
13	"	15 " 16 "
13	"	16 " 17 "
3	"	17 " 18 "

259 giving an average age of 12·91 years.

RE-VACCINATION. The lymph employed was obtained from the arms of four healthy children, who, of course, had been previously submitted successfully to the operation. It was taken on ivory points at the eighth day of the vesicle, and before the areola had attained its full development; it was, therefore, in its most active state. In all instances, two punctures were made in the left arm; or at least each spot was slightly scarified by the point of a lancet again and again at right angles. This is certainly the most successful mode of vaccination, when employing lymph dried on points.

The first effect of re-vaccination was the appearance of a vivid efflorescence, gradually extending from the second to the fifth day. This then subsided without the formation of a vesicle, if the system were still efficiently protected by the previous vaccination. Those cases on the eighth day merely appeared as slight, very minute dry scabs, just serving to mark the spots where the incisions had been made. In about fifty-six cases, or 21·4 per cent., this was apparent in both punctures. In seventy-three cases, or about 28·8 per cent., this was the effect in only one point. These have, in the accompanying tables, been registered respectively as failures in two points, and failures in one point.

In thirty-six cases, however, the effects proceeded to a step further. On the eighth day a conical elevated and inflamed base was formed, having an areola more or less

irregular in figure, with a minute vesicle on the apex of the cone; but this vesicle was neither umbilicated nor of any determinate form. These cases did not advance, but either gradually subsided, or at most dried up to a slight and imperfect crust, which invariably fell off at an early date. These were all registered as "abortive vesicles"; and were about 14·0077 per cent.

In seventeen of the cases the vesicles were larger, but had a more or less irregular outline, somewhat oval, with borders ragged from the existence of numerous smaller vesicles at the edges of the primary vesicle. These, probably, arose from the little patients having scratched and more or less rubbed and injured the vaccine vesicle during its formation. These generally became purulent, and dried at the same dates with the next and more perfect class, and the crusts endured the usual period; but as they were not perfect, they were excluded from the correct enumeration. This class is arranged under the head of irregular vesicles; and amounts to 6·61 per cent.

In seventy cases a single perfect vesicle, with a good and more or less evident areola, formed "the real pearl upon the rose". Most of these appeared as usual upon the eighth day; some were later, and not formed until the ninth or tenth day; but these were not a dozen in number. This class, therefore, contained about 27·23 per cent. There were also eighty-eight cases, in which two perfect vesicles were formed on the same arm. This class contained 34·63 per cent. The two last classes went through their subsequent stages of maturation, pustulation, desiccation, and desquamation, or rather dehiscence of the crust, in the usual way, and at the regular periods, as if they had not previously been submitted to vaccination. The perfectly successful class may therefore be said to include both the seventy cases of single vesicles, and the eighty-eight cases of double vesicles; and would therefore amount to 61·96 per cent.

In these per centages, all cases have been taken indiscriminately; they are the general results of the whole experiment. But upon analysing the facts a little more rigorously, some curious results become apparent.

TABLE II.—Results of Re-Vaccination, as shewn by preceding Tabulated Experiments.

Cases.		Cases.	Description.	Re-Vaccinated.	Total failures in two points.	Partial failures.			Successful cases.		
						Falling in a single point.	Vesicles only slight and abortive.	Vesicles irregular.	Double perfect vesicles.	Single perfect vesicles.	Total double and single vesicles.
242	Vaccinated	230	Vaccination	230	51*	68	32	15	75	64	139
		12	Varioloid and Variola 2 in bed	10	1		2	2	6	2	8
17	Un-Vaccinated	17	Variola	17	4	5	2		7	4	11
259		259		257	56	73	36	17	88	70	158

* Case 11, vaccinated four months ago; 132, two years and five months ago; 214, six years and four months ago, did not take at all.

In the first place, seventeen cases who had had small-pox were experimented upon; these had not been previously vaccinated, but all more or less presented evidence of having suffered from this ruthless destroyer of human beauty.

(a.) Of these seventeen cases, there were four of perfect failures in both points = 23·53 per cent.

(b.) Of these seventeen cases, there were five in whom single points did not produce vesicles = 29·4 per cent.

(c.) Of these seventeen cases, there were only two in whom the vesicles were "abortive" = 11·765 per cent.

(d.) There were no irregular vesicles.

(e.) There were seven cases in whom double vesicles resulted = 41·2 per cent.

(f.) There were four cases in whom a single vesicle, perfect in shape, etc., made its appearance = 23·53 per cent.

(g.) The two last classes together make a per centage of successful vaccination after small-pox of 64·73.

There is a class of ten cases, in whom vaccination had been successfully performed, as is shown by decided cicatrices. Four of these have one mark; five have two cicatrices; and one case has even three cicatrices. The evidence of small-pox is also pretty strong in all of them: in some, however, the marks are only slight; but these were decided to have had the small-pox, only after a rigorous examination of the parents as to the age at which they had it, and the effects of the same epidemic upon others of their children who had it at the same time.

- (a.) There was one double failure = 10 per cent.
 (b.) There was no single point failure.
 (c.) There were two cases of abortive vesicles = 20 per cent.
 (d.) There was one case of irregular vesicles = 10 per cent.
 (e.) There were six cases of double and perfect vesicles 60 per cent.

(f.) There were two of single perfect vesicles = 20 per cent.
 Having disposed of the influence which the two minor classes, variola and varioloid (B and C, Table I), have upon vaccination, we may ask whether the distinct evidence of previously successful vaccination has any influence in preventing the reabsorption and constitutional effects of vaccine virus. For this purpose Table III has been compiled.

TABLE III.—*Effect of previous Vaccination upon the present Results, as estimated by the Distinctness or Indistinctness of the Cicatrices.*

CLASS I. CICATRICES DISTINCT.

	No. of cicatrices.	Cases.	Failures in double points. a	Imperfectly successful.			Successful.		Total successful cases. g
				Failing in single points. b	Vesicles abortive. c	Vesicles irregular. d	Double vesicles. e	Single vesicles. f	
a	1	30	8	9	4	2	5	10	15
b	2	112	25	31	16	6	45	24	69
c	3	19	5	5	3	3	4	10	14
d	4	2		1			1	1	2
Total.....163			38	46	23	11	55	45	100
Per cent.			23.313	28.22	14.11	6.742	33.742	27.60	61.350

CLASS II. CICATRICES FAINT.

a	1	18	4	4	3	1	5	4	9
b	2	46	9	17	6	5	13	12	25
c	3	1	0				1		1
d	4	1		1				1	1
			66	13	22	9	6	19	17
			19.70	33.33	13.6	9.00	28.8	25.75	54.54

From this it appears, that upon dividing the vaccine cicatrices into two classes—one distinct and well marked, the other faint and slight—the following results are obtained.

There were one hundred and sixty-three cases in the first class. These cicatrices were in everything all that could be wished as evidence of perfect vaccination. The per centage of entire failures amounted to 23.313.

Comparing this with the second class, in which the cicatrices are slight and indistinct, we find that the failures are about 19.79 per cent. This would appear as if successful and perfect previous vaccination exerted a slightly in-

creased preservative influence over the system, thus rendering its subsequent impregnation more difficult.

However, this view does not appear to be entirely borne out; for upon looking to the column g, or that of total success, we see that there is a per centage of 61.35 for the first class, and 54.54 only for the second. The other columns shew a remarkably close parallel between the two classes, and justify us in coming to the conclusion that the distinctness or indistinctness of the vaccine cicatrix has but little, if anything, to do with the question at issue. We will now examine a careful *resumé* of all the previous per centage results, as collated in Table IV.

TABLE IV.—*Per-Centage Results of the foregoing Experiments on Re-Vaccination.*

	Total Failures. a Per cent.	Imperfectly successful.			Successful in every respect.		Total successful cases. g Per cent.
		Failures in single points. b Per cent.	Vesicles abortive. c Per cent.	Vesicles irregular. d Per cent.	Double vesicles. e Per cent.	Single vesicles. f Per cent.	
Previous Re-Vaccination, 230 Cases	22.174	29.565	15.21	6.521	32.60	27.826	60.435
(a.) Cicatrices distinct, 163	23.313	28.220	14.11	6.742	33.742	27.60	61.350
(b.) Cicatrices faint, 66	19.700	33.33	13.6	9.09	28.800	25.75	54.54
Variola and Varioloid after Vaccination, 10 Cases	10.000	0	20.00	10.000	60.00	20.00	60.00
Variola without Vaccination, 17 Cases	23.53	29.4	11.765	0	41.20	23.53	64.72
Average results of the whole 257 Cases	21.40	28.8	14.0077	6.61	34.63	27.39	59.49

One fact of importance may be noticed in this place: I refer to Table II. It there appears in a note that three cases—No. 11, vaccinated four months ago; No. 132, vaccinated two and a half years ago; and No. 214, vaccinated six years and four months ago—did not again become sensible to vaccine at this short interval.

The inferences to be deduced from a consideration of these experiments are the following:—

I. That three cases re-vaccinated within seven years were not again susceptible to vaccine.

II. That vaccine, after the interval of from eight to seventeen years, does not prevent the reception of vaccine again, except in 22-174 per cent.

III. That the distinctness or imperfection of the vaccine cicatrix does not materially alter these results.

IV. That variola does not prevent the formation of the vaccine vesicle, except in about 23-53 per cent.

V. That the occurrence of small-pox subsequently to vaccination does not destroy the susceptibility of the human system to again receive the vaccine poison, except in about 10 per cent.

VI. That in all the previous cases, whenever the secondary vaccine vesicle assumed its perfect form, its subsequent history was the same as if the system had not previously laboured under vaccine variola or varioloid.

VII. It is probable that the protective influence of vaccination has diminished in consequence of repeated transmission of the vaccine matter through the human body.

VIII. It is desirable that re-vaccination should be extensively followed, as one means of giving additional protection to the masses.

IX. That when possible, the stock of vaccine should be renewed by going back to the original source.

32, Old Market Street, Bristol, March 1853.

CONGENITAL OCCLUSION OF DUODENUM: EXCRETION RESEMBLING MECONIUM PASSED FOR EIGHTEEN DAYS.

By FREDERICK MASON, Esq.

(Read before the Quarterly Meeting of the Bath and Bristol Branch, March 24th, 1853.)

CASE. M. O., born on December 31st, 1852. She was said to have appeared weakly, and to have cried but feebly, and vomited soon after birth. Her mother was attended during labour by a woman. I first saw her on the evening of January 7th, 1853. She appeared to be a small and delicate infant, and was said to have frequently vomited (from the day of birth) a dark brown matter. Besides suckling, she had been fed on gruel, etc. The bowels were not much acted on, but that which passed was said to be quite black. I directed her to be fed only from the breast, and to have a small quantity of hydrargyrum cum cretâ and rhubarb.

January 8th. By daylight she appeared jaundiced, the skin and conjunctiva being very yellow. She winced and showed signs of pain when pressed gently over the right hypochondriac region: the mother had noticed the same when washing her. She had not rejected either medicine or milk; yet there was still frequent vomiting of a dark chocolate-coloured matter, resembling coffee-grounds. The bowels had acted; the evacuations being black, or very dark green, of the colour and appearance of meconium, but somewhat stiffer in consistence. The tongue was clean and red, and constantly thrust out between the lips, rolled round, and drawn in again. She did not appear to have any inclination or sufficient strength for suckling. I prescribed two grains of hydrargyrum cum cretâ three times daily. This treatment, with the addition of a dose of castor oil, was continued for about three days, when the yellowness of the skin disappeared, and it acquired a natural colour; still the coffee-ground vomiting and the dark-coloured motions continued, and she became more and

more emaciated. There was no abatement of these symptoms before her death, which occurred on January 17th.

POST MORTEM EXAMINATION, fifteen hours after death. The body was very much emaciated. On laying open the abdomen, the first things which attracted notice were the stomach and duodenum; they were enormously distended, contrasting strongly with the very empty and shrunken condition of the remaining portion of the intestines. On raising the liver, the rudiments of a gall-bladder were seen lying flat, and like a small membrane, on the liver. On carefully dissecting the bile-ducts, the cystic was found to be impervious and threadlike. The hepatic and common ducts were pervious, and entered into the distended portion of the duodenum. The stomach and duodenum were filled with a dark greyish fluid; and when removed from the body, the duodenum at first appeared to be only a *cul-de-sac*. When the remainder of the intestines was removed, and the duodenal end sought, it was found very transparent and thin, and had inadvertently been separated by the knife from the duodenum. The interior of the stomach and duodenum was now examined, and a complete septum was found stretching across the duodenum, which completely closed it, and prevented the passage of anything into the jejunum. The whole of the intestines below the septum was in a normal condition. The other organs were healthy.

REMARKS. One of the most remarkable symptoms in this case appears to be the fact, that, notwithstanding that all communication between the portion of intestines below the duodenum was cut off from the stomach and duodenum, and also from the liver, by means of the septum in the lower part of the duodenum, yet an excretion, resembling meconium in colour, but differing from it in being thicker and more pasty in consistence, continued to be discharged from the bowels frequently during each day, until the time of the infant's death. On the morning of this day (17th January), there was one evacuation; and this must have completely emptied the bowel, as after death nothing remained in any part below the duodenum.

On referring to the second edition of Müller's *Physiology*, page 165, I find it stated that "it is the excrementitious matter of the bile of the fœtus, which collects together with intestinal mucus in the lower part of the canal, forming the meconium."

In this case it would appear that the bile could have had nothing to do with the formation of this excretion, all communication with the liver being cut off by the occlusion of the duodenum below the entrance of the bile-duct.

5, Cleveland Place East, Bath, March 1853.

CASE OF STOMATITIS MATERNA DURING PREGNANCY.

By WILLIAM HENRY CULLEN, M.D.

THE following case seems to bear on others contained in an article in the *Periscopic Review* at p. 213 of the *ASSOCIATION JOURNAL* for 11th March, entitled "Stomatitis Materna". I send it for publication, as you therein express a wish to have an account of any similar cases which may have occurred in the experience of members.

CASE. In May 1849, I was called to see Mrs. J., who was suffering severely from salivation, in the sixth month of pregnancy with her sixth child. The discharge was so profuse as to compel her to have always a small basin at hand to receive the stream of saliva which would produce vomiting if she attempted to swallow it. No mercury had been taken, and, with the exception of slight heartburn, the general health was good. I prescribed antacids with some relief. In June, the symptoms all returned with increased severity. The tongue and lining membrane of mouth were unnaturally clean, of a deep red colour, and covered with small ulcers. The sides of the tongue were furrowed with deep cracks or fissures, so that talking produced great pain. Only gruel and arrowroot could be taken, (though the appetite was

good,) and that only when nearly cold. I gave mild mercurials as the liver was inactive, applied the solid caustic freely to the tongue and apththæ: and finding no directions in any work I could refer to as to the treatment of so severe a form of stomatitis materna, and that antacids in every variety and combination failed to give the least relief, I prescribed on the 6th July the following:

R.—Pulveris tragacanthæ comp. 3j.
Tincturæ hyoscyami 5j.
Infusi pareiræ 3iv. M.
Fiat mistura cujus capiat partem 4tam bis terve die.

Marked relief followed the use of this, which was persevered in till the middle of August, when she was delivered of a daughter after a very easy labour, and made a rapid recovery. If the pareira was left off for more than a day, and she attempted to take meat, or even a boiled chicken, a relapse was sure to follow. There was no symptom, as in the American cases, of any affection of the mucous follicles of the intestines. The symptoms entirely disappeared after delivery.

Sidmouth, Devon, April 1853.

PERISCOPIC REVIEW.

OPHTHALMOLOGY.

ON COLOUR-BLINDNESS.

In the *Athenæum* for January 20th, Mr. W. H. TYNDALL pointed out the danger arising from the use of colour signals on railways; where red signifies danger; green, caution; white, safety.

White light, it is well known, consists of three primary colours, red, blue, and yellow; any two of these producing the secondary colours; thus, red and blue give violet, the complementary colour of which is yellow: red and yellow give orange, to which blue is complementary: whilst blue and yellow give green, of which red is the complementary: hence it follows that when a secondary is mixed with its proper complementary colour, white light results. Now, with the colour-signals used on railways, it so happens, as will be evident from the foregoing, that if the danger and the caution colours, viz., red and green, are combined, the safety colour, or white light, is produced. On putting this to the test of experiment, Mr. Tyndall found that when a pointsman, stationed at one end of a tunnel some four hundred yards in length, was directed to report the signals made by a man placed at the other extremity of the tunnel, who was furnished with two lamps, a green and a red one, and directed to flash them together, the pointsman, a practised hand, declared that the light was white, indicating safety; nor could he be persuaded that the red and green lamps were used, in spite of subsequent explanation. Thus the very means now adopted for attaining safety, in practice involves the greatest risk; since the danger and caution colours, when seen together, or in rapid succession, at a distance, produce the impression on the retina of the safety signal; and may, probably, already have actually been the cause of the most frightful accidents, when we remember the contradictory evidence given on inquests with respect to the colour of the signals.

Dr. George Wilson, of Edinburgh, author of *The Life of Cavendish*, in a letter to the same journal of the week before last, directs attention to an additional source of danger arising from this use of coloured signals on railways, owing to the frequency of Daltonism, *Chromatopsedopsis*, or colour-blindness, which, since the interest excited by Dalton's publication of a defect in his vision, which led him to confound scarlet with green, has been found to be far more prevalent than might be imagined, and thus increases the probability of danger arising from use of coloured signals. He first of all remarks that colour-blindness is a very common affection; Prévost declaring that it occurs in one male among twenty; whilst Seebeck found five cases among forty youths in Berlin. Dr. Wilson states, that amongst his own pupils (in chemistry) this winter he has detected two marked instances, and that five others have made themselves known to him; one of the two pupils having four relatives also subject to this affection. Professor A. Thomson, of Glasgow, made a similar investigation some years since, and arrived at the conclusion that from the frequency of colour-blindness, the use of coloured signals on railways, or elsewhere, is fraught with peril to the public.

Further investigation amongst the students at Edinburgh shows that 1 in 37 or 38 are defective in the appreciation of colour, this defect appearing to be almost exclusively confined to males, amongst whom are to be found painters (artists), dyers, stationers, surgeons, a shawl-manufacturer, and an enamel-maker, employments we should have presumed to require the nicest appreciation of colour.

It also would seem that this defect is usually so great as to incapacitate those who are subject to it from distinguishing some colours, and especially red from green, and green from red, the railway signal colours; thus four of Dr. Wilson's own cases were unable to distinguish these colours; three instances observed by Professor Kelland were similar to and as marked as Dalton's own case; one of the surgeons, above alluded to, betrayed his defect by his inability to distinguish the scarlet of the berries of the mountain-ash from the green of its leaves: another supplied himself in Paris with a *bonnet-rouge* in lieu of a green cap as he intended, and still worse, brought home a flamingo-coloured dress to a lady who had requested him to procure her a green one. Others are unable to distinguish ripe from unripe strawberries but by the touch; one stationer offered blue sealing wax for red, others made continual blunders about the colours of the bindings of books, the colours of pink and green tinted paper, etc.; all of these proving the frequency of this inability among the community to distinguish between red and green colours.

Dr. Wilson also finds that, in the cases he himself has observed, and also, he thinks, in those of Professor Kelland, there was not merely *chromatopsedopsis*, but actual colour-blindness; so that they did not merely confound green with red, but doubted about every colour; and, on different occasions, gave different names to the same colours; betraying an imperfect appreciation of all colours, confusing one with another. On these grounds, he recommends a speedy investigation of all the railway officials who are entrusted with or observe signals, in order to detect the cases of colour-blindness which probably occur amongst them, with a view to remove this cause of public peril, or, at any rate, an alteration of the signals employed, so as to avoid the danger thus incurred; concluding by requesting statistics on this subject from all who may feel interested in it, for which purpose we subjoin his address,* that such of our members who may be so disposed may communicate the results of inquiries in their own practice to a quarter where these results may be tabulated, and probably lead us to some interesting conclusions upon this singular optical affection. The comparative freedom of females from this affection is very remarkable; Dr. Wilson stating that only six female cases are as yet on record.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the last monthly meeting of the Committee, it was announced by the Treasurer, that one of the annuitants, who was blind, had lately died, leaving his widow and child in great distress. Voted £10.

Letters of acknowledgment of the receipt of monies, voted at the previous meeting, having been read, the Treasurer stated, that since July 1852, the sum of £500 15s. had been received in annual subscriptions, and £296 14s. in donations; that the expenses had been £51 12s. 3d., and that £489 had been spent in grants, leaving the sum of £20 due to the Treasurer.

The following cases were presented:—

- i. The widow of a surgeon of Nottingham, who died in February last, having practised there thirty years, leaving eleven children, eight of whom are unprovided for. Voted £25.
- ii. The wife of a physician lately practising in London. Left in great distress. Voted £5.
- iii. The wife of a medical man, whose husband is imbecile, and who supports herself, husband, and two children, by letting lodgings. Relieved twice previously. Voted £5.
- iv. The widow of a medical man, also relieved previously. She supports herself by going out as a governess, and her two daughters, who are in bad health, endeavour to support themselves by working as milliners. All at present in difficulties. Voted £10.

[We did not receive this report till Monday, the 11th current.—EDITOR.]

* Dr. G. Wilson, 24, Brown Square, Edinburgh.

EDITOR'S LETTER BOX.

GENUINE LYMPH MORE IMPORTANT THAN A COMPULSORY VACCINATION ACT.

LETTER FROM J. A. HINGESTON, ESQ., TO THE EDITOR.

SIR,—Will you favour me with the insertion of the few following lines in the next number?

I find, by a letter from Mr. Ceely, that I have not represented Dr. Thiele's experiments accurately in my article on *Vaccine Lymph*, in your impression of the 1st of April. Mr. Ceely's words are:—"In the article (*vaccine*), page 270, I do not think the phrase used, in speaking of Dr. Thiele's experiments, quite expressive of the fact. Dr. T. *selected* milch cows; *rejecting* others which I was *compelled*, from circumstances, to *take*, and did *succeed* on such as he *rejected*." So I have stated in a note at the conclusion of my paper in the eighth volume of the *Transactions of the Provincial Medical and Surgical Association*.

I take this opportunity of saying a few words on the subject of vaccination, in relation to Lord Lyttelton's Compulsion Bill in the House of Lords. The question is not whether vaccination shall be compulsory, which may or may not be advisable; but whether the vaccine lymph shall be genuine: in default of which compulsory vaccination, good, bad, or indifferent, as it may be in the abstract, would become practically nugatory. If his Lordship would inquire into the circumstances of the case, he would learn that the chief want among medical men is that of genuine lymph. During the present week, I have received two letters, one from Mr. Wilson, of Runcorn, Cheshire, and the other from Dr. John Grigor, Nairn, N.B., both complaining of the inefficiency of the lymph they use, and begging for a more effective supply of it from Mr. Badcock's stock. These cases are not solitary, and they exclude the idea of any advantage being derived from compulsory vaccination.

I am, etc.,

J. A. HINGESTON.

Brighton, April 9th.

CAUSE OF THE OUTBREAK OF CHOLERA IN THE BAHAMAS.

LETTER FROM H. N. CHIPMAN M.D., TO THE EDITOR.

SIR,—I received, per last packet, the ASSOCIATION MEDICAL JOURNAL of January 17th, containing a copy of my letter to Dr. Cogswell regarding the outbreak of cholera here, etc.

I am happy to say that it has now entirely left our shores, although probably, as in other instances, it may again revisit us. The mode of its introduction, whether by importation or otherwise, is involved in much obscurity. The general belief among the non-professional is, that it was introduced here by the schooner *Reform*, a vessel belonging to this port, and which had conveyed a cargo of pineapples to New York in August last. She lost a man from cholera while in the port of New York, but the disease did not extend to any of the crew, and she reached this island in September, and was undergoing some cleansing in the vicinity of the spot where the disease first manifested itself. I cannot myself think that she had anything whatever to do with its introduction. It is, however, true that the first case which showed itself was that of a Mrs. Hall, an elderly female, who had been to a house near her own, on the Eastern Parade, where the captain of the said schooner *Reform* resided, and who spent some time with him, making inquiries about her son, who commanded a vessel then expected from Philadelphia. Mrs. Hall died suddenly of cholera on the 17th September. I am aware that your own opinion is rather that of a contagionist, judging from a communication which I remember having seen in the *Medical Gazette* some time since. I hardly have myself arrived at any very definite conclusion upon this very important point. I do not wish to be decisive upon so vital a question without further experience, although I am free to confess that much perplexity surrounds the subject, in the same manner as that which exists upon the contagiousness or otherwise of yellow fever. If typhus fever be contagious, as it is now generally acknowledged to be, why not yellow fever?—why not cholera, which appears to me allied to this class of diseases? Scarlet fever, also, we admit into the category, and does not this often fatal affection sometimes present itself to us, as it were, in the collapse stage, the patient suddenly sinking upon the first invasion without the manifestation of its more developed symptoms? The poison which ordinarily, when not so rife, not so virulent, shows itself in lesser degrees, in the shape of intermittent, in stronger is remittent, and, in its somewhat more potent influ-

ence, yellow fever, and in its most powerful, cholera. I dare say you may think this a very crude speculation on my part; nevertheless, I cannot but fancy that such ideas may, with more enlarged experience, be found to be something more than "the baseless fabric of a vision". We all of the profession strenuously opposed the idea of contagion; and, by our example, I trust we carried out the idea that *cholera is not contagious*. Fearful as has been the havoc which the disease has made, I believe the coolness, and disregard to the doctrine of contagion, has saved many lives; and, on this account, such a belief should not be admitted without the most decisive testimony.

I am, etc.,

H. N. CHIPMAN.

Nassau, 7th March, 1853.

AGITATE IN FAVOUR OF THE MEDICAL BILL.

LETTER FROM J. D. JONES, M.D., TO THE EDITOR.

SIR,—The much-desired and long-pending Medical Reform question is at last before the profession. I have weekly looked, but looked in vain, for some editorial suggestion or direction as to the best mode of agitating. For it must be well known to all that have had anything to do with political questions, that nothing short of agitation will wake the medical profession from its usual apathy. Its members always trust to some other hands than their own for doing all that is desirable or necessary; but rouse them, and they will be made to understand the necessity of individual as well as collective action.

I had an opportunity some years ago of witnessing this to a most extraordinary extent: I allude to the period when a "Medical Registration Committee" held its weekly meetings at the Freemasons' Tavern, under the able leadership of Dr. Lankester, as chairman. The immense power wielded by that committee, although up to that time most of its names were unknown to the profession, would be scarcely believed by those unacquainted with its operations.

Remembering this, it occurred to me that a similar demonstration ought to be made at the present time. I would suggest first a general meeting, not only of the Metropolitan Counties Branch of the Association, but of the profession generally; and at this meeting, a committee to be elected to organize a plan of operation.

Without some such agitation, this Bill, like all its predecessors, will die a natural death, or, more correctly speaking, an unnatural death; but, with the assistance of the great body of the profession, such a consummation may be readily avoided. I then say agitate, agitate, agitate! To you, sir, we look for direction in this affair. The present Medical Bill is the Bill of our ASSOCIATION, of which you are at the present moment the eye and the hand. Use these organs vigilantly and vigorously, and doubt not the successful result.

I am, etc.,

J. DALSTON JONES, M.D., F.L.S.

Dalston, April 9th, 1853.

THE MILITIA BALLOT:—MEDICAL MEN NOT EXEMPT.

LETTER TO THE EDITOR.

SIR,—You would confer a favour upon me, and upon many others, by suggesting to our Parliamentary friends the great hardships of the Militia Ballot to medical men. It presses with peculiar severity upon the juniors, who are often unable to meet the expense of providing substitutes. In reading over the various Acts, I find that clergymen are totally exempt. Surely our claim is far stronger than theirs, as their duties can all be performed equally well by deputy, whereas ours cannot. Will you kindly suggest, in your next number, what steps ought to be taken to remedy this grievance?

I am, etc.,

V.

Southwold, April 1853.

[As far as we can discover, our correspondent is quite right as to medical men not being exempt from the Militia Ballot. The Acts are 15 & 16 Victoria, cap. 50, and 42 George III, cap. 90. Most of the men have, we believe, been raised voluntarily under the recent Act; but still that is no reason why the statute should not exempt the medical profession as well as the clergy from serving. As to the steps which ought to be taken to remedy this grievance, we can suggest none better than frequently agitating the question in the *Times* and other newspapers, as well as in the medical journals; bringing the subject before the Branch Societies of our Association; and using every

influence that can be commanded with the government or with private members of parliament. The topic might furnish us with an excuse for preaching over again an old sermon from a new text; but from this we abstain, as we have already, in the present number, exceeded the bounds which convenience assigns for our leading articles. Let us remark, however, that all sorts of injustice will continue to be inflicted upon our profession, from ignorance of its claims and wishes, so long as there are no able and trustworthy members of our own body sitting in the House of Commons. It matters not whether our colleagues enter parliament as the representatives of universities, counties, or burghs; but they must, if they are to be of the slightest use, be *bona fide* practitioners—sterling men, business men, and men who are thoroughly imbued with professional sympathies and independent patriotism.—EDITOR.]

THE PLACE AND DATE OF ORFILA'S BIRTH, AND THE DISEASE OF WHICH HE DIED.

LETTER TO THE EDITOR.

SIR,—I do not find the place of Orfila's birth stated in any of the recent biographies which have appeared of the illustrious deceased, either in the French or English journals. I observe, however, that you mention, in your leader of 18th March, that "he was born in Spain, at the frontier town of Mahon." Will you kindly mention in next number, upon what authority you made that statement, and inform me, at the same time, of the date of Orfila's birth, and the immediate cause of his death?

I am, etc., G. Y.

Edinburgh, April 11th, 1858.

[In travelling in Spain in 1840, the writer of the leader referred to, when visiting the University of Valencia, was informed by one of the professors that Orfila was born at Mahon, and, from a note made at that time, the statement was transferred to the ASSOCIATION JOURNAL. The Spanish medical journals just received confirm the accuracy of the statement. The *Heraldo Medico* of 24th March has the following paragraph in its biography, which is quite in point, and describes Orfila's start in life:—

"Mateo José Orfila nació el 27 de abril de 1783, en Mahon, de una familia de comerciantes, que en 1802 le dedicó a la marina y le embarcó en clase de segundo piloto. En 1805, el joven marino, que se sentía inclinado al estudio de la ciencia médica, abandonó la carrera naval y fué a Valencia, donde empezó sus estudios de medicina. Un año después, ganó el primer premio de física y de química."

Mahon is not on the French frontier, as we stated, but is in the island of Minorca. The immediate cause of Orfila's death was pleuro-pneumonia.—EDITOR.]

MEDICAL FEES AT INSURANCE OFFICES.

LETTER FROM PATRICK FRASER, M.D., TO THE EDITOR.

SIR,—Having observed with great interest several letters which have been published recently in the Journal, respecting the non-payment of medical men, by Life Assurance Societies: I think it right to draw attention to our advertisement, which has appeared in the *Times* newspaper and elsewhere, in which it is stated that the Directors will "award a consultation fee of Two Guineas for every medical report rendered to the Company, when the proposed assurance is not less than 300*l.*; and of One Guinea when under that amount"; and that "the Directors will always, when practicable, appoint the medical attendant of the assured their adviser, as possessing, without doubt, the best means for forming an accurate opinion on the case". The Directors have also determined that all medical reports shall be transmitted direct to the medical officer of the Company at the head office in London.

I am, etc.,

PATRICK FRASER, M.D.,

One of the Medical Officers of the Company, and a Member of the Provincial Medical and Surgical Association.

Guildford Street, Russell Square, April 13th, 1858.

THE OBSOLETE SYSTEM OF THE ENGLISH UNIVERSITIES.

SIR,—In your leading article on the Success of Medical Improvements, at p. 287, you say: "The theology, the science, and the statesmanship of the Universities are sterile, sapless, monkish,

and mouldy". I do not object to this denunciation of the university system; but I think it would be well to accompany it with some allusion to the exertions which are now being made, not only by Parliament, but also by a reforming body within the Universities themselves, to remodel and modernize their system of education. It ought not to be forgotten that Dr. Ogle, the President of our ASSOCIATION, and Regius Professor of Medicine in the University of Oxford, announced himself, at the last Anniversary Meeting, as a reformer; and, to use his own words, said: "The truth is, that the system transmitted to us from a distant date, and well suited to the state of society a century or two since, is become, through those changes which time, in flourishing states, ever rapidly brings about, in some particulars obsolete." (*Provincial Med. and Surg. Journal*, Aug. 4, 1852, p. 387.)

The insertion of this will oblige

Yours, etc.,

OXON.

London, April 12th, 1858.

NEWS AND TOPICS OF THE DAY.

ROYAL COLLEGE OF PHYSICIANS:—DRAFT OF CHARTER.*

VICTORIA, by the grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, to all to whom these presents shall come greeting: Whereas the Commonalty or Fellowship of the Royal College of Physicians in London have, by their petition, humbly represented unto us, that the said college was incorporated by letters patent, bearing date the twenty-third day of September, in the tenth year of the reign of King Henry the Eighth, which letters patent were confirmed by an Act passed in the Session of Parliament holden in the fourteenth and fifteenth years of the reign of King Henry the Eighth, intituled "The Privileges and Authority of Physicians in London", and that by such Act of Parliament certain other powers and privileges were granted to the said commonalty; and whereas the said college has also represented unto us, that since the making of the said letters patent divers other charters have been granted to the said college: and whereas the said college has also represented unto us, that by an Act of Parliament made and passed in the present year of our reign, intituled "An Act making Provision for the Granting a New Charter to the College of Physicians", after reciting as or to the effect hereinbefore stated, and that it was expedient that certain changes should be made in the constitution of the said college, and particularly that new regulations should be made for the election of the officers of the said college, it was enacted, that it should be lawful for the said corporation to surrender all the charters which had theretofore been granted to them, other than and except the said charter of King Henry the Eighth; and also so much and such part of the last-mentioned charter as should be in anywise inconsistent with or repugnant to any new charter to be granted to them by us; and that it should be lawful for us to grant and for the said corporation to accept from us a new charter, which charter might make such alterations as should be deemed by us expedient in the constitution of the said corporation, and might, if we should so think proper, change the name of the same corporation; and further, that when and so soon as the said corporation, under their then present common seal, should have accepted any new charter so to be granted as aforesaid, the acceptance thereof should operate as a surrender of all the other charters of the said corporation, except the said charter of King Henry the Eighth, and should also operate as a surrender of the said charter of King Henry the Eighth, and as a repeal of the first-mentioned Act of Parliament, so far as the same should be inconsistent with or repugnant to such new charter; and further, that from and after such acceptance of such new charter, the said charter of Henry the Eighth should stand, and be ratified and confirmed, except so far as the same should be so surrendered as aforesaid: Provided always, that nothing therein contained should extend to authorize us to create any new restriction in the practice of physic, or to grant to the said corporation any new powers or privileges contrary to the common law of the land; and that no such new charter, whether the name

* Clauses 5 and 6 are drawn under the supposition that the Legislature will, in future, and without interfering with existing legal rights, or the privileges of the Universities of Oxford and Cambridge, require it to be established upon all physicians practising in England and Wales, as being created by the College of Physicians of England.

of the corporation should be changed or not, should in anywise prejudice, affect, or annul any of the existing statutes or bye-laws of the said corporation further than should be necessary for giving full and complete effect to the alterations which should be intended to be effected by such new charter in the constitution of the said corporation: now know ye, that we, taking the premises into our royal consideration, of our especial grace, certain knowledge, and mere motion, have granted, declared, ordained, and appointed, and by these presents, for us, our heirs and successors, do grant, declare, ordain and appoint, in manner following, to wit:

i. That the said corporation shall henceforth be styled, "The Royal College of Physicians of England".

ii. That the said corporation shall consist of fellows and members, including a president and council, four vice-presidents, four censors, a treasurer, and a registrar.

iii. That all the present licentiates of the said corporation shall be members of the said corporation.

iv. That each of the present extra licentiates of the said corporation may be admitted a member of the said corporation on the production to the said censors of the said corporation of testimonials of character which shall be satisfactory to the said censors, and on his assuring the said censors that he is not engaged in the practice of pharmacy, and on his paying to the said corporation a fee of fifteen pounds fifteen shillings exclusive of the stamp duty.

v. That every person practising as a physician in England or Wales, and who shall have taken the degree of doctor in medicine at any university in the United Kingdom of Great Britain and Ireland, after regular examination at least three calendar months previously to the date of these our letters patent, and also every person who shall have received a license to practise physic from either of the Universities of Oxford or Cambridge, and also every person practising as a physician in England or Wales who shall have taken the degree of doctor in medicine at any foreign university at least three months previously to the date of these our letters patent, after regular examination and after having resided during a period of not less than two years in an university, and also every person practising as a physician in England or Wales who shall have been for a period of not less than three months previously to the date of these our letters patent a fellow of the Royal College of Physicians of Edinburgh, or a fellow or licentiate of the Royal College of Physicians of Dublin, and who shall have been admitted as a fellow of such Royal College of Edinburgh, or Dublin, or licentiate of the Royal College of Physicians of Dublin, as the case may be, after regular examination, provided such person shall have attained the age of twenty-six years, and shall not be engaged in the practice of pharmacy, shall at any time within twelve calendar months from the acceptance of these our letters patent by the said corporation in the manner mentioned in the Act of Parliament hereinbefore stated to have been passed in the present year of our reign, be admitted a member of the said corporation, without any examination, on the production to the censors of the said corporation of his diploma and of such testimonials of character and professional qualifications as shall be satisfactory to such censors, and on his proving himself to be of the said age, and on his assuring such censors that he is not engaged in pharmacy, and on his paying to the said corporation a fee of fifteen pounds fifteen shillings exclusive of the stamp duty.

vi. That any person who after regular examination shall have taken a degree in medicine at any university in the United Kingdom of Great Britain and Ireland, or at any foreign university to be from time to time recognised by the said corporation, and who shall have attained the age of twenty-six years, and shall not be engaged in the practice of pharmacy, and shall have gone through such course of studies, and who shall have passed such examination before the censors of the said corporation touching his knowledge of medical and general science and literature, and complied with such other regulations as are or shall be required by the bye-laws of the said corporation, shall be entitled to become a member of the said corporation without being subject to any other election.

vii. That the present fellows of the said corporation shall continue to be fellows of the said corporation.

viii. That every member who shall be admitted a member of the said corporation as hereinbefore mentioned, who shall be desirous of becoming a fellow of the said corporation, shall be capable of being elected a fellow thereof, provided he shall, in addition to the examination hereinbefore mentioned, at any time after that examination, have passed such further examination before the censors of the said college, touching his knowledge of medical and general science and literature, and complied with

such other regulations, as are or shall be required by the bye-laws of the said corporation: provided nevertheless, that such member shall not be capable of being actually elected a fellow as aforesaid until he shall have been a member of the said corporation for a period of not less than four years.

ix. That during the period of twelve months, to be computed from the date of these our letters patent, the council of the said college shall have the power to nominate such members thereof as in the opinion of the council shall have distinguished themselves in the pursuit of science and literature, provided the members so to be nominated shall have attained the age of thirty years, without any limitation as to the period during which such members shall have previously been members of the said corporation, to be proposed to the fellows for election as fellows at meetings of the fellows to be holden, with due notice, for this purpose at any time before the expiration of the said twelve months.

x. That after the expiration of the period of twelve months, to be computed as aforesaid, the council of the said college shall have the power to nominate yearly such members thereof as in the opinion of the council shall have distinguished themselves in the pursuit of science and literature to be proposed to the fellows for election as fellows, provided the members so to be nominated shall have been members of the said corporation for a period of not less than four years.

xi. That the fellows of the said corporation shall be elected by ballot at a meeting of the fellows, and that after the expiration of the period of twelve months, to be computed as aforesaid, such meeting shall be held yearly on the twenty-fifth day of June, unless the same shall fall on a Sunday, and then on the twenty-sixth day of June; and that the first of such meetings shall be held on the twenty-fifth day of June (or twenty-sixth day of June), one thousand eight hundred and

xii. That if it shall at any time hereafter appear that any present or future fellow or member of the said corporation shall have obtained admission to the said corporation by any fraud, false statement or imposition, or that he shall have violated any bye-law, rule or regulation of the said corporation, then and in every such case, and after such previous notice to and such hearing of such fellow or member as under the circumstances the president and censors of the said corporation shall think proper, it shall be lawful for a majority of the fellows present at a meeting of the fellows to declare such fellow or member to be expelled from the said corporation, and thereupon every such fellow or member shall cease to be a member or a member and fellow of the said corporation, as the case may be, accordingly, and all the privileges granted to such member or member and fellow, as the case may be, shall cease and be extinguished.

xiii. That the present president of the corporation shall continue to be president of the said corporation until a new president shall be actually appointed in his place, and that upon the day next after Palm Sunday in the year one thousand eight hundred and , and on the same day in every subsequent year, a new president of the said corporation shall be elected at a meeting of the fellows of the said corporation; but the retiring president shall always be capable of being re-elected, and every president shall remain in office until the actual election of the new president.

xiv. That at the meeting of the fellows held for the election of the new president, the council of the said corporation shall, out of the first fifty fellows in the list of fellows of the said corporation, nominate some one of such fifty fellows to be proposed to the fellows of the said corporation to be by them elected president; but if the fellow so nominated shall not be elected president by a majority of the fellows present at such meeting, another fellow shall in like manner be nominated by the council out of the first fifty fellows in the list of fellows to be proposed as aforesaid, and so on until a president shall have been elected: the election of president shall be taken by ballot, and in case of any difference in the council concerning their selection of a president, the president nominated by the majority shall be proposed to the fellows, and in case of an equality of votes in the council, the senior fellow so nominated shall be so proposed.

xv. That in case of the death or resignation of the president for the time being, a new president shall, with all convenient speed, be elected in his place, such election to be made in all respects in the same manner as is provided in the last preceding regulation.

xvi. That at any time before or at the meeting of the fellows of the said corporation, after the meeting of the fellows at which the president of the said corporation shall have been elected, the president so elected shall appoint four fellows out of the first fifty on the list of fellows, which four fellows shall be called

vice-presidents, any one of whom may act as president in the temporary absence of the president, upon such president expressing his desire to such effect to any such vice-president, in writing, or to the registrar; and in case of the death of the president, the first vice-president for the time being in the list of vice-presidents shall act as a president until a president shall have been appointed, and the present president of the said corporation shall, at the meeting of the fellows of the said corporation next after the granting of these our letters patent, appoint four vice-presidents for the purposes aforesaid.

xvii. That the vice-presidents shall cease to be vice-presidents when a new president shall have been appointed in the place of the president by whom they were nominated.

xviii. That there shall be sixteen fellows on the council of the said corporation.

xix. That the present council of the said corporation shall continue to be the council of the said corporation until a new council shall have been actually elected in their place, and that on the twenty-second day of December next four fellows shall be elected to make up the number of the council to sixteen, and that on the twenty-second day of December, one thousand eight hundred and , and on the same day in every year (except when the same shall fall on a Sunday, and then on the twenty-third day of December) four of the council shall go out of office, and four fellows shall be elected of the council: but the fellows going out of office shall not be re-eligible until they have been one year out of office, and the fellows to be elected as aforesaid shall remain in office until others shall have been actually elected in their place; and that on the same day other fellows shall be elected to the council to fill up vacancies occasioned by death or resignation since the last election.

xx. That the council shall be elected by the fellows out of their own body by ballot, either by list or otherwise, as the said corporation shall from time to time determine by the bye-laws.

xxi. That in addition to the sixteen fellows so elected, the president, censors, and treasurer of the said corporation shall ex officio be of the council of the said corporation.

xxii. That the present censors of the corporation shall continue to be the censors thereof until new censors shall have been actually elected in their place, and that on the day after Palm Sunday, in the year one thousand eight hundred and , and on the same day in every subsequent year, four new censors shall be elected, and censors going out of office shall be re-eligible, and the censors to be elected as aforesaid shall remain in office until other censors shall actually have been elected in their place.

xxiii. That on the day for electing censors, the council shall nominate four of the fellows of the said corporation to be proposed to the fellows to be by them elected censors, but if any fellow or fellows so nominated shall not be elected a censor or censors by a majority of the fellows present at the meeting, another fellow or fellows shall be nominated at such meeting by the council to be proposed to the fellows, and so on until four censors shall have been elected. The election of censors shall be taken by ballot. In case of a difference in the council concerning the nomination of censors, the censors nominated by the majority shall be proposed to the fellows, and in case of an equality of votes in the council, the president or chairman of the council shall have a casting vote.

xxiv. That in case of the death or resignation of either of the censors for the time being, a new censor shall with all convenient speed be elected in his place, such election to be made in the same manner as is provided by the last regulation.

xxv. That the present treasurer of the corporation shall continue to be treasurer of the said corporation until a new treasurer shall be actually elected in his place, and that on the day after Palm Sunday, in the year one thousand eight hundred and , and on the same day in every subsequent year, the president shall nominate one of the fellows to be elected by the fellows as treasurer in the same manner in all respects as is before appointed for the election of censors by the fellows, and the treasurer shall be re-eligible, and every treasurer shall remain in office until a new treasurer shall be actually elected in his place.

xxvi. That in case of the death or resignation of the treasurer for the time being, a new treasurer shall with all convenient speed be elected in his place, such election to be made in all respects in the same manner as is provided by the last preceding regulation.

xxvii. That the present registrar of the said corporation shall continue to be the registrar of the said corporation until a new registrar shall be actually elected in his place, and that on the day after Palm Sunday, in the year one thousand eight hundred

and , and on the same day in every subsequent year, the president shall nominate one of the fellows to be elected by the fellows as registrar, in the same manner in all respects as is before appointed for the election of censors by the fellows, and the registrar shall be re-eligible, and every registrar shall remain in office until a new registrar shall be actually elected in his place.

xxviii. That in case of the death or resignation of the registrar for the time being, a new registrar shall with all convenient speed be elected in his place, such election to be made in all respects in the same manner as is provided by the last preceding regulation.

xxix. That the president, council, censors, treasurer and registrar shall be considered as remaining in office during the whole of the day on which their successors shall be elected.

xxx. That the said corporation may from time to time by a bye-law change the day hereby appointed for any election to take place, and if from any cause whatsoever any election shall not take place on the day hereby or by any bye-law appointed for that purpose, the same shall take place on some other day appointed for that purpose by the said corporation.

xxxi. That proxies shall not be allowed at any election.

And we do hereby, for us and our heirs and successors, further grant that the duties, powers and privileges of, and incident to, the said respective offices shall, except so far as the same are varied by these presents, and subject to any variations therein which may be made by the said corporation, continue to be the same as the duties, powers and privileges of the same offices respectively now are:

And we do hereby, for us and our heirs and successors, further grant that it shall be lawful for the said corporation to admit as a member of the said corporation any person who shall have exceeded the age of forty years, on the production to the censors of the said corporation of such testimonials of professional education as shall be satisfactory to such censors, and on passing such examination before the censors as shall be required by, and shall be satisfactory to the said censors, and such person shall, after such his admission as a member of the said corporation, be entitled to have and use the degree or designation of Doctor of Medicine:

And we do hereby, for us and our heirs and successors, further give and grant unto the said corporation full and lawful power and authority to hold, possess and enjoy, for the use and benefit of the said corporation, all manors, messuages, lands, tenements, rents, services, possessions or hereditaments whatsoever (whether the same are or shall be holden of us, our heirs and successors, or of any other person or persons whomsoever), already given, granted, sold, aliened, assigned, disposed of, devised or bequeathed unto or to the use of or in trust for the said corporation, and to have, hold, take, purchase, receive, possess and enjoy for the use of the said corporation any other manors, messuages, lands, tenements, rents, services, possessions or hereditaments whatsoever (whether the same are or shall be held of us, our heirs and successors, or of any other person or persons whomsoever), so as that such other manors, messuages, lands, tenements, rents, services, possessions or hereditaments hereinafter to be had, holden, taken, purchased, received, possessed or enjoyed by the said corporation, shall not at any one time exceed in value the clear yearly value of ten thousand pounds above all reprises, according to the value thereof when respectively acquired by the corporation:

And we do hereby, for us and our heirs and successors, further give and grant unto every subject or subjects whatsoever of us, our heirs and successors, whether incorporated or not incorporated, special licence, power, faculty and authority to give, grant, sell, alien, assign, dispose of, devise or bequeath unto the said corporation, for the use and benefit of the said corporation, any manors, messuages, lands, tenements, rents, services, possessions or hereditaments whatsoever (whether the same are or shall be holden of us, our heirs and successors, or of any other person or persons whatsoever), so as that the same do not, at any one time exceed in the whole the clear yearly value of ten thousand pounds above all reprises, according to the value thereof respectively when acquired by the said corporation:

And we do hereby, for us and our heirs and successors, further grant that all the said provisions in the said Act of Parliament of our present reign shall be, and the same are hereby expressly confirmed in such and the same manner to all intents, constructions and purposes as the same might have been by being herein repeated; but this present provision shall not be deemed in any way to weaken, control or affect the provisions of the same Act of Parliament or any of them:

And we do hereby, for us, our heirs and successors, further

grant unto the said corporation and their successors, that these our letters patent, or the enrolment or exemplification thereof, shall be in and by all things good, firm, valid, sufficient and effectual in the law, according to the true intent and meaning thereof, notwithstanding the not fully or duly reciting the said letters patent, or the date thereof, or any other omission, imperfection, defect, matter, cause or thing whatsoever to the contrary thereof in anywise notwithstanding: In witness whereof we have caused these our letters to be made patent: Witness ourself, at our Palace at Westminster, this
day of _____ in the _____ year of our reign.

ROYAL COLLEGE OF PHYSICIANS:—DEPUTATION TO LORD PALMERSTON.

On Wednesday, April 6th, a Deputation of the Fellows of the Royal College of Physicians waited on Lord Palmerston, at his official residence in Downing Street, for the purpose of urging upon his lordship the propriety of taking such immediate steps as may be deemed necessary to obtain a new charter for the College.

The Deputation consisted of the following Fellows:—Dr. Paris, President of the College; Dr. Monro, Treasurer; and Dr. F. Hawkins, Registrar,—the Elects; Drs. Todd, Crawford, Webster, and Owen Rees,—the Censors; Drs. Meryon, Wilson, Spurgin, Alderson, Waterfield, Burrows, Copland, Tweedie, F. Farre, Aldis, Nairne, Daniell, Gooden, A. J. Sutherland, Barlow, Sayer, Rigby, Risdon Bennett, Kingston, Weber, Gull, King Chambers, Henry Monro, Philp, Basham, George Johnson, Peacock, T. Thompson, Barclay, and Sieveking.

Dr. PARIS (President) opened the business of the Deputation by stating that the ancient charter under which the College had been incorporated, and which still regulated its proceedings, was now productive of serious inconvenience to the institution itself, to the medical profession generally, and to the public. The present charter was not ill adapted to the age in which it had been granted; but since railway travelling had made the nation like one great city, the divided jurisdiction which the College possessed with regard to licensing in the town and in the country occasioned great inconvenience to the members of the medical profession, gave rise to unpleasant feelings amongst them, and, in a word, led to results as little advantageous to the community at large as to the medical profession. He hoped that the noble lord would perceive the propriety of doing everything in his power to facilitate the introduction of a more satisfactory state of things. With his lordship's permission, Dr. Hawkins, the Registrar of the College, would submit a statement which would comprise in a few sentences all that need be said upon the subject.

Dr. HAWKINS then read the following statement:—

The President and Fellows of the Royal College of Physicians desire respectfully to represent to Lord Palmerston that they are charged by the legislature with public duties which, under the encumbrance of the present charter, it is impossible that they should perform satisfactorily to the profession, beneficially to the public, or creditably to themselves.

They are sure, therefore, that in earnestly requesting Lord Palmerston to obtain for them an amended charter, they shall not appear to his lordship to be importunate or unreasonable.

At present, the College, or more correctly, its Board of Elects, is compelled to grant to any one who applies, and who can pass a sufficient examination, letters testimonial entitling him to practise as a physician in the country, but not in London, or within seven miles round.

Such letters testimonial, or extra license, as they are termed, have the advantage of being exempted from very heavy stamp duty, which is imposed upon licenses for practising in London.

But it is obvious that restrictions upon practice, constituting a person a physician in one place and not in another, are wholly unsuited to the present state of society, and to the close connexion which now exists between the metropolis and the country.

It is certain also that they create class distinctions and dissensions, and that ultimately they lead to contempt of the law; an instance of which is, that some of those who are licensed for the country transfer themselves to London, and practise there, discreditably, because illegally.

Moreover, a large proportion of physicians who are practising in the country, many of them being physicians to county hospitals and large infirmaries, and possessing diplomas from Scotland, Ireland, the University of London, or the continent, are nevertheless deficient in the legal qualifications which the

law requires in this country; for the law of England recognizes no physicians except the licentiates and extra-licentiates of the College of Physicians, and graduates of Oxford and Cambridge licensed to practise; and the last have no legal qualification to practise in London.

It is much to be regretted that persons of education and character should be placed in such a position as to be infringing by their daily practice the common law of the land; and a vast number of the physicians so situated in the country have expressed themselves as most desirous of becoming members of the College, on the terms offered in the proposed new charter.

If, by means of this charter, the College of Physicians of London were made a College for all England, and the College itself improved in some respects as to its internal constitution, there is every reason to believe that much irregular practice, as regards the order of physicians, would be put an end to, and not recur again; and that the public would be enabled, which at present they are not, to distinguish between qualified and unqualified persons; that is, between those whose competence to practise has been properly tested, and others whose pretensions have never been inquired into, or avouched by trustworthy authority, and of whose qualifications there can be no assurance.

Therefore, on public grounds, and not for mere selfish or corporate purposes, the President and Fellows implore the aid of Her Majesty's Government to obtain for them a charter better suited than that with which they are now encumbered to the present state of society, and to the pressing requirements of the medical profession and the public.

FRANCIS HAWKINS, M.D., Registrar.

Royal College of Physicians, April 6th, 1853.

When the perusal of Dr. Hawkins's statement was concluded, Lord PALMERSTON said that he would give to the subject his earliest attention, and lose no time in taking such steps with regard to it as might be deemed necessary.

Dr. BURROWS thought it proper to direct the attention of the noble lord to this fact, that, although the Deputation appeared before him as the representatives of a body of physicians who resided in London, and were anxious to procure for themselves a new charter of incorporation, the object they had in view was one to the principle of which it was not to be anticipated that the slightest opposition would be offered by any other section of the medical profession. Not only were the Fellows of the Royal College of Physicians completely agreed among themselves on the subject of a new charter, but they had reason to believe that the profession out of doors viewed the question with unanimous interest, and were anxious that the College should obtain the object of their ambition. It was not simply out of regard for their own interests that the college desired to be remodelled; they were also influenced by considerations having reference to the welfare of the public and of the profession generally. They had to endure a pressure from without, and were not unfrequently reproached with insincerity for not having acted with sufficient energy and decision in the matter. He believed he was fully warranted in assuring the noble lord that, if the government could be prevailed upon to take the matter into their immediate consideration, they need have but little apprehension of encountering any opposition from the medical profession.

Dr. TODD reminded the noble lord that a short time since he had been waited upon by a Deputation from the Provincial Medical and Surgical Association, who represented very accurately the feelings of the profession in the country with reference to this matter. They stated what he believed to be strictly correct, that the bill which that Association so strenuously advocated was in entire harmony with the charter of the College.

Dr. HAWKINS respectfully submitted that, as the object which the College had in view was one in respect of which no opposition was to be anticipated, it might be as well if the government would direct their attention to it before they took in hand any other matter relating to medical affairs which might give rise to diversity of opinion.

Dr. TODD remarked, that the object which the College had in view was simply to procure the enactment of a law authorising them to surrender their present charter, and to obtain a new one. In that object no other considerations were involved.

Lord PALMERSTON accepted a copy of the statement read by Dr. Hawkins, and repeated his assurance that the subject to which it referred should receive the earliest and most serious consideration of the government.

The Deputation then withdrew.

LORD LYTTTELTON'S VACCINATION BILL.

[House of Lords, April 12th.]

LORD LYTTTELTON moved that the House go into committee on the Vaccination Extension Bill. It was needless to dwell upon the importance of the subject, and he would content himself with quoting some facts from the [unpublished] report of the Epidemiological Society, a new society, of which Sir B. Brodie, Dr. Babington, Dr. Southwood Smith, Dr. Bright, and other eminent medical men, were members. His lordship then read an elaborate statistical statement, from which it was made to appear that, in countries where vaccination was compulsory, small-pox prevailed much less than in England: it likewise showed that vaccination was most general in this country where the greatest facilities were afforded, and where the local authorities best remunerated the vaccinators. He thought that, sooner than pay the fine, the great majority of parents would have their children vaccinated. Another objection urged to the bill was, that it was an undue interference with the liberty of the subject. This objection was founded upon an entire misapprehension of the nature of the evil. He should consider that allowing children to be unvaccinated was distinctly a criminal act, and deserved treatment as such. Moreover, the principle of the bill had been admitted. Inoculation, as their lordships knew, was illegal; and the exposure of children so as to spread infection was also punishable by the legislature. As to the pay of medical officers by the unions for these duties, he feared this was a matter with which he could not meddle. He had contemplated fixing a *minimum* rate of payment in the bill, but he was told that no such provision could be introduced. With regard to the general subject of the remuneration given to the medical officers of unions, he could not wonder that the Poor-law Board and the government felt very great difficulty in interfering on this subject, when they saw medical men of the highest character entering into these contracts year after year, and duly carrying them out. The alterations he proposed did not affect the principle of the bill, and he hoped there would be no objection to them on the part of their lordships.

The Earl of SHAFTESBURY supported the bill by arguments and statistics. As to the amendments of which notice had been given, he must say he agreed in thinking that children should be vaccinated from the arm of a healthy child, for no doubt there was a prejudice against the virus from animals. If the bill were properly carried out, and remuneration given to those engaged under it, he believed they would soon exterminate the disease; and he had not the slightest doubt that generations to come would thank their lordships for the attention they had bestowed on that important subject, and on the blessings that had resulted from it. (Hear, hear.)

The Earl of ELLENBOROUGH observed, that the act now in force had been introduced by him some years ago, but he must admit that it had not produced all the good he had expected from it, and that the noble lord had made out a case for very material alterations. He did not object to the principle of compulsion, but he confessed that it appeared to him rather hard to compel people who had strong feelings against vaccination to bring their children to be vaccinated, unless all their prejudices as to the manner in which the operation was performed were consulted, and every possible facility afforded to them. He therefore would propose a clause to the effect that, in every case, vaccination should be performed from the arm of a healthy child, and that provision should be made for giving people facilities for the operation; and he would suggest to their lordships to adopt some regulations which he had found very useful in his own neighbourhood. He was not indisposed to adopt a plan which appeared to be carried out in other countries, and affix a penalty for sending unvaccinated children to school. Nay, more, he was willing to extend that principle to every person applying for poor-law relief; and he saw no reason why penalties should not be imposed on unvaccinated persons in factories, as it was in schools, manufactories, and large assemblages of persons, that the disease was most apt to spread. He begged to suggest that each union should be divided into proper vaccination districts, as it would prove very inconvenient if they were too large. Finally, in order to give their lordships time to consider the subject, he proposed that all the amendments in the bill should be printed, and that the bill should be re-committed at some future period.

LORD LYTTTELTON assented to the latter proposition.

The House then went into committee, and, several amendments having been agreed to, the House resumed, and the bill was ordered to be read a third time.

MEDICAL BENEVOLENT COLLEGE. At the last meeting of the Council, Lord Dynevor and Thomas Copland, Esq., F.R.S., were unanimously elected Vice-Presidents of the College. Thanks were voted to the Bishop of London for his Sermon in aid of the funds, and to the Rev. Thomas Garnier, of Trinity Church, St. Marylebone, for granting his pulpit on that occasion. The latter gentleman was also elected an Honorary Governor of the Institution.

ST. CLEMENT'S CHURCHYARD. On Monday next, the 18th instant, this churchyard is expected to be closed by the order in Council, under the Nuisance Removal Act. Strange to state, a number of burials, more than ordinary, have lately occurred in this churchyard, (in the very heart of London,) and the parishioners are anxiously looking for the final closing.

ROYAL COLLEGE OF SURGEONS.—PASS LIST. The following gentlemen, having undergone the necessary examinations for the diploma, have been admitted members of the College at meetings of the Court of Examiners.

On the 8th instant:—W. E. Smith, Bristol; J. H. Drew, Southampton; John Jones, Swansea; Alfred Brown, E.I.C.S., Steeple Bumpstead, Essex; Maurice Griffith Evans, Blaenafon, Caermarthenshire; Robert Thomas Simons, Sydney, Australia; John Hawkes, Wells, Somerset; Robert Walker Jenkins, Mansell Street, Goodman's-fields; Horace Kersey Debenham, Queen's-road, Dalston; Robert Dempster, Sussex; William George Nicholas Manley, Barking, Essex; and Thomas Lawes Rogers, Alvediston, Wilts. On the 11th inst.:—Thomas Watson Hudson, Whitehaven, Cumberland; George Ross, London; James Earl Moreton, Marton Hall, Cheshire; Frederick Augustus Strutter, Wickhambrook, Suffolk; Clarence Chapman, Devonshire Street, Portland Place; James Joseph Cregeon, Deptford; Cecil Calvert Cogan, Winsley, Bradford, Wilts; William Forbes Goss, Paternoster Row; William Henry Dodge, St. Austell, Cornwall; Edward Pratt, Appledore, North Devon; and Cyril John Vincent, Oxford.

EPIDEMIOLOGICAL SOCIETY. The annual meeting of this Society was held on Monday. The following gentlemen were elected office-bearers for the year 1853-54.—**PRESIDENT:** Benjamin Guy Babington, M.D., F.R.S.—**VICE-PRESIDENTS:** Thomas Addison, M.D.; Richard Bright, M.D., F.R.S.; Sir B. C. Brodie, Bart., F.R.S.; Sir Wm. Burnett, Knt., K.C.B., K.C.H., F.R.S.; Sir C. M. Clarke, Bart, M.D., F.R.S.; Rev. Thomas Dale, M.A., Canon Residentiary of St. Paul's; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., Worcester; Sir John Liddell, C.B., M.D., F.R.S.; Sir James McGrigor, Bart., K.C.B., K.C.T.S.; John Nussey, Esq.; John Probert, Esq.; G. L. Roupell, M.D., F.R.S.; Thomas Southwood Smith, M.D.; Colonel Sykes, V.P.R.S.; Thomas Watson, M.D.—**TREASURER:** Thomas Addison, M.D., vice-president.—**HONORARY SECRETARIES:** J. O. McWilliam, M.D., F.R.S., R.N., and J. H. Tucker, Esq.—**MEMBERS OF COUNCIL:** C. A. Aikin, Esq.; A. Beattie, M.D.; James Bird, M.D.; Samuel Brown, Esq.; A. Bryson, M.D., R.N.; J. Hall Davis, M.D.; Charles Hawkins, Esq.; E. Headland, Esq.; T. Hunt, Esq.; W. Jenner, M.D.; Waller Lewis, M.B., F.G.S.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Gavin Milroy, M.D.; A. Nisbett, M.D., R.N.; Hon. Joceline Percy, M.P.; G. Pilcher, Esq.; E. Seaton, M.D.; F. Sibson, M.D., F.R.S.; E. Sieveking, M.D.; Professor Simonds, R.V.C.; J. Snow, M.D.; C. R. Walsh, Esq.; Erasmus Wilson, Esq., F.R.S.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

- CHAMBERS, Richard, M.D., at 38, Wimpole Street, on April 6th. The deceased was found dead in his bed.
- DICKINSON, William Lindow, Esq., surgeon, at Workington, Cumberland, on March 19th, aged 65. We hope to have room on an early occasion to give some account of the career of this excellent man.
- DYER, Thomas, Esq., Surgeon, at Ringwood, Hants, suddenly, from disease of the heart, on April 2nd, aged 62.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

- LUDLOW, Harvey, Esq., elected Surgeon to the Metropolitan Free Hospital.
- REES, George Owen, M.D., elected Examiner in *Materia Medica* to the University of London, in the room of the late Dr. Pereira.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XVI.

LONDON: FRIDAY EVENING, APRIL 22, 1853.

NEW SERIES.

PERISCOPIC REVIEW. The simultaneous claims upon our columns of long ORIGINAL COMMUNICATIONS and of urgent PUBLIC QUESTIONS, have obliged us for several weeks past to delay much valuable matter destined for this department. We can assure several correspondents who have addressed us on this subject, that we have no intention of permanently curtailing the *Periscopic Review*. We do not expect to be often called on to occupy so much space with editorial articles and official documents, as in last number.

MEDICAL REFORM. Correspondents are informed that the Bill in its modified shape is unfortunately not yet before us.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

PROGRESS AND PROSPECTS OF THE VACCINATION BILL.

THROUGH the courtesy of Lord LYTTELTON, we have received a copy of his amended bill, to which we intend next week to direct attention, in connexion with other important documents which we have received. The bill, in its passage through committee in the House of Lords, has been somewhat improved; but it still remains insufficient for the purpose which it is intended to fulfil—the repression of small-pox through the instrumentality of a national system of vaccination. We have therefore much satisfaction in being able to announce that no immediate attempt is to be made to hurry the measure through the House of Commons; and that some time will be afforded for the profession to express its opinion through the press, through the Branch Societies of our ASSOCIATION, and through such other organized communities of the medical profession as are disposed to assist in the solution of the vaccination question. It is no small satisfaction to have obtained a certain amount of delay; but unless the profession act zealously, it will at the last be saddled with a burden too heavy to be borne.

Unfortunately, the Epidemiological Society, or rather the Small-pox Committee of that body, in place of using its influence to retard the progress of the bill till the whole profession shall have been fairly consulted regarding its principles and its provisions, has limited its exertions to endeavours to improve Lord Lyttelton's measure. This they have attempted by private conferences, and by hurrying their long-promised report, in an avowedly unfinished state, into the hands of the Home Secretary. In these circumstances, it becomes necessary to impress upon Parliament and upon the public, that, however valuable may be the information collected and about to be published by the Epidemiological Society, medical men are not disposed to admit the right of that society, or of any other society, to arbitrate between the profession and the legislature.

The Provincial Medical and Surgical Association, we sub-

mit, has a peculiar right to crave delay till such time as it can give an opinion upon the contemplated measure; seeing that its own report on the subject, published many years ago in its *Transactions*, is the earliest and still one of the best public documents upon the vaccination question. It may in fact be considered as the germ of that more extended inquiry of the Epidemiological Society, which has been brought to so untimely a birth by the appearance of the bill now under discussion. A panic was produced; and the notion was hastily taken up, that to delay legislation till the materials for legislation had been collected, published, and publicly discussed, was impossible; that the passing of a vaccination act during this session was inevitable; and that all the Society could do, was to make the measure as much as possible in accordance with its own views. It is our duty as watchmen—guardians appointed to a watch-tower of the profession—to give the alarm, and, so far as we can, prevent our fellow-practitioners from being taken captive by a *coup de main*. We feel also that it is as much a social as a professional duty to continue earnestly and firmly to crave delay, as we well know that no public good can be gained by passing a vaccination act which does not meet with the general concurrence of the medical profession, by whom its machinery must mainly be worked. Again, medical men have surely some right to be consulted regarding this, and all other public questions, which either concern their science or their social position.

It will be our duty to bring before the ASSOCIATION the valuable Report of the Epidemiological Society, which has been kindly placed at our disposal for that purpose, by Dr. SEATON, the Secretary of the Small-pox Committee. From this and other documents, we hope to enable members of the ASSOCIATION to form correct conclusions upon the whole subject. In the mean time, we would call attention to Mr. Ceely's letter at p. 256; and again implore our colleagues to use every means in their power to obtain DELAY.

INCOME TAX.

BEFORE this number can come before our readers, they will have seen by the newspapers that Mr. Gladstone has asked Parliament to renew the Income Tax, without making any distinction in the rate to be levied on fixed and precarious incomes. As it is universally felt that the tax, though nominally sought to be reimposed for only a limited number of years, is in all probability to be made permanent, the success of the government financial scheme in its integrity, will be felt as a serious evil by our profession. The unequal Income Tax has, however, to sustain the assaults of many influential parties before it can obtain the sanction of the House of Commons, so that we still entertain a slight hope that the prayer of our petitions may find an answer in equity.

ORIGINAL COMMUNICATIONS.

OBSERVATIONS ON THE RECENT PROGRESS OF SURGERY.

By JAMES MILLER, Esq., F.R.C.S. Edin., F.R.S.E., Professor of Surgery in the University of Edinburgh, Surgeon in ordinary to the Queen for Scotland, etc.

(Read before the Medico-Chirurgical Society of Edinburgh, April 6th, 1853.)*

A RETROSPECT of the advance of surgery during the past thirty years may be attempted in two ways; first, by entering upon the details, *seriatim*, of what may seem the most prominent and important improvements in its practice; or, secondly, by classing these improvements into groups; and so taking a more general and comprehensive, and probably safer view of the subject. While the latter plan is preferable, it will, nevertheless, be necessary to adopt both methods, briefly, in the present instance. And first, as to the *catalogue raisonnée*.

1. INJURIES OF THE HEAD. Within the last thirty years, these have become better understood in their nature and risks, and are more successfully treated. The use of the trephine has been limited in ordinary fracture, even with depression; and extended in the case of punctured fractures, even without head symptoms. Both are improvements; operation is withheld, when not absolutely required; operation is performed, when, without it, formidable and fatal evil is inevitable. The use of the instrument is also better understood in cases of compression by blood or pus; and the whole subject has been cleared of some, at least, of the uncertainty and difficulty with which it is almost necessarily connected.

2. AFFECTIONS OF THE EYE. The anatomy, pathology, and therapeutics of the eye, as improved, might well occupy a paper by themselves; and amply testify how what have been termed the specialties of surgical practice should not, and need not, ever give rise to anything in the slightest degree inconsistent with the highest honour and strictest integrity in the conduct of those who practise them. Had not the eye and the ear been carefully and successfully investigated, as they have been, in their disease and cure, by men of science and skill (as Travers, Lawrence, Mackenzie, Dalrymple, and Toynbee) devoting special attention to them, we should have been at this day deprived of much valuable knowledge; not only as affecting diseases of these parts in particular, but intimately connected with the nature and treatment of disease in general. We should have neither seen nor heard much that concerns us, both as patients and practitioners, to see and hear. It is only when the specialties of surgery are cultivated—or rather laid waste—by occupants of unhallowed motive and sinister design, seeking only their own gain, and careless of all other interests beside—it is only then that humanity and our art suffer injury; it is then, and then only, that the stain of quackery, in its most offensive form, attaches to the self-degraded practitioner—whether the specialty be in the eye or in the ear; in the skin or in the spine; in the bladder or in the blood; in the uvula or in the uterus.

The diagnosis and treatment of all the ophthalmiæ, the dealings with cataract, the management of orbital abscess and orbital tumours, might all be dwelt upon. But I content myself with but one example of safe and suitable

* This paper was read in answer to a somewhat similar paper by Mr. Syme, discussion of which had been aborted at the previous meeting of the Society. The author, in his public capacity, felt it to be his duty to comment on that paper, on two grounds:—1. That the Edinburgh Surgical School might not seem to claim for itself almost the entire mass of alleged improvement, introduced into the practice of surgery during the last thirty years. 2. That the mind of the profession, more especially of its junior part, might not be led away, without warning, into the belief that surgery mainly consists of operative or other mechanical details; and that in this direction its main improvement lies. The paper is necessarily fragmentary and otherwise imperfect; and does not pretend to be anything like a full exposition of the entire advance of modern surgery.

The same feeling which constrained the author to read this paper, lays an obligation on him to publish it.

extension of the operative department of surgery, in the application of myotomy for the cure of strabismus—proposed by Stromeyer, first practised by Dieffenbach—an operation liable to abuse when performed either imperfectly or unnecessarily; but nevertheless, in good hands, a decided boon, if not to suffering, at least to squinting humanity.

3. The subject of MYOTOMY is an extensive one. The application of its principle ranges from the orbit to the toe; and, when united with the principle of *subcutaneous wound*, embraces the whole body; constituting a most decided improvement in practical surgery; affording relief at the cost of little pain, less blood, and no permanent injury. In this department the great mass of modern surgeons have been all at work; but the names of those just mentioned probably deserve a special pre-eminence.

4. RHINOPLASTICS have undergone a decided advance; not so much, perhaps, in restoration of the whole organ, as in those partial repairs, of which the part so often stands in need. The best of such operations, for obvious reasons, are those which, by simple incision, subcutaneous or direct, effect the desired repair with little or no detraction from neighbouring parts. One of these deserves special notice—restoration of the columna nasi, as invented and practised by Mr. Liston; effectively restoring the lost portion of the nose, and at the same time decidedly improving the upper lip. The names of Liston and Dieffenbach rank high in rhinoplasty.

5. AUTOPLASTY. Almost the whole of this subject, in its better aspect, is new; including, as already stated, repair by simple incision, as well as by transplantation; the former the higher art of the two. It were endless to particularise its many applications. It may be enough to mention its connexion with loss of the lip. In the practice of the incisional variety, the names of Blasius (1836), Dieffenbach (1838), Serre (1842), and Syme (1847), may warrant special notice.

6. AFFECTIONS OF THE WINDPIPE. Here is a vast store of improvement in pathology, diagnosis, and therapeutics. The more successful application of tracheotomy to oedema glottidis and the extraction of foreign bodies; the proof of its general preferability to laryngotomy, especially in the case of disease; the withholding of all operation in hopeless croup; its occasional use in otherwise fatal laryngismus; and perhaps its palliative power in certain cases of aneurism, are instances. But above all, the true surgical reformer is delighted by the *prevention* of this operation, by means of the simple application of remedial agents to the affected parts; for example, that which has been specially practised and pointed out by Mr. Green. The "swabbing of the windpipe"—liable to miscarry, from either imperfect or excessive introduction of the instrument—is, in skilful and judicious hands, one of the decided improvements of our art: it exhibits simplicity, science, and skill, *versus* bistoury and blood.

7. The JAWS. Here operative surgery has been extended with good effect, in the case of tumour, more especially of the non-malignant kind. Mr. Lizars first proposed excision of the upper jaw; Messrs. Liston and Syme practised bold and successful operations on both the upper and lower jaws; and the Edinburgh school thus occupies a good place in connexion with this operative advance of the art.

8. STAPHYLOGRAPHY. This, at all times a difficult and uncertain operation, has been rendered more simple and sure by Mr. Ferguson; observing what muscles, in their action, strain and separate the parts, and paralyzing these by previous section.

9. The TONSILS, too, have benefited in the matter of evacuation of their abscesses, and removal of their obstinate projecting hypertrophies by simple ablation. Besides, they have been rescued from certain specialists who enjoyed an exclusive reign in that department, as brief as it was undeserved.

10. SPINAL AFFECTIONS have also been delivered, in a great measure, from the hands of some specialists, who, in seeking to do themselves alone good, did others much harm; and these affections are now—thanks to the common sense

of modern surgeons—as well understood and as well treated as any other disease.

11. **MAMMA.** In chronic affections of the female breast, not of a malignant kind, pressure has proved a most valuable agent of cure; more particularly as applied by means of the hydrostatic or aerostatic system of Dr. Arnott.

12. **HYDROTHORAX.** Relief, at least temporary, and it may be a powerful adjuvant to final cure, is obtained by surgical treatment formerly too much neglected. By means of a small trocar and canula, employed with great care so as to avoid the casualty of atmospheric entrance, the fluid is safely withdrawn: respiration is at once freed, and remedial measures have a much better prospect of action in the future. For this useful application of simple surgery we are indebted mainly to Messrs. Cock and Hughes; not forgetting one whom we all esteem and love, Dr. Alison of this city.

13. **GASTROTOMY** includes a great deal of the heroic in modern operative surgery. In the case of ovarian or other tumours, which are slowly enlarging, causing little inconvenience, and not immediately endangering life, it will probably be argued by most prudent men, that to these the extension of surgical operation on the vast scale of the sterno-pubic incision, or even by smaller wound, has been no improvement. But in those cases of complete intestinal obstruction, where the crisis is urgent, death at hand, and agony great; and when by operation it is possible by exposing the seat of obstruction* to afford relief, to protract existence, and perhaps even to obtain a cure—not arriving at such conclusions by mere theory, but by the aid of recorded experience already obtained—then it seems a serious responsibility, under such circumstances, to withhold our surgical aid, difficult, and doubtful, and dangerous though it be. It is a practising of the lowest part of our art, but little removed from the mechanical trade of butchery, no doubt; but, according to our present gifts, it is all that is in our power; and ought it to be withheld? The casual reputation of the surgeon, or even of surgery, must not find a place among the elements for consideration; the question simply is, can life be preserved or protracted, or suffering saved? To attempt relief is a plain but painful duty; the crisis may be neither sought nor shunned. The addition of living and intelligent hours—much more, of days and months—may prove of countless value to a fellow-being.

14. **HERNIA.** The revival of Petit's method of extra-peritoneal section, in many cases of strangulated hernia, has been established mainly by Mr. Luke and others of the London school; rendering the operation at once more simple and more safe. But, better still, in opium and chloroform we have obtained important and additional assistance in the taxis; often preventing resort to operation altogether.

15. **URINARY DISEASE.** It were superfluous to dilate on the vast strides which have been made here in the science of surgery. By the aid of the microscope, and by the advance of pathology, great power is now given to detect the origin of disease, and prevent its cumulative establishment; more especially in the case of urinary concretions. Prevention is better than cure, at any time; and more especially is it better than that peculiar kind of cure which comes by resort to the knife. And here, among many other examples, is found a striking illustration of the great benefit which accrues from the maintenance of an "*entente cordiale*" between the friendly, not rival, powers of surgery and medicine; powers which have but one aim and one science; powers which cannot thrive under estrangement and separation, and whose true prosperity must ever depend on mutual support and incorporation. To tell the truth, were there ever to be a final and complete divorce—a result we cannot contemplate even imaginatively without dismay—it is very plain that surgery must prove the greater sufferer.

16. **LITHOTRIPSY.** Since the first labours of Civiale, in

* The profession will doubtless agree with Mr. Phillips, that operation is warrantable only when there is something like an accurate diagnosis of the site of the obstruction.

1823, just thirty years ago, this mechanical department of surgery has not ceased to make progress. And little doubt remains, in the impartial mind of any one, that such a degree of perfection has been at length obtained in the construction and use of lithotriptic instruments, as to render this operation decidedly preferable to lithotomy, in regard to safety of performance, in not a few cases of stone in the bladder. In the list of operations it certainly stands *minor* to lithotomy; and of two evils we are bound to choose the least. Were this operation, however, or indeed any other, to be practised as a mere specialty, and had recourse to in all cases applying for relief, much harm must inevitably accrue. The surgeon here must be in one sense ambidextrous: equally qualified to cut or to crush; and ready to apply to each case the treatment which to him seems the more suitable.

17. **LITHOTOMY.** Perhaps the principal advance in this has consisted in the operation having been saved from certain innovations which were no improvements, but the contrary; such as, the invention of curious staffs, and the revival of the gorget, or the use of knives simulating the gorget. At the same time, the rules of practice in the received lateral operation have been established and confirmed; for external, limited internal wound; dilatation rather than incision, but incision rather than laceration or bruise; in the prostatic wound, mere notching and thorough division alike reprehensible; the necessity for cutting the inelastic tendinous texture near the prostatic base; the avoidance of bruise and tear in the bladder, as well as in the wound; especial regard to prevent, by all means, infiltration of urine; and last, not least, due preparation of the patient, more especially in regard to his urinary secretion, before the operation is performed. In this good work all surgeons have been labouring; but if one deserves mention over his fellows, it is Liston.*

18. **THE VENEREAL DISEASE.** More than thirty years ago, the venereal disease was treated by mercury with much and melancholy excess. Under the pressure of the many evils which accrued from this, a reaction took place; and, like most other movements of this kind, went too fast and too far. From treating invariably and copiously with mercury, the reactionists came to treat always with none; and evils, though of a lesser kind, emerged in the form of imperfect and protracted cures. In progress of time, the wise and prudent have come to believe in and to seek for that happy medium which is presumed to exist between all extremes, and in which "*tutissimus ibis*". No doubt there are some extremists still, unmoved by experience, and undeterred by ill-success; some out-and-out mercurialists, some non-mercurialists to a grain. But the received practice undoubtedly is—to give no mercury in any form or shape, when experience has shown that the disease can be cured without it—and such cases happily constitute a majority; but at the same time to give mercury, yet with a cautious and economical hand, in those cases in which experience has shown that a cure cannot be obtained satisfactorily, if at all, without it; and such cases do most certainly exist. But, better than all, thanks to the exertions of Ricord and others, the disease may be aborted in its infancy, and "punched out", without any constitutional treatment whatever; again constituting that prevention which is better than all cure. Let me state, however, that the only mention which one mode of prevention of foreign growth deserves here—namely, that by cold-blooded inoculation†—is to enter it into that category which by Mr. Carlyle is somewhat emphatically termed "scoundrelism".

19. **HYDROCELE** has been simplified in its cure by the use of tincture of iodine as an injection; an improvement due to Mr. Ranald Martin, of Indian celebrity.

20. **CIRSOCELE** too, in its radical cure, has been shorn of

* This eminent surgeon was, at one time, too neglectful of the due preparation of his patient.

† Not the test of a suspected venereal sore already existing; not the notion of curing advanced and chronic syphilis by the addition of a new and fresh poison; but the attempt, by introducing modified syphilis into the healthy human frame, to render men, women, and children, subsequently proof against that contagion.

some of its risk; experience having shown that instead of dangerously interfering directly with, and obliterating the veins, by means of needle, or ligature, or cautery, it is enough in some instances to apply gentle but equally adjusted pressure at the groin. This improvement is mainly due to Mr. Curling.

21. **FUNGUS TESTIS.** Modern surgery has done a good work of reclamation here. Sir Benjamin Brodie (1834) had shown that the fungus was part of the testicle, and that instead of being shaved off or dissected out, it ought to be reduced and recovered by cicatrization of the sore. Mr. Curling, (1843) having more plainly demonstrated the projection to consist of the tubular structure, changed by abnormal deposit of a simple inflammatory kind, strongly reprobated excision, and advised that the part should be treated by pressure applied by means of adhesive strap over dossils of lint—with the double view of repressing the fungus under absorption, and at the same time drawing the integument over it towards approximation; thus obtaining cicatrization of the wound, while the testicle gradually regained both its normal bulk, and its normal position in the scrotum.

Mr. Syme (1845) has proposed and practised repression in another way, by cutting off the callous margins which sometimes edge the sore, separating by dissection the integument around, and bringing the line of wound at once into apposition by suture. Should anything like primary union occur, the period of cure will thus be abbreviated; but otherwise, the method by compression of the fungus, with traction of the integument, seems preferable, because obviously more consistent with the general principles of surgery.* And it would seem that advance in this direction, rather than with the knife, is the more sure way to reach perfection in this item of our practical art.

22. **AFFECTIONS OF THE BLADDER** are greatly better understood and better treated within the last thirty years; thanks to the labours of surgeon and physician alike—Brodie, Prout, and a host of others. Among them, Lallemand has certainly done service, by directing attention to the remedial application of nitrate of silver to the posterior part of the urethra, the neck of the bladder, and the bladder itself; as well as by elucidating the nature of a peculiar ailment of undoubted existence and sad importance, but not wholly indicated in the phrase *spermatorrhœa*; and rescuing it from the heretofore almost exclusive grasp of the most false, foetid, and foul, of all quackeries.

23. **STRICTURE OF THE URETHRA.** The use of caustic has been abandoned, as a destructive agent; it is used only, and that very seldom, as a sedative and alterative, in parts specially affected by irritable excitement. The simple use of the bougie, both by perforation and pressure, has become better understood and more highly appreciated. The medical treatment of the urine and its organs, greatly advanced in perspicuity and precision, has proved a most powerful auxiliary to surgical manipulation. For the worst class of strictures, which will not yield to aught else, the knife is still reserved as a last resort; and in those which are at all permeable, though it may be with much difficulty, Mr. Syme has established an improved principle of operation; dividing the stricture throughout its whole extent, on a grooved staff, by direct incision; the cure to be afterwards completed by use of the bougie in the ordinary way. In these several ways, the treatment of this disease has made good progress; but, alas! we cannot yet say that its cure is perfect. Surgery will not rest satisfied, we trust, till the knife has been banished, almost if not altogether, from this portion of its practice; and even the bougie restrained within narrower limits than it is. To medicine and surgery conjoined, the obstacles surely cannot prove insuperable, which stand in the way of removal by absorption of the redundant non-malignant deposits, and consequent changes

of structure, which occur in the course of this mucous canal.*

24. **ANEURISM.** The Hunterian operation has been simplified and improved, by freeing the incision from all tear or bruise; by isolating the arterial coats thoroughly, but only at the point of deligation; and by carefully avoiding all injury to the vein, and every other contiguous texture whatever. But from the Dublin school has emanated a scientific and successful revival of pressure, applied to aneurisms which are external and accessible, founded on the principles of the Hunterian operation, and carrying out those principles more thoroughly than even did the ligature. With this—the ligature—intromission with a sound portion of the artery could not always be secured, even in the case of popliteal tumour; but modern pressure escapes this difficulty by proving successful to cure the aneurism, while it is so slight in its application as not to be likely to injure the arterial or venous coats. The theory is beyond cavil; its successful practice has been demonstrated. The authentic records of surgery now show that such pressure, well applied, cures certain external aneurisms, on the average, as rapidly, as easily, much more safely, and at least as permanently, as does the ligature.† Under such circumstances, the conclusion seems inevitable, that the surgeon who shuts his eyes to this improvement

* It is not meant that the use of instruments may be expected altogether to cease; but only that in the management of this disease the surgeon shall become less exclusively dependent on them than he is at present; deriving more and more doebstruent power from non-mechanical means.

† That compression is an *effectual* cure for aneurism, is proved by the fact that, during eight years, the ligature has only been used three times in Dublin, either in hospital or private practice, in two of these cases the aneurism being traumatic. During this period, compression has been employed in 39 cases. In 30 of them, a perfect and complete cure was the result. In 1, compression was discontinued, and the tumour did not increase in size. In 2, the ligature was used successfully. In 3, amputation was necessary, the patient surviving in each instance. Three patients died; 1 from erysipelas, and 2 from disease of the heart. It is quite clear, from the details of the cases in which amputation became necessary, that the ligature would not have lessened the necessity for removal of the limb; but, on the other hand, would have almost certainly induced gangrene, and thus lessened the probability of saving the patient's life. The death from erysipelas occurred during a prevalence of this disease in the hospital, galvano-puncture having been employed, and the patient himself having unduly increased the amount of pressure.

The average duration of treatment in these cases, was twenty-five days. The average of the eight most favourable cases was only twenty-eight hours. In one case, seven hours and a half only were required for total solidification of the contents of the sac. There can be no doubt that, from the admission of a patient to the time he leaves the hospital, after the employment of the ligature, a longer average stay than twenty-five days takes place, and that a very speedy cure cannot be hoped for.

Statistical returns of the success of the ligature give the following results:

"In Dr. Crisp's work (*Diseases of the Blood-vessels*, p. 235 *et seq.* 9) are detailed the particulars of 188 cases, where the vessel was secured for popliteal or femoral aneurism. Of these—

Died from the effects of the operation	35
Recovered after suffering subsequent amputation	11
Recovered after sloughing of the sac	9
Recovered after mortification of the toes	1
Recovered after sloughing of the integuments	1
Total	67

So that more than the fourth of these cases either terminated fatally, or were maimed for the rest of life.

"Mr. Phillips's experience and researches are the next to be considered. They are thus quoted by Mr. Storks (*Lancet*, May 1846):—"Mr. Phillips collected 171 cases of aneurism affecting the lower arteries, which were submitted to the Hunterian operation. Of these cases, 57 (or exactly 1 in 3) were unsuccessful, in which all the patients except 2 died, not of the disease, but of the operation. Amongst the successful cases, secondary hæmorrhage took place 15 times. 50 of these cases required ligature of the femoral artery, 39 of which were unsuccessful; thus giving a mortality of 2 in 3 in the artery most frequently subjected to the operation."

"Mr. Norris (*American Journal of Medical Science*, October 1849) gives a fuller report, his table embracing 177 instances (135 of popliteal and 22 of femoral aneurism) where the operation was performed. He gives the surgeon's name, the sex and age, situation of disease, its duration, periods when each operation was performed, when the ligature came away (if fatal), the date and cause of death, with reference as to where the particulars of each case are recorded. There is, then, no getting behind this collection, no stating, in general terms, that statistics are wrong, and cannot be relied on. If truth is spoken in the first published details, it is re-echoed in Mr. Norris's table.

"He gives, I say, 177 cases, of which—

Died from the effects of the operation	38
Recovered after subsequent amputation	6
Recovered after suppuration of the sac	10
Recovered after gangrene of the foot	2
Total	56

So that nearly one out of every 3 cases operated upon, either terminated fatally, or were, to a certain extent, maimed for the remainder of their lives." (pp. 148-50.)—*British and Foreign Medico-Chirurgical Review*, October 1851, pages 470-471.

* A wound inflamed and suppurating, having failed to adhere, tends to gape, and should be allowed to do so—stitches, with this object, being cut away. Here, however, under such circumstances, the stitches must be maintained, on account of their mechanical effect alone; otherwise the fungus would again protrude, and the parts resume the *status quo*.

alike of his science and art, and refuses to practise it, incurs a serious responsibility each time he applies his knife and ligature for the cure of an external aneurism to whose treatment a more gentle, more scientific, and safer means, is proved to be applicable; the more so, when it is further observed, that, should compression fail, the way is still left open to the treatment by deligation on at least as favourable terms as if compression had not been employed. The liberal and enlightened surgeon will at all times cheerfully acknowledge that the science which saves resort to the knife is ever a true improvement; and that when, in the successful cure of aneurism, he compares Hunterian pressure with Hunterian ligature, the former is the higher art of the two.*

25. THE AFFECTIONS OF THE RECTUM, at one time the almost undisputed domain of quackery and imposture, have been restored to science and common sense—a good work due to many good surgeons; among others, to Boyer, Brodie, Dupuytren, Ribes, and Syme. It is enough to mention the detection of the internal aperture in fistula, and the simplifying of the operation in that disease; the pathology and treatment of hæmorrhoids, external and internal; the detection and management of fissure and ulcer; the dilatation of simple stricture; the introduction of O'Beirne's defæcating tube, capable of affording great relief in many cases of peril and distress; and the ignoring of all long bougies adapted for the removal of the promontory of the sacrum, or at least intended only for the benefit of the miserable specialist, whether unprincipled or uninformed, who certainly (whatever his poor, deluded, hypochondriac patient might do) could never lay claim, in any sense, to the "*mens conecia recti*".

But it were alike ungenerous and unjust to withhold due meed of praise from the sister art of medicine, in the improved treatment of affections of the rectum. She has taught us that congestions occur here, as elsewhere, from causes situated remotely from the parts affected, and are to be treated accordingly; that irritable ulcers, abrasions, and fissures, are invariably connected with, and almost always dependent on, disorder of the general system, and that, when they occur in the rectum, they are to be treated in conformity with that general law; that spasms of muscles here, as in other mucous canals, are often dependent solely on irritation in some other and perhaps distant part, and that such spasms are often best removed by removal of this irritation, irrespective of all local treatment whatever; that in all cases the most successful local treatment will prove but temporary and deceptive, if not associated with careful attention to the *prima via* and general health; and that it is a limited *half-surgery*, worthy not of modern, but of ancient times, which rests content, here or anywhere else in man's living frame, with the mere work of the hands.†

26. FRACTURES. The nature of the process of reunion has certainly become better understood; and the restless ingenuity of man has not been idle in inventing mechanical means to assist it. Of the many varieties of modern splints, however, we need not speak, save to felicitate ourselves that, among so many, there must be surely some improvements. But the system of M. Seutin—the immobile apparatus, or starch bandaging—may be safely set down as a step taken in the right direction; such apparatus, when applied in the proper time and way, saving the practitioner much trouble, the patient much annoyance, and certainly contributing to rapidity and certainty and perfection of cure. Ununited fracture has had a more definite treatment assigned to it: in the recent and slighter cases, the starch and immobile apparatus; failing that, subcutaneous puncture; that failing, the seton, or Dieffenbach's pegs.

* Of course, no one supposes that pressure is ever to supersede ligature altogether in aneurism; but only in certain cases. As in some cases lithotomy is preferable to lithotomy, resection to amputation, etc.

† Fissure and ulcer of the anus often require the use of the knife, along with notwithstanding constitutional treatment. In not a few cases of these affections, and in many more of anal spasm, ordinary treatment will wholly supersede operation. In no case whatever can immunity from return be expected, unless constitutional and local treatment have been conjoined. To cut the sphincter and merely because it is affected by spasm, is as irrational as to open the windpipe in every case of laryngismus.

27. DISLOCATIONS. In the examination of injury, what surgeon has not constant cause of thankfulness to anaesthesia for facility and accuracy of diagnosis, as well as for vast facility and safety in effecting reduction? The best auxiliary in this task is on all hands admitted to be chloroform.

28. LOOSE CARTILAGES IN JOINTS. By applying the principle of subcutaneous section, at the instance of Messrs. Syme and Goyrand, these and other foreign matters have found a safer mode of exit than was wont to be; and the knee-joint profits specially by this. The operation, as first practised, has been subsequently improved; and it is likely that in not a few cases even this improved operation may be superseded by a yet simpler procedure—fixing the cartilage at a safe part of the joint, with a view to its being first incorporated, and perhaps afterwards absorbed, in the permanent locality. This latter principle of treatment was first proposed by a writer on systematic surgery, in 1844; and has lately been adopted and modified by Mr. Syme.

29. AMPUTATION is a necessary evil in surgery; it can never be wholly superseded; but its practice has of late years been much improved in many ways, as regards the hæmodynamic compression, the formation of the incisions, deligation of the vessels, and dressing of the wound. In this good work, the name of Mr. Liston stands pre-eminent.

Revival of amputation at the ankle, and the making of a much better cushion there for the ends of the bones, is a decided and important improvement, due to Mr. Syme.

30. RESECTION OF JOINTS. To the same surgeon we are indebted for the revival of this operation, more especially in connexion with the elbow and shoulder joints. Resection, when successful, is greatly preferable to amputation, as it entails less risk to life, and leaves the limb but little impaired in function.

31. DISEASES OF JOINTS AND BONES. Infinitely superior to either resection or amputation, is that improved knowledge and treatment of joints and bones which averts or arrests disease, and obtains a cure without recourse to operative surgery at all, whether of the conservative or destructive kind. Many a limb which, thirty years ago, would have been doomed to amputation, is saved by resection of its joint; and many a limb which, ten or twenty years ago, would have been saved only by resection, is now saved by the combined appliances of medicine and surgery, without resort to any knife work whatever. Conspicuous in this good work—because its founder—must ever remain the name of Brodie. (1818, 1st ed.)

32. TREATMENT OF WOUNDS AND SORES. Here very decided advance has taken place, in greater simplicity and efficiency of management; superseding cumbrous greasy poultices by simple water-dressing—ointments by lotions—sutures by attention to position, and the use of tenacious, non-irritating straps; discarding sponges as fomites of evil; limiting greatly the use of cauteries, more especially the actual; never treating a disease merely by its name, nor employing any general panacea;* and by constant care of the system, both as to medicine and hygiene, averting or mitigating those many inflammatory evils which prove such sworn foes to safety and speed of cure. In the Edinburgh school, it need not be said that Liston's name stands foremost in this practical reform.

33. TUMOURS. The pathology of these growths has been wholly recast; thanks not to surgery alone. Alas! however, the cure has not kept pace with the knowledge of the disease. The majority of all tumours are remediable only by the knife; and the majority of malignant tumours refuse to obey even this stern power. It will be true improvement when excision proves more effectual than it is; it will be a better improvement still, should the knife be superseded by simple discussion. In that direction lies the true advancement of surgery.

* A sore is liable to shift its character suddenly and often; and the treatment requires to be altered accordingly. Further, the "varicose ulcer" may and does include every kind of sore—healthy, weak, indolent, irritable, etc. And the assertion that for the "varicose ulcer," any form of lotion, ointment, or other application, is an invariable cure, is calculated to retard surgery.

Even now, it is something to know, better than we did, what tumours admit of discussion under our present gifts, and what do not; what tumours are curable in any way, and what are in all ways incurable. To attempt the impossible in either class of cases, must ever prove fertile of unmitigated evil.

34. GANGRENA SENILIS is better managed than in the days of Pott. He saw the evil of stimulant constitutional treatment, yet scarcely avoided it. Marjolin, more alarmed, flew to decided antiphlogistics (1824); Broussais (1827) adopted that extreme still more thoroughly; and Dupuytren (1833) still, for a time at least, was over-antiphlogistic. Then, however, the oscillations between the two extremes of heroic stimulants and heroic antiphlogistics settled down; and the pendulum has for some time rested at or near the *juste milieu*. In 1835, the principles and practice of the modern day in this disease were publicly taught and recorded by Mr. Liston.* In 1841, the same subject was contributed to by Mr. Syme, but with probably too near an approach to the antiphlogistic stringency.† The difficulty obviously is, to feed the patient and yet starve the disease (*inflammatio debilis*); to cure the disease, and yet not kill the patient.

Such are some only of the improvements introduced into surgery of late years, considered in detail. In connexion with these, but few names have been specially mentioned, simply because it is most difficult for an impartial inquirer to determine to what individual men the improvements are really due. Surgeons are one vast company, all travelling over the same wide field, at different times, with different strength and speed, and, it may be, sometimes by somewhat different ways. Some men there are, each specially bent on discovery, with downward head and limited vision, thinking little either of their present neighbours or of those who have gone before, and with mind and eye intent only on their own limited track; and some of these may often cry "Eureka!" little knowing that the same thing had already been discovered by a previous traveller on the self-same path: or, perhaps, that while they lit on it, other eyes and hands had at the same time also found it. The truth is, the hunters are in packs, whether they will or no. There is no room, in the present day, for an exclusive and solitary following. Discovery, improvement, advance, in the main, are due to surgery rather than to schools; to surgeons rather than to any generation.

Time permits me to touch but briefly on the second and more important part of the subject: viz., to classify the modern improvements, and embrace them in a more general view.

I. MEDICAL TREATMENT OF SURGICAL DISEASE. I would venture to state, as the greatest improvement, that which has united the sister sciences of surgery and medicine more closely and inseparably than ever they were before; the two combined constituting the best specimen of "rational medicine" that humanity has ever known. As already observed, their science is one and the same; it is their practice only that differs. The constitutional, or medical, treatment of wounds and sores, of bones and joints, of urinary affections, of spasms and pains, etc., has done more to advance true surgery in our day than any other agency whatever. Disease is more accurately and easily detected, and is more speedily subdued; texture is better saved, function is more speedily and thoroughly restored; a more complete victory is won, while the frame is less shaken in the struggle; and the opprobria of our art—its operations—are in consequence being limited within an ever narrowing circle.

With this may be classed a better knowledge of, and a more confiding trust in the reparative powers inherent to the frame—the *vis medicatrix nature*: the surgeon having come to know, better than ever he did before, that it is often his cue to stand by, and see the part or system evolve its own cure.

II. THE INTRODUCTION OF ANÆSTHESIA has revolutionized our operative department, and given a bright page to the history of modern surgery. For anæsthesia we stand indebted to our transatlantic brethren; and it needs not to be stated here to whom we owe the use of chloroform, as yet the best anæsthetic. The detection of injuries; the reduction of fractures, dislocations, and herniæ, the absence of pain, and the increased power of endurance during operations—these words all call up a host of thoughts and experiences in the minds of practical men, testifying to the great value of this discovery. It has been a progress in the right direction; often preventing operation, and mitigating its horrors when inevitable.

III. THE TREATMENT OF ANEURISM BY COMPRESSION, with all efforts of a similar kind, constitutes also a sound step in advance; doing, by means of science, and in comparative safety, what the rough art of the knife does more rudely, and with comparative risk.

IV. MYOTOMY, and SUBCUTANEOUS SECTION in general, have contributed much to the relief of suffering and deformity, at the cost of little pain or danger. Inflammation, hæmorrhage, and the other risks of open wounds, having been avoided, joints have been supplied, eyes liberated, necks straightened, foreign bodies extruded, noxious fluids drained away, feet and legs restored to form and function; and all without danger or loss.

V. RESECTION OF JOINTS, as already stated, has saved many a limb, and perhaps not a few lives also, which otherwise must have yielded to amputation.

VI. THE MAJING OPERATIONS, such as amputations, dissections of tumours, and excision of bones, have been simplified in their performance, and, to some extent, made more safe. Besides, they have been extended to the remedy of some forms of disease previously rated incurable; and this, though the least of modern improvements, and hanging on the very outskirts of true advance, is still to be gratefully acknowledged. *Remedium anceps et durum, melius tamen quam nullum.*

To sum up in more general terms:—

1. The greatest improvement has undoubtedly been that application of the general principles of science common to the healing art, whereby all operative interference has been averted.

2. The use of anæsthesia, when operation has become inevitable, deprives it of all immediate pain, as well as of much of its formidable shock.

3. Minor operations have been successfully substituted for major ones; a very capital improvement. And

4. The greater operations, while performed more seldom, are done better.

In conclusion, may I be permitted to state wherein true surgical improvement and advance seem to consist, and wherein they do not? Not in extending the field of operation (save only in those extreme cases which, according to our present gifts of healing, are otherwise incurable); not in devoting the sole energies of surgery to its handicraft and mechanical details, an art in some respects but little removed from that of the mere tradesman; not in seeking to do with the knife what can be at least as well done without it. But in cultivating Surgery's head rather than her hands; in prosecuting, more and more successfully, that general knowledge, common to surgery and medicine, whereby the diseased part is to be cured, and not cut, far less cut out or cut away; in fulfilling the great mission given to our god-like profession—"Assuage suffering, heal injury, remove deformity, but with the slightest possible cost of flesh, and blood, and life; and, by every reasonable and available means which ingenuity can invent, and experience warrant, avert death." This last duty, while humanity lasts, must no doubt entail a certain amount of knife-work, and that even of the baser sort, as in removal of hopelessly crushed and mangled limbs. But let us ever remember that, in general, rather than cut the worse than Gordian knot of disease, it is better patiently to unravel the tangled cord,

* Lancet, March 14th, 1835, p. 850.

† "Enforcing a strictly vegetable diet".... "This starving plan may appear rather startling"—Syme, *Contributions, etc., to Surgery*, p. 6.

leaving its several strands entire. That diplomacy which, though perhaps prolonged and fluctuating, yet terminates in peace, is better far, and shows a higher skill, than that which, hot and gusty, at once takes up the sword. Let us remember that there is much truth in the quaint Hindoo apothegm—"He that knows herbs, is a man; he who knows mercury, is a god; but he who knows the knife alone, is a demon." Let us seek to acquire the utmost dexterity and tact in all operative and other mechanical details of surgery; let us be ready at a moment's warning, when stern necessity demands, to undertake the most fearful and formidable knife-work, in that calmness which sense of duty, mingled with sense of power, can alone bestow. But let there be no ground for any one pointing to surgery as some Shylock, ever whetting her weapon, and demanding "the pound of flesh" which is "written in the bond". Let her show rather Portia's spirit, seeking mercy, and, by some easier way, saving the victim from all claims of the stern creditor Disease. Let no one have ground to say that surgery is again to become a thing of mere handicraft in its peculiar and special phase, and that it may once more be annexed to physica as little other than a menial serving-man. Let us draw more close the bonds—not servile, but friendly—which unite the two branches of our common profession, and arm in arm, with kindred spirit and kindred aim, go forth as brethren, and dwell together in unity.

Edinburgh, April 1858.

CLINICAL NOTES ON RHEUMATISM.

By JOSEPH BULLAR, M.D., Physician to the Royal South Hants Infirmary.

THE most severe acute disease admitted into the wards of this Infirmary, during the winter, is rheumatic fever, and its usual serious complication is the inflammation of the pericardium or internal lining of the heart. During the winter of 1851-2 the heart was affected in most of the cases admitted; but this winter (1852-3) the lungs, and not the heart, have been affected, and in a sufficient number of cases to shew the epidemic constitution of the season.

CASE I. December 30th. Ann B., aged 27, a domestic servant, had been indisposed for two months with cold, cough, and pains in her legs, but was not laid up from work until two days before admission, when she was seized with rheumatic fever. On admission she had severe pain, swelling, and redness of the joints of the elbows, wrists, knees, and ankles; she had a rapid full pulse; a loaded tongue, dry, and brown in the centre; profuse acid sweats; and cough, with quickness of breathing. There were fine crepitating *râles* over the posterior surface of the left lung, the lower lobe of which was dull on percussion, and did not expand fully; this passed on to complete hepatization. The expectoration, which was at first scanty and rusty, became copious, muco-purulent, and greenish, as if tinged with bile. The secretions from the bowels were drab-coloured and offensive.

At first she was freely purged with saline purgatives with some relief. On the sixth day of the disease she was ordered two grains of calomel, with one grain of opium, at bedtime, and two drachms of Rochelle salts in the morning; and to be repeated, if necessary, so as to insure at least two liquid stools daily. On the tenth day, the dose of calomel and opium was diminished one half, which she continued for twelve nights, with her saline purgative in the morning. This gave her quiet nights; and the symptoms gradually improved; but although the joints were well, yet, as the tongue was still coated, the lower lobe of the left lung not pervious to air, and the secretions still light and offensive, a pill, containing one grain of hydrargyrum cum creta, with a grain of Dover's powder, and three grains of rhubarb, was ordered to be taken every night. It was continued for ten nights; when, as the tongue became clean, the secretions natural, and the lung permeable to air, it was discontinued; and in a week she was discharged well.

Although the whole of the left lung was inflamed, and the lower lobe completely hepatized, she was convalescent in a month. She was strong, rather plethoric, but of a good constitution. The state of the tongue, and the offensive light-coloured stools, indicated the necessity of unloading the liver; and as the general symptoms improved under this treatment, no specific remedies were employed for the pulmonary complication.

CASE II. Samuel D., aged 32, a carpenter, had had rheumatic fever twice previously; once when 18, when he was confined six months; and a second time, for two months, six years ago. He was admitted on January 18th. He had been ill a fortnight before admission, and confined to his bed five days. He looked pallid and debilitated; he was helpless, as all his large joints were swollen and painful. His pulse was rapid; his tongue dry and brown; and he had no sleep. The day after admission, cough came on, with shortness of breath and rusty expectoration; and on examination, the right lung was found inflamed. In the upper lobes, crepitating *râles* were heard posteriorly, and there was dullness on percussion over the lower lobe, which soon became hepatized. The treatment consisted in two grains of calomel and one grain of opium at night; which, after a few doses, was diminished to half the quantity; and a draught with two drachms of sulphate of magnesia and half a drachm of carbonate of magnesia in the morning, repeated in the afternoon, if necessary, to secure a free evacuation of the bowels. The stools were at first lumpy, light-coloured, and offensive; but the medicine brought away copious bilious stools, and the tongue became moist.

He found much relief from his harassing cough from this mixture:—

Rx. Vini antimonii tartratis ʒj.

—ipecacuanhæ ʒj.

Syrupi papaveris ʒij.

Oxymellis scillæ ʒij.

Liquor ammoniæ acetatis ʒij.

Misturæ camphoræ ad ʒviij. M.

Fiat mistura, cujus sumat partem sextam ter quotidie.

The calomel and opium at night, and the saline purgative, were continued for three weeks, with gradual improvement of all his symptoms. In a month he was convalescent, but was weak, with a tendency to pain and swelling of his hands. He improved under quinine, and five weeks after admission was discharged. The hepatized lung was quite permeable to air, expanding fully; but he still had some cough.

CASE III. February 3rd. Thomas H., a strong, vigorous young man, aged 23, was admitted under Dr. Oke. Three weeks before, he had caught cold from exposure to wet, with cough, hoarseness, and loss of voice; followed in a week by rheumatic inflammation of his knees, ankles, and elbows, pain in the back, great dullness, and no sleep. On admission, besides the usual symptoms of acute rheumatic fever, he had pneumonia of his left lung with complete hepatization of the lower lobe. The following pills were ordered:—

Rx. Hydrargyri chloridi gr. j.

Extracti aloës aquosi gr. j.

Extracti colchici acetici gr. ʒ

Pulveris opii gr. ʒ. M.

Fiat pilula ter die sumenda.

He continued this for a week; and it was then taken twice a-day for another week, and then once for a few days. It acted freely on his bowels, with marked and gradual improvement both of the rheumatic and lung symptoms. On the 14th he left his bed. The lower lobe was still impermeable to air, but it was gradually restored to a healthy state, and on February 21st he was discharged.

In the following case the only internal organ affected was the lungs, though it did not run into hepatization.

CASE IV. Jan. 29th. James P., aged 33, a waiter, had been confined to his bed with rheumatic fever a fortnight before admission. It came on with severe shivering and much pain in the larger joints, so that he could not bear the bedclothes to touch him; he had sleepless nights, and some cough. On admission, he was so weak and helpless as

to be unable to sit up in bed: all the large joints were painful and somewhat swollen, and the ankle joints were also red. The tongue was dry and brown; he had no quickness of breathing, but cough, with expectoration of tenacious mucus sticking to the vessel, and of the rusty pneumonic colour; but there was neither the fine crepitation nor dulness on percussion; and the only stethoscopic symptoms were moist *râles* in the back parts of both lungs. Two grains of calomel and one of opium at bedtime, with half-an-ounce of castor oil in the morning, for three days, brought away copious foetid, light-coloured stools, with general relief. The calomel and opium were then diminished one-half, and a draught with two drachms of sulphate of magnesia and half-a-drachm of carbonate of magnesia given in the morning. The tongue soon became moist and cleaner, and all the symptoms gradually improved. He left the infirmary on the 20th of February, convalescent.

CASE V. During this period there was another case which might belong to the same class. The patient was a young woman, who had been for some time in delicate health, and her prominent symptoms were severe pains in her limbs and back, which were aggravated at night, and which seemed to be of a rheumatic character. On Dec. 24th, she became feverish with some cough; and on examining the chest on the 27th, the greater part of the right lung was found to be dull and impermeable to air, with true crepitating *râles* above it. Her convalescence was slow, but her treatment did not require any better means.

REMARKS. In neither of these cases was there any affection of the heart; and as the hepatization of the lung was recovered from, it must be considered a fortunate circumstance that the effusion was poured into the substance of the lungs rather than into the pericardium, or upon and within the heart. One advantage the lungs must possess is in the relief which copious expectoration must afford; so different from a shut sac, where absorption alone can remove the effusion. In one of these cases, where the patient was plethoric and young, the expectoration of mucus, which looked green with bile, was very profuse, and must have greatly assisted in relieving the over-loaded system. The chemistry of expectoration from the lungs, and especially the recent valuable researches of Dr. Beale on the expectoration in pneumonia, in which he has shown that the chlorides which are deficient in the urine during pneumonia, are present in great quantity in the sputa, are in accordance with the rational notion that copious expectorations from mucous membranes are channels by which waste and superfluous matter is got rid of, and it is a branch of investigation very promising of results, and most worthy the attention of chemical physicians. The treatment in these cases was tried on the principle that the system had been over-loaded, and that nature required assistance in her attempts to relieve herself; and as the liver is one of the chief organs of such eliminations, the means were essentially purgative—a moderate dose of calomel and opium at night, and a saline purgative in the morning, so as to insure at least two loose stools. At first, two grains of calomel and one of opium at bedtime, reduced in a few nights to half that quantity, with two drachms of sulphate of magnesia and half a drachm of carbonate of magnesia in the morning, and repeated in the afternoon if necessary, and continued until the symptoms yielded and the tongue became clean, were the chief remedies. When the cough was troublesome, a mixture with ten minims each of antimonial and ipecacuanha wine, with half a drachm each of syrup of poppies and oxymel of squills every five hours, gave relief; and strict farinaceous diet, without any broths, was enjoined, with tea and lemonade as drink. In all the cases, on admission the tongue was so loaded as clearly to indicate the necessity of aperients. On this simple plan these cases proceeded satisfactorily; neither became at all unmanageable; nor did it seem necessary to treat the pneumonia otherwise than as a symptom of the rheumatic fever.

Southampton, April 1853.

CASES ILLUSTRATING THE EFFECTS OF THE WARM BATH IN ASPHYXIA: WITH REMARKS.

By JOSEPH C. S. JENNINGS, Esq.

(Read before the Bath and Bristol Branch, March 24th, 1853.)

CASE I. DROWNING: RESUSCITATION AFTER TWENTY MINUTES' IMMERSION: WARM BATH: DEATH.

A. A., aged 80, threw herself into the river Avon, the water reaching to her waist. She was carried by a rapid current three hundred yards down the stream, and round several sharp curves, rolling over in her course; and finally sank in a deep hole. She was then carried under water a distance of forty yards, where her further progress was arrested by a tree growing in the middle of the river, in which her clothes were entangled; her head and body still remaining submersed nearly on the bottom.

I was present when the body was taken out. The time of complete submersion had been at least twenty minutes. The countenance was livid, and the tongue protruded from the mouth. I immediately applied my mouth to hers, but with some difficulty, from the circumstance of the jaws being toothless, and the muscles thoroughly relaxed. However, holding the nose with one hand, and compressing the thorax with the other, I began to inflate the lungs, and persevered for ten minutes, when I was relieved by the arrival of a strong man, to whom I relinquished the task of inflation, while I went for a galvanic battery. I previously directed the body to be stripped of wet clothes, enveloped in four blankets, and laid on a board, to avoid damp from the earth. I also directed frictions to be applied. On my return, I found the lips quivering, and feeble attempts at respiration. I immediately applied one wire to the precordial region, and the other to the head and neck, in the course of the pneumogastric. The heart began to act, and respiration was, in the course of a minute, thoroughly established. The patient speedily began to groan loudly, and continued to do so for four hours, during which time I continued the galvanism. At the end of that period, she was still unable to speak, there being almost complete insensibility; the power of swallowing, had, however, returned, and she took half a glass of brandy. She was then carried home (nearly a mile), groaning loudly all the while; and placed in a warm bed. Hot bottles were applied to the surface of the body; but, as it still continued cold, and the patient comatose, I directed a warm bath to be prepared, which was speedily done. After being placed in it for three minutes, she looked about with great anxiety of countenance, and attempted to raise herself. I was just about to speak to her, when I perceived that she convulsively grasped her chest with both hands, and then fell forward in a state of syncope. I immediately lifted her on the bed; but she only gasped a few times. I then applied the wires, but without avail; and found it impossible to inflate the lungs, although I introduced a flexible tube into the trachea.

I have introduced this case to the notice of the Association, as I am anxious to learn whether galvanism is usually resorted to at receiving houses in such cases, and with what benefit; also whether the warm bath may not frequently, especially at such an advanced age, produce syncope, and so be likely to prove rather injurious than beneficial.

CASE II. ASPHYXIA FROM CARBONIC ACID GAS.

Aaron Hillier, aged 60, accompanied by Eli Knee, aged 22, descended into an ice-house, twelve feet in depth. Hillier was going down the ladder first, with a lighted candle; but had not proceeded many steps before the light was extinguished. He returned, and, having re-lighted the candle, again attempted to descend; but again the light was extinguished. Ignorant of the cause, he procured another light, and a third time went down. This time he reached the bottom, when the lantern was heard to fall. Knee then went down, followed by two others, all three holding each other by the hands. On reaching the bottom of the ladder, Knee became insensible; and it was with great difficulty that he could be brought up.

water was then thrown into the house; but Hillier was not brought up for nearly an hour.

On my arrival, about half an hour after Knee had been extricated, I found him respiring feebly, much convulsed, and totally insensible. After applying the electro-galvanic current, at intervals, for half an hour, he was able to articulate, but remained insensible to what was going on around him for a long time. At length he recovered.

As soon as Hillier was brought up, I inflated the lungs, and applied electro-galvanism for an hour and a half. Frictions and hot blankets were also resorted to. The surface was very cold, in consequence of the large quantity of water which had been thrown upon him while lying on the ice. Respiration and pulsation at the wrist had both ceased; but, after continuing the current for the time above stated, the jugular vessels became much distended, and the face livid. I then opened the jugular vein, and about half a pint of blood flowed freely. As the body and extremities remained cold, and no attempt at respiration could be perceived, I placed him in a warm bath, but found, within two or three minutes, that galvanism ceased to produce even convulsive action, and that any further attempts to restore animation were useless.

REMARKS. As regards the first case, there can be no reasonable doubt as to the length of time during which the woman was totally immersed. A boy, who saw her walk into the river, ran by the side exhorting her to endeavour to get out, until he saw her finally sink in deep water. He then ran a mile to give the alarm; and an equal portion of time, necessarily occupied by him in so doing, must have been spent by those who came to render assistance. It is to be feared that many lives are sacrificed, under the supposition that the period of immersion has been too long for any efforts to be successful.

I found it requisite to continue the galvanism as above described, as the respiration became feeble and almost imperceptible whenever it was discontinued. While the patient was being carried home—a distance of a mile—and after she was placed in bed, she continued to groan loudly without the assistance of the battery; but the jugulars were much distended, and the lungs and brain probably congested from the long immersion and cold weather.

The ice-house had been opened for some time the day previously to the accident which befel the two men. Might not the carbonic acid have been generated by the oxygen supplied to the carbon of the decomposing and fermenting straw and faggots, upon which the ice was placed? The same parties had been down on the preceding day, when there was no foul air. If this be correct, such accidents may be prevented for the future.

We constantly find, in medical works, or in charts containing lists of remedies in cases of accident or poisoning, the warm bath recommended as of great value. We must, however, remember that nothing is to be more dreaded than syncope; for then the functions of respiration and circulation are almost or altogether suspended, even although previously thoroughly established. In cases, then, of asphyxia, or (speaking more properly) of apparent death by apnoea, frictions and external dry warmth will restore the excitability of the reflex functions; but, after restoring, we may again exhaust by the continued application of one stimulant, even warmth. But by employing, at intervals, electricity, warmth, and other stimulants, we shall excite the reflex function without exhausting or destroying it.

The cold douche also, if employed immediately after the poor man had been exposed to the carbonic acid, might have saved him by exciting the reflex function; particularly as each bucketful carried with it a current of atmospheric air, which would have been inhaled with each sudden inspiration.

The battery used in the case of drowning was a powerful four-celled Daniell's (kindly lent by W. H. Fox Talbot, Esq., of Lacock Abbey), with a large coil and regulator, and in good working order. The other used was Smee's, by Messrs. Horne and Co., and was such as is commonly employed for medical purposes.

Abbey House, Malmesbury, Wiltshire, March 1853.

CASE OF MALIGNANT DISEASE OF OVARIES: SUDDEN DEATH.

By GEORGE KING, Esq.

CASE. Miss H., aged 47, a dressmaker, single, of cachectic diathesis, applied to me on 27th November 1852.

A short time previously, she had discovered a swelling in the left iliac region, which she assured me she had only very recently noticed. On examination, I found a tumour of considerable size occupying the greater part of the iliac region of the left side; it was circumscribed, and gave the sensation of indistinct fluctuation. She had experienced very little pain or inconvenience, nor was the tumour tender.

On examination *per vaginam*, the os and cervix uteri were found healthy, and the uterus itself appeared of normal size. The catheter entered the bladder obliquely, but no urine was found there. The catamenia had flowed with tolerable regularity until quite recently, and her general health had been tolerably good.

On inquiry, I found that the bowels had been somewhat confined; and thinking there might be some fecal accumulation, she was moderately purged for several days without diminishing the tumour. At the end of a week, there being some tenderness over the tumour, leeches were applied several times, and calomel with opium given. When the inflammation had subsided, iodide of potassium was administered internally, and the unguentum iodinii comp. applied over the surface of the tumour.

Having persevered in this treatment for some time without any benefit, and feeling that the case was one of considerable obscurity, I urged her to see Mr. Norman, of Bath. He quite agreed with me as to the obscurity of the case, and that the tumour contained fluid; but whether it was an abscess or a softened cancerous tumour, he could not say, although from the history of the case he inclined to the former opinion. In this uncertainty, he recommended that we should wait the further development of the case, and in the interim give some simple tonic. This plan was persevered in for some time, and the case remained in much the same state until the 26th February 1853, when I was hastily summoned to her. I found her in a state of extreme collapse. She revived, however, under the free use of stimulants; and when I saw her next morning, she was almost as well as usual. About eight o'clock that evening, however, I was again hastily summoned to her, as her friends thought she was dying. I went immediately; but before I arrived, she had expired.

EXAMINATION OF THE BODY fifteen hours after death. The body was well formed, but slightly emaciated, and bore the appearance of a person who had died of hæmorrhage. There was a tumour in the left iliac region; but it appeared less prominent than during life. On opening the abdomen, the bladder was found to contain about twelve ounces of urine, and was firmly adherent to a large tumour posteriorly. The tumour, with the bladder and uterus, were removed. The uterus was of normal size. There was a large cyst which originated in the left ovary, occupying the left iliac region, and firmly adherent to the bladder. This tumour contained about a pint of grumous fluid; and behind it, at its base, were several smaller cysts containing encephaloid matter in different degrees of softening. There was no other trace of the left ovary remaining.

The right ovary was not so entirely disorganized; but there were two cysts connected with it, which contained encephaloid matter, but no fluid. There was scarcely a trace of peritoneal inflammation, nor was there any extravasation of fluid in the peritoneal cavity. As far as we could ascertain, there was no disease of any other organ.

The marked absence of pain in this case inclined us to hope that it was not malignant, and favoured the opinion that it was deep seated abscess. The sudden termination of the case was quite unexpected; nor did the *post mortem* examination clear up the difficulty; and it still remains a question what caused the sudden termination of life.

Melkham, Wiltshire, March 26th, 1853.

PERISCOPIC REVIEW.

SURGERY.

MR. SYME ON THE IMPROVEMENTS INTRODUCED INTO THE PRACTICE OF SURGERY IN GREAT BRITAIN WITHIN THE LAST THIRTY YEARS.

We reprint, with slight verbal curtailments, from the *Monthly Journal of Medical Science* for the present month, the important paper by Professor SYME, which is referred to in the foot note to Professor Miller's original article, at page 342.

The great improvements which in recent times have been so profusely contributed to the well-being of society by other departments of practical science, frequently suggest the question, Has the practice of surgery advanced in a proportionate degree? The older members of our profession, who have not quite kept pace with the march of progress, are apt to express doubts as to any real advantage having been gained of late; and our younger brethren, who are occupied more with learning present opinions than in tracing their origin, although inclined to believe that things are better than they used to be, feel rather at a loss, when called upon to explain the grounds of their persuasion. In these circumstances, I have thought that it might not be improper, from my own observation and recollection, to mention some of the improvements which have been introduced into the practice of surgery within the last thirty years.

In attempting to execute this task, I do not propose to record those particular achievements of operative surgery which merely reflect credit upon the skill and intrepidity of the gentlemen who performed them, or those new modes of treatment which are either decidedly objectionable or of questionable expediency. The excision of ovarian tumours; the aperture of the larger intestine to afford relief from obstructions of the bowels; the opening of the abdominal cavity in search of internal strangulations; the excision of the knee-joint instead of amputation; the remedy of ankylosis by forcible rupture of the adhesions between the articulating surfaces, and other less promising proposals, have all had their respective advocates; and it is not improbable that some of them at least may ultimately be established in practice. But, in the mean time, I think it is better that our attention, upon such an occasion as the present, should be confined to points of advantage so well ascertained as to leave no room for doubt in any reasonable and unprejudiced mind.

Thirty years ago, a dresser commenced the discharge of his daily duty in the hospital, by spreading a quantity of calamine cerate upon pieces of lint or linen, and cutting some sheets of adhesive plaster into narrow strips. He then proceeded to dress all the suppurating sores, by applying to each a pledget of ointment, next a cushion of carded tow, and finally a long bandage to keep all secure for twenty-four hours. At present, the use of greasy applications and elaborate bandaging is almost entirely abandoned in such cases; the water dressing, or wet lint covered with oiled silk, being substituted with great advantage, in regard not only to convenience, but also to promotion of the healing process.

The strips of adhesive plaster were devoted chiefly to the treatment of indolent or callous ulcers of the legs, according to the method of Dr. Baynton. This was a troublesome and expensive process. But it is now known that the hard swelling of the limb, which gives these ulcers their peculiar character, may be quickly removed by a large blister, so as to allow speedy healing and sound cicatrization. Varicose ulcers of the legs also used to be treated by strapping with adhesive plaster, but are now known to heal readily under the simple application of the black wash.

Another class of ulcers was held to require very severe means of treatment. This was the syphilitic, or more correctly, the mercurial sore, of a sinuous or burrowing character, which is so common wherever the delusion of mercury prevails, in all parts of the body, but especially the inner side of the legs and thighs. Its remedy was believed to be impracticable, except through the agency of caustic potass, a stick of which was pushed into all the winding sinuosities of the sore, and rubbed over the discoloured skin surrounding its orifices, so as to destroy the vitality of the unhealthy textures; with what pain to the patient may be easily imagined, and not readily forgotten by any one who has heard the walls of an hospital resounding with the shrieks of agony so excited. Now-a-days, a gentle administration of

the hydriodate of potass, to the extent of two grains, twice or thrice a-day, and a blister applied over the sore, afford relief not only without suffering worthy of mention, but much more quickly than in the other way. The same constitutional and local treatment is now found sufficient for the disease of the shin-bone, then confounded with the incurable condition of caries, and supposed to require removal or destruction of the part affected, by rasping, scraping, and the red-hot iron. Chauffers bristling with cauteries are no longer brought into the operating theatre for this purpose; and the only local treatment deemed requisite, is the application of one or two blisters, followed by water dressing.

In the treatment of simple incised wounds, or those desired to heal by the first intention, formerly, immediately after their infliction, the edges were closely approximated, and retained in contact by strips of adhesive plaster, and covered with pledgets of lint, cushions of tow, and tight bandages. As a necessary consequence, blood accumulated in the cavity sufficiently to cause separation of the surfaces, so that an abscess resulted, instead of union. Now, the greatest care is taken to allow the blood free vent so long as it is disposed to escape, all impermeable covering being withheld, while pressure is diligently applied to maintain the raw surfaces in apposition, so as to be within reach of the adhesive effusion by which their union is effected. Instead of suppuration being the almost invariable rule, and cicatrization a very rare exception, the results are now reversed; and the primary healing of wounds is looked for, if not with certainty, at least with confident expectation.

Not many years ago, one of the most painfully discouraging subjects of surgical study or practice was *gangrena senilis*. The insidious commencement of its attack; the agonising distress which attends its progress; the inefficiency of measures employed for its remedy, and the inevitably fatal result to which it led, rendered this disease indeed one of the *opprobria* of surgery. According to the ideas then entertained, nothing could be done, except keeping up the patient's strength, by an ample allowance of wine and brandy, dulling his sensibility with opium, and preparing his friends for the issue. But now, the morbid action being attributed to excessive irritability, dependent upon weakness proceeding from an imperfect supply of blood, instead of attempting to supply the deficient vigour by stimulants that can do no good, and must hurry on the disease, the treatment is directed with a view to lessening the tendency to over-action by the use of soothing means. The patient is confined to bed, debarred from animal food in every form, with the exception of milk, which, with water, constitutes his only drink, supplied with doses of morphia in proportion to his pain and restlessness, and has the part affected covered with a linseed poultice. Under this system the distressing symptoms gradually disappear, the slough ceases to extend, and after its separation the sore cicatrizes soundly, no difficulty or bad effects being subsequently experienced in returning to the ordinary habits of diet and exercise. The student, therefore, no longer turns over this page of his principles with a blush for the imperfection of surgery; and the practitioner, instead of being called upon to undertake a hopeless task, has frequently the satisfaction of conducting his patient safely through what might formerly have well been called the valley of the shadow of death.

A great revolution has taken place in regard to amputation. Formerly, upon all occasions, whether for the removal of a finger or one of the larger limbs, this operation was done by circular incision; but now it is no less generally accomplished by the formation of flaps. The advantages urged in favour of the latter method by those who established it were the facility, rapidity, and consequently smaller amount of pain, attending its execution, together with the superior covering to the bones, afforded by the resulting stump. Of these considerations, the former has lost its value through the introduction of chloroform; but the latter, which was always the more important of the two, still maintains its ground; and, with the exception of the lower part of a muscular thigh, and the upper part of the leg, where the circular method appears preferable, leaves no room for hesitation between the old and present modes.

The ankle-joints and bones of the tarsus are so liable to caries, which pre-emptorily requires removal of the affected part, that amputation of the leg was not many years ago one of the most common operations in hospital practice; and as the patients could only afford the expense of the simplest form of wooden pin, the limb was taken off immediately below the knee. But it is now well ascertained that, when the disease is so far advanced as to extend above the articulating extremities of the tibia and fibula, the patient may be relieved by detaching the

of the foot, while the thick integuments of the heel are preserved to form a cushion for supporting the weight of the body. And upon the stump thus formed, the patient may stand and walk with comfort and security, hardly less than when the limb remained entire. Moreover, the operation, instead of frequently proving fatal, like amputation of the leg, is most entirely free from danger.

Next to the ankle-joint, the elbow is the articulation most subject to incurable disease of the osseous tissue, and hence used frequently to entail upon surgeons the painful duty of performing amputation of the arm, while the hand was perfectly sound. The inferior extremity being chiefly employed in supporting the body, may be replaced with an artificial substitute, much more effectually than the arm; and indeed, so far as appearance and utility are concerned, with one preferable to the natural limb when it is much shortened, distorted, or weakened. But the hand, in its most imperfect condition, far surpasses in usefulness the most ingenious contrivance of art; and therefore preservation of the arm, even in the most crippled state, would be a great object. It is now established on the most ample experience, not only that an arm suffering from disease of the elbow-joint may be saved from amputation by cutting out the diseased bones, but that the limb thus preserved may retain its mobility and power so little altered or impaired, as to be hardly distinguishable from one in its natural state. Excision of the elbow-joint, therefore, instead of being regarded as a doubtful experiment, is now the established rule of practice. Indeed the operation is deemed so safe and so satisfactory, that even in cases where there is no existing disease, but merely stiffness of the joint in a straight or some other inconvenient position, it is undertaken, to restore mobility and usefulness to the arm.

The morbid condition which requires excision of the articulating extremities of the bones occurs in adults most frequently from ulceration of the cartilages; and to prevent any cavil on the part of those gentlemen who view all questions of pathology through the microscope, and never seem so happy as in endeavouring to unsettle the ideas of practical men by altering the nomenclature of things familiar to them, I beg to explain that by this term I understand merely a particular form of disease, characterized by peculiar symptoms leading to certain changes of texture, and remediable by certain means of treatment. Leeches, blisters, soothing means, and all the ordinary forms of counterirritation have been found productive of little more than palliation; but the actual cautery, when employed before suppuration has taken place, may be relied upon as a nearly certain and effectual remedy. The ankle, knee, wrist, and elbow joints are most liable to the disease, especially the one last-mentioned; and here the beneficial effect of surgical interference may often be witnessed in circumstances of the most impressive character. Yet thirty years ago, the actual cautery, so far as I know, had never been used in this country for the purpose of counterirritation; and even now I suspect that it is chiefly confined to practitioners who have derived their education from Edinburgh.

In the more frequent forms of articular disease which depend upon scrofulous degeneration of the textures, a no less conspicuous improvement has been introduced, not through the employment, but from the disuse, of active measures. It is now admitted that in such cases depletion and counterirritation are not only productive of no benefit but actually injurious, from the weakening effect which they produce on patients whose weak state of system is the source of derangement, and should be the great object of reparation, all that the affected joint requires being protection from motion or other causes of disturbance.

In the treatment of aneurism, especially of the femoral and popliteal arteries, a great addition has been made to the resources of surgery in the employment of pressure, not only with regard to the principles of its application, but also to the means by which this is accomplished. Indeed, recent times have afforded no greater boon to the members of our profession than they have done here to those who aspire only to mediocrity. I think it cannot be doubted that the ligature, when properly applied, is the simplest, safest, and most effectual remedy. But pressure is certainly preferable to an imperfectly performed operation; and as many of our brethren can accomplish the former, who are scarcely equal to the latter, it is plain that the treatment of this disease may now be practised with safety much more generally than it was wont to be. In retention of urine depending upon stricture, it may not be possible for all the members of the medical profession to introduce a catheter; but there are few who would experience difficulty in thrusting a trocar from the rectum into the bladder, which, although attended with no small danger, is certainly preferable to perse-

vering in attempts productive of no better results than making false passages, or leaving the patient to his fate. In the same way, if the question were to lie between exposing the femoral artery by scratching down to it with blunt instruments, such as copper or silver knives, and employing pressure, there should be no hesitation in preferring the latter method for the remedy of aneurisms admitting of its application.

The loose cartilaginous bodies which are occasionally met with in the joints, and especially that of the knee, were formerly regarded as most unpleasant subjects of practice, from the urgency of the symptoms, and the danger attending the employment of incision and extraction. In a large proportion of cases—perhaps a third, or even half—inflammation of the joints resulted from this operation, and resisting all measures of counteraction, proceeded to the destruction of the limb or life. It was hoped that a subcutaneous opening of the synovial membrane, so as to allow displacement of the moveable body, might accomplish the object more safely; but experience has taught us that, although in some cases practicable, it is generally impossible thus to effect removal, without causing such disturbance of the textures as to incur the risk of bad consequences. It is satisfactory to know that permanent relief may in most cases, if not always, be afforded, by bringing the cartilage into a part of the joint where it can be retained by external pressure, and where the coverings are thin; then making a free subcutaneous incision through the synovial membrane and the cartilage, and finally applying a small blister over the part. By this process the body becomes fixed, so as no longer to cause annoyance; and soon suffers absorption, partial or complete.

The bursa which accompanies the flexor tendons of the fingers from the wrist into the palm of the hand, is liable to morbid thickening and distension by fluid, together with solid bodies resulting from effusion into the cavity. As this condition renders the fingers nearly useless, its remedy is an object of no small consequence, but was formerly deemed almost impracticable, from the means employed proving ineffectual and dangerous. It is now ascertained that the disease may be cured easily and certainly by making an incision, about an inch or little more in length, through the integuments and subjacent textures, including the annular ligament of the wrist, on the integrity of which the peculiar obstinacy of the case appears to depend.

The great toe is liable to two morbid states which are productive of extreme inconvenience, and at no very distant date were reputed irremediable except by amputation. In one of these, the corner of the nail causes irritation and ulceration of the skin, so as to render walking painful, and wearing a shoe almost impossible. A great variety of means were formerly employed, with very little advantage, for the palliation of this complaint, but have been completely replaced by the expedient of removing a portion of the nail, by dividing it longitudinally from the free margin quite up to and through the soft texture from which it grows. This procedure not only affords immediate relief, but, when properly executed, effectually protects the patient from further uneasiness.

The other ailment is an exostosis of the distal phalanx, which projects the nail, and renders any pressure on it intolerable. The contents of museums will show that amputation was formerly practised for the remedy of this condition; but it has been long ascertained that simply removing the growth is sufficient.

The treatment of deformities proceeding from a contracted state of the muscles, more particularly wry-neck and the different forms of club-foot, has been rendered easily practicable, instead of being nearly impossible, by the employment of subcutaneous incision for dividing the tendons. Two-and-twenty years only have elapsed since the first operation of this kind in Great Britain was performed on the sternal attachment of the sterno-mastoid, and now tenotomy is almost the daily duty of a surgical practitioner—with what advantage can hardly be imagined by any one who cannot recollect the tedious and unsatisfactory attempts, that were made in former times to accomplish the object by the unaided effect of mechanical support. It must be admitted, however, that the introduction of this system has led to a most serious evil in developing a new set of specialists, under the title of Orthopædists, who are doing an incalculable amount of mischief to the public and the profession by reviving and carrying to an unprecedented extent the use of apparatus, in cases where it can never be otherwise than either hurtful or productive of no benefit. It is surprising that the apathy of medical men should tolerate the practices of these persons, especially in regard to lateral curvature of the spine; and I can account for their silent endurance only by attributing it to the slavish fear of running counter to popular prejudice, and in-

curring the enmity of those who thrive on the delusions which spring from this source.

The bad effect of withdrawing a particular operation, or the treatment of a particular disease, from the general practice of surgery, is well illustrated by what has happened in regard to the cure of squinting, by division of the muscles which cause this deformity. The public was greatly delighted with the prospect of relief from an unseemly and inconvenient condition, which had baffled all previous attempts, and readily submitted their eyes to any who undertook the reparation of their obliquity on the new system. From the lowest level and thickest obscurity, through the united influence of impudence and credulity, a host of squint-cutters started into notice; and although they might never before have used the knife or scissors on a living human body, freely practised on the patients who crowded round them. But the process required being a surgical operation of great nicety, and entirely useless unless complete, it is not surprising that in such hands failure was more frequent than success; and the former result, instead of being attributed to its true source, was accounted for by alleging that the relief was not always permanent, and that relapse could not be prevented. The operation, therefore, got a bad name; and although deserving the greatest confidence, is even now labouring under the obloquy incurred by its self-constituted and unworthy professors.

Both the upper and lower jaws are liable to morbid growths, of the same nature as those which occur in other parts of the osseous system, and have long been remedied by amputation. Sometimes they are soft and cerebriform, at others of a firm fibrous or fibro-cartilaginous consistence. In both cases removal was formerly attempted by laying open the cheek, exposing the tumour, and digging it out so far as possible by scissors or chisels, and finally applying caustics or cauteries to destroy any portion that might remain. But such proceedings, however bloody, severe, protracted, and dangerous, hardly, if ever, accomplished the object in view; and so far from even prolonging the patient's existence, generally shortened it, under circumstances peculiarly revolting and distressing. In one of the cases which I recollect seeing thus treated, the actual cautery was applied forty times, and the daily dressing, with its stench and maggots, was a scene not soon to be forgotten. About thirty years ago, a better plan of affording complete extirpation was introduced, upon the principle of ascertaining the limits of the growth, and then dividing the bone beyond the disease, where it was known to be sound. This principle was applied first to the lower, and then to the upper jaw, with the most distinguished success and advantage; tumours of the most formidable character being removed from both situations easily, safely, with little deformity, and with permanent relief. Like other good measures, this operation has been abused, by employment in cases either not requiring or not admitting of its beneficial performance, as when the tumour depended upon a glandular enlargement adherent to the bone, or upon growths proceeding from the bones of the skull, and simulating enlargements confined to the maxillary region. But the untoward results of such unwarrantable doings should not be allowed to lessen the credit of what ought to be regarded as one of the greatest improvements of modern surgery.

Both the superior and inferior maxillary bones are liable to the formation of serous cysts, which originate within the osseous substances, and so expand it as to resemble solid growths through the firmness of their walls, which, however, are always, in part of their extent, so yielding to pressure, that a careful examination is sufficient for detecting the nature of the case. These cysts were formerly thought to require very severe treatment, and at least laying open throughout the whole of their extent, together with the application of caustic, or the actual cautery, to destroy their secreting action. But now it is well known that such strong measures are quite unnecessary, the only essential requisite for contraction and obliteration of the cavity being an ample aperture, so situated as to allow free vent to its contents, and that for this purpose it is sufficient to remove an elliptical portion of the parietes, to prevent the speedy closure which would result from a simple puncture or incision.

Suppuration of the maxillary antrum also is now treated much more satisfactorily than it was wont to be: since it has been ascertained, that although a small opening may suffice for palliation, a free one is essential for complete relief. The old practice, therefore, of drilling a hole through the socket of a tooth, and throwing up injections by this narrow channel, in the thick alveolar ridge, to wash out the cavity, has been superseded by the much easier, and far more effectual plan of lifting up

the lip, and cutting parallel with the gum, above the bicuspid teeth, so as to make a free opening into the antrum, where its anterior wall is thinnest. If this be properly done, no further treatment is required; and the lesson thus afforded is useful in regard to the healing of all sinuses, whether of the hard or soft parts of the body, by showing the importance of effectual drainage, which will always be found preferable to injections and other expedients of an unsound pathology.

The tumours of the nasal cavity, which are comprehended under the title of polypus, were formerly supposed to be of only two kinds—the simple or mucous, and the malignant, so that the peculiar sort of growth, characterised by its firm texture and hæmorrhagic disposition, which is now known by the name of fibrous, not being distinguished from the others of a bleeding nature, was along with them deemed irremediable. But we now know that of all polypous tumours, this is the one which most requires and admits of relief, whether we regard the gravity of its symptoms, or the permanence of recovery after removal. Indeed there are few cases of surgery in which the efficiency of interference is more distinctly shown than when a patient, oppressed by obstructed breathing, and exhausted by frequent hæmorrhage, is instantly transferred, by a proper application of the forceps, to comfort and security.

In extracting the ordinary kind of polypus, there has been a great improvement in the instrument employed, and the mode of procedure. Formerly the forceps were large, with windows or apertures in their blades, to increase the security of grasp, and the operator aimed at seizing the body of the tumour. But now these growths being known to originate from a small portion of the cavity, however large they may be, and whether they project forwards, or hang down into the pharynx, forceps of the smallest possible size consistent with the requisite degree of strength are gently insinuated towards the root, which they separate by a combined movement of torsion and evulsion. The object in view is thus accomplished not only with infinitely less suffering, but far more effectually, than according to the old system; and the patient, instead of being tormented by a succession of sittings, as the abortive attempts were named, is at once freed from trouble. It is hardly necessary to add, that the old plan of noosing a polypus, by slipping over it loops of ligature or wire introduced into the nose, or through this cavity into the pharynx, has been entirely rejected from the rational practice of modern surgery, though it may still decorate the pages of those compilations for the use of students, which perhaps assist them to pass their examinations, but can never convey sound principles of practice.

In restoration of the nose, and other important parts of the face, destroyed by disease or injury, two methods were formerly taught, although only one of them was, so far as I know, ever practised in this country. These were the Taliacotian and Indian operations, of which the former was effected by borrowing the requisite portion of integument from some other part of the body; while the latter accomplished the object by turning round a flap from the neighbouring skin so as to supply the deficiency. The procedure last mentioned is the one that was formerly always employed, but has now been superseded by another, which, wherever practicable, seems greatly preferable. This, which may be called the plan of lateral displacement, supplies the defect by separating flaps of skin from their sub-jacent connections, and transferring them to the side where they are required, without any twisting of the connecting isthmus. Any one who has practised the latter method, or witnessed the facility with which it is accomplished, will find difficulty in conceiving how the other could ever have been employed.

Enlargement of the tonsils occurs very frequently at an early period of life, impeding respiration, especially during sleep, rendering the voice husky, causing a disposition to sore throat, and occasionally producing a degree of deafness. Thirty years ago, the practice of surgery in Great Britain did not afford any effectual remedy for this disease. The French method by excision had not been adopted; and what was called the English operation by ligature, though taught in the schools, was never attempted, at all events, more than once by the same practitioner. Removal by the knife was introduced in Edinburgh, and, through the influence of gentlemen educated here, is now widely extended, notwithstanding a certain degree of discredit which it has acquired, from the proceedings of those specialists who profess to cure cases of deafness usually reputed incurable; and, among other means for this purpose, are alleged to cut tonsils in no wise redundant, or in any respect warranting interference. The operation, when properly performed, in circumstances really requiring it, affords, with perfect safety, such an

amount of speedy and permanent relief, as justly to merit the title of a substantial improvement in the practice of surgery.

Opening of the chest for evacuation of fluids accumulated in its cavity was formerly accomplished by an incision in one of the intercostal spaces most convenient for the purpose, but with results so unsatisfactory as to be regarded a very nearly, if not entirely, hopeless undertaking. In the first instance, there was considerable risk of fatal inflammation; and at a later period, if he escaped this danger, the patient was almost sure to be carried off by the exhaustion of continued discharge. Instead of this unpromising procedure, a great improvement has been introduced, by substituting for the knife a slender trocar, which is thrust directly through the parietes of the chest without any preliminary incision. The wound thus inflicted does no more harm than the puncture of a needle, and may be repeated without any fear of bad consequences, however often it may be requisite for the patient's relief. Thus upwards of 600 ounces of purulent fluid have been withdrawn, with the effect of complete recovery, while in others one or two tapings have been sufficient for the purpose.

The operation for hernia is now frequently performed without opening the sac; and although this modification is not applicable to all cases, there can be no less doubt that, if judiciously employed, it tends greatly to lessen the difficulty and danger. There seems indeed to be room for fear, that the division of the constricting textures has thus been rendered so simple as to deprive the groin of that careful attention, which in times past was devoted to it by students of surgical anatomy. But as nothing can steady the hand of an operator so effectually as knowledge of the structure concerned in his proceedings, I venture to hope that the rising generation of surgeons will not neglect the inguinal fasciæ, which it cost their fathers so much trouble to unravel.

In the treatment of hydrocele, a great improvement has been introduced by the substitution of iodine for the port wine formerly employed, since the process of injection is thus rendered much more safe and certain. Various mixtures and combinations are still employed for the purpose; but it appears to be fully established, that from one or two drachms of the tincture injected into, or allowed to remain in, the *tunica vaginalis*, afford the easiest, least painful, and most effectual means of curing the disease. The various measures, therefore, of which the contending claims for confidence were formerly the constant subject of discussion, no longer embarrass the course of practice; and candidates for medical honours have ceased to select the treatment of hydrocele as the theme of their inaugural dissertations.

Fungus of the testicle, although removed from the category of malignant diseases, to which it was formerly referred, continued until lately to be deemed remediable only through removal by knife or caustic. It is now well established, that the protrusion admits of recovery by absorption of its interstitial effusion; and that for this purpose an easy and effectual method is to detach the scrotal integuments from their subjacent connexions sufficiently for allowing them to unite over the tumour, and thus subject it to the influence of compression. In this way the object is speedily attained, and the portion of gland preserved may perhaps be still able for the performance of its function.

The extraction of urinary concretions from the bladder has been much improved, in the first place, by the introduction of lithotripsy or stone-crushing; and, secondly, by the establishment of sound principles for the performance of lithotomy. When the stone is small, it may be easily and safely crushed; but if it is of a size so large as to require frequent repetition of the process for the removal of fragments, there is great risk of disagreeable consequences, both immediate and remote; and the cutting operation, therefore, not being superseded, should be rendered as perfect as possible. Formerly a mysterious uncertainty brooded over this subject; and surgeons who successfully achieved all the other difficulties of practice, failed signally in cutting for the stone; while others, notoriously deficient in the ordinary qualities, not only of head but also of hands, acquired the reputation of skilful lithotomists. When the latter were asked to explain their mode of procedure, they gave the most conflicting accounts of it, some maintaining that "the less that is cut, the greater the patient's safety", and protesting against more than notching the apex of the prostate, while others insisted upon the necessity of obtaining ample space by free incision of the vesical coats. But when the operation was conducted upon the first of these principles, it was almost certain to prove fatal from suppurative inflammation at the neck of the bladder; and when the second was taken for a guide, extravasa-

tion of urine no less regularly followed. Operators who supported these different doctrines freely charged each other, no matter how successful, with not knowing the actual extent of their incisions, so that doubt and discomfort were unavoidable by all except those fortunate individuals who happened to acquire the knack of overcoming the difficulty. But now the truth has been fully ascertained, and the reason of failure, as well as of success, is correctly referred to its proper causes. The great source of difficulty and danger is found to be a particular texture, which lines the interior of the prostate at its base to the extent of about half an inch in thickness. This sort of ring admits of being stretched to a certain degree, but then resists further expansion with great force; and if torn by violence, is sure to excite a fatal inflammation of the neighbouring parts,—while, if it is divided by incision, no bad consequence results, and the other tissues at the neck of the bladder readily yield to any expanding force, so as to permit the extraction of even large stones easily and safely. The surgeon, therefore, after making an adequate opening through the subjacent fasciæ and muscles of the perineum, has merely to make sure of cutting this important part, which may be done most safely by a knife, guided on the finger, and then with the latter dilate the other textures sufficiently for his purpose. This procedure was formerly hardly practicable in adults, except by an operator possessing a long finger; but may now be always easily accomplished through the aid of chloroform, which prevents the straining and contraction of the *levator ani*, which in a conscious patient withdraws the neck of the bladder deeper into the pelvis.

In the treatment of stricture, it has been found that all contractions of the urethra which yield to dilatation may be remedied most easily and safely by the simple bougie, and that those which resist the proper application of this means admit of no effectual relief, except by external incision upon a grooved director, conveyed through the narrow part of the canal. These points being duly established, will, it is hoped, prevent professional attention from suffering distraction by the conflicting claims of less effective measures, and, concentrating it upon what appear to be the simplest and safest, throw completely into the shade those objectionable precedents that would never have been tolerated except as forlorn hopes, in circumstances deemed otherwise entirely desperate. It may be now confidently said, that if any man endures continued distress, or loses his life, from stricture, the blame is no longer imputable to the defective condition of surgery; and if the Marquis of Argenteuil had still to make his will, I hardly think he would found a prize of £500 to be conferred at stated periods for practical improvements in the treatment of this disease.

Diseases of the rectum, from being much in the hands of specialists and irregular practitioners, have been slow in their progress towards improvement. Indeed, until a comparatively recent period, they were regarded as a sort of incomprehensible mysteries, unworthy of professional attention. Thirty years ago, fistula in ano was thought to require division of the septum between it and the bowel, to the whole of its extent. An internal opening, if present, was supposed to be at the summit of the cavity; but, whether present or absent, was considered of secondary consequence. The surgeon, therefore, arming his finger with a horn gorget, thrust it up the rectum, and then inserted into the fistulous canal a sharp bistoury, having its point guarded by a pea or bit of wax, until it reached the extremity, when pressure was made upon the gorget, and both instruments were drawn out together. Profuse hæmorrhage frequently followed this deep incision, and great care was requisite, for three weeks or months, to prevent adhesion of the edges, by the daily introduction of dressing between them. This operation often required to be repeated, and not seldom proved entirely abortive. Now we know that the fistula always takes its origin from an abscess in close connexion with the mucous coat of the intestine, which, in the first instance, with few exceptions, opens outwardly, and after a time establishes a connexion with the cavity of the bowel by a small aperture, seated very regularly at the distance of an inch, or inch and a quarter, from the orifice of the anus. All that is necessary, is division of the septum between the internal and external openings; and the operation is not only very easy, perfectly free from risk of hæmorrhage, and so superficial as not to require any dressing, but, what is of more consequence, always proves successful.

Internal hæmorrhoids, which occur so frequently, especially in the upper ranks of society, and occasion so much distress by causing protrusion, bleeding, or pain, or all of these effects together, were formerly subjected to excision, ligatures, caustic, and the actual cautery, with various and often unsatisfactory consequences. It now has been long established, that the liga-

ture, when properly applied, affords relief with most ease to the patient, with most permanent advantage, and with greatest security from danger. It is true that no operations can be considered absolutely free from risk; but I am not acquainted with any one of the minor kind which is so seldom followed by a bad result, as the ligature of internal hæmorrhoids.

Fissure of the anus is the source of such excessive pain and annoyance, that the severe means formerly held to be essential for its remedy were occasionally practised, although both patient and practitioner generally shrunk from the performance of so serious an operation for so trivial an ailment. Instead of a complete division of the sphincter, and a confinement of months to bed, it is now well ascertained that a small incision, slightly exceeding the length and depth of the little ulcerated fissure, is sufficient for its remedy, without any after treatment, or restriction from exercise, beyond a day or two of quiet.

Spasmodic stricture of the anus, which was formerly either regarded as incurable, or tortured by ineffectual attempts to afford relief by dilatation, is now remedied at once by division of the external sphincter, with an amount of comfort, and an immunity from suffering, that can hardly be conceived by any one who has not witnessed such cases.

The only organic stricture of the rectum which admits of remedy is now known to be situated within little more than two inches from the anus; and the preposterous proceedings to which credulous patients were formerly subjected by the rapacious empirics who pretended to cure contractions far up the bowel, or even in the sigmoid flexure and ascending colon, are no longer heard of; and if an man were now to wield a rectum bougie, two feet in length, he would do so at the risk of being deemed worthy of accommodation in Newgate or Bedlam. The amount of human misery which has been, or may be, saved by the alterations thus introduced into the treatment of diseases of the rectum, it would not be easy to calculate.

Enough has, I trust, been said to show that surgery during the last thirty years has not stood still, but, on the contrary, introduced into practice so many useful improvements, that the practitioners of this time have no reason to be ashamed of it, or to fear its comparison with any other period of similar extent in medical history.

POLYPI OF THE LARYNX.

The *Gazette des Hôpitaux* for January 20th quotes from the *Gazette Médicale de Strasbourg* some remarks by Dr. TOURDES, on polypus of the larynx.

The history of the disease is almost entirely contained in the work of Professor Ehrmann. He relates thirty-one cases, of which only one recovered, after the timely employment of tracheotomy. Dr. Tourdes also gives the details of a case which proved fatal.

CASE. A. St. J., aged 7, the child of poor parents, was admitted into the Orphan Asylum at Strasbourg in September 1852. The child was of feeble constitution, and had goitre, with some signs of cretinism. He had been for some time subject to dangerous attacks of suffocation. Soon after his admission, he was seized with violent attacks of cough, threatening asphyxia; and was taken into the children's sick ward, on November 16th.

When admitted into hospital, he was very anxious; at times, asphyxia seemed imminent. During the attacks, the respiration was noisy, whistling, convulsive, and attended with a hoarse cough. Expiration seemed much more painful than inspiration. There was no expectoration. In the intervals, the dyspnoea continued; the voice was hoarse and changed, but never entirely lost; the cough was frequent. There was great diminution of the respiratory murmur in both lungs, but no rhonchus: the breath-sound was whistling in the trachea and larynx. The fauces and pharynx presented no trace of false membrane, but merely a slight redness. No pain was produced by pressure on the larynx: there was no enlargement of the cervical lymphatic glands. The skin was cold, and the circulation accelerated.

The diagnosis was difficult. There was no evidence of a foreign body in the larynx; nor were there sufficient grounds for attributing the symptoms to cough, abscess in or near the larynx, or acute laryngitis. Hence it was concluded that the disease was polypus of the larynx; but this diagnosis was rendered uncertain by the absence of any information as to the previous condition of the patient.

Vomiting was excited by tartar emetic; burnt alum was blown into the larynx, and solution of sulphate of copper was applied to the fauces: mercurial frictions were also employed. Tracheotomy was at first discussed, but was negatived on the

ground that all the cases of a similar nature, in which the operation had been performed in the institution, had proved fatal.

There was no alleviation of the symptoms; double pleurisy set in, and the patient died on November 24th, during an attack of dyspnoea.

Post Mortem Examination. A reddish, soft, nodulated tumour, of the size and shape of a flattened strawberry, occupied the left ventricle of the larynx, and extended over the arytenoid cartilages, as far as the right ventricle, which was unaffected. The posterior and left lateral part of the glottis was closed by this polypus, which occupied about two-thirds of the opening. It was adherent to the larynx by a broad base; in this respect alone differing from the vegetations described by M. Ehrmann. The lobes of the thyroid body were largely developed, and joined in front of the trachea. The pleurae were lined with a thick layer of soft false membranes. The tissue of the lungs was only congested; the bronchi contained much frothy mucus; the mucous membrane was healthy.

REMARKS. The want of information as to the previous history of the patient was the principal impediment to arriving at a correct diagnosis; and if this had been possible, tracheotomy might have been performed with some chance of success. The recorded cases of polypus of the larynx show that the progress of the disease, and the gradual development of the symptoms, have always furnished decisive signs. There is no pathognomonic sign, although the greater difficulty of expiration, the expectoration of portions of the polypus, or even its projection above the glottis, have been mentioned as such: these may be all absent.

After tracheotomy had been performed, the tumour would have to be removed. In the only successful case recorded by M. Ehrmann, he cut open the larynx, and excised the polypus, two days after the performance of tracheotomy. In M. Tourdes' patient, the tumour adhered by a broad base; which would have increased the difficulty of cure.

PRACTICE OF MEDICINE AND PATHOLOGY.

VICARIOUS EXCRETION OF URINARY AND BILIARY PRINCIPLES BY THE LUNGS: RESEARCHES OF DR. C. BLACK.

In a series of papers at present being published in the *Monthly Journal of Medical Science*, Dr. C. BLACK describes, in the number for the present month, an affection which he terms pulmonary cellulitis—or inflammation confined to the epithelium of the pulmonary cells, extremely prevalent among children, and often regarded as pneumonia, and not rare in adults. In it, and in "epithelial bronchitis", the products of inflammation appear on the free surface of the membrane; while in pneumonia, intercellular exudation, corresponding with the submucous exudation of severe bronchitis, occurs. Pulmonary cellulitis is more common in the lower than in the upper half of the lungs; in the posterior than in the anterior portions; in children than in adults: it may occur suddenly, or supervene on either the epithelial or the severe form of bronchitis.

In the course of his paper, Dr. Black makes some statements which are of much interest in connexion with the communication of Dr. Joseph Bullar, published at p. 347 of this number. He says:—"As to the chemical composition of the sputa in cellulitis, after the full establishment of expectoration, the mean of eighteen analyses, uninfluenced by hereditary taint or constitutional peculiarity, gave

	In 100 parts.
Water	94.80
Organic matter	3.68
Chlorides of sodium and potassium,	1.47
Alkaline sulphates and phosphates	
Sulphate and phosphate of lime	.05
	100.00

"When, however, a constitutional peculiarity, a peculiar diathesis, or another disease is associated with cellulitis, the exudation from the pulmonary membrane contains frequent evidence of the presence of certain products, dependent on such peculiarity of constitution or on disease. I have, consequently, found the uric acid diathesis furnish urate of ammonia to the sputa of cellulitis,—the oxalic acid diathesis distinct crystals of the oxalate of lime, together with the occasional presence of cystine,—and jaundice, cholesterine, and the colouring matter of the bile."

In illustration of each of these facts, Dr. Black gives an example.

In the first case, the patient had acute articular rheumatism, with epithelial bronchitis. On the second day, the urine deposited a thick yellowish-red sediment of urate of ammonia: the expectoration was thinly viscid and frothy, consisting of epithelial patches and mucus-corpuscles. During the night, the breathing became oppressed, with weight and burning in the lower and posterior part of the right side of the chest, cough, and partial suppression of expectoration: the physical signs indicated cellulitis. On the third day, the urine deposited urate of ammonia: the expectoration was re-established, and becoming more copious. It was seen to consist of a few epithelial patches, mucus-corpuscles containing distinct globules of urate of ammonia, free urate of ammonia, exudation masses and cells, and irregularly shaped flakes and masses of fibrin. During this and the following day, the urate increased in the urine and diminished in the sputa. On the fifth day, no trace could be discovered in the sputa. On the ninth day it reappeared in the sputa, at which time the urine was quite free from it; but on the morning of the eleventh and during the remainder of that day, a copious excretion of the urate took place from the kidneys; and on the following day there was no appearance of it in the sputa. From this time the urate was confined to the urine, in which, on the fourteenth day of the disease, a very copious sediment occurred. The cellulitis henceforth rapidly disappeared: and on the twenty-second day, convalescence from rheumatism was established.

That the globules seen in the sputa were urate of ammonia, was proved by the production from them of uric acid crystals by the addition of hydrochloric acid, and by the formation of murexide on the addition of nitric acid and ammonia.

In the second case related, a medical student, aged 20, while under treatment for oxaluria, took cold from incautious exposure, and pulmonary cellulitis supervened. On the establishment of the expectorant stage, examination of the sputa proved the occasional presence of urate of ammonia, and of oxalate of lime, particularly at the time when they were being eliminated by the kidneys in small quantity, and were hence accumulating in the blood. Crystals of the oxalate were present in the mucus-corpuscles to a limited extent, being for the most part free in the sputa; but the urate of ammonia was not infrequent in the mucus-cells. In the wood-cut accompanying this case, the form of crystal of oxalate of lime in the sputa is the octohedral: this, with the dumb-bell and ovoid forms, were found in the urine.

In the third case, pulmonary cellulitis supervened on jaundice in a woman lately confined. The sputa exhibited plates of cholesterine.

In all these instances, Dr. Black employed the usual chemical tests, which confirmed the appearances presented under the microscope.

From the foregoing cases, which are only single examples of several which have occurred to him, he draws the following deductions:

"1. That the manifestation of a particular diathesis, or the presence of a particular disease in the system, is capable of influencing the character of the sputa in inflammation of the bronchio-pulmonary membrane.

"2. That this influence is manifested by the presence, in the sputa, of the morbid products of the particular diathesis or disease with which inflammation of the bronchio-pulmonary mucous-membrane is associated.

"3. That such morbid products are eliminated by the epithelial cells of the membrane; that they, therefore, appear as accidental constituents of the mucus-cells; that they likewise escape in the exudation from the denuded surfaces of the basement membrane; and that they are never present in the exudation cells.

"4. That the bronchio-pulmonary epithelium can thus act the part of an excretory organ: but that this peculiarity of action is probably rather dependent on the particular character of the blood, than on any selective power inherent in the cells.

"5. That before such eliminative action takes place, an undue accumulation of morbid products occurs in the blood; that the action of the different organs, intended for the elimination of such morbid products, is for the time being deficient; and that on its becoming more vigorous, the sputa quickly regain their normal character."

LOCAL EFFECTS OF PUS ON THE BLOOD.

Some time ago, the Edinburgh Physiological Society appointed a committee to repeat Mr. H. LEE's experiments; and at the meeting of the 8th of January, Dr. HUGHES BENNETT read the report of the committee, which we reprint from the *Monthly Journal of Med. Science* for March 1853.

EXPERIMENT I. The saphena vein of an ass was exposed, and a tube introduced confined by a ligature. Fresh and healthy pus was then slowly injected upwards towards the heart, from a syringe holding an ounce. A slight obstruction was now perceived, and the vein above the ligature could be seen to be somewhat swollen. This swelling, on being felt, was very soft; and on pressing the vein from below upwards, the mixed blood and pus was readily pushed before the finger, when all obstruction to the passage of pus from the syringe was removed. The syringe was again filled, and another ounce of pus injected, without occasioning any further local effects. The animal was then allowed to get up, and exhibited no change in its normal condition whatever.

EXPERIMENT II. The same ass was the subject of this experiment a fortnight later, having been perfectly well in the interval. Six inches of the jugular vein in the neck were carefully dissected and exposed; and a minute aperture was then made in the upper end of the exposed vein, and the bent tube of the syringe introduced without a ligature. The coats of the vein were so transparent, that the flowing blood could be seen through them. An ounce of fresh and perfectly healthy pus was then slowly injected downwards towards the heart; and, owing to the transparency of the vein, the yellow opaque fluid was seen to join the blood, and to continue a few moments running side by side with the crimson current, until at length the vein became full of pus. On removing the syringe to obtain a fresh supply, the blood from above could be seen to join the pus, and to continue side by side with that fluid, presenting a streaked red and white appearance, without any coagulation, until all the pus was carried forwards and downwards towards the heart, and the vein was again full of blood. Another syringe-full of pus was then injected, which could once more be seen first to flow with the blood, then, as its quantity increased, to take the place of the blood, and then, on the syringe being exhausted, to receive blood from above; the two mixing together, and continuing their course without coagulating, until once more the vein contained nothing but blood. The wound was now closed, and the animal allowed to rise, which he did without apparent suffering. He presented no unusual symptoms whatever during the next four days, when he was killed, and the parts carefully dissected. The vein was pervious, presented no thickening, cording, nor abscesses, and the external wound was nearly healed.

This experiment appeared to be so decisive, and so clearly opposed to the idea that the contact or mixture of pus and blood necessarily induced coagulation in a living animal, that it was thought unnecessary to repeat it. With regard to the slight coagulability apparently occasioned in the first experiment, it was attributed partly to injecting contrary to gravity, whereby the mixed pus and blood were allowed to fall backwards and remain stationary, while the ligature prevented any flow of blood from being continued. No such phenomenon was observed in the second experiment, where no ligature was employed, and where the effect of gravity was avoided by injecting downwards. In a communication, however, received from Mr. Henry Lee, he had informed Dr. Bennett that no ligature was employed by him.

The second experiment performed by the committee was in its nature the same as the seventh and eighth experiments of Mr. Henry Lee, and yet none of the appearances observed by that gentleman resulted. There was no fulness or cording of the vein, no acceleration of respiration or constitutional symptoms; and after death, no coagulation of the blood, no obliteration of the vein, nor local inflammation. What are the circumstances which occasioned this difference, the committee are not prepared to say; but the positive fact of having introduced the pus on two separate occasions, as recorded in Experiment II, of having seen the pus mix with the blood, and the blood with the pus, through the transparent vein, without producing coagulation, is, in the opinion of the committee, sufficient to negative the general proposition, that whenever pus is mingled with blood in a living animal, coagulation of the latter fluid is the invariable result.

Dr. GAIRDNER remarked, that these experiments did not necessarily disprove the conclusions arrived at by Mr. Henry Lee, of London, from his observations; but he (Dr. G.) considered that further investigation into the mode of experiment-

ing adopted by different individuals, might tend to reconcile the apparent discrepancies in their statements as to the effect of pus on the blood.

SACCHARINE URINE IN EPILEPSY.

The urine of epileptic patients, immediately after a paroxysm, has been repeatedly found by MM. MICHÉA and ALVARO REYNOSO to contain sugar. The ordinary method of detecting it by solution of potass fails in this instance, as likewise does the saccharimeter; but the best mode is to employ fermentation and the liquor of M. Barreswil. In using this latter, certain precautions are necessary. The urine is first to be treated with acetate of lead to precipitate the organic matter, and then with carbonate of soda to throw down the salt of lead. Concentrate the urine, add the liquor of M. Barreswil, and boil. Without these indispensable precautions to get rid of the organic matter, the presence of sugar is not determined with sufficient accuracy; or reactions may even occur which would denote its presence when really absent.—*Comptes Rendus*, Janv. 31, 1853.

ANATOMY AND PHYSIOLOGY.

COLOUR PRODUCED IN SILK THROUGH THE MEDIUM OF THE FOOD OF THE SILK-WORM.

It has long been known that certain colouring matters, if administered to animals along with their food, possess the property of entering into the system and tinging the bones. In this way the bones of swine have been tinged purple by madder; and instances are on record of other animals being similarly affected. No attempt, however, was made to turn this discovery to account until lately, when M. ROULIN speculated on what might be the consequences of administering coloured articles of food to silk-worms just before spinning their cocoons. His first experiments were conducted with indigo, which he mixed in certain proportions with the mulberry leaves serving the worms for food. The result of this treatment was successful; he obtained blue cocoons. Prosecuting still further his experiments, he sought a red colouring matter, capable of being eaten by the silk-worms, without injury resulting. He had some difficulty to find such a colouring matter at first, but eventually lighted on the *Bignonia chica*. Small portions of this plant having been added to the mulberry leaves, the silk-worms consumed the mixture, and produced red silk. In this manner the experimenter, who is still prosecuting his researches, hopes to obtain silk, as secreted by the worm, of many other colours.

OVA OF FISH IMPREGNATED WITHIN FEMALE.

DR. ROBERTSON, of Dunkeld, questioning the popular idea as to the natural history of fish, which is, that the male and female meet on the redd or spawning bed for the purpose of each depositing its roe and milt in the channel—and conceiving, on the contrary, that the ova of the female were impregnated previous to their development within the body of the fish, took a number of live female trout from the spawning-bed, and having extracted the roe, deposited them in a perforated zinc box, containing some gravel. All these, upon the 14th of October last, were placed in a running stream, and on examining the box last week, several of the ova were found to be hatched, of which a specimen may be seen by any one taking an interest in the matter. The proof of this will completely do away with the trouble of obtaining the milt to apply to the roe, as is done by the French fishermen, and establishes a theory strongly advocated by Mr. T. Stoddard. From the severity of the winter, the whole of the ova are not yet hatched. We understand that the doctor is preparing a detailed account of the experiment.—*Perth Courier*.

ASSOCIATION INTELLIGENCE.

SOUTH WESTERN BRANCH.

A MEETING will be held at the Devon and Exeter Hospital, on Tuesday, the 26th instant, at 1 P.M., to receive the Report of the Committee appointed to confer with the promoters of the Medical Reform Bill, and to determine on such measures as may be deemed advisable.

As this Bill, if passed into law, may materially influence the position of practitioners in medicine generally, the gentlemen of the medical profession, residing in Devon and Cornwall, although not members of the Association, are invited to attend and to take part in the proceedings.

W. D. KINGDON, M.D., Secretary.

St. Thomas's Hospital for Lunatics, near Exeter, April 18th, 1853.

EDITOR'S LETTER BOX.

LORD LYTTLETON'S VACCINATION BILL.

LETTER FROM ROBERT CEELY, ESQ., TO THE EDITOR.

SIR,—I beg to offer you my hearty thanks for your able article in the ASSOCIATION JOURNAL of last week, on "Compulsory Vaccination", in every word of which I cordially concur.

I hope our brethren (of the ASSOCIATION in particular) will promptly respond to your just and energetic appeal before it be too late. They must be aware that it will be worse than useless to force upon the profession and the public a scheme of compulsory vaccination, infinitely more objectionable in its character, and far more injurious to the profession, than the present act, with all its vices and imperfections.

Those who are zealous for the character and credit of vaccination, and desirous of defending the profession from renewed and "barbarous" injustice, ought to lose no time in earnestly petitioning Parliament to reject, *till further inquiry*, the hasty and random attempts at legislation of well-intentioned but ill-advised philanthropists, on a subject confessedly replete with difficulties, and needing the most careful and enlightened consideration of the best informed. Those who know anything of the matter must admit that the public has far greater need of the means for extending *efficient* vaccination, than a measure which seeks merely to establish the principle of compulsion. The propagation of small-pox may and ought to be restrained by far less impolitic and objectionable means than the recognition and enforcement of that principle.

But the extension of *efficient* vaccination requires very different measures than the existing or projected law provides. Any amount of success professedly resulting from the present law, is derived from the unrequited zeal and the personal and pecuniary sacrifices of those members of the profession who are already taxed beyond endurance. *Efficient* vaccination is no necessary result of that act, which has disappointed its advocate and promoters, and proved to its active agents a source of injury, oppression, and degradation.* And who will not venture to predict that the measure now in contemplation, instead of accomplishing the intentions of its advocates and promoters, is more likely to *disparage and discourage vaccination, and still further to damage and disgust the medical profession?*

I earnestly hope, sir, that our colleagues of the ASSOCIATION, individually and collectively, will promptly exert themselves to secure for vaccination and the profession that consideration to which, for the benefit of the public, both are pre-eminently entitled.

I have been anxiously engaged in endeavours to attract the attention of eminent official persons to the subject, in which I feel a deep and enduring interest; and I now place at your disposal the copy of a letter I have had the honour of addressing to Lord Viscount Palmerston, on small-pox repression and vaccination extension.

I may add, that similar letters have been addressed to the Registrar-General, Lord Lyttelton, and the Epidemiological Society.

With renewed thanks for your valuable labours, and with an earnest desire for their success, I am, etc.,

ROBERT CEELY.

Aylesbury, April 18th, 1853.

COPY OF MR. CEELY'S LETTER TO LORD PALMERSTON.

To the Right Honourable Lord Viscount Palmerston, Her Majesty's Secretary of State for the Home Department.

Aylesbury, 30th March, 1853.

MY LORD,—I venture to address your lordship on small-pox and vaccination, believing that the importance of these subjects to the community will be deemed my best apology for the in-

* "In almost every locality the working of the Act has led to dissension and altercation, either between the guardians and resident practitioners, or among the latter themselves."

"As respects the profession, therefore, the measure has proved one of injury, oppression, and degradation; while, with reference to its professed object, it must be considered a failure."

"The efforts of medical practitioners to extend vaccination among the working classes have been checked by removing the ordinary inducements and facilities for its performance; and the distrust and apathy of the poor have been increased, by connecting this invaluable protection, with the administration of the Poor Law."—*Preliminary Report of the Poor Law Committee of the Provincial Medical and Surgical Association (1850)*. Second year, page 115. Sherwood and Co.

trusion. But I have an urgent motive for doing so at this time, as the attention of Parliament is already called to the subject of *compulsory vaccination*.

The prevention of small-pox and the extension of vaccination are deserving of the serious consideration of the legislature.

It is earnestly to be hoped that the hasty, imperfect, and erroneous measures, relative to these and kindred subjects, which have emanated therefrom of late years, may soon be deliberately reconsidered, more efficient measures devised, and the administration of them delegated to appropriate and active authority.*

The annual sacrifice of human life by the retention and propagation of small-pox among us, the facility with which it can at any time be arrested by the prompt performance of vaccination, and the incalculable benefits which would flow from the universal adoption of that practice, have induced many humane and philanthropic persons, in and out of the medical profession, earnestly to call for *compulsory vaccination*.

Cordially concurring in the absolute necessity of stringent and decisive measures for the repression of small-pox, and earnestly desirous of the extension of vaccination, I am, nevertheless, decidedly opposed to *compulsory vaccination*.

I deem it unwise, unsafe, and, if not indeed unconstitutional, at least inexpedient at present.

It would be felt to be derogatory to the medical profession, and be found to be disparaging to the practice of vaccination.

Compulsory vaccination cannot be proved to be necessary, even if practicable, till more legitimate, consistent, and efficient measures for the repression of small-pox have been fairly tried in vain.

A consideration of the principal causes of the neglect of or resistance to the practice of vaccination among the poor and ignorant, will, I think, warrant these conclusions.

These causes may be thus briefly stated:—

i. Apathy and indifference to remote danger.
ii. Suspicion and distrust of a measure connected with the Poor Law authorities.

iii. Fear of imparting other diseases with the vaccine.

iv. Repugnance to the process, unless performed with lymph taken from a subject selected or approved by themselves.

v. Ignorant and absurd prejudices—often dignified as religious scruples—against the introduction of even a mild disease of brute origin, and a perverse preference for the “*real thing*”, however severe, because of human origin.

vi. Exaggerated notions of the inadequacy of vaccination to protect from small-pox.

vii. The facility and legal impunity with which, in the present defective state of the law, the absence of a public prosecutor, or a competent and efficient sanitary board, small-pox is suffered to exist, and be propagated from person to person and from place to place.

Vaccination really needs, deserves, and ought ever to be treated by the legislature as a beneficence, and administered as a boon; and not by a compulsory enactment of it, made odious to ignorance, already imbued with venial and unmitigated prejudice.

Like education, it should be facilitated, fostered, and encouraged, by liberal, gracious, and attractive measures.

On the other hand, small-pox deserves and requires to be treated as an unmitigated evil: as a great social pest; and its promoters and propagators as enemies dangerous to the public health.

The strong arm of the law can, and ought to be, effectually raised to repress and oppose its progress whenever and wherever it appears.

The eighth clause of the Vaccination Extension Act† provides a punishment, by summary process and conviction, for the wilful production, or attempt at production of small-pox by inoculation or infection.

But other provisions are required, and should be made clearly applicable to the negligent, reckless, or wilful exposure of the person, apparel, or any other infected article, either on the Queen's highway, or within any dwelling, or in any situation so as to endanger the health and safety of Her Majesty's subjects by the propagation of the disease.‡

The provisions of the Nuisances Removal and Infectious Diseases Prevention Act§ should be extended to persons, apparel, bedding, and every other article infected with small-pox.

And it should be lawful also to remove, like any other nuisance, to a suitable place of safety, and for appropriate treatment, any person labouring under small-pox, who, from contiguity or propinquity of residence, may by himself or herself directly, or indirectly, endanger the health and safety of a neighbourhood.

It should also be made compulsory on such persons, either by themselves, their friends, or attendants, to give immediate notice to the proper authorities of the existence of small-pox within their dwellings, in order that such removal, if practicable, may be promptly made; and if impracticable, that proper measures of precaution to warn and protect the public, may be summarily put in force.

Such dwellings, and all their inmates, should be placed under the observation and superintendence of the police or other local authority (acting under the direction and control of proper sanitary advisers), to carry out a rigid and efficient system of quarantine.

Pest-houses, or houses of reception, suitably appointed and properly situated, should be provided in every parish by the same authorities, under the same direction and control, for the reception of all classes of removable small-pox cases. And such authorities to be empowered to claim and recover reasonable fixed charges for such accommodation and treatment as the respective cases may require.¶

Such system of quarantine or seclusion to be rigidly enforced for a period of not less than forty-two days, from the development of the disease in ordinary cases, whether at the dwellings of the patients or in the pest or reception houses.

These or similar measures for preventing the spread of small-pox, while they do not abridge the liberty of the subject to choose or reject the casual disease for himself or his dependents, very properly insist that the exercise and enjoyment of that liberty—questionable as it is in the abstract—should not be dangerous, as it now daily is, to the rest of the community. Such measures are based on principles already recognised as just and legitimate, but which need further extension and development under competent authority and administration.

The rigid enforcement of them would not only signally discourage the maintenance, and effectually prevent the diffusion of small-pox, but would powerfully and speedily, though indirectly, promote the practice of vaccination.

The administration of such amended laws against small-pox propagation, as well as of all other matters relating to the public health, should be confided to a properly constituted central board of health. To such a board, also, should be delegated the administration of amended, or, more properly speaking, better devised laws for a system of national vaccination.

In the construction of such a system it ought to be always borne in mind that vaccination extension (not less than small-pox repression) is not merely an affair of a parish, a district, or an union, but a matter that concerns the entire community.

A national system of vaccination should be entirely free from the grave objections and obvious defects appertaining to the present system, and should avoid its parsimonious and distasteful arrangements.

It should appoint and endow in every city and town in the United Kingdom, possessed of the requisite population,‡ permanent stations furnished with properly qualified vaccinators and inspectors.

Such stations would attract a fair attendance for vaccination, of young and healthy subjects, from whom a good and regular supply of vaccine lymph, with proper management, could generally be procured for the public benefit, and for the assistance of vaccinators less favourably circumstanced.

There are various important details in the construction of such a scheme of national vaccination, requiring careful consideration: but to these I forbear more particularly referring at present.

I cannot, however, refrain on this occasion from the respectful but earnest expression of a hope that, in the consideration of a

* 3rd and 4th Vict., chap. 29; 4th and 5th Vict., chap. 32; 11th and 12th Vict., chap. 123.

† 3rd and 4th Vict., c. 29.

‡ Exposure of the person, while labouring under small-pox, on the Queen's highway, is an indictable offence; and of course, an offence never indicted. I have often fruitlessly attempted to incite the local authorities to this important but expensive duty.

§ Under proper sanitary regulations and control, such houses of reception might be made at other times subservient to the public health, by isolating the early cases of other infectious diseases in any locality.

Such houses are essential to an efficient system of sanitary police. They would save many lives, and materially abridge the present enormous annual expenditure caused by the propagation of small-pox and other infectious diseases.

‡ Not less than 60,000.

measure intended for the public good—the active and efficient agents of which must be found in the medical profession—liberality to that profession may supersede present and prospective injustice.

Thus by amended laws, an efficient sanitary police, the cordial and zealous co-operation of the medical profession, all the causes for the neglect of, or opposition to vaccination will, in due time, with the spread of intelligence, and the growth of better feelings, under more extended experience, gradually fade away and eventually disappear.

Small-pox will thus certainly and speedily be reduced to a perfectly manageable minimum, and exist only as a salutary stimulus to the practice of voluntary vaccination.

I am, etc.,

ROBERT CZEELY, F.R.C.S. Eng.,
Surgeon to the Bucks Infirmary.

THE EDINBURGH STRICTURE CONTROVERSY.

LETTER FROM JAMES SYME, ESQ., PROFESSOR OF CLINICAL SURGERY IN THE UNIVERSITY OF EDINBURGH, TO THE EDITOR.

SIR,—In the nineteenth volume of the *Transactions of the Provincial Medical and Surgical Association*, I have just read the following passage of an "Address on Surgery, delivered at Oxford, in July 1852, by James Torry Héster, Esq.:"—

"If we cast our eyes beyond the Tweed, we see the melancholy exhibition of a city, celebrated through long ages as the birth-place of genius, torn by two rival factions and a petty squabble about the perineal section. It is not in these days a question whether the operation originated with Dessault or Syme, nor whether it be adapted for the cases in which it has been recommended. The ultimate condition of the patient is lost sight of in fierce animosity and personal invective, and the two leading surgeons have appealed to a Court of Law upon a question of truth. *Proh pudor!* It were vain to expect them to issue from the contest humbler, better, and wiser men. But should their repentance be ever so great, it will never efface the scandal such proceedings bring upon the profession.

"That such scenes may shortly cease to be enacted in the modern Athens, is my most earnest prayer; and as to ourselves, may we ever be delivered from envy, hatred, malice, anger, and all such pestiferous perturbations, which militate in no small degree against that tranquillity of mind so essential to the practice of the healing art. Were we to take a retrospect of the whole of this unhappy quarrel, in which direction must we turn for liberality or courteous bearing? Where is the trace of industry or of research? It is not even clothed in sparkling wit or glowing language. No! The terms which have been selected would have better suited the tavern or the hustings. If there be value in the practice recommended, we, as independent but anxious trustees of the public health, have a right to ask for a new series of experiments, under circumstances which would admit of no misunderstanding. Until then, no violence of language, no unblushing assertion, even in the form of advertisements in the public journals, will have weight to influence our judgment."

It is possible that the opinions of Mr. James Torry Héster, whose name is entirely new to me, may not possess the greatest weight; and it would be unreasonable to hold the Association responsible for all that is uttered by its annual orators. But when a statement such as that here quoted is made at a public meeting, and afterwards published in the *Transactions*, it acquires a stamp of approval which entitles it to pass current as deserving of credit. Now, having, throughout the whole discussion relative to the treatment of stricture by external incision, scrupulously avoided the use of language calculated to give personal offence; having resisted the urgent advice of my legal agent to prosecute the libellous calumnies on my practice which have been published in London, republished in Edinburgh, and anonymously circulated throughout the country; having been satisfied with denying the truth of these injurious allegations, and declined a controversy with persons whom I regarded as utterly unworthy of notice; having had the defensive course twisted into a charge of aggression which a jury on two different occasions without hesitation declared to be groundless; and having thus incurred the expense of more than £500 in maintaining a principle of treatment which I believe to be of practical value,—I did not expect to receive the censure of such a body as the Provincial Association, especially when the result of my efforts had been an addition to the resources of surgery. The faction opposed to it in Edinburgh never consisted of more than Dr. Mullar and his associate; and as the former, for rea-

sons which your ingenuity may probably suggest, has lately disappeared, the latter is now its sole representative.

I am, etc.,

JAMES SYME.

Edinburgh, April 16th, 1853.

[The *Transactions* are edited by the General Secretary of the Association; but neither he nor the Association is bound by the sentiments expressed by the different authors. Even in the Journal, the opinions contained in editorial articles are not necessarily Association opinions, inasmuch as the editorial articles are not subjected to any official censorship. EDITOR.]

NEWS AND TOPICS OF THE DAY.

LORD LYTTLETON'S VACCINATION BILL.

[House of Lords, April 14.]

The House went into Committee on this Bill.

Lord ELLENBOROUGH called attention to an inadvertency in the clause requiring notice to be given by the registrar. It directed notice to be given to the person who gave information of the birth. Now the person who came to register the birth might be almost unconnected with the father or mother, and yet by this bill it was proposed to impose upon that person the burden of giving notice to the parents or persons having charge of the child, under the penalty of fine or imprisonment. Some short time ago, he had told a registrar of two or three births of which that person was ignorant; and, if this act had been in force, he (Lord Ellenborough) would have been compelled, under a penalty of fine or imprisonment, to search out these persons, and to give them notice about the vaccination of the children. (A laugh.) He should propose, therefore, that instead of the provision he had alluded to, the registrar should deliver the notice of vaccination to the father or mother of the child, or to such other person as might have charge of it, and should, together therewith, deliver a notice of the time and place within the district in which he officiated at which the medical practitioner should attend for the purpose of vaccinating.

He had suggested that a penalty of five shillings should be enforced upon every schoolmaster or schoolmistress who, after a certain day, should admit into their schools an unvaccinated child. This, he thought, would be a fair requirement. Another provision which might be introduced was, to enforce the vaccination of emigrants; for where small-pox was once introduced into a ship where there were no means of vaccination, the destruction of every person who had not been vaccinated was often the consequence.

Their lordships had had a statement a few nights ago, and a very interesting one, as to the entire success of the compulsory system of vaccination in parts of Germany and Lombardy. What he desired to know, however, was, by what machinery that result had been attained—how it was they brought the person to the vaccinator, or the vaccinator to the person? A society had been formed in this country—he would not venture upon the extraordinary name by which they were designated—to investigate the cause and the extent of epidemics; and their view, he understood, was, that there should be in every union, or in every district, a public vaccinator, whose duty it should be, not to remain fixed in one place, but to go from house to house, to propose to operate upon those children or persons who he found had not been vaccinated. He thought the nearer this system was approached, the more perfect they would make this bill.

Lord LYTTLETON agreed to the amendment proposed.

The clause as amended was then agreed to.

On the clause regulating the fees payable,

Lord ELLENBOROUGH said, if, instead of giving the medical man an additional shilling for every case of vaccination, they gave the patient a shilling, there would be a rush to the vaccinator, and all the poor would, without the least reluctance, carry out the principle of vaccination.

[April 15.]

The report (on recommendation) of the above bill was brought up by Lord LYTTLETON. Some verbal amendments were introduced, and the report was received.

THE BUDGET.

[House of Commons, April 18.]

The CHANCELLOR OF THE EXCHEQUER (Mr. Gladstone) made his financial statement in a speech of five hours' duration. Our space only permits us to give a dry abstract of the main details.

In April 1852, Mr. Disraeli estimated the revenue for the year at £51,025,000, which in December he increased to £52,325,000, and at the end of the year the amount was £53,089,000, an increase of £1,404,000 on the estimate framed at the commencement of the year. The expenditure was estimated in April 1852, at £51,163,000, but the actual expenditure was only £50,782,000. The balance-sheet showed an actual surplus of £2,460,000. The question was whether or not the income tax should be parted with at once. By the imposition of certain other taxes, this tax might be got rid of; but the government did not recommend such a course. The amount of the tax—five millions and a half—large as it was, did not afford an adequate idea of the magnitude of the question. If the efficacy of this great engine were not destroyed, it would afford us the means, should hostilities unhappily break out, of at once raising an army of 300,000 troops and a fleet of 100,000 seamen, with other auxiliary aids, that would put this country in a condition to defy the world. Forty years ago, at a period of violent struggles, it enabled this country to raise an income above the expenses of the civil government, and in 1842, in a time of peace, its giant aid produced as remarkable results, and it might now assist us in completing the reform of our commercial system, and with ours that of other nations. Although called a tax, it was a complicated system of taxation. If he took the total receipts of the tax at £5,600,000, one twenty-eighth part would be £200,000. Now, lands and houses under schedule A paid no less than £2,400,000, or twelve twenty-eighths of the whole tax; and trades paid £1,800,000, or nine twenty-eighths; so that these two together paid three-fourths of the whole tax, while professions paid about one twenty-second part. It had been said that the same rate of tax ought not to be levied on precarious and realized incomes; but what were precarious and what realized? The relation between the payment on lands and trades would go a great way to solve the difficult question as to the justice of the tax. The real tax was paid by the land and houses. They paid 7d. in the pound uniformly on an income not assessed by the possessor, and without the smallest deduction in respect to the difference between gross and net income; whereas, if the present scheme of the tax was broken up, allowance must be made for repairs, insurance, law expenses, cost of management, arrears and abatements of rent. Taking this deduction at 10 per cent. upon £80,000,000, the gross income, it would be reduced to £87,200,000, which really bore the £2,330,000, the amount of the tax under that schedule. Then there were mortgages and settlements, which would reduce the income by at least £20,000,000, leaving it only £47,200,000, the net receipt of those beneficially interested in the lands and houses; so that the rate of the tax upon this species of property was 9d. in the pound, trades paying only 7d.—a proportion nearly equal to the 7d. and 5½d. proposed by Mr. Disraeli. If the basis of the tax were to be broken up, there would be a war of classes, and it was difficult to see where it would end. It had been said that the fair proportion which land should bear to trades was as four to three, and that was the relative proportion of the tax at present. As to the averaging of classes among themselves, he insisted that this was impracticable. Some trades were better than perpetuities, while others were not worth three years' purchase. As regarded the state of the case between land and trades, there was no sufficient ground for attempting to reconstruct the scheme of the tax. With regard to schedule C, including fundholders, he appealed to the House whether, if that schedule stood alone, it would not be an argument against breaking up the tax. Some rational construction must be given to the words of the Loan Act. The proposal to levy the tax upon the capitalized value of the income was one which could not with honour be adopted by the British Parliament. At present, only one-third of the public debt was held on sole accounts, indicating, generally speaking, absolute property; and the remaining two-thirds were held on joint accounts by persons not in their own right. Professions paid one twenty-second part of the tax, and public feeling recommended a change of this part of the scheme; and he warned the committee of the more than Herculean task that must be undertaken if an attempt be made to reconstruct the tax because of so limited a case as this schedule. There had been a most earnest desire on the part of the Government to consult the public feeling on the subject of this tax; the difficulties were insuperable. These were the views of the Government regarding the income tax, a gigantic engine, but the circumstances attending it rendered it impossible to maintain it as a portion of our permanent fiscal system. One thing he hoped the House would not do—namely, nibble at it, and try one experiment after another. Whatever was done with it should be bold, intelligible, and decided; pal-

tering with it would jeopardise one of the most valuable of our fiscal resources. Government propose to abolish it altogether after a gradual diminution for seven years. In 1855 it shall drop to 6d. in the pound, and in 1857 to 5d., where it is to stand till 1860, when it is finally to expire. Meanwhile it shall be levied to the extent of 5d. on all incomes down to £100, and shall be extended to Ireland, also at the same rate. Duty on tea by a shilling a pound; viz., from 2s. 2½d. a pound to 1s., spreading the reduction over three years. The duty on soap, producing a net sum of £1,111,000, he proposes to abolish at once and altogether. The duties on many other articles of domestic consumption are diminished or abolished. Receipt stamps are to be abolished, a Queen's head franking a receipt as it does a letter. The stamp duty on life assurance is to be reduced; and those on attorneys' certificates respectively from £12 and £9, to £8 and £6; and the stamp on admission from £120 to £80. The duty on advertisements it is proposed to reduce from 1s. 6d. to 6d., and to fix the duty on each newspaper at one penny a copy, without regard to its size, and without imposing an additional duty on supplements.

ADVERTISEMENTS.

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The Middlesex Hospital School of

MEDICINE.—The SUMMER SESSION will commence on MONDAY, MAY 2nd, 1853.

Fee for attendance on all the Lectures and Hospital Practice required by the Royal College of Surgeons and the Society of Apothecaries, £75, which may be paid by instalments of £30 at the beginning of the First Session, £30 at the beginning of the Second Session, and £15 at the beginning of the Third Session. Fee for Eighteen Months' Attendance on the Medical Practice, and Three Years' Attendance on the Surgical Practice of the Hospital, £30.

FORENSIC MEDICINE—DR. GOODFELLOW, Nine to Ten a.m.

MIDWIFERY—DR. FRERE, Ten to Eleven a.m.

BOTANY—MR. BENTLEY, Eleven to Twelve a.m.

PRACTICAL CHEMISTRY—MR. TAYLOR and MR. HEISCH.

(Fee for Pupils of the School, £2 2; for others, £1 4.)

MATERIA MEDICA—DR. STEWART, Three to Four p.m.

DR. VAN DER BYL will give a COURSE of LECTURES on PRACTICAL HISTOLOGY and the APPLICATION of the MICROSCOPE to the INVESTIGATION of DISEASE. The Class will meet for two hours twice a week. Fee, £2 2.

The ANNUAL DISTRIBUTION of PRIZES will take place on WEDNESDAY, MAY 4th, at Half-past Three, when the LORD BISHOP of OXFORD will preside.

Prospectuses and further particulars may be obtained on application at the Hospital.

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Extracts and Editorial Note from the "New York Journal of Medicine".

March 1st, 1850.

"BROWN'S CANTHARIDINE TISSUE.—It presents peculiar claims to our notice in the inflammatory diseases of females and children, in whom the unpleasant consequences which so often follow the application of the Emp. Cantharides are most apt to occur. We have found it a reliable and peculiarly safe vesicant, and from the many trials we have given it, we are satisfied that it deserves the attention of the Medical Profession.

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From the "Medical Examiner and Record of Medical Science" for May 1850, Published in Philadelphia.

"We have received from Mr. Geo. D. Phelps, of New York, specimens of BROWN'S CANTHARIDINE BLISTERING PLASTER AND DRESSING, with which our readers are doubtless familiar as a new and exceedingly neat preparation, easy of application, and certain in their effects. We have given them a fair trial, and find they fully answer our expectations."

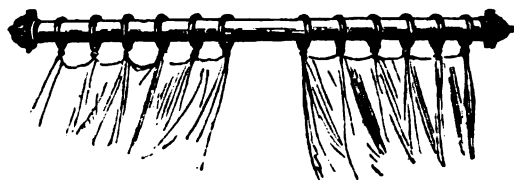
Army Medical Department, January 10, 1847.

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WILL TAKE PLACE AT THE

FREEMASONS' TAVERN, on WEDNESDAY, THE 4TH OF MAY NEXT.

THE PRESIDENT, THE EARL MANVERS, IN THE CHAIR.

THE FOLLOWING NOBLEMEN AND GENTLEMEN HAVE KINDLY CONSENTED TO ACT AS STEWARDS ON THAT OCCASION:

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 Carlisle, Earl of
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 Aldis, Chas. J. B., M.D., Chester Terrace, Chester Sq.
 Anderton, James, Esq., New Bridge St., Blackfriars
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Gentlemen who purpose attending the Festival are informed that Tickets, which may be had of the Secretary, should be procured before the 31st instant. Tickets One Guinea each.
 OFFICE,—4, HANOVER SQUARE,
 April 18th, 1853.

By order of the Council,
HENRY TUDOR DAVIES,
 Hon. Secretary.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XVII.

LONDON: FRIDAY EVENING, APRIL 29, 1858.

NEW SERIES.

PROFESSOR MILLER, of EDINBURGH, the author of a communication in our last number, has, we find, been confounded by several correspondents with DR. F. G. W. MULLAR, the pursuer in the recent jury trial at Edinburgh, "Mullar against Robertson and others, conductors of the *Monthly Journal of Medical Science*". As MR. MILLER and DR. MULLAR are different gentlemen, more than one correspondent will see the propriety of our declining to publish his letter.

THE PROSPECTS OF MEDICAL REFORM.

We hoped to have been able to-day to report some progress in the Medical Reform question; but we regret to find that as yet Lord Palmerston has not communicated with the Reform Committee. Mr. Hastings has in these circumstances written to his lordship, and an immediate reply may be expected. In the mean time, it is our duty to state that great impatience is felt by the profession throughout the country; and that a fear is expressed by many that the session of Parliament may be allowed to pass away without any Bill being brought forward, in consequence of present silence being imputed to apathy, and not to its true cause—uncertainty as to the exact position of affairs. As there is no Bill before Parliament, it is not competent for us to petition for any specific measure; but it might be well for us to guard against a future charge of indifference, by petitioning generally for such a measure of medical reform, as will embrace the three great objects for which our ASSOCIATION has contended, and is now contending, viz. :—

- I. UNIFORMITY OF QUALIFICATION:
- II. EQUAL RIGHT TO PRACTISE THROUGHOUT THE UNITED KINGDOM: AND
- III. REPRESENTATIVE COUNCILS FOR THE GOVERNANCE OF THE PROFESSION.

THE INCOME TAX.

MR. GLADSTONE, in the exposition of his financial scheme, is represented as having used the following words, by way of illustrating his argument that the life annuitant is entitled to an exemption from the tax on income, at least equally with the professional man :—

"When you come to life annuitants, you then deal with the desolate widow, with the orphaned daughter, with the defenceless woman, whose right it is to expect at your hands justice, tenderness, and protection. Are their incomes precarious, or are they not? I will take some lady who has been bred in the lap of luxury, and who then, upon the death of her parent, finds herself with the interest of £5000 or £6000 to live upon for the remainder of her days. I want to know whether that is to be subjected to the higher tax as an income from realized property? Will you, then, tell me, that upon the daughter and the widow you will lay that exceptional tax, and yet speak of doing justice, because you put the higher tax upon her, in order

that you may put the lower tax upon bankers and brewers, and physicians and lawyers?"

The accomplished Chancellor of the Exchequer has been trained in a school where rhetorical skill has always been successfully taught, and its value fully understood. No one, therefore, is better acquainted with the best method of introducing to his hearers an appeal to the feelings: no one more likely to observe the rule, that no address to the passions should be delivered directly as such, but that the best way of making a demand on the sympathies of the audience, is to illustrate the general argument by narrating a case in point; and, moreover, if the object be to excite pity, that the phraseology should be epigrammatic and suggestive, rather than copious and clear. There is, however, such a thing as overshooting the mark. We shall endeavour to show (as the question dips deeply into our professional pockets) that the Chancellor's argument is fallacious, and his illustration consequently of no avail; although, in so doing, we run the risk of being charged with presumption for daring to measure swords with a Chancellor of the Exchequer, and with want of gallantry for endeavouring to disprove the plea of the ladies.

Two things particularly strike us in reading Mr. Gladstone's statement; first, the careful suppression of all allusion to the causes for which taxes on income are imposed; and second, the including "physicians" in the same category with "bankers, brewers, and lawyers". As the first circumstance materially bears upon the second, we shall proceed to discuss them briefly in the order in which they stand.

For information on the general principles of taxation, we refer our readers to Adam Smith's well-known work on the *Wealth of Nations*. It is sufficient for our present purpose, to state the axiom, that *every tax should be viewed as the purchase-money paid for equivalent advantages*. Now, the advantages which are derived from taxation are clearly of a protective character; it is therefore at once obvious, that the life annuitant is especially concerned in the security of the fund from which his or her annuity is derived, and that fleets and armies are necessary to defend the Treasury from dangers without, as well as that courts of law must be maintained for the administration of justice within the realm. But how can this principle be made to apply to the protection of incomes derived from no such source? We confess we are driven back upon our original proposition, and must ask how the professional man can view the income tax as *the purchase-money paid for an equivalent advantage* in the same ratio as the annuitant, when the one pays for the protection both of the public generally, and of the *principal* of his own income in particular, whilst the other, so far as his immediate income is concerned, has no principal to protect? The conclusion at which the Chancellor arrives would be perfectly just, if the portion of the case which he has thought proper to make known to us were the whole of it; but since he has kept in the background a material element in the calculation—

namely, the principle upon which the particular tax in question is levied—a principle which, if brought forward, must vitiate the result—we cannot but think that logicians will consider his argument entitled to take rank among the fallacies of non-observation.

We now address ourselves to the second division of our subject; and here we wish carefully to avoid the imputation of seeking to exempt our profession from the common burdens imposed by the necessities of government. We are each and all of us bound to contribute our share to meet the public expenditure, and to perform those acts of citizenship which are within our power: but there are conditions annexed to the duties of the medical man which separate his fortunes from those of all other men, and make him a person of no inconsiderable consequence, and liable to be called upon to exercise the most arduous, as well as the most satisfactory functions of his office, at a time when all other classes of the community are involved in anarchy and confusion. Let it be remembered that the art of healing is an art of peace, even in the midst of war; and that it possesses a quality like that of its companion, mercy:

"It droppeth as the gentle rain from heaven
Upon the place beneath. It is twice blessed;
It bleaseth him that gives, and him that takes."

For it is not only true that we practise a profession which is of service to all people, but that this profession is called into action at all times and under all circumstances—nay more, that the virtues of our craft to the eye of the multitude shine brighter by the watch-fires of the bivouac, and among the flames which consume the besieged city, than when viewed by the light of a domestic fire-side, which has never known the horrors of war.

We have no desire to push this subject too far, or even to carry out our argument to its fair and legitimate conclusion. It is enough to say, that even in our own times the services of medical men have been honoured and esteemed during revolutionary periods, when the hearts of all were failing them for fear, and when ruin was staring them in the face. We heartily pray, for the sake of our altars and our hearths, that we may never be called upon to practise the science of medicine and surgery under the fire of an invading army, or amidst the abominations of a civil war; but we would have the legislature to do us justice, and to understand that no social volcano which crumbles to dust the institutions of other men can shake the integrity of medicine as a profession; for it is while such storms are raging, that medicine appears in her true character and brightest colours. When emperors and kings are tottering on their thrones, the good deeds of Medicine proclaim, that her officers hold their commissions from the King of kings.

THE CHANCELLOR OF THE EXCHEQUER ON MEDICAL FEES.

In the *Times* of Monday last, a letter is reprinted which the Chancellor of the Exchequer has addressed to Mr. Joseph Lloyd Phelps, a clerk in Birmingham, on the subject of the income-tax. We direct the attention of our readers to this interesting communication, for two reasons; first, because it exhibits a most kindly feeling to all classes of the community on the part of the important functionary from whom it proceeds; and secondly, because Mr. Gladstone has most candidly and sagaciously exhibited in a new light the value of the services of medical men to a large section of the general public.

In one part of his letter, Mr. Phelps complains that the clerk with a salary of £100 a year will, by the proposed measures of the Government, be in no way relieved "on house rent, on clothes, on meat, on flour, on coals, on education of children, on medical attendance, on borough and parochial rates."

In his reply, Mr. Gladstone refers to the question of medical attendance and makes the following significant remarks:—

"You say medical attendance is not cheapened. Surely, medical attendance has since 1842 been virtually and really cheapened to you, if medical men (as has been the case) have been called upon, without any increase of their fees, to pay income-tax in order to reduce the price of articles, of which persons of £100 a year are, relatively to income, larger consumers than they themselves who have paid the tax."

There is no occasion for us to offer a comment on this extract. It plainly indicates that the claim of the medical man to be freed of the burden of the income-tax has not passed unheeded by the Chancellor of the Exchequer; and it strengthens the hope, expressed in our last number, that the numerous petitions which the profession is now laying on the floor of St. Stephen's may not prove altogether useless.

GALVANIC QUACKERY IN EDINBURGH.

THE remarks which we made a fortnight ago upon Pulvermacher's Chain, and the advertisements of its proprietor, have brought us a number of very curious communications illustrating the subject of second-hand advertising.

From Edinburgh, we learn that the Galvanic Quackery is there flourishing as luxuriantly as in London. A person of the name of Harthill fills columns of the front page of the newspapers with puffs in the usual extravagant style and phraseology adopted by universal curers. In place of the "Hydro-Electric Chain of Pulvermacher", we have the "Halsean System of Galvanism without Shock or Pain". The following is an extract from a very long advertisement which appears regularly in the *Caledonian Mercury*.

"The Halsean System of Galvanism gives neither shock nor pain; and whether, as regards the apparatus employed, or the mode of its application, it differs entirely from the electrical influence of rings, chains, and small galvanic batteries. HALSE'S Pamphlet on Galvanism, together with Mr. HARTHILL'S List of Cures, may be had gratis (or post free for two stamps), at 7, Castle Street, Edinburgh. They contain particulars of cures in obstinate cases of Rheumatism, Sciatica, Paralysis, Nervousness, Dyspepsia or Indigestion, Pains in the Head, Spine, and Limbs, Asthma, Neuralgia, Lumbago, Tic-Doloureux, Liver Complaint, certain cases of Deafness and Dimness of Sight, Spinal Complaints, General Debility, Costiveness, Stiff Joints, Female Complaints, Deficiency of Nervous Energy, Rheumatic Gout, and all sorts of Nervous Disorders. As a remedy for Diarrhoea, and a preventive of Cholera, HALSE'S Galvanism is invaluable. Patients can be Galvanised at their own residences when required. Terms moderate."

The Halsean quack of the northern metropolis is evidently omnivorous: he lies in wait for all sorts and conditions of invalids, as appears from the preceding extract: and if the subjoined *morceau* (which constitutes a part of the advertisement from which we have quoted) be not a forgery, he can boast of having patient and puffery combined in a fellow of the Royal College of Physicians, Edinburgh. Mr. Meinig can show nothing to match this.

IMPORTANT TESTIMONIAL.

From one of the most eminent medical men in Scotland.

"I have much satisfaction in stating that I was under Mr. Harthill's care for some weeks, with considerable advantage in diminishing many very unpleasant symptoms of oppression of the chest, and general weakness. His skill, attention, and kindness, were extreme; and I regret that I was prevented, by pressure of business, from continuing longer under his care. I mean speedily to renew the galvanic treatment, which, as applied by him, is most safe and beneficial, and in a greater variety of cases than is usually supposed—whether of mal-organisation or function of different organs—it strengthens the nervous and circulating systems, and in palsy, weakness of the spine, and nervous complaints, often performs miracles. (Signed)—JOHN THATCHER, M.D., Fellow of the Royal College of Physicians, etc., Edinburgh, 14, Picardy Place, May 8th, 1852.

When next Dr. Thatcher is able to emancipate himself from the "pressure of business", he might with advantage submit his case to his college. We feel convinced that it is their duty to administer to him a more legitimate restorative than Halsean galvanism.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY AND THE DISCUSSION OF TUESDAY ON URETHROTOMY.

WE have to-day reported at some length an interesting discussion which took place on Tuesday, in the Royal Medical and Chirurgical Society, upon the reading of a paper by Mr. Syme of Edinburgh, on the treatment of obstinate stricture of the urethra by external incision. The attendance of hospital surgeons, we regret to state, was not large—smaller, we think, than on an ordinary occasion when no subject of special surgical interest is expected. An hospital appointment surely carries with it an obligation to communicate experience when that experience is required to elucidate a new or doubtful method of treatment; and it therefore cannot escape notice that on Tuesday night Guy's, St. Bartholomew's, the London Hospital, King's College, University College, the Westminster, Charing Cross, and St. George's Hospitals, were not represented in the debate.

THE "CHURCH AND STATE GAZETTE" v. THE MEDICAL PROFESSION

By a mere chance, a copy of the *Church and State Gazette* or *Churchman's Family Newspaper* of Friday, April 22nd, fell under our notice. Casting our eye over the leading articles we read as follows:—

"The remarks made by Mr. Gladstone on incomes derived from the funds, and those made in the exercise of lucrative professions and trades will find an echo in every honest breast. The majority of fundholders—we allude especially to bona-fide investors who do not speculate but who live on the interest of their investments—may be said to consist of persons who have toiled long, and spared and saved, in order that their old age might not be entirely defenceless or desolate. To make these pay a greater proportional amount of income tax than the medical man or the lawyer, who lives like a prince, scorns to save, and leaves his family to the charity of friends, would be a gross act of injustice. Generally speaking, 'professional men' are the Bedouins of civilized society. They enforce a most extravagant rate of remuneration; and to supply this on the side of the public, renders cold many a hearth, extinguishes many a fire, and condemns to utter desolation entire households. It is a saying in France, that fashionable medical men are assassins who ride in gay carriages; we

will not say the same of those nearer home; but we will say that to save such from income tax, while the latter is left to weigh heavily on poor and unprotected female fundholders, would be an amount of injustice in which none would willingly acquiesce—save perhaps the professional gentlemen themselves."

Let us briefly examine one or two points in this passage.

In the first place, it is written under the assumption that the rich or "fashionable" portion of the profession are agitating for an exemption from the income tax, at the expense of the poor fund holder. A passage from a letter which we received this morning from a country surgeon, may throw some light upon this part of the subject, and tend to show that we are not advocating the cause of the rich, but of the hard-working and ill-paid medical man.

"For many years I had to work six large parishes in the Union in which I live; and although I could prove that these parishes cost me from £50 to £100 a-year, over and above the salary which I received, yet for many years I paid income tax upon the entire salary I received from the Union. Again, when I took occasion to appeal against a surcharge made upon my return, the law was laid down to me, that if fifty of my patients, owing me £10 each, were to march off to America without paying me, I was liable to pay income tax, less deductions, upon the £500; in other words, that my income was to be calculated upon what I booked, and not upon what I received. Now is this what is termed a just incidence of taxation?"

Does the Editor of the *Church and State Gazette* mean to say that this is fair or honest, when compared with the sevenpence in the pound taken from the £1,200 a-year, paid to a clergyman for being "in residence" for three months in the year as a canon in one of our cathedrals? We might, were we to descend to the literary platform of the *Church and State Gazette*, easily retort upon the writer of the passage which we have quoted, by saying that these incomes of £1,200 a-year would make warm many a naked fellow-creature, or feed many a hungry and starving wretch, in the parishes from which these stipends are wrung; but we would deserve the condemnation of every right-thinking gentleman were we to follow such a course of argument.

But what does this writer mean by saying, that the medical man "scorns to save"; and "leaves his family to the charity of friends"? Does not the assertion belie the writer's words, that such men exact "an extravagant rate of remuneration"? There are too many, alas! of the families of medical men who are left destitute, and in some cases this destitution is the penalty of improvidence; but to say that the majority of medical men live extravagantly or recklessly is untrue; and to conclude that this is the case because many of their families are left destitute, is a cruel misstatement.

And what, may we ask, does the *Church and State Gazette* mean by quoting a story supposed to be rife in Paris about medical men, and by then leaving his readers to infer, that "fashionable medical men" are "assassins who ride in gay carriages"? Is this the temper which ought to influence the organ of one profession in criticizing even the faults of another? Is this "the charity which thinketh no evil"? Can we recognize in our clerical contemporary any attempt to conform to that character which ought to distinguish men who claim to be the direct successors of the Holy Apostles, and whose divine errand it is to proclaim to the world the gospel of peace, goodwill, and salvation? Nay, do not the mere requirements of gentlemanly, not to speak of Christian language, forbid the bandying of such epithets as "plunderer" and "assassin"?

ORIGINAL COMMUNICATIONS.

HINTS ON AUSCULTATION, WITH A VIEW TO THE SIMPLIFICATION OF TERMS AND ARRANGEMENT.

By THEOPHILUS THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption and Diseases of the Chest.

THE present century has been a period of remarkable progress, as respects the diagnosis of thoracic disease. A glance at standard works published less than thirty years since will exhibit striking evidence of the truth of this assertion.

It may be sufficient to instance the remarks of Dr. Mason Good, in the second edition of his work on the *Study of Medicine*,* published about the period when Dr. Forbes first called the attention of the profession in this country to the observations of Laennec. The chapter on Dropsy of the Chest, in Dr. Good's work, affords material of much interest, viewed in relation to the present mode of investigation. In reference to dropsy of the mediastinum, pleura, pericardium and lungs, Dr. Good observes: "These can never with any degree of certainty be distinguished from each other till after death"; and "those who are desirous of examining into the curious and often contradictory signs by which these several forms of pectoral dropsy have been attempted to be discriminated by various writers, may turn with advantage to Sir J. Maclean's work upon the subject". He adds (p. 407): "The only decisive symptom in this disease is the fluctuation of water in the chest, whenever it can be ascertained; for several of the other signs are often wanting, or, in a separate state, are to be found in other complaints of the chest as well as in dropsy, more particularly in asthma and empyema."

Every reader of this JOURNAL is familiar with the change effected in this department of inquiry since these remarks of Dr. Good were penned. It must, however, be acknowledged that the advantages which the new modes of investigation offer, have not always been realized; partly in consequence of a tendency to regard the phenomena observed by means of auscultation as necessarily intricate and complicated. Such an idea is surely founded on misapprehension. The soft silky sound, heard on listening to the chest of a healthy individual in the act of breathing, cannot be mistaken. Every practitioner must have had frequent occasion to observe this silky murmur superseded by bubbling sounds, when, in consequence of affections of a catarrhal character, the air in its entrance and its exit passes through the secretions with which the air passages are occupied: the sound being necessarily modified according as this secretion is confined to bronchi of considerable calibre, or diffused through the smaller tubes, or the aerating tissue of the lungs. When the smooth expansion of this tissue is prevented by causes extrinsic to the cells, and the air in expiration does not pass through secretion, the sound produced has not a bubbling character, and may be confined to the period of inspiration. In this way, varieties of crackling and crepitation sounds originate.

When, in consequence of thickening of the investing membranes, or the presence of any partial obstacle, the calibre of the bronchi is altered, vibratory sounds are induced, which may be grave or acute, according to the diameter of the passages affected.

The simple view thus presented sufficiently represents the principal circumstances, which require to be considered in the practical application of auscultation to those diseases of the chest, in which difficulties are most frequently experienced and errors most readily committed.

It must be acknowledged that familiarity with the practice of auscultation requires for its attainment considerable devotion of time and labour; but it will scarcely be disputed that, in addition to the difficulties inherent in the subject, others have arisen: 1st. From attempted refinements, not

authorized by existing phenomena; 2nd. From the use of terms, either inaccurate, or not sufficiently distinctive. The first of these mistakes tends to render the art of auscultation unattainable: the second introduces confusion, which is often worse than ordinary error, because it is a form of error difficult to correct. I do not expect in the present communication altogether to avoid these defects; but it will be my aim to describe only sounds which can be readily recognised, and to select such terms as shall express as marked a difference as possible between sounds differing in their character and practical significance. Whilst avoiding any unnecessary alteration of terms which have been sanctioned by general usage, I shall not scruple to displace those which are obviously inaccurate or calculated to induce practical error.

In attempting to form systematic classifications of auscultatory phenomena, confusion has often arisen from the circumstance, that some sounds have been designated according to the impression made on the ear, and others in subserviency to some theoretical idea regarding their mode of origin. Thus, for example, the crepitant rhonchus, although from its name implying a sound dry in character, is yet placed by some authors amongst moist rhonchi, from the supposition of its being due to the presence of secretion. If it be considered convenient and expedient to make an arrangement founded on the nature of the impression made on the ear, whether of dryness or of moisture, the crepitant rhonchus should certainly be placed in the first of these divisions: and my own view of its cause would induce me on theoretical grounds to consider this its appropriate place.

The following arrangement may be considered to afford a simple and comprehensive exhibition of the most remarkable sounds, according to the principle of classification which has just been noticed.

TABLE I.—*Rûles or Abnormal Sounds produced within the Lungs, arising from Morbid Secretion.*

		Heard in	
		Inspiration.	Expiration.
I. Dry.	1. Sibillant	—	—
	2. Sonorous	—	—
	3. Crackling (or dry click)	—	—
	4. Crepitant	—	—
	a. Primary (or fine crepitant)	—	—
II. Humid.	b. Secondary	—	—
	1. Bubbling (or subcrepitant, or moist crepitant, or mucocrepitant)	—	—
	2. Mucous	—	—
	3. Crackling (humid click)	—	—
	4. Cavernous (or gurgling)	—	—

This plan is a slight modification of that suggested by Dr. Walshe, as proposed by my colleague Dr. Cotton; but, however comprehensive and simple in appearance, it appears to me on practical grounds liable to objection.

It is difficult by any verbal representation to convey to one man a correct idea of the impressions made on the senses of another; and in adapting terms to describe impressions on the ear, it is undesirable to introduce those which are expressive of pathological conditions. The remarks of Skoda, that crackling is a dry sound, and indicates the presence of fluid, probably of a tenacious character, in some of the bronchial tubes, or in a cavity, may serve to illustrate the contradictory character of the language, to which designations involving speculative opinions are apt to lead. In the attempt now made to simplify the subject, I shall not include all the auscultatory sounds, but chiefly those of practical importance, which are most easily confounded, in consequence either of some supposed similarity in their character, or of the ambiguous terms by which they have been designated. Percussion sounds, modifications of sound derived from the voice, cardiac, venous and arterial murmurs are omitted; since they are far the most pathologic.

distinguished, and the terms by which they are designated are sufficiently expressive.

It is undesirable to give similarity of name and juxtaposition in arrangement, to sounds characteristic respectively, some of inflamed lungs, others of consumption, and I would venture to propose, as simple, distinct, and suited for clinical purposes, the following division into bubbles, clicking, crepitation, crackling, and vibration.

The first column exhibits the arrangement which I propose; the second, the corresponding terms in most frequent use; the third contains brief descriptions of the distinctive characteristics of each sound; the fourth notes the occurrence of the sound, whether chiefly in inspiration or expiration, or in both; the fifth shows the most common seat of each sound; and the sixth, the principal disease in which each sound is manifested.

TABLE II.

	Sounds.	Synonyms.	Character of sound.	Relation to		Common seat.	Accompanying disease.
				Inspiration.	Expiration.		
I.	Bubbling. a. Bubbling rhonchus b. Small bubbling rhonchus c. Gurgling	Mucous rhonchus. Subcrepitant rhonchus. Cavernous rhonchus.	Unequal irregular bubbles altered by cough. Few irregular bubbles.	— — — —	— — — —	Middle of both lungs. Base of both lungs. Summits.	Bronchitis. Capillary bronchitis. Excavation.
II.	Clicking.	Humid crepitation or humid crackling rhonchus.	2, 3, or 4 clicks.	— — — —	— — — —	Summits.	Softening tubercle.
III.	Crackling.	Dry crepitation or dry crackling rhonchus.	2, 3, or 4 dry sharp sounds.	— — — —	— — — —	Summits.	Unsoftened tubercle.
IV.	Crepitation.	Crepitant rhonchus.	Numerous minute, similar rapid puffs, like salt on fire, or rubbing lock of hair between fingers.	— — — —	— — — —	Base of one lung.	Pneumonia.
V.	Vibration. a. Sonorous rhonchus b. Sibilant rhonchus			— — — —	— — — —	General General	Bronchial asthma, etc.

I. BUBBLING SOUNDS are produced by air passing through secretion in the bronchial tubes, as peculiarly occurs in bronchitis; in those of moderate calibre constituting what has been usually designated mucous rhonchus. The smaller bubbling rhonchus produced in the capillary bronchi, commonly known as subcrepitant, should rather be termed sub-mucous, if, from respect to long usage, the somewhat questionable term "mucous" be retained. To these bubbling sounds the term rhonchus is appropriate; but I do not dignify with this title sounds probably produced externally to the cells, such as crackle and true crepitation, which are not proved to have any relation to the passage of air through secretion or vibrating tubes.

II. CLICKING consists of a series of sounds, few in number, exactly corresponding to the term, audible in some degree during expiration as well as inspiration, and probably never existing except when softened tubercle is present.

III. CRACKLING—a term which itself defines the sound—consists of a few, (not more than three or four,) crackles limited to the period of inspiration, seeming to arise at a distance from the ear, probably produced externally to the cells, and characteristic of the first stage of phthisis, although not invariably present under such circumstances.

IV. CREPITATION consists of more numerous and finer sounds than crackling. It is also confined to the period of inspiration, and is probably due to viscid secretion in the cell-walls, occasioning difficulty in their expansion. It is peculiar to pneumonia.

V. VIBRATIONS. Of sonorous, grave or cooing, and sibilant, shrill or whistling rhonchus; sounds resulting mainly from vibration, and indicating flattening or narrowing of tubes, such as is common in chronic bronchitis, it may be sufficient to remark that, when occurring interruptedly, these rhonchi may be occasioned by vibrations of air produced by pellets of mucus, as is sometimes observed in pertussis; but that in proportion to the continuousness of these sounds, there is reason to suspect turgescence or thickening of the membrane, or effusion in the submucous tissue.

A few incidental remarks may here be expedient, in order to explain a little more particularly the modifications which are suggested in this communication.

The term subcrepitant rhonchus has been so long and extensively employed, that the attempt to displace it may seem a bold and doubtful experiment; but I scarcely know a medical expression which has tended to more danger in practice. The term conveys to the mind the idea of a sound analogous to that usually designated crepitant rhonchus (but which I propose to call crepitation); and has in consequence led to injurious depletion. If asked to specify the greatest abuse of auscultation with which I am conversant, I should instance the leeching and antimonializing of children, in certain pectoral affections, of which the subcrepitant rhonchus is a prominent symptom. Under the cover of a pedantic numerism, the cure of pneumonia without depletion has, on the continent especially, been assumed to be common, because this so-called subcrepitant rhonchus, although really differing in character of sound, as well as in cause, has been mistaken for the rhonchus characteristic of pneumonia. A reference to the table (No. 2) will show the marked difference between these sounds.

As respects diagnosis and treatment I cannot but think that great importance may be advantageously attached to the co-existence of certain sounds with expiration as well as inspiration, with certain qualifications, particularly in reference to vibratory rhonchi; the presence of a morbid sound during expiration affording evidence of the presence of secretion within the cells or tubes. This view is supported by the concurrence of clicking, from softened tubercle, with both respiratory actions, as contrasted with the inspiratory crackle of the first stage of phthisis. The same peculiarity distinguishes the small bubbling (submucous rhonchus) from true crepitation (crepitant rhonchus), which resembles the noise produced by rubbing a lock of hair between the fingers, and conveys to the mind an idea (probably in harmony with the fact) of the abrupt forcing open of cells rendered less yielding by glutinous deposition in their walls.

If the cause commonly assigned for "crepitant rhonchus"—namely, air passing through secretion—were correct, the air in repassing should produce a rhonchus during expiration also. The presence of viscid secretion within the pulmonary cells in pneumonia may be acknowledged, without conceding that this secretion is concerned in the production of crepitation; indeed, its tenacity may be a reason why bubbles are not produced, the calibre of the capillary tubes to a certain extent remaining free. When, in the resolution of pneumonia, the secretion becomes less viscid, and occasionally more copious, the rhonchus changes in character, and the sound which has been designated the *redux* crepitant rhonchus, having more of a bubbling character, and more or less audible during expiration, is produced. The sound sometimes termed continuous subcrepitant rhonchus, existing only during inspiration, and accompanying pulmonary congestion such as attends some forms of fever, I should regard as a subcrepitation, not a rhonchus.

As respects the treatment of inflammatory affections of the lungs, in proportion as sounds are confined to inspiration, they afford reason for depletion; in proportion as the rhonchi become bubbling, they indicate secretion, and suggest a discontinuance of antiphlogistic treatment.

The advantage of introducing terms so diverse as is suggested in the present plan is obvious. If we speak of crackle, the first stage of phthisis is indicated; if of clicking, the stage of softening; if of crepitation, pneumonia is known to be present; if of bubbling or small bubbling rhonchus, secretion more or less copious is known to be present in the different orders of bronchial tubes.

Some authors, otherwise instructive, have complicated the subject of auscultation by looseness of expression, as well as by over refinement. Dr. Stokes, for example, in a work generally admirable for breadth of view and clearness of style, has sanctioned the use of that ambiguous term "muco-crepitant rhonchus"; regarding which it has been well observed, that if twelve physicians were asked the meaning, it is doubtful whether two would agree.

It is a sufficient proof of the vague manner in which auscultatory terms are employed, that when an author uses the word crepitation, we are often at a loss to determine whether he intends dry crepitation (crackle), moist crepitation (clicking), or subcrepitant rhonchus (small bubbling rhonchus), or the true crepitation (crepitant rhonchus) of pneumonia.

The distinctions attempted in this communication may be open to incidental objections; and doubtless the phenomena observed in practice are not likely exactly to correspond with systematic arrangements; but the beginner requires broad distinctions, and his own studious care will familiarise him with the requisite modifications. It should be remembered that the loudest sounds are not the most important. On the contrary, catarrhal affections of the larger tubes may seem to the novice more alarming than the fine crepitation of pneumonia, or the delicate crackle or clicking of phthisis. Skoda has expressed an opinion that dry crepitation (crackle), and moist crepitation (clicking), are bronchial sounds, and have no necessary relation to consumption. I cannot concur in this conclusion, although aware that varieties of subcrepitation may be mistaken for them, if we overlook the modifications produced in bronchial sounds by deep inspiration or cough. If a doubtful sound is removed by cough, or superseded by vibration sounds on deep inspiration, we may, with little exception, conclude that it is not crackle or clicking.

Let me venture to urge the desirableness of avoiding the mongrel combinations of different languages, too common in medical descriptions, and of adhering, whenever practicable, to our own mother tongue. The avoidance, as far as possible, of foreign expressions, is important to simplicity, to accuracy, and one is almost tempted to add, to patriotism. And although, in this particular department of physical science, the use of French words has a special palliation, it is yet better to sacrifice this consideration; since, whenever our own language is deficient in descriptive terms, Greek words, or Latin words of Greek derivation, have the superiority in expressiveness, and in harmony with our own. Of this

truth, the word "terminus", for the extremity of a railway line, may furnish an example. For the purpose of designating certain unnatural sounds not easily expressed by any of our English words, the word "rhonchus" is perhaps the most appropriate, from its compass and expressiveness of meaning; but there are advantages in restricting its application to sounds produced by air permeating tubes or cells, modified by the condition of those tubes or cells, or of the fluid through which it passes. The original word "rhonchus" was occasionally employed to represent the sound of air disturbed in its course; but not unfrequently to signify the murmur of waves against particular obstacles. It was especially applied to the noise of deep waters striking against precipitous rocks. Those readers of this Journal who retain the youthful freshness of their classical literature, may recollect other instances. I will only quote an example of the use of the kindred verb in the beautiful description which Homer gives of the waves breaking against the rocks of Scylla:—

Ἐρθεν μὲν γὰρ πέτραι ἐνπρόθεες, πρὸς δ' ὕδατος
Κῦμα μέγα βοῶντι κνανόωντος Ἀμφιπύργου

It may be objected that the introduction of new terms will tend to increase the perplexity we desire to avoid; but this difficulty may be to a great extent obviated, if, in using words not generally adopted, the best understood of synonymous words be placed in parentheses; for example, crepitation (crepitant rhonchus), bubbling rhonchus (mucous rhonchus).

In conclusion, it should be observed that the most accurate description of sounds, and the greatest aptitude in their detection, must never be considered sufficient without a careful investigation of collateral symptoms. A habit of expecting conclusive evidence from unassisted auscultatory signs has frequently entailed disappointment, and induced unreasonable disparagement of this branch of the medical art. A change of sound doubtless proves a change of condition; but as several pathological conditions may sometimes induce a similar sound, other indications must be sought, in order to determine which of these conditions is present. Notwithstanding the definiteness of information regarding local affections, which auscultation may often supply, no prudent practitioner would determine his treatment without taking into account such circumstances as the degree of rapidity or labour in respiration, the character of the expectoration, and the amount of constitutional disturbance. The inadequacy of any single indication as a guide applies, however, still more to symptoms arising from sympathies than to those depending on acoustic principles. There is in some minds a "barrenness of faith" leading them to distrust the details which conduce to general truth; and it is doubtless easy to be unnecessarily minute in distinctions of sound, but the misuse of auscultation arises less frequently from undue refinement than from a want of correct appreciation of the distinctions most practically important. Disproportion is the great cause of erroneous opinion, no less than of monstrous forms. It is better to begin with doubts and end with certainty, than to begin with confidence and end with distrust; and I cannot question that whilst auscultation is studied with the caution and ingenuousness of true philosophy, it will never lose ground in the estimation of the profession.

3, Bedford Square, April 12th, 1853.

ON THE OCCURRENCE OF HERNIA BRONCHALIS DURING LABOUR.

By HUGH ROBERT RUMP, Esq.

THE following observations on hernia bronchalis, as it occurs during labour, I have been induced to offer, from the silence of all obstetric authors on the subject; at least as far as I am enabled to judge. Burns is the only writer who alludes distinctly to the neck as a region connected with the process of parturition in a pathological sense, and then only as regards bronchocele. In the treatment

* *Odyssey*, xii, 55-56.

chapter of the tenth edition of his *Principles of Midwifery*, he writes—"Swelling of the thyroid gland takes place so much more frequently after parturition than under other circumstances, that it may with propriety be mentioned here. It appears within a few days of delivery, and is often attributed to exposure to cold. In other cases, the woman feels as if something had given way about the throat. It may remain long in an indolent and stationary state, being productive either of no material inconvenience, or only of a slight difficulty of swallowing. In other instances, it augments in size, and becomes dangerous, from its pressure on neighbouring parts; or it forms a large abscess, and bursts."

It is somewhat singular that two, if not all, the cases about to be related had been mistaken for bronchocele, and treated accordingly.

Hernia bronchialis, goître vesiculaire, goître arien, hernia gutturalis, and bronchocele vera, are synonymes for a peculiar protrusion of the mucous membrane lining the air passages, either through the crico-thyroid membrane, or between two of the cartilaginous rings of the trachea; forming externally, in front or on either side of the throat, a soft tumour, not tender to the touch, and without discoloration of the integuments. The first description of this very remarkable tumour was given by Larrey in his *Clinique Chirurgicale*, tome xi, p. 81. The subjects of this disease who came under his observation during the war in Egypt, were some French soldiers and Mahommedan priests; persons who had been in the constant habit of calling at the highest pitch of the voice. This continued vocal effort he regards as the sole cause of the disease. He says—"Notwithstanding the statement of the authors who have written upon goître, we have accurately observed and recognised that which has been designated under the name of bronchocele, but which might be termed, with greater propriety, pneumo-guttural hernia. It consists of one or more air tumours, which form in front of the throat, and principally by the sides of the larynx. These tumours, which sometimes acquire a considerable size, may be attributed to the arrangement of the parts, and to the more or less violent efforts occasioned by the cries or songs of the individual. The air which has served for the purpose of inspiration, being afterwards, by the effort of expiration, driven outwards with all the modifications necessary to impart to the cries, or the voice, the desired intonations, gradually produces these tumours."

The diseases or affections likely to be confounded with hernia bronchialis, are—1, bronchocele: 2, cystic disease of the thyroid gland; 3, a cyst situated beneath the deep cervical fascia, and in proximity with the carotid sheath. It may, however, be readily distinguished from these diseases, and its true nature accurately ascertained, by observing—1, that it greatly diminishes in size, or entirely disappears, upon the application of gradual and uniform pressure; 2, that on a deep inspiration being made, the tumour ceases to be prominent, the air being withdrawn from its interior, its walls collapse, and scarcely any swelling is perceptible; 3, that during a strong expiration, the nostrils and the lips being at the time compressed with the fingers, the opposite condition ensues, the air rushes into the interior of the hernia, and it becomes tense and greatly distended. With aneurism it could scarcely be confounded.

From the facts which I have been enabled to collect, it appears that hernia bronchialis occurs during the second stage of severe and protracted labour, in which uterine action is very powerful, and where considerable resistance is offered to the passage of the head, either by a rigid and unyielding perineum, or by contraction of the pelvic outlet. The same circumstances which favour laceration of the perineum, I apprehend may be productive of hernia bronchialis. During the violent straining of the last pains of labour, the diaphragm is fixed, the abdominal muscles powerfully contracted, the glottis closed, and respiration for a time suspended; the cavity of the thorax becomes diminished, and the air contained within the lungs is forced upwards against the inferior surface of the glottis,

carrying with it and elevating the larynx to a certain extent, thereby producing a *certain amount* of elongation of the trachea, separation of its rings, and consequent attenuation of its tissues; the same force will render the crico-thyroid membrane tense, and place it in the most favourable condition for separation of its fibres. The accuracy of the foregoing remarks, as regards the effects of straining upon the larynx and trachea, may be tested by personal experiment.

In ordinary labour, the force of the column of air upon the sides of the trachea and larynx is gradual and moderate; if it be excessive, hernia bronchialis may result. During puerperal convulsion, the closure of the glottis is sudden, the pressure is immediate and fearful, and the tissues unable to sustain it; rupture, and then emphysema, ensue. Of the latter accident, the following case is an example.

CASE. Mrs. S., aged 26, at the full period of pregnancy with her first child, was seized, early on the morning of the 19th January, 1849, with violent convulsions, and perfect insensibility. I was summoned immediately, and found her in a comatose condition, lying on the back, with the arms and legs extended, and the head thrown backwards. The face was slightly flushed, and bedewed with perspiration; the pupils were contracted; and the pulse in the radial and temporal arteries was full and bounding. The relatives of the patient stated that she retired to bed on the previous evening in her usual health; but that about a week previous, she had suffered from extreme giddiness, and partial loss of speech for a few hours. These symptoms were attributed, at the time, to constipation; and a free action of the bowels having been procured, they entirely subsided. It was evident that no time was to be lost. A vaginal examination being made, the os uteri was found undilated, and the vertex presenting. The patient was propped up with pillows, and between thirty and forty ounces of blood taken from the arm, in a full stream. The hair was cut off closely, and linen cloths, dipped in cold water, were applied to the head; sinapisms were placed on each calf; and two drops of croton-oil, with ten grains of calomel, mixed with a little butter, were put on the back of the tongue. About an hour after the venesection, convulsions recurred, and lasted a few minutes, but were less severe than the first. During the succeeding three hours, the patient was convulsed every twelve or fifteen minutes; the fit now being evidently connected with uterine action, and preceded by restlessness and moaning. On examination, the os uteri was found dilated to the size of a half-crown, thick or cushion-like, and well lubricated with mucus. The membranes were unruptured. A strong terebinthinate enema was now administered. A very short period had elapsed after the administration of the enema, when a convulsion of the most alarming character occurred. The patient had been lying tolerably still, when suddenly slightly raising herself from the bed, she uttered a cry, and fell backwards frightfully convulsed. The head was jerked violently to the right side, froth issued from the mouth, the teeth were ground together with the greatest violence, the extremities were extended and rigid, and the head and neck became tinged with blood, and almost purple. She appeared, in fact, upon the point of suffocating. The seizure, however, gradually subsided, and it was noticed that the neck had become much enlarged, and that the swelling was extending over the face. By making pressure with the finger upon the neck, crepitation in the areolar tissue was distinctly felt; and it was manifest that emphysema, from rupture of the air-passages during the paroxysm, had taken place. The pains were now strong, and recurring at very short intervals, but were unaccompanied by convulsion. The patient still remained in the most profound insensibility. The emphysema progressively increased, air having universally permeated the areolar tissue, and the patient's appearance becoming most singular, resembling that of a case of general anasarca from obstructive disease of the right side of the heart. Delivery was effected shortly afterwards; but consciousness did not return until after the lapse of nearly three days. The extravasated air be-

came gradually absorbed; and, after a series of relapses, the patient finally convalesced.

Having thus attempted to explain the causes, or mode of production, of emphysema and hernia bronchialis during labour, and having adduced the preceding case in support of my views on the subject, I shall now proceed to give the histories of three cases of hernia bronchialis, two occurring in my own practice, the third in that of my friend Mr. Parry, of Docking, to whose kindness I am indebted for the report.

CASE I. Mary Stone, aged 36, the wife of an agricultural labourer, a woman of highly strumous aspect, consulted me for an enlargement of the submaxillary glands. Upon exposing her neck, my attention was arrested by a very singular tumour on the right side, in the space between the sterno-mastoid and the larynx. It was of an ovoid shape, and of the size of a turkey's egg, perfectly smooth, painless, and elastic to the touch. After considerable manipulation, I was inclined to believe it a cystic growth, and was carefully regarding it, when the patient, probably fatigued by the long examination, drew a deep inspiration, and, to my astonishment, the tumour decreased to half its former size. I then requested her to compress firmly the lips and nostrils with her fingers, and to make a strong inspiratory effort. The result was, that the tumour became scarcely visible. The lungs having been thoroughly inflated by a deep inspiration, the nose and lips were once more compressed, and a forcible expiratory effort being made, the tumour became greatly distended, remarkably tense, and projected considerably from the neck. It was now evident that it was a sac or cavity communicating with either the larynx or trachea; in fact, the hernia bronchialis of Larrey.

In reply to my interrogations, she stated that she had always been very delicate and sickly, and had suffered, whilst a girl, from suppurating lymphatic glands. She married at the age of twenty-one, and had had eight children. In her third labour, which was unusually severe and protracted, a distinct snap took place, and the swelling on the right side of the throat immediately presented itself. She said that she expressed at the time her conviction "that something had burst in her throat". She considered that the tumour increased in size with each succeeding labour.

The above case at the time I considered unique, and showed it to several of my medical friends, who coincided with me as to its interest and rarity.

The woman died very suddenly on the 7th April, 1848, from some obscure cause; and as the coroner's jury returned a verdict without having heard medical evidence, the husband resolutely refused a *post mortem* examination.

CASE II. Mary Tuddenham, aged 28, the wife of an agricultural labourer, residing at South Creak, enjoyed excellent health until she attained her twenty-second year, when she married, and since marriage had never been robust or well. She had had four children. After her first confinement, she perceived a swelling on the right side of the neck; but as it occasioned but little inconvenience, she did not seek medical advice. The tumour presented very much the appearance of unilateral goitre, for which it might be readily mistaken, as there was considerable thickening about the sac; but upon careful examination, hernia bronchialis was easily recognized. The woman was the subject of frequent distressing headaches, lasting many days together; indeed, she was very seldom free from headache. My friends Dr. Rudge and Mr. Parry examined the case, and concurred with me as to its nature and probable cause. (See Figure.)

CASE III. Mrs. Quantrill, aged 35, the wife of a labourer, consulted Mr. Parry for an enlargement of her throat. She had always enjoyed excellent health, and had never suffered from any particular disease. She married at twenty-one; and during her first confinement, which was very severe, she was desired by the midwife in attendance, during an expulsive pain, to "hold her breath, and bear down", when she felt something give way in her throat, but did not im-



CASE II.

mediately discover the swelling. She had particularly observed that the tumour had increased in size both during and after her subsequent confinements.

Her throat presented all the appearances of goitre, for which the swelling had been mistaken several times, and had consequently had iodine ointment applied to it. Upon requesting the patient to swallow, the tumour rose and fell with the larynx and trachea, thus simulating bronchocele: but upon closing the mouth and nose, and directing her to make a deep inspiration, the swelling almost disappeared, but immediately resumed its former condition upon expiration.

Since I was furnished with the history of this case, Mr. Parry has attended the subject of it in labour, and informs me that a remarkable augmentation in the size of the tumour took place during the expulsive pains.

Loss of voice, partial or complete, and constant headache, were noticed by Larrey, as prominent symptoms in all the cases which came under his observation; the latter symptom he attributes to "pressure exercised by these tumours upon the superficial vessels of the neck, determining a stasis of blood in the sinuses of the dura mater".

In only one of the preceding cases was headache complained of. There was no diminution of vocal power in any of the patients. The cry which generally, or at least frequently, occurs at the termination of the second stage of labour, or whilst the head is passing through the os externum, has been said by some obstetric writers to be conservative. By the glottis being opened, the air rushes from the chest, the diaphragm ascends, and the pressure of the foetal head, which had threatened the integrity of the perinæum, becomes moderated. During the closure of the glottis, short in duration though it be, may not the larynx and trachea be as equally exposed to rupture as the perinæum?

As to the treatment of this singular affection, little, I apprehend, can be said. The neck is so circumstanced in an anatomical point of view as to preclude the possibility of compression being efficiently applied. Larrey states:—"The most desirable indications in this description of disease are—first, to unload the vessels of the head, by the abstraction of blood from the jugular vein; secondly, to excise, in combination with repercussive sedatives, a great compression on the tumour."

Of these remedial measures, I have no experience. In bringing forward the foregoing cases, my object has been rather to draw attention to the diagnosis of this singular affection, than to offer or advocate any novel mode of treatment.

Wells, Norfolk, April 1853.

CASE OF ABSCESS OF THE LIVER: SPONTANEOUS EVACUATION: CURE.

By FREDERICK MASON, Esq.

CASE. Mrs. —, a laundress, aged 58, had had slight pains in the epigastrium and bowels for some weeks. She had hernia on both sides for many years, easily reducible; and she had suffered very little uneasiness from this cause. On December 20th, 1852, she did an unusually heavy day's work, continuing at it until one o'clock the following morning. On the afternoon of this day (21st), she was seized suddenly with violent pain in the left side, a little below the margin of the ribs. I saw her about 10 o'clock, P.M. She was sitting on the edge of the bed, complaining of intense pain in the left side of the umbilical region, increased on pressure, and preventing her from lying down. The skin was cold; the tongue moist; the pulse 74, and weak. She had no vomiting. The bowels had acted once on the 20th, but not on this day. The hernia on the left side was not protruded; that on the right was to some extent, but was very easily reduced. I directed her to have the bowels well and constantly fomented with flannels wrung out of hot water, and to take four grains of calomel and ten of Dover's powder directly; to be followed by an effervescing mixture of citrate of potash every four hours, and a dose of castor oil early in the morning.

December 22nd. The pain in the left side was relieved, but was more severe in the right hypochondrium, and more especially so in the epigastrium, passing through to the back and to the left shoulder. The bowels had acted twice. I prescribed one grain of calomel and four grains of Dover's powder every six hours; and ordered the mixture and fomentations to be continued.

December 23rd. The pain was not so violent, though still severe. I directed six leeches to be applied to the epigastrium, and ten minims of tincture of opium to be added to each dose of the mixture.

December 24th. The gums being slightly affected by the calomel, it was now discontinued.

December 25th. The pain had increased, and a circular swelling, about two inches in diameter and a quarter of an inch in height, had appeared in the epigastrium. The heart-sounds were very distinct and clear beneath the swelling; and there was an impulse communicated to it, but no *bruit* of any description. She complained of severe throbbing pain in the swelling. I prescribed two-thirds of a grain of solid opium every six hours. In the evening of this day, she had frequent and violent attacks of shivering, followed by cold sweats. The pain not having abated, she was ordered to continue the opium, and to apply six more leeches.

During the following week she continued much in the same state. She had occasional attacks of shivering; generally lay on her right side; and complained of numbness in the left side, especially in the arm and leg, when she turned on to her back. Morphia was substituted for opium at bed-time; but it failed to procure sleep.

January 5th, 1853. The swelling was increased in size, more tense and elastic to the feel; but I could not detect fluctuation.

January 6th. She appeared better. She said that, on the preceding evening, she felt a sensation of something bursting "with a pop" beneath the swelling; and that soon afterwards a profuse diarrhoea began. The evacuations were so offensive, that they were obliged to be thrown away immediately: they were said to be of the colour and appear-

ance of barm. The swelling was gone, and also the arterial impulse. She had no vomiting.

January 7th. She was better, and had less pain. The bowels were not so much relaxed. The motions were feculent. The tongue was covered with a moist slimy-looking fur. The pulse was weak and quiet.

January 8th. The tongue was cleaner. The appetite had improved. She complained of a very foetid-smelling and nauseous froth frequently rising in the mouth. Pulse 72.

From this time she gradually improved. Slight tenderness on pressure along the margin of the liver remained for a few days, but this soon quite disappeared. She was able to sleep well without morphia.

January 17th. She sat up for three hours. There had been no return of pain.

January 28th. I found her down stairs, doing a little light work; and I was now able to discontinue my attendance.

I have made inquiries for her lately, and find that she continues well.

5, Cleveland Place East, Bath, April 1853.

LIGATURE OF THE EXTERNAL ILIAC ARTERY FOR A WOUND.

By JAMES OGDEN, M.D.

DURING my practice as a surgeon in Rochdale, the following case occurred to me in 1825. Although so many years have elapsed since the operation, I have not seen another case recorded of tying the external iliac artery for a wound; nor have I been able to elicit from the experience of my professional friends, or from any other source, any account of a similar case. Having been often solicited to communicate the circumstances of the case, I have done so from the notes of my case-book, as an unique contribution from the records of an extensive practice of many years.

CASE. Jeremiah Crossley, aged 26 years, a stout and active young man, having provoked an irritable Irishman, a vendor of small wares, whilst stepping into a public-house, was attacked by him on coming out, and stabbed with a long sharp penknife in the right iliac fossa, about an inch above Poupart's ligament. A most frightful hæmorrhage ensued; and he was instantly dragged across the street into my surgery, in a state of syncope, apparently dead, and his clothes saturated with blood; on their removal, blood was found flowing *per saltum* from the wound.

With the assistance of my apprentice, Mr. Preston, now of Prestwich, and the late Mr. Buckley, I immediately passed a director between the peritoneum and the fascia transversalis, cutting this fascia, and the internal and external oblique muscles, so far as to allow me to introduce my finger as a guide for the better protection of the peritoneum. I carried the incision upwards for about three inches, in the direction of the anterior superior spinous process, about an inch and a quarter internal to it. The coagulum which presented itself was scooped out; and, carefully drawing aside the peritoneum and gradually separating it from its cellular attachments to the parts beneath, I was enabled to raise the artery upon the point of my finger, when the wounds in the sheath and artery were perceived. Compression with the finger retarded the hæmorrhage. The wound in the fascia was somewhat enlarged, so as to enable me to apply a double ligature, taking care at the same time not to denude the vessel of its *vasa vasorum* any more than could possibly be avoided, and carefully separating the vein from the artery. On examining the state of the parts more minutely, I found that a nerve was included; this was excluded by passing a second needle, armed as before, and withdrawing the first. The artery was then secured firmly, above and below the wound; one end of each ligature was cut off close to the vessel, and the

wound in the abdomen secured by sutures, etc. The necessary means were taken to restore animation and warmth to the extremities; and, in the space of two hours, we had the gratification to find pulsation at the wrist, and, in half an hour afterwards, consciousness. The patient was placed in bed at the inn, with the limb slightly bent, and supported by pillows at the knee. A draught was given, composed of spirits of ammonia, compound tincture of cardamoms, and Battley's sedative solution of opium. Warm applications were applied to the feet, etc.

November 14th, 6 P.M. Six hours after the operation, he became somewhat restless. The foot and leg were cold, and no pulsation could be felt in the femoral, popliteal, or anterior tibial arteries. The draught was repeated, and warmth applied to the leg and foot. The wound was tolerably easy. Considerable reaction had taken place. The pulse was 110, small, and compressible.

November 15th, 6 A.M. He had been composed during the night. There was free perspiration. Pulse 96, much firmer.

At 8 P.M., he was slightly feverish; the pulse was full, and more bounding; the bowels had not been moved since the operation, at which time they were evacuated involuntarily. He was ordered to take immediately a grain of opium with three grains of calomel.

November 16th, 7 A.M. He slept several hours during the night. This morning he was feverish, with slight head-ache. Pulse 100. Half-an-ounce of castor-oil in mint-water was given. There was no pain or tenderness in the abdomen; the wound was not painful, but slightly tender when pressed upon; the leg and foot were cold.

At 7 P.M., the bowels had been freely moved; the pulse was 92; he was free from head-ache, and perspired copiously. The leg and foot were cold, and of a dingy colour.

November 17th, 8 A.M. He passed a good night. The pulse was 90, with occasional *intermissions*. The abdomen was soft, and free from tenderness on pressure; the leg and foot were cold as marble, and mottled in places. There was no return of pulsation in any of the tangible arteries of the leg.

At 7 P.M., he was much the same as in the morning. A draught was given, with twenty drops of Battley's sedative solution, and an ounce of liquor ammoniæ acetatis.

November 18th, 8 A.M. The adhesive plasters were moist with a slight sanious discharge from the wound.

At 8 P.M., he remained much the same.

November 19th, 7 A.M. The leg and foot were still cold. He appeared more anxious in his looks. I partially dressed the wound, which looked healthy, and was slightly adherent in parts. The pulse was 100, and feeble. The draught was repeated at night.

November 20th, 7 A.M. He was free from pain. Pulse 92. There were slight typhoid appearances, and occasional singultus. The leg and foot were perfectly cold, dark, mottled, and somewhat shrivelled.

At 8 P.M., he was restless. The pulse was too irregular to be counted satisfactorily, but was supposed to be above 100, including intermissions. The draught was repeated, with a musk and ammonia bolus, formed with opiate confection.

November 21st, 7 A.M. He had some sleep during the night. The skin was moist and clammy. The leg and foot were almost black, more shrivelled, cold, and in a state of gangrene. The hiccup continued. There was slight discharge from the wound, but not offensive.

At 9 P.M., the symptoms were much the same. He was occasionally incoherent, and said, when asked, that he had not the least pain. The draught and bolus were repeated.

November 22nd, 4 A.M. I was called in haste, on account of hæmorrhage, and found him in *articulo mortis*, and deluged with blood. He died in a few minutes.

EXAMINATION OF THE BODY. We found that the artery on the cardiac side of the ligature had sloughed, having partaken of the mortification in the extremity and contiguous parts.

REMARKS. This case was pronounced, by the verdict of the jury at the coroner's inquest, to be one of wilful murder; but this verdict was ignored by the grand jury at Lancaster, and the case was tried before the late Judge Bailey as one of manslaughter. The prisoner was committed for the term of two years.

On the third day after the operation, I was convinced that the case would terminate fatally, as no warmth or circulation could be established; proving to me that the anastomoses would not be sufficient for the supply of blood to the extremities, owing to the circulation having been too suddenly cut off to give the gluteal and other collateral branches time to become sufficiently dilated, to enable them to carry on the circulation in the limb below.

Arndwick Villa, Manchester, April 1853.

PERISCOPIC REVIEW.

EPIDEMIOLOGY, HYGIENICS, AND STATISTICS.

STATISTICS OF THE DEAF AND DUMB IN IRELAND.

THE *Journal of the Statistical Society*, published last month (March), has an interesting article, bearing the title given above, by Mr. W. R. WILDE, Assistant-Commissioner for the Census in 1851. This census was made the medium of the inquiry, with the permission of the Lord Lieutenant, and at the request of the local secretaries of the Society. The return also presents at one view, not only the amount and distribution of disease, but also the maladies to which the inhabitants of Ireland are most exposed at a certain period of the year. This, we believe, is the first attempt yet made to collect and tabulate the diseases presented on a single day in even a limited portion of any country. We earnestly solicit the attention of the profession to the very important medium of observation thus opened to the study of endemic disease. The general return of the diseased is divided into permanent and temporary; and foremost among the former stands *deaf-mutism*, a subject highly interesting, both in its physiological and social bearings.

The exact number of the deaf and dumb population cannot be precisely ascertained, from the difficulty of determining mutism under two years of age. It appears probable that the estimate for Ireland would be about one deaf-mute in 1,500 inhabitants. For all Ireland, 4,485 deaf-mutes were returned, or 1 in 1401 inhabitants. Taking the most authentic information for our guide, this approaches very nearly the proportion of the whole of Europe, which is one in 1,593. "The duchies of Luxembourg and Wurtemberg, and the kingdoms of Tuscany, Bavaria, Belgium, and Holland, possess the fewest, while Sardinia, Norway, and parts of Switzerland, exhibit the greatest number of deaf-mutes in proportion to their populations; the average of the former countries being one in 2,209, and of the latter, one in 641.9. In some of the Swiss cantons, the proportion of the deaf and dumb to the population is as high as one in 206; and in those localities it is generally combined with cretinism and idiocy. In a country like Ireland, completely insulated, limited in extent, and possessing great sameness of surface, one would not expect that the proportion should alter very much in the different provinces and counties; still we find the following variation:—in Leinster, one in 1,794; Connaught, one in 1,689; Ulster, one in 1,487; and in Munster, one in 1,409. Deaf-dumbness, arising from all causes, prevails most in the rural, and least in the civic portions, or those towns whose inhabitants amount to 2,000 and upwards, exclusive of workhouses. Thus there are fewer cases in proportion to the population to be found in the towns of Drogheda, Carrickfergus, Galway, and Belfast, and the cities of Cork and Dublin, the average for these places being one in 2,384. Generally speaking, the flat campaign counties, such as Roscommon, Westmeath, Dublin, Meath, and Kildare, present the fewest cases; the average in these being one in 1,950; while Mayo, Limerick, Donegal, Waterford, and Wicklow, and also Tipperary, Tyrone, and Fermanagh, the five first lying chiefly on the coast, and the majority presenting mountain ranges, have a greater number of deaf and dumb, in proportion to their population, than the remaining counties, their average being one in 1,338; and in Wicklow the proportion is as high as one in 1,000. Leitrim, Clare, Down, and Antrim, are also high.

"Of the total 4,485 mutes, 4,151 were deaf and dumb,—2,349 males and 1,802 females; and 334 were dumb but not deaf. Among the former class, 3,325 were born so, and 400 became so after birth by accident or disease. In 267 instances, the precise cause was uncertain or unknown; and in 159 cases, the persons were at the same time paralytic, idiotic, or both. Among the latter class—the dumb, not deaf—181 were dumb only without defect, 45 were paralysed, 115 idiotic, and 43 both paralytic and idiotic.

"The sexes of the deaf and dumb from all causes are as 100 males to 76.61 females; such being in accordance with the usual law which appears to regulate the sexes in this class. Among the congenital cases, the proportion is 100 males to 74.62 females; and in the acquired, it is 100 to 91.37—showing in the former an excess of males over and above the general proportion of that sex. It must, however, be remarked, that according to the present census, there is an undue proportion of females above males in Ireland.

"Among the sixteen tables inserted in the report, there are two which show, by ages and sexes, the occupations of the deaf mutes themselves, as well as the employment of their parents. The former exhibited the great variety and extent of arts, trades, and handicrafts, upon which the deaf and dumb are capable of being employed; and the latter showed that the great bulk of the mutes in Ireland are derived from the agricultural and labouring classes.

"Among the subjects discussed in this report, is that of marriage and its results, as regards the offspring of deaf mutes. In 77 instances, one parent was deaf and dumb, and in 5 instances both parents; from these marriages but two mute children resulted, one to each class. It is remarkable, that while mutism is often manifest in several members of a family derived from a common stock, the defect is seldom transmitted direct from parents to children; thus, according to the returns of the Hartford Institution, in the United States, we learn that out of ninety-one instances where both parents were deaf and dumb, there were only four cases in which the children were similarly affected.

"Several tables have been constructed, with a view of showing the number of mute children born to each family, and the proportion of the sexes, where there was more than one mute, the position in the family, whether first, second, or third child—in 2,962 instances—the result of hereditary predisposition, and the consanguinity of parents, as well as the causes of acquired deaf-dumbness, and the ages at which the diseases or accidents producing such occurred. The state of education, and the number, locality, and date of erection of the several institutions for the instruction of the deaf and dumb in Ireland, as well as the mortality and causes of death, and even the particular races, whether Irish, English, or Scotch, to which the deaf and dumb belonged, were likewise described, all showing with what minuteness this interesting inquiry had been sifted.

"The following are some of the results obtained:—2,512 families had one mute child; 287, two mutes; 127, three mutes; 32, four mutes; 8, five mutes; in 3 instances there were six; in 1 seven; and in 1, eight mute children, born of the same family of the same parents. Fourteen instances occurred of twins, in which one or both were mute; and families of six and seven had more frequently a mute child born among them than families of any other number. In every instance the male sex largely predominated, except in cases where the eighth child was deaf and dumb, and in these the sexes were about equal. In 154 instances, the parents were related; and out of 281 cases, in which the influence of hereditary predisposition in the production of congenital mutism was traced, it was shown that in 149 instances the taint descended through the father's side, and in 132 through the mother's. The family history had been traced back in several instances to the grandparents, and in a large number to the cousins and collateral branches.

"Six cases were recorded of persons deaf, dumb, and, blind; and a great number of instances were related of rare and remarkable cases, showing peculiar combinations of deaf-dumbness, with other congenital or acquired defects."

The report is highly interesting, as giving the history of the instruction of the deaf and dumb from the earliest period to the present time. The first educational establishment for the deaf and dumb in Great Britain was that established by Thomas Braidwood, in 1760, which is spoken of in terms of commendation by Dr. Johnson, in his *Tour to the Hebrides*.

"In concluding the subject of the education of the deaf and dumb, the commissioners have suggested the propriety of ingrafting upon the system of national education some institutions for the instruction of this class of the community.

"The popular terms for deaf-dumbness are: deaf and dumb—dummy—the silent people—mutes; and in the Irish, *Bodhar agus Balbh*—deaf and dumb. Some interesting instances of persons so circumstanced have been related in the Irish metrical romances and bardic histories. The Irish medical manuscripts of the sixteenth and eighteenth centuries abound with notices of diseases of the ear and deafness.

"The subject of race, in so far as it affects the deaf and dumb, is another subject of great interest. It appears that out of 1,671 so afflicted, 1,198 were Irish, 352 English, and 121 Scotch.

"The last subject which falls to be considered is the mortality of the deaf and dumb. In 291 instances the cause of death was recorded; and we learn that 72 persons died of zymotic or epidemic diseases, of which fever, dysentery, and small pox, were the most fatal; and 135 died of sporadic diseases. Consumption was the cause of death in 77 instances; it is not only the most frequent cause of death in this class, showing a proportion of one to 2.81 of the entire number of specified causes; but the fact thus related confirms the opinion, that as deaf-mutism itself is frequently a variety of struma, so are the persons afflicted therewith more particularly predisposed to diseases of a scrofulous character in after life. Ten met with violent or sudden deaths: rather a large proportion, but one naturally resulting from the deprivation under which this afflicted class all suffer."

To this report is subjoined the substance of a letter from Dr. Peet, the Superintendent of the Institution for the Deaf and Dumb at New York, containing the unpublished results of the American inquiry into the state of the deaf and dumb, in common with the blind, insane, and idiotic. From it we learn that there were 9,422 white mutes in a population of 19,371,591 persons in the United States, according to the census of 1850, or one in 2,073; and but 96 of the same class among a free coloured population of 251,205, or one in 2,953. The number of blind among the former class amounts to 7,997. A comparison of the numbers of deaf and dumb, blind, insane, and idiotic, in the whole Union, with the population of the same colour and condition, gives the following proportions:—

	Deaf and Dumb.	Blind.	Insane.	Idiotic.
Whites.....	1 in 2,073	1 in 2,455	1 in 1,295	1 in 1,384
Free Coloured	1 " 2,956	1 " 867	1 " 1,355	1 " 983
Slaves.....	1 " 6,552	1 " 2,640	1 " 11,011	1 " 3,081
Total Slaves & Free Coloured	1 " 5,730	1 " 2,131	1 " 5,936	1 " 2,461

"It will be perceived from this, that blindness is more prevalent, and deafness and insanity less frequent, among the coloured races than among the white. The proportion of insane among the slaves is remarkably small. Perhaps the returns of the idiotic among the slaves are defective, as their large proportion among the free coloured seems to show that idiocy is more common among the coloured races than among the whites. In a large body of slaves, those only partially idiotic, or deaf and dumb, might be forgotten or overlooked by the master or overseer (who filled the schedule), being, in many cases, still useful hands, while the blind and insane would be more likely to be remembered.

"It appears that the deaf and dumb and the blind are most numerous in those States from which the emigration is greatest (the Central and New England), and least in those States whose population receive accessions from immigration—showing that comparatively few of these two classes of persons are carried along with the stream of emigration. In California, Utah, and Oregon (omitted in the foregoing calculations, on account of their recent settlement and peculiar circumstances), where the population consists almost wholly of recent immigrants, there are only six deaf and dumb, and two blind, in an aggregate population of 184,370. New Mexico is also omitted in these calculations, its population being of a peculiar character, chiefly a mixture of Spanish and native Indian races, with but few Anglo-Americans."

DR. J. C. STEELE ON THE INCREASE OF SMALL-POX IN GLASGOW.

The following is an abridgement of an article published by Dr. J. C. STEELE in the *Glasgow Medical Journal* for April 1853.

A casual survey of the improved mortality bills in connexion with the city of Glasgow for the last seventeen years (since, previous to 1835, no mention is made of the causes of death), affords proof of the ravages to which Glasgow has been subjected by small-pox and typhus fever, both in the condition of ordinary prevalence, and in the occasional exacerbations which they periodically assume. During the past four years, the mortality returns from fever exhibit a gratifying diminution when compared with

a like interval for many years preceding; a diminution justly attributable to the improved condition of the working classes, as well as to a decrease in the number of casual poor; since there are few localities in which the connexion between famine and fever has been more strikingly illustrated, than in this city. Small-pox has observed during the same, and it is feared for a much longer period antecedent, a high and even increased rate of mortality; notwithstanding the agencies in daily use for the purpose of prevention, and in spite of the enlarged powers afforded to vaccination boards, as well as to the local guardians of the poor, for the universal adoption of these checks.

The purposes of the present paper are to inquire, whether, and to what extent, small-pox has increased of late years in Glasgow; and how far vaccination has relieved the mass of the population from the disease. And there are other matters allied to the questions at issue, which must be incorporated with the following remarks. While singling out one subdivision in the class of zymotic affections for special comment, I admit that there are grounds for gratulation at the improvement which the mortality bills have exhibited for several years, in relation to the health and average mortality of our adult population. Dr. Strang's interesting Reports on the Mortality Bills,* compared with data of an analogous nature, taken from the Reports of the Registrar-General, show that, exclusive of the large infantile mortality, there are few cities capable of exhibiting such a marked immunity from the diseases destructive to adult life. These very circumstances, however, afford negative proofs of the importance of examining minutely into those causes of mortality that are operating in the midst of increasing prosperity.

We possess materials for investigating the history of small-pox in Glasgow, extending as far back as 1783. Dr. Robert Watt prepared tables from the parochial registers; and among other valuable information, there is a statement detailing the number of deaths occurring annually in Glasgow for thirty years subsequent to 1782, as also the annual number of deaths from small-pox during the same period.† These returns show the annual ravages of small-pox among the young, at a time when inoculation was generally had recourse to; as well as the beneficial results which flowed from the adoption of vaccination. During the first decennium of the above period, the mortality from small-pox, compared with the total number of deaths under ten years of age, was as high as 34·9, or one in three; while in the last decennium, that is, from 1803 to 1812 inclusive, a period when vaccination was all but universally followed, it had decreased to 0·2. From 1812 to 1835 no record of the deaths from small-pox has been kept. Since the year 1821, annual bills of mortality have been issued under the sanction of the lord provost and magistrates; but Dr. Cleland, at whose suggestion these were instituted, and who afterwards superintended their publication, gave no list of the diseases attended with fatal results. We are, therefore, left in conjecture with respect to the estimated prevalence of small-pox previous to 1835, although Dr. Robert Cowan was strongly of opinion that the disease had considerably increased before that period. Dr. Scott Orr has shown, in a table; constructed from the Glasgow Bills of Mortality from 1836 to 1845 inclusive, that during the latter half of this decade the mortality from small-pox was undergoing a favourable diminution, and hence he doubted that the disease was on the increase. The apparent diminution, however, will be observed, by reference to the following table, which I have extended to the close of 1852, to have been only temporary; and it affords a marked instance of the periodic revolutions to which all contagious maladies are subject:—

Years.	Estim. Popul.	Deaths from Small-pox.	Years.	Estim. Popul.	Deaths from Small-pox.
1835	230,860	473	1844	305,534	99
1836	238,950	577	1845	313,334	195
1837	247,040	352	1846	321,134	5
1838	255,300	388	1847	328,934	592
1839	264,010	406	1848	336,734	300
1840	272,000	455	1849	344,534	366
1841	282,134	347	1850	352,336	456
1842	289,934	334	1851	360,138	618
1843	297,735	151	1852	370,000	584

* The praiseworthy efforts recently made by the Lord Provost and magistrates to conform the Mortality Bills for Glasgow with the plan adopted by the Registrar-General of England, has been attended with greater success than the most sanguine could have anticipated. It is by no means complimentary to Scotland, that it should now be the only catholic country in Europe wherein a proper Register of Mortality is wanting. As far as Glasgow is concerned, the local authorities may justly claim the credit of removing the stigma, independent of legislative interference.

† Appendix to Treatise on Hooping Cough.

‡ Edinburgh Medical and Surgical Journal, No. 171.

§ The Returns for 1846 have not been published.

More than half a century has elapsed since the antivariolous efficacy of vaccination was first established in this city; and in the intervening period no exertions have been spared, either by the authorities or the medical faculty, to impress upon all classes its protective agency. It is lamentable to reflect, that the first two years in the last half of the nineteenth century should exhibit a larger mortality from small-pox than any similar period of which we have a record since the introduction of vaccination; and that they even outnumber in fatality the returns of a like period during the preceding century, when variolous inoculation was the only protective resorted to. The continued prevalence of the malady is doubtless mainly attributable to unjustifiable carelessness on the part of the poor, since the mortality has been chiefly confined to the infantile population; but it has also extended itself, though in a more mitigated form, to those previously vaccinated; and not a few adults also have fallen victims to the disease. The means of ascertaining the relative proportions of vaccinated and unprotected, in a given mass of population, are necessarily limited. Out of 244 individuals placed in similar circumstances to the poor in Glasgow, Dr. Stark discovered that only 116, or less than the half, were vaccinated; that 104 of the remainder had already taken small-pox, leaving 24 still unprotected.* The ascertained results of practice in the Glasgow Royal Infirmary are exceedingly instructive as regards many questions in the pathology of small-pox. The returns, however, are only applicable to the disease in adults. The same rule holds with respect to other epidemics peculiar to children, as measles, scarlatina, and hooping-cough. On the other hand, so general has the habit become of sending all affected with fever—a disease of adult life—to the hospital, that during several stated periods for last year, the fatal cases from this disease in the hospital corresponded with the mortality returns for the whole city and suburbs.

The universality of small-pox gives it an intermediate position; and from the data furnished in the hospital, its prevalence among the adult portion of the community has been considerably on the increase for many years. Previous to 1834, the number of cases admitted seldom reached above 30 in the course of a year, and several years do not yield a single example. From 1795 to 1804 inclusive, the numbers admitted amounted to 22; and during ten years subsequent to 1804, they had only reached to 33. From 1815 to 1825, 163 cases are reported as having occurred. Judging from a considerable increase in 1823-4, there appears to have been an epidemic of small-pox at the period, inasmuch as the numbers for each year respectively amount to 46 and 37, and conjointly present a larger number than were admitted during the first twenty-two years of the history of the institution. From 1825 to 1835, the cases admitted amounted to 204, the last two years of the decennium furnishing 132 of that number. The following table exhibits the numbers and mortality of the cases admitted from 1832 till the present time, arranged in septennial periods:—

Years.	No. of Cases.	No. of Deaths.	Years.	No. of Cases.	No. of Deaths.	Years.	No. of Cases.	No. of Deaths.
1832	3	1	1839	59	15	1846	99	10
1833	14	5	1840	61	18	1847	84	21
1834	62	4	1841	26	0	1848	48	13
1835	72	18	1842	38	5	1849	43	12
1836	110	45	1843	13	3	1850	78	18
1837	75	8	1844	10	0	1851	163	30
1838	35	10	1845	22	4	1852	115	19
Mortality per cent. 1st Period, 24·5.			2nd Period, 19·2.			3rd Period, 19·5.		

The interval between 1835 and 1838 comprises a period when the deaths from epidemic causes in Glasgow appear to have reached their maximum; the rate of mortality, exclusive of still-born, in 1837, rising as high as 1 in every 24 of the population. This unusual fatality was chiefly accounted for by the ravages of fever, no fewer than 3433 individuals having been cut off by this disease alone. The returns for 1836 were greatly augmented by an increased prevalence of small-pox, which told most severely on the young; the number of deaths under five years amounting to 520, or nearly 92 per cent. of the whole cases. Out of 110 adults attacked during the same period; 45 cases terminated fatally; a very large comparative mortality, and indicative of an unusually large number of unprotected. The most important features in the table are the diminished rates of mortality which the two last periods present, and the increase in the number of cases which the last septennial system exhibits. How these conflicting circumstances are to be explained, becomes a question of vital importance in its bearing on the future history of the disease.

* Edinburgh Medical and Surgical Journal, No. 322.

Few doubt that small-pox has increased in frequency in this country during the last twenty years, and most observers have attributed the change to a neglect of vaccination. That this neglect has prevailed, and is still prevailing in Glasgow, especially among the children of the Irish poor, there can be little doubt; but that vaccination is more generally neglected now than formerly, is open to question. The prevalence of small-pox among the protected is by no means so rare as is generally supposed. The proportion of post vaccine cases treated in hospital is actually larger than the number of unprotected, and instances of the former class have been considerably on the increase for some years.

I am indebted for the materials used in the construction of the following table to the published investigations of Drs. Cowan,* Orr,† and A. P. Stewart;‡ the data furnished by the last three years of the series being the result of my own inquiries. The doubtful cases have been purposely omitted:—

Year.	Total.	Vaccinated.	Unvaccinated.	Deaths in	
				Vaccinated.	Unvaccinated.
1836	95	55	40		26
1837-38	71	31	40	1	15
1846	99	47	52	2	8
1849	42	23	19	3	8
1851	128	52	76	8	17
1852	101	57	44	5	12
Total,	536	265	271	19	86

The advantages of vaccination are here vividly illustrated; for while the per centage mortality among the unprotected reaches 31.8, the post vaccine deaths amount to 7.1. With but few exceptions, the post vaccine cases have occurred after the age of puberty; and the disposition of the disease to attack at that period would lead us to infer that certain constitutional changes are liable to take place among many people, which render them more susceptible of the variolous miasm. Statistics drawn from other sources tend to corroborate these results. Out of 1519 admissions to the Small-pox Hospital, from 1826 to 1839 inclusive, and reported by the late Dr. Gregory,§ as having small-pox at variable periods after vaccination, 100 terminated fatally. Over the whole cases, the proportion of vaccinated and unprotected is nearly equal; and while the numbers diminish in an unequal ratio for one year, they usually reverse the process in the next. It would seem that when an epidemic of small-pox begins to decline in severity—that is to say, after it has reached its culminating point—it exhibits a greater tendency to attack the previously vaccinated than it showed at the outset. In a report recently read to the governors and subscribers of the London Small-pox Hospital,|| it appears that, during the last year, a larger number of patients have been admitted than were ever treated for a similar interval since the foundation of the hospital in 1746. In 1851, the admissions amounted to 682, out of which only 230 were vaccinated; and during last year, 1852, the admissions had risen to 800, and showed an increase of post vaccine cases, over 1851, of no fewer than 120.

The form which the disease assumes is to be borne in mind when speculating on the ultimate issue of the two classes. In the following table I have analyzed 101 cases treated to a termination during 1852, reducing the forms, for convenience of description, to discrete and confluent small-pox:—

<i>Confluent and Malignant Small-pox.</i>				<i>Discrete and Modified Small-pox.</i>			
	Total.	Cured.	Died.		Total.	Cured.	Died.
Males, vaccinated .	7	5	2	Males, vaccinated .	26	24	2
Females, do.	7	6	1	Females, do.	17	17	0
Males, unvaccinated	16	8	8	Males, unvaccinated	8	8	0
Females, do.	11	7	4	Females, do.	9	9	0
Total.	41	26	15	Total.	60	58	2

Hence, out of 44 unprotected individuals, 27 were attacked severely, while 17 escaped with a mitigated illness. The two deaths among the discrete cases were produced by internal inflammatory complications. It will be observed that males have suffered more, both in numbers and fatality, than females. An example illustrative of the non-identity of small-pox with vaccinia occurred in a female, whose case is incorporated in the number of discrete

and vaccinated cases. Several days previous to the attack she had been vaccinated; and on admission the vaccine vesicle was found fully matured. The two diseases proceeded simultaneously to a favourable termination, without apparently interfering with each other's progress.

Cases of secondary or recurrent small-pox are rarely met with in this hospital. In the course of my inquiries, I have been able to discover one instance only.

The disposition of small-pox to attack individuals, immediately on their transference from an open and salubrious locality to one in which the disease constantly prevails, is a feature of considerable importance in its pathology. This remark, however, is not applicable to children. The following table, detailing the length of residence in Glasgow of the 101 cases formerly cited, will enable us to judge of the comparative frequency of small-pox among recent residents:—

Under two weeks	10	From five to six months	19
From two to four weeks	14	From six to twelve months	19
From one to two months	4	From one to two years	6
From two to three months	3	From two to three years	5
From three to four months	6	From three to six years	7
From four to five months	6	Six years and upwards	2

No fewer than 81 individuals out of 101 had been less than twelve months resident in Glasgow, and 24 of this number had been less than one month. The peculiar susceptibility among recent residents no doubt is greater when the variolous miasm spreads epidemically; but it would be difficult to find more corroborative evidence of the influence of climate and residence than that presented by the preceding table.

We are next led to trace the various localities from which patients have come, or where they may have spent the early period of their lives. The following table shows in what parts of the West of Scotland vaccination is chiefly neglected: it incorporates the results of 1849 with those of 1852, and extends over 143 cases of the disease:—

Birth-place.	Tot. Cases.	Va.	Unv.	Birth-place.	Tot. Cases.	Va.	Unv.
Argyleshire	56	24	32	Counties south of			
Inverness-shire	7	5	2	Forth and Clyde	35	30	5
Aberdeenshire	4	3	1	Born in Glasgow	4	1	3
Ross-shire	3	1	2	England	3	3	0
Sutherlandshire	2	1	1	Ireland	19	9	10
Perthshire	5	1	4	Foreign Countries	4	2	2
Shetland	1	0	1				
				Total.	143	80	63

Hence, out of 63 unprotected cases, 43 have been natives of the Highlands, 10 were born in Ireland, 5 in Lanarkshire and the neighbouring counties, and 3 had been permanently resident in the city. The greater liability of the Highland population is no new feature in the local history of small-pox. Twenty years ago Dr. Cowan drew attention to the fact, and there are few medical men in Glasgow who have not had ample evidence of the same. Nor is it the case that the Highland poor show a decided aversion to vaccination. The proverbial laxity prevailing among them regarding the practice, probably arises more from ignorance of its benefits, than from prejudice or unwillingness to adopt it. The prejudice in favour of variolous inoculation, which prevails in various parts of England notwithstanding the legal enactment of 1840, does not appear to extend itself to any part of Scotland. In the country parishes, and to a less extent in the towns, the poor are largely influenced by their clergy, whose labours to advance the social as well as the spiritual well-being of the people are universally acknowledged. By this class especially, seconded by the united exertions of the parochial authorities throughout the Highlands, much good remains to be effected. It is to be regretted, however, that in many districts, the difficulty of obtaining the services of a medical man to perform vaccination militates against its general adoption. The sequestered islands of Coll and Tiree, in which small-pox seems only to be known by occasional importation from the low country, annually contribute their quota of unprotected to the small-pox wards; and the minister of these islands writes, that several lives are annually lost in the parish from the want of a medical practitioner.*

It is interesting to observe with what tenacity small-pox clings to the Scotch branch of the Celtic inhabitants in preference to the Irish, a feature rendered more striking by the disproportion which the former bear to the latter in the population. While the Highlanders form 44 per cent. of the cases analyzed in the preceding table, natives of Ireland amount to only 13 per cent. In the various forms of continued and typhus fever, natives of

* Vital Statistics. + Op. cit.
 † Monthly Journal of Medical Science, October 1851.
 ‡ Lectures on the Exanthemata,
 § Morning Post, February 5th.

* New Statistical Account of Scotland.

Ireland average usually from 60 to 65 per cent. of the whole admissions to the Fever Hospital; and in the ordinary medico-surgical wards, the number is never below 35 per cent.

The ages of the individuals attacked with small-pox is the next step in investigation. In the unprotected state, the liability of attack at all ages is well known. It is different, however, with the vaccinated. The following table includes only the 57 cases who had small-pox after vaccination, in 1852; of these there were,

Under five years . . .	3	From twenty-five to thirty . .	8
From five to ten . . .	2	From thirty to forty . . .	3
From ten to fifteen . .	1	Upwards of forty . . .	0
From fifteen to twenty .	21		
From twenty to twenty-five	19	Total . . .	57

The interval between the period of vaccination and the onset of the disease thus ranges from one to thirty-five years; but the disposition to attack has reached its maximum between fifteen and twenty-five, no fewer than 40 cases out of the 57 occurring during this decennium. After the age of thirty, it does not appear that the liabilities are so numerous. Out of 298 post vaccine cases occurring in 1838, in the London Small-pox Hospital,* only 17 were above the age of thirty, and 14 of these were below thirty-five. The major part of the unprotected treated in 1852, in the Glasgow Hospital, occurred immediately after puberty; only 3 being above the age of twenty-five. The infantile period affords, in Glasgow, by far the largest number of deaths from small-pox; but as children are mostly debarred from admission to hospital, the data are too limited for analytical purposes. From the Monthly Returns of Mortality for the city and suburbs of Glasgow, I have been enabled to form the following table, detailing the number, sex, and age of the individuals cut off by small-pox in the course of 1852. The total deaths amounted to 584, of which there occurred—

	Total.	M.	F.		Total.	M.	F.
Under 1 year . . .	188	96	92	From 25 to 30 yrs	2	1	1
From 1 to 2 . . .	150	72	78	From 30 to 40 . .	8	4	4
From 2 to 5 . . .	189	101	88	From 40 to 50 . .	1	1	0
From 5 to 10 . . .	20	13	7	From 50 upwd . .	1	0	1
From 10 to 15 . . .	4	1	3				
From 15 to 20 . . .	2	0	2	Total . . .	584	300	284
From 20 to 25 . . .	19	11	8				

Hence, among the total deaths from small-pox in 1852, 527 were under five years of age, 24 occurred between the ages of five and fifteen, and 33, or 1 in 17½, took place after the period of puberty. In comparing the data with the returns of 1835-36, we find little variation in the proportion of deaths to the various ages:

	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	Above 10.	Total.
1835 . . .	204	154	75	17	23	473
1836 . . .	202	174	144	23	34	577
1852 . . .	188	150	189	20	37	584

For the three years, the annual average number of deaths under 10 years of age amounts to about 513; and when compared with the average returns for ten years after the introduction of vaccination, they exhibit an increase of more than 400 annually. It is necessary to bear in mind the great increase of population which has taken place in Glasgow during the last half century. But after making due allowance for this in the case of small-pox, it will still be found that the number of deaths resulting therefrom, when compared with that in localities where vaccination is sedulously attended to, is inexcusably large. In the city of Paris, with a population of one million, the number of deaths from small-pox in 1850 was 342, and in 1851 it amounted to 364;† while in Glasgow, with its population of 370,000, no fewer than 1,202 deaths from the same cause have occurred during the last two years. In no country in Europe, with perhaps the doubtful exception of Prussia, is vaccination so thoroughly attended to as in France. It will be interesting, therefore, to know the relative ages at which small-pox proved fatal in Paris in a given number of cases. The following table represents the ages of 706 individuals cut off by small-pox in Paris during the period above noticed:

	Total	M.	F.		Total	M.	F.
Under 1 year . . .	126	62	64	From 25 to 30 . . .	89	58	31
From 1 to 2 . . .	32	17	15	From 30 to 40 . . .	128	72	56
From 2 to 5 . . .	94	52	42	From 40 to 50 . . .	22	13	9
From 5 to 10 . . .	31	16	15	From 50 upwards . .	4	3	1
From 10 to 15 . . .	20	12	8				
From 15 to 20 . . .	51	34	17	Total . . .	706	402	304
From 20 to 25 . . .	109	63	46				

* Lectures on Eruptive Fevers.

† Annuaire pour l'an 1853-54.

While this table shows the ages at which small-pox is likely to prove fatal, in a community in which vaccination is all but universally adopted, the table referable to Glasgow must, we fear, be considered as indicative of a locality in which vaccination is egregiously neglected. In Paris, the number of deaths under 5 years amounts only to 35·6 per cent., and in Glasgow the same period of life furnishes 90 per cent. of the total cases. It scarcely admits of doubt, that the comparatively large figure of mortality in Paris after 15 years, has originated, to a considerable extent, among the previously vaccinated. On no other ground can we explain the fact of more deaths occurring between the ages of 30 and 40 than in the infant period of life, during which, in the unprotected state, two-thirds of children are attacked by small-pox; and, on an average, 1 out of every 3 attacked dies. The Bulletins of the Royal Academy of Medicine, however, show that, during the mid-period of the last half century, in consequence of the rigid enforcement of vaccination, the deaths in Paris alone fell from 1,090 to an annual average of 420; and more recent returns exhibit a further diminution to 353.

From the observations already made, the inference naturally forces itself, that at certain ages, and under peculiar circumstances, the most prominent of which are change of residence and exposure to concentrated miasm, the constitution becomes re-susceptible of the variolous poison, notwithstanding the vaccine protection. This susceptibility has not manifested itself to a very fatal extent in the returns adduced relative to Glasgow, chiefly from the reason, that those predisposed to contract the affection are for the most part visited with it in early life; and that, in the event of recovery, the primary attack affords a safeguard for the future. To remedy this defect in the permanent influence of cow-pock, recourse has been frequently had to re-vaccination; and the process is generally recommended, though not so frequently adopted by medical men. So common, indeed, has post vaccine small-pox become in several countries on the Continent, that the governments of Denmark and Prussia, impressed with the importance of the protective agent, issued orders many years ago for the revaccination of their standing armies. The success of a similar trial in Württemberg has induced the authorities of that country to extend the operation to the whole civil population. Its propriety has been called in question, in consequence of small-pox occurring after a second and even after a third vaccination; but it is unjust to argue, on this ground alone, that re-vaccination is entirely useless. The expedient is safe and harmless, and its practice is peculiarly applicable at the present time, for the future protection of the emigrating class of the community.

The beneficial results of the operation of the Vaccination Act of 1840 in England and Wales warrant the inference, that it would have been attended with similar advantages in Scotland; but it is questionable whether the working of the act has fulfilled the expectations of its originators. Besides the rendering the practice of inoculation illegal, it is equally desirable that the non-performance of vaccination should be considered illegal also. It is only by some stringent measure of this kind that the protective agent will become universal; and when universal, it can only be considered as a means of greatly mitigating the mortality and prevalence of the disease. Medical authorities in this country are at variance as to the comparative merits of inoculation and vaccination; but, by reason of the enactment, the majority are restricted to the latter alternative. In Scotland, where no such law prevails, a similar practice is generally followed, since few would risk the danger of spreading real small-pox by the foci of contagion, which inoculation must originate. Of the two means of protection, one affords a sure, the other a doubtful, safeguard against small-pox; but the advantages in favour of the former are more than counterbalanced by the host of evils that would ensue, unless the practice were universally adopted. With a knowledge of these facts, it is surely the duty of all who are interested in the welfare of, and intrusted with the management of the poor, to exert every legitimate means in their power to check the ravages of small-pox. It may be argued, that few places offer more facilities and better opportunities for universal vaccination than Glasgow; that there are five separate stations throughout the city where vaccination is performed gratuitously, and that it is rendered incumbent on the parochial surgeons to be constantly supplied with lymph, and be at all times ready to vaccinate the poor in their own localities. That all these measures have proved inefficient in checking the increasing evil, has been fully demonstrated; and it now only remains to suggest a remedy more efficacious than any hitherto had recourse to.

It is useless to anticipate more benefit by the same means.

of additional stations for vaccination. If, by authoritative arrangement or otherwise, it were rendered imperative on every parent, and also on the clergy of every denomination, to see that vaccination was only performed before the child received baptism, our annual mortality would be most materially diminished. Another plan would be, to make it incumbent on the individual who superintends the delivery of the child, whether accoucheur, midwife, or medical student, to see that it is properly vaccinated within a given period after birth. The absence of a proper system of registration in Scotland necessarily precludes the possibility of enforcing any measure relative to vaccination, that might have an analysis of the actual births as a groundwork for its operation; and an increased responsibility is thereby entailed on the parochial boards. The subject is doubtless beset with many difficulties; but there are few evils of any magnitude that are not equally surrounded, and for the removal of which the enforcement of some stringent practical remedy is not absolutely necessary.

SURGERY.

CASES OF RECOVERY AFTER LOSS OF PORTIONS OF THE BRAIN.

Instances have been from time to time recorded, in which portions of the substance of the brain have been lost through injury, and in which the patients have completely recovered.

Mr. Guthrie, in his work on *Injuries of the Head affecting the Brain*, says: "One man shall lose a considerable portion of his brain without its being productive at the moment, or even after his restoration to health, of the slightest apparent functional inconvenience; whilst another shall fall, and shortly die, without an effort at recovery, in spite of any treatment which may be bestowed upon him, after a very much slighter injury inflicted apparently on the same part. . . . The result of my experience on this point is, that brain is more rarely lost from the fore part of the head with impunity, than from the middle part. . . . I have never seen a person recover with a foreign body lodged in the anterior lobe of the brain, although I have seen several recover with a loss of a portion of the brain at this part."

The following collection of such cases will show that they are perhaps more common than is generally supposed.

CASE I. Dr. JAS. YONGE, of Plymouth, the author of the *Curvus Triumphalis e Terebintho*, in a small work on *Wounds of the Brain proved Curable*, published in 1682, relates, with much minuteness, the case of a child, four years old, who came under his care on account of being injured by a heavy field-gate falling on him. The head was crushed between a stone on the ground, which bore on the left side somewhat above the ear, and a pin of wood standing out half an inch from the gate on the other side. Before Dr. Yonge saw the child, it had bled much; it had not fainted nor been convulsed, but had vomited two or three times. In examining the wound, Dr. Yonge found depression of a portion of the skull on the right side, where it had come in contact with the wooden pin, and removed several pieces of brain from the wound. On the other side there was also fracture with depression. A large portion of bone was removed; the wound on the left side was healed in seven weeks; that on the right side in three months.

In an appendix, Dr. Yonge has collected the opinions of sixty authors, who affirm that wounds of the brain are curable, and confirm these statements by above a hundred observations. Among these are Galen, who, in his *Commentaries on the Aphorisms of Hippocrates*, says that he has several times seen recovery after injury of the brain—especially a case at Smyrna; Jacobus Corvus, who, in his *Tractatus de Fractura Cranii*, says, "Up to the present time, I have seen six persons, from whom a notable quantity of brain escaped, and they yet recovered"; Guy of Chauliac, who is quoted as having seen a person who had a wound of the back part of the head, with loss of a small portion of the brain, and recovery; Gabriel Fallopius, who says that he saw a gipsy, who, in the month of January, received an extensive wound in the head from a partisan, with loss of as much brain as could be contained in a hen's egg, but recovered; and who also says, that he has seen several patients who had lost portions of brain, and remained insensible for some time, some of whom lived for a hundred and twenty days, while others recovered. We could quote several more instances from this interesting contribution to medical history; but we can merely mention the names, supplied by Dr. Yonge, of Fabricius ab Aquapendente, Zacutus Lusitanus, Veslingius, Jacques Guillemeau, Ambroise Paré, Fabricius Hildanus, Sen-

nertus, Scultetus, Fernelius, Thomas Bartholinus, etc., etc., all of whom bear witness to the possibility of recovery after loss of portions of the cerebral substance.

CASE II. In the *Edinburgh Medical and Surgical Journal* for January 1816, Mr. C. K. CRAWFORD relates the case of a boy, aged between two and three years, who received fracture and depression of the left parietal bone. About the bulk of a walnut of brain was lost. In the course of the case, hernia cerebri occurred, and was successfully treated by compresses and bandages. The report of the case closes with stating the child to be "clever, healthy, and apt, and not in the least injured by the accident".

CASE III. This case is related by Mr. JOHN EDMONDSON, of Keswick, at page 199 of the *Edinburgh Medical and Surgical Journal* for April 1823. On August 2nd, 1822, C. H., aged 15, was wounded by the bursting of an over-loaded brass cannon. The frontal bone was fractured, and a portion, two and a half inches long by one and a quarter broad, including the frontal spine, was removed; as were also other smaller portions of various sizes, in all thirty-two in number. More than a table-spoonful of cerebral substance came away at the time. Portions of brain were also discharged at three dressings, becoming less each time. At no period were there any symptoms referable to this injury; during the time that the brain was discharged, he is reported as "giving correct answers to questions put to him", and as being "perfectly rational". On October 27th, the wound, from which there had been free supuration, was completely closed; and on November 7th, he was reported in perfect health, and as having suffered no derangement of his mental faculties.

CASE IV. In the *Bulletin de l'Académie Royale de Médecine* for April 1842, is mentioned a case related by M. POIRROUX, in which a young man, aged 20, received a blow with a stone on the right side of his forehead. He instantly fell; but, recovering his senses, got up, and was able to walk. No paralytic symptoms ever appeared. The skull was deeply driven in; the soft parts were severely injured; and a portion of brain had escaped from the wound. Copious supuration soon commenced, when several additional portions of brain escaped along with the purulent matter. The patient recovered without having had a bad symptom.

CASE V. A case is related by Dr. ROGERS in the *Medico-Chirurgical Transactions* for 1827. A young man, aged 19, received a wound on the frontal bone just above the centre of the left supraciliary ridge, from the bursting of a gun, on 10th July. It was not until the 4th of August that he discovered a piece of iron lodged within the head in the bottom of the wound, from which a considerable quantity of bone had come away. On extracting it the next day, it proved to be the breech-pin of the gun, three inches in length, and three ounces in weight. On the 10th of December, he was perfectly cured.

CASE VI. Dr. H. BIGELOW relates, in the *American Journal of the Medical Sciences* for July 1850, the case of a man, aged 25, who, on September 13th, 1848, had an iron rod driven through his head by the exploding of some gunpowder, while engaged in preparing a rock for blasting. The iron passed from the angle of the lower jaw to the centre of the frontal bone, near the sagittal suture. He was at first rendered insensible, and was slightly convulsed; but soon recovered his consciousness and power of speech. There was considerable hemorrhage. The daily progress of the case is reported by Dr. Harlow, under whose care the patient was. No remarkable symptom appeared till the 18th September, when he became delirious; and, from the 23rd of that month till the 3rd October, he lay in a semi-comatose state, answering only in monosyllables when spoken to. During this time, also, he had lost the sight of the left eye, and an abscess had formed under the occipito-frontalis muscle. After this, he recovered gradually, with the exception of the effects of a chill, from getting wet in the feet while walking out on 14th November. The symptoms were subdued in a few days; and, on the 18th, he was reported as in a fair way of recovery.

In January 1850, he was seen by Dr. Bigelow. There was ptosis of the left eyelid, and the eye was incapable of being moved outwards or upwards. The situations of the orifices of the wound were occupied by cicatrices.

Dr. Bigelow performed some experiments on the dried skull, to ascertain precisely what parts must have been injured. He found that the iron entered beneath the zygoma, removing the orbital portion of the sphenoid, the anterior part of the squamous portion of the temporal bone, and the internal surface of the zygoma and malar bone laterally. In the orbit, the

sphenoid bone, part of the superior maxillary, and a large part of the frontal, were removed, leaving the optic foramen intact. At the base of the skull, the frontal, temporal, and sphenoid bones were cut. In the brain, the central part of the left anterior lobe, and the front of the middle lobe, must have been destroyed, laying open the lateral sinus. The falx and longitudinal sinus must also have been lacerated.

The instrument weighed thirteen pounds and a quarter, was three feet seven inches in length, and was one inch and a quarter in diameter. At the end which entered the head, it tapered off for seven inches, till its diameter was a quarter of an inch at the point.

In the *Canada Medical Journal* for May 1852, Dr. F. S. VERITY relates the following case.

CASE VII. D. C., aged 14, while teasing a horse, was kicked on the side of the head. He fell down senseless. On examination an hour after the accident, Dr. Verity found a fracture of the skull between the right parietal and temporal bones. On the external surface of the wound, which had bled very freely, there were small portions of bone and brain mixed in a clot of blood; on removing these, a detached portion of bone was found imbedded in the brain. On removing this, several portions of brain escaped, the largest of which was about the size of a hazel-nut. The patient remained comatose; the pulse was 60, the countenance pale, and the breathing heavy. Reaction took place in twenty-four hours, which was successfully treated by cold applications to the head, and by brisk purgatives. In two days, sensation returned; at the end of a week, the patient was perfectly conscious, and in a month was quite well. Portions of the brain came away at the first three dressings.

In the *Monthly Journal of Medical Science* for September 1845, a case of a gun-shot wound of the brain, followed by recovery, is related by Mr. C. G. E. FORD, of the Madras Medical Establishment.

CASE VIII. A boy, aged 15, was shot in the head, apparently accidentally, during the practice of a regiment. When discovered, he was insensible, and breathed stertuously. The ball had passed through from three-fourths of an inch in front of the summit of the right ear, and to an inch and a quarter above the centre of the left eyebrow. The skull was fractured irregularly between the wounds, also from the place of entrance to the lambdoidal suture, and over the sinus of the right os frontis. In the process of the case, portions of brain were discharged; there were delirium, and involuntary evacuations; but he gradually but perfectly recovered his intellect and memory and senses.

CASE IX. This case is related by Dr. DE BARBE, of Chaumes, in the *Gazette des Hôpitaux* for 5th February 1853. The patient was a man, aged 25, who was wounded by the bursting of his gun, a portion of which penetrated the skull above the centre of the left eyebrow. He was able to search for the fragments of the gun, and to walk some distance to a hospital. When the piece of the gun was removed, a spoonful of cerebral matter escaped. There was no disturbance of intellect, nor of the senses, nor of speech, throughout the progress of the case. On the twelfth day, the patient was discharged cured.

In the *Gazette des Hôpitaux* for 10th February 1853, M. CHASSAGNAC relates some cases, with the object of showing that injuries of the brain are not only less fatal than is commonly supposed, but are even less frequently followed by severe symptoms.

CASE X. A farmer, named Meen, was wounded in the head while discharging his gun, by a piece of the breech. It pierced the frontal bone about an inch and a half above the border of the left orbit, and entered the brain, driving before it a round piece of his hat and several fragments of bone. He had no troublesome symptoms, beyond an attack of epilepsy.

CASE XI. In a young man, aged 17, a musket-ball entered the upper lip, and passing upwards, traversed the right nostril, and entered the skull through the floor of the orbit, whence it made its exit through the upper part of the frontal bone, near the sagittal suture. In this part there was a fracture extending as far as the parietal bone, and a large wound, with loss of substance in the integuments. After the extraction of the splintered portions of bone, and the escape of several portions of brain, there were severe symptoms; but these ceased on the nineteenth day, and the patient recovered.

CASE XII. A soldier received a gunshot wound in the head at the first revolt in Cairo. The ball entered the middle of the frontal bone, near the sinus, and passed obliquely backwards between the skull and the dura mater, thus traversing the course of the longitudinal sinus as far as the occipital suture,

where it stopped. Trephining was performed, in consequence of some symptoms of compression. The foreign body was removed, and recovery took place without any unfavourable symptoms.

CASE XIII. At the battle of Waterloo, a ball entered the outer side of the left frontal bone, near the left orbit, and buried itself at a point corresponding to the curved line in the temporal fossa. The patient had involuntary discharge of urine and faeces, hemiplegia of the left side, and loss of memory of proper names, and of some names of objects. He recovered from these symptoms, rejoined the service, and died of phthisis in 1827.

CASE XIV. G., aged 21, was, while discharging his gun, wounded in the forehead by the breech-pin, which buried itself in the lower part of the frontal bone, immediately above the nasal spine. The wound extended to the left, including the internal angle of the orbit, as well as a portion of the front of its upper surface and the projection of the eyelid. There was escape of cerebral substance. No severe symptom occurred; and recovery took place in less than twenty-four days.

CASE XV. A young man, aged 22, was discharging a gun; it burst, and he received in the frontal bone, a little above the border of the orbit, a piece of the breech-pin, which penetrated an inch and a half into the brain, driving before it a fragment of bone three quarters of an inch in diameter. The stones near the place where the accident occurred, were soiled with debris of cerebral substance, and with a little blood.

CASE XVI. The cause of the injury was here unknown. On making a *post mortem* examination (after death, from some other cause), there was found to be a fracture of the frontal bone, with penetration of the fragments into the brain.

CASE XVII. A man, aged 32, was wounded in the head by the bursting of some fireworks. There was a large wound on the left side in front, with laceration of the dura mater, and escape of cerebral pulp. This patient died; but it is to be observed that he was able to walk for some minutes a quarter of an hour after the accident, to sleep the next night, and to be carried the next day in a boat on the Rhone to the Hôtel-Dieu, at Lyons; that he preserved entire for thirty-two days his intellect, sensation, and motion; and that it was only at the end of that time that these functions gradually became disturbed, and fatal symptoms supervened.

The following case is related in the *Medical Times and Gazette* for April 23rd.

CASE XVIII. William Rogers, aged 2½, a strong healthy looking child, was admitted into St. Thomas's Hospital under Mr. South, on September 7th, 1852. About two hours before admission, he had fallen down an area ten feet in depth. When picked up, he was screaming violently, and bleeding copiously from a wound just above the left frontal eminence of the head. He did not seem to recognize or take notice of his parents. The wound was at once dressed by a surgeon. At that time there was no protrusion of the brain; but in about half an hour, a whitish substance was noticed to be protruding from the wound. On his admission into hospital, there was found to be a wound about an inch in length, in which was a detached portion of brain of the size of a kidney-bean. No fracture was detected in the wound, but an apparent depression backwards existed above it. The child was insensible, and the right side of the face and right arm were convulsed, but not violently; the pupils were dilated, and the left eye was closed by swelling. Just before admission, he had vomited the contents of his stomach, with a considerable quantity of clotted blood. During the dressing of the wound, he again vomited, and bled slightly from the nose. The pulse was 120, regular; the breathing tranquil. In about half an hour, he appeared to be sinking; but soon began to mend; he became partially sensible, the pupils answered to light, and the convulsions had ceased. No operation was considered necessary.

The subsequent report of the case shews that he went on favourably, without a bad symptom, and was discharged with the wound nearly healed on September 17th, ten days after the accident.

TREATMENT OF DISLOCATION COMPLICATED WITH FRACTURE.

M. RICHET, at a meeting of the Surgical Society of Paris, in 1852, reported in one of the numbers of the *Union Médicale*, read a memoir on the possibility of reducing dislocations of the humerus and femur, when complicated with fracture of the bone in the vicinity of the joint. He gave as his opinion that, by placing the patient under the influence of chloroform, and employing coaptation, without extension, the dislocation might be reduced.

before the fracture: in opposition to the doctrines of Boyer and Dupuytren. M. Richet employed this method successfully in a case of dislocation of the humerus with fracture of the surgical neck. He also demonstrated the practicability of the proceeding by experiments on the dead body. He proposed to apply the plan of coaptation to the treatment of dislocation in general, whether complicated with fracture or not.

In reporting on the essay of M. Richet, M. Gosselin stated the principal merit of the author to consist in having brought forward a plan of treatment which had indeed been employed by other individuals, but which was not generally known, from the cases being published in periodicals and theses, and hence inaccessible to many members of the profession. He objected to the use of chloroform so frequently as recommended by M. Richet: and believed that reduction by coaptation could often be accomplished during the state of prostration succeeding the injury. He thus summed up the proper treatment of fracture complicated with dislocation. "As soon as the lesion is discovered, no matter at what time, reduction by coaptation should be attempted, chloroform being given, if not contraindicated: and the operation should be repeated several times, if it does not at once succeed. If reduction is not obtained, and the upper fragment of the bone is large enough, extension should be combined with coaptation: the application of the starched bandage (*appareil inamovible*) is useful. If we do not then succeed, we must wait until the fracture is united, and then attempt to reduce the dislocation; and if we then fail, we must favour by passive motion the formation of a false joint."

In the *Revue Medico-Chirurgicale* for February 1853, M. MALGAIGNE gives a summary of the present state of knowledge on this subject: and adds the results of his own experience.

In seven years he has had under his care, in the hospital of St. Louis, thirteen cases of dislocation complicated with fracture, viz., one case of dislocation of the fourth cervical vertebra with fracture of the posterior arch: one of dislocation of the sacrum with fracture of one ilium: one of dislocation of an arm with fracture of a leg: one of dislocation backwards of the elbow with fracture of the fore-arm: one of dislocation backwards of the elbow with fracture of the radius: one of dislocation forwards of the radius, with fracture of the fore-arm: one of dislocation with fracture of the radius: three of dislocation of the lower end of the ulna with fracture of the radius: one of dislocation of the knee with fracture of the leg: one of dislocation of both knees with fracture of the left leg and arm: and one of dislocation of the tibio-tarsal joint with fracture of the tarsal bones.

Among these cases, those are the most frequent in which the fracture affects the luxated bone: this is most commonly found in the arm; then in the fore-arm, thigh, and leg.

From the attention of the surgeon being directed to the fracture, often to the exclusion of the dislocation; from the swelling being more rapid and considerable than in simple cases; and from the pain of the dislocation being masked by that of the fracture, the luxation is often not detected by the surgeon: and M. Malgaigne acknowledges that he has erred in this way in a case of dislocated humerus, and in one of dislocation backwards of the head of the radius.

When dislocation with fracture is recognized, how is it to be treated? Pasicrates, who wrote about half a century before the Christian era, and Oribasius, advise that the dislocation should be first reduced; and then the fracture. Arisdon preferred extension, so as to act on both at the same time. Celsus and Galen say nothing of the subject; and Paulus Egineta and Haly Abbas give very meagre instructions. Guy of Chauliac writes: "If dislocation is complicated with fracture, let the dislocation be first reduced, and then the fracture, if possible. But, if otherwise, let the fracture be reduced; and when the callus is firm, the dislocation may be treated." J. L. Petit quotes this precept, and adds that reduction of the dislocation is impossible when the fracture is near the joint. To this M. Malgaigne objects, first, that it is not the distance of the fracture which forms the great obstacle; secondly, that it is rarely that reduction must be effected by extension. Boyer properly admits that the luxations of the ginglymoid joints can be reduced without extension: but, with regard to the ball and socket joints, he says that dislocations cannot be reduced while fracture exists, and that, when the callus is solidified, the length of time opposes an obstacle. Sir A. Cooper advises immediate reduction of the dislocation in all cases, from fear of reproducing the fracture, if extension is employed subsequently.

In recent cases of dislocation, M. Malgaigne observes that mild means succeed best; such as pressure, impulsion, and rotation: and that the ball and socket joints are as amenable to this treatment as the others.

Delamotte, in his *Traité de Chirurgie*, relates a case of dislocation of the humerus, complicated with fracture of the bone near the junction of the upper with the middle third, and with fracture of the clavicle. The dislocation was reduced by an assistant pressing firmly on the acromion, while Delamotte "drew the head of the bone downwards, at the same time pressing it upwards": in fact, by a movement of rotation. Laroche (*Thèse Inaugurale*, Strasbourg, 1803) had a case of dislocation of the humerus under the clavicle, the bone being also broken at the lower third. Having had the acromion fixed, he pushed back the head of the humerus into the glenoid cavity. James Gordon (*Trans. of the Medico-Chir. Society of Edinburgh*, 1824) reduced in a similar manner a dislocation of the humerus, complicated with comminuted fracture of the bone. Houghton (*Lancet*, 1845) reduced on the tenth day a dislocation complicated with fracture four inches below the acromion.

Dupuytren (*Leçons Orales*, tome i, p. 85) asserts that when luxation of the humerus is complicated with fracture of the surgical neck, art and nature can do almost nothing. But, in 1777, Bottenheit reduced two cases, in which the fracture was as close as possible to the joint; and more recently, M. Baroni (*Gazette des Hôpitaux*, 1841, p. 192) has obtained a similar result on the sixth day. More recently, M. Richet (*Union Médicale*, 1853, p. 499) has reduced a dislocation of the humerus complicated with fracture of the neck of the bone, by pressing with the thumb on the acromion, and pushing the head of the bone outward and upwards with the fingers.

Luxations of the femur may be reduced in the same way as those of the humerus. In 1836, M. Etève had a case of dislocation backwards of the left femur, with fracture of the bone at the middle third, a penetrating wound of the knee-joint, and a fracture of the fibula on the same side. The patient was held firmly by two assistants who placed their hands under the axillæ; two others held a towel surrounding the thigh, between the dislocation and the fracture; while three others held up the limb, so that the thigh was bent almost at a right angle with the pelvis. After making gradual extension, the surgeon pushed with all his strength the head of the femur into the acetabulum, and reduction was instantly accomplished. (*Gazette Médicale*, 1838, p. 751.) Some years before this, Bloxam had reduced, on the eighth day, a dislocation of the femur on the pubes, with fracture above the middle third of the bone, by flexing the limb on the pelvis, and pushing the head of the bone downwards and backwards.

Examples of reduction of dislocation of the ginglymoid joints are more rare. Pézerat (*Journal Complémentaire*, tome iv, p. 276), had a case of dislocation backwards of the radius and ulna, with fracture of both bones two inches above the styloid process. The dislocation was immediately reduced: but by what means is not stated. M. Malgaigne relates a case in which there was dislocation backwards at the elbow-joint, with fracture of both bones at their middle. M. Malgaigne chloroformed the patient, and readily pushed the bones into their place. The fracture was treated; and the patient nearly recovered the perfect use of the arm.

One case only of reduction of dislocation of the knee, with fracture, is known to M. Malgaigne. In 1850, a woman came under the care of M. Jules Guérin (*Arch. Gén. de Méd.*, October 1852, p. 152) with dislocation outwards of the left knee, and fracture of both bones of the leg at the middle. Slight extension was employed: and the luxation was reduced by rotating the leg from without inward.

Delamotte relates a case of dislocation of the foot with fracture of the leg three finger-breadths above the joint. He applied extension and counter-extension; and pushed back the dislocated bone with the palm of the hand. That the extension here, as in other cases, was not of much value, M. Malgaigne thinks proved by the fact, that Delamotte succeeded without it in reducing dislocation in an analogous case. M. Corbin, in 1843, communicated a similar case to the Academy of Medicine. Delamotte (*Chirurgie*, 1845) and M. Robert (*Journal de Chirurgie*, 1845) have reduced dislocations of the lower jaw, complicated with fracture.

In operating on these cases, M. Malgaigne recommends that chloroform should be used; that the fractured limb should be held by assistants; and that it should even be temporarily put up in an apparatus before the reduction of the dislocation is attempted. Gentle motion of the joint should be practised at an early period.

In dislocations of older standing, Boyer, Sir A. Cooper, and Dupuytren, discountenance attempts at reduction. In 1828, however, Warren reduced a dislocated humerus, where the bone had been fractured, at the end of seven weeks. In 1846, M.

Malgaigne met with a case of fracture of the radius, with dislocation backwards of the elbow. He did not discover the latter accident until the seventeenth day; and when he then tried to push the bones into place he failed. He therefore waited until the fracture was united; and, on the thirty-eighth day, reduced the dislocation by extension and sudden flexion.

He also relates a case of dislocation of the radius with fracture of the fore-arm. Reduction of the dislocation was attempted after the union of the fracture: it was unsuccessful, but the power of motion was improved.

M. Malgaigne concludes his essay by referring to cases in which a false socket has been formed; and in some of which, MM. Ribéri, Peyrani, and others, have successfully attempted, by perseverance in passive motion, to give to the limb a considerable power of movement.

specially relieve the viscera within, or any one of them more than another.

The author introduces the accompanying sketches to illustrate his views.

We shall assume the anatomical details to be correct (the author being a lecturer on anatomy), referring to the original paper any of our readers who may not be satisfied on this point.

The author assumes two points as the foundation of his argument. 1, that the relief in local blood-letting is through the blood-vessels, or vascular system; and 2, that there can be no special relief from local blood-letting, unless the blood-vessels of the affected part communicate with those of the part from which the blood is drawn.

He shows that the arteries of the walls (which are accompanied by corresponding veins) are derived from branches of the subclavian, axillary, external and internal iliac, and common femoral arteries, and from the lumbar and thoracic intercostal arteries, which arise from the back part of the aorta, whilst the visceral arteries spring from its front and sides; that the visceral arteries form no communications with the parietal arteries; and consequently that blood taken from the latter cannot relieve the viscera, except by diminishing the volume within the parent trunk, the blood-letting thus losing its local character and becoming general.

The author notices one exception to this, in the anastomosis along the rectum between the vessels of the great intestine and those of the perineum. This has led to the French practice of leeching the perineum to relieve the abdominal viscera, but this practice has not met with much favour in this country.

He also shows that the reflections of the serous membranes, as they connect at certain places the viscera to the walls, cannot be regarded as establishing a medium through which the blood-vessels of the viscera can be relieved.

Having shown that there can be no direct relief or *draining* of blood to the viscera from the walls, he next proceeds to point out that neither can there be relief on the principle of derivation, or *counter-draining*, as he terms it. The arteries of the wall arise at too great a distance from those of the viscera, or, in the case of the intercostal and lumbar arteries, have the great current of the aorta interposed between the orifices of the vessels; and the author accordingly concludes that "it must therefore be held, that the abstraction of blood from the wall of the abdomen or chest cannot act in any way or according to any principle, as far as specially influencing the contained viscera is concerned, in any other light than as a general blood-letting."

After a survey of the blood-vessels of the head, within and without the cranial cavity, the author concludes that the brain is not to be reckoned as one of the internal viscera beyond the reach of local blood-letting, as the veins of the scalp communicate by the parietal and mastoid veins with the sinuses of the dura mater. He remarks:—

"It would appear, then, from anatomy, that, by leeching the scalp, especially behind the ear, the sinuses of the dura mater and veins of the brain may be relieved, and that as directly, though not so rapidly, as by the method of opening the external jugular vein at the root of the neck.

PRACTICE OF MEDICINE AND PATHOLOGY.

ANATOMICAL CONSIDERATIONS ON THE MODE OF ACTION OF LOCAL BLOOD-LETTING IN AFFECTIONS OF THE INTERNAL VISCERA.

In the *Monthly Journal of Medical Science* for this month, there is a paper by Mr. JOHN STRUTHERS, of Edinburgh, on Local Blood-letting in Affections of the Internal Viscera. The author's object is to show, on anatomical grounds, that local blood-lettings on the chest and abdomen act upon the internal viscera as general blood-lettings, and not locally or specially, as is probably pretty generally supposed. The paper is chiefly an anatomical one, showing, after a careful and comprehensive survey of the blood-vessels which supply the viscera and the walls, that there is no connexion between them, and that therefore blood taken from the walls of the chest or abdomen cannot

Fig. 1.

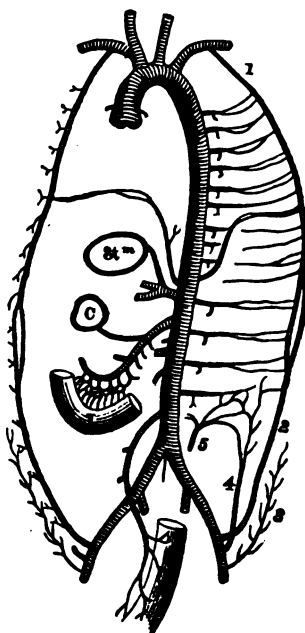


Fig. 1. Longitudinal plan of the arteries of the trunk. The left side shows both the longitudinal and transverse anastomosing arteries of the wall; the right side only the longitudinal and diaphragmatic anastomoses belonging to the wall, and the various visceral arteries springing from the aorta.

Left Side. 1, internal mammary; and 2, deep epigastric; connected behind to aorta by series of intercostal, lumbar, and diaphragmatic arteries; 3, superficial epigastric; 4, circumflex iliac; 5, ilio-lumbar from internal iliac.

Right Side. Branches of abdominal aorta, from above downwards, diaphragmatic, celiac axis, superior mesenteric, right supra-renal and renal, right spermatic or ovarian, and inferior mesenteric.

Fig. 2. Transverse plan of the arteries of the abdomen opposite to liver, spleen, and stomach. 1, aorta, giving off from its back part the arteries (2, 3) for the wall, which unite in front with branches of the internal mammary arteries (3, 3). 4, celiac axis, coming from front of aorta, and supplying spleen, stomach, and liver, the latter also receiving the vena porta.

Fig. 3. The same, lower down, showing portion of small intestine and sections of ascending and descending colon and of kidneys. 1, aorta, giving off behind the lumbar arteries (2, 3), which join in front with branches of the deep epigastric (3, 3). In front, as if coming from the aorta at the same part, are shown the superior and inferior mesenteric, and at the sides the renal arteries. Fig. 1 shows the order in which these visceral arteries come off at different stages of the aorta, and their relative size.

The anatomist will notice, that it is chiefly the anastomosing branches of the arteries of the wall which are shown, and also that these are represented proportionally larger than natural.

"The common practice of cupping on the back of the neck, with the view of specially relieving the brain or head, is no doubt generally, or in great part, efficacious, simply as a slow or mild general blood-letting; but is at the same time not without anatomical recommendation as a local blood-letting. The mastoid communication from the lateral sinuses is to the occipital veins, and these communicate freely with the veins of the back of the neck; and also the arterial supply to the back of the neck, derived from the deep cervical and occipital arteries, has free communications with the posterior muscular twigs, which the vertebral arteries give off during their ascent to the brain."

Like most of our brethren in the north, who have seen

who revere the names of Monro, Abercrombie, Kelly, and John Reid, Mr. Struthers is one of those who "cannot understand how the quantity of fluid within the cranium can vary, until it can be proved that the brain can be compressed, *i. e.*, diminished in bulk, by any force that the heart is capable of exerting". But to this disputed question in physiology he merely alludes for the purpose of protesting against the idea of some, that it should be allowed to alter or influence our practice in cerebral affections; remarking that, "whichever view be correct, we have still the same principles to contend with in practice; we have in both increased or diminished *pressure*, and in both increased or diminished *rapidity* of the circulation; and it therefore appears to me that those are in error who suppose that this question should influence our practice or our reasoning thereon".

Having drawn the above conclusions as an anatomist, Mr. Struthers next comes, as a practical man, to inquire whether these considerations should lead us to abandon local blood-letting in affections of the viscera. It will be satisfactory to those who have long used the leech and cupping-glass, in the faith of their special efficacy, to "learn that the prudent and proper practice still is to apply the treatment over the affected part. This is because we cannot be sure of the exact situation and limits of the disease. There is pain as if in the liver. Is the affection one of the liver itself, or of one of the serous layers of the diaphragm, or of the parietal peritoneum? There is pain as if in the kidney. Is it in the kidney, or in some part of the wall, or in both? We cannot be sure, and therefore we must treat the affection as a regional one—as an affection of, or in, the right hypochondriac region in the one case, and of the lumbar region in the other. If the viscus alone be affected, the blood drawn from over it will at least relieve it *as much* as a similar quantity taken from some other part would do; and, if the wall also should be affected, or be the entire seat of the disease, the patient, without running the risk of missing a better practice, has had the benefit of the doubt.

"The same remarks apply to the chest. Local blood-letting must have the same direct effect in pleuritis that it has in peritonitis; the membrane in either case forming part of the wall: and can the practitioner be sure that the parietal pleura is not involved as well as the lung? The pericardium, again, receives part of its vascular supply from the internal mammary arteries; and it is therefore in our power to derivate from this part by leeching the front of the chest.

"We must therefore come to the conclusion, that, in treating affections of the viscera of the abdomen and chest, it is best to take the blood from over the painful or affected part; grounding the localisation of our practice, not on the vague belief that we can thereby specially relieve the viscus, but on the uncertainty of diagnosis, which leaves us unable to say whether the wall also is affected or not."

The only alteration in practice which such considerations would warrant, would be in those cases in which it is the object of the practitioner simply to lessen the quantity of blood in a congested or over-active viscus, or where he feels assured that the affection is *limited to the organ*; and in such cases the author remarks, "it would appear that it matters not where or how he bleeds; according to circumstances, he may take his choice both of the part and the mode, feeling assured that, from whatever part he takes the blood, whether by the leech, the cupping-glass, or the lancet, he will reach the affected organ only by having withdrawn so much blood from the general circulation".

It is but seldom, however, that such cases occur in ordinary practice. Whilst we frequently know the parietal pleura or peritoneum to be affected as well as the viscus, we never can be quite certain that they are not so, even in these days of physical diagnosis and clairvoyance; and as the same quantity of blood taken from over the organ will do at least *as much* good as a similar quantity taken elsewhere, whilst the rule is simple as a guide to the practitioner, besides being more likely to ensure the confidence of the patient,—the author very properly recommends the continuance of the present practice of drawing the blood from over the affected or painful part.

The object of this paper, then, is not to alter our practice, but to explain the mode in which our local blood-lettings are serviceable in affections of the abdomen and chest. Mr. Struthers shows that local blood-lettings relieve the stomach, intestines, liver, spleen, kidneys, heart, and lungs, only as general blood-lettings to the same extent would do; and that the superiority of local over general depletion (which all experience goes to establish) is due to the local relief afforded to the wall, which is usually in part, and sometimes in whole, the seat of the affection.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 12TH, 1853.

JAMES COPLAND, M.D., President, in the Chair.

SCIRRHUS OF THE PROSTATE GLAND, ALSO OF THE LUMBAR AND PELVIC LYMPHATIC GLANDS. BY JOHN ADAMS, ESQ.

CASE. A gentleman, aged 59, was suddenly seized with paralytic symptoms, which seemed to arise from derangement of the circulation. During his recovery he experienced frequent desire to pass urine, and required the constant use of the catheter. The instrument passed over a hard and rough surface, and induration and enlargement of the prostate were felt on examination *per rectum*. Pains about the pelvis ensued; the saphena vein became thickened; the thighs were drawn up upon the trunk; and he died three years after the appearance of the first symptoms. There had been no hæmorrhage.

EXAMINATION OF THE BODY. The lumbar glands, and the lymphatic glands of the pelvis, were enlarged by the deposition of scirrhus. There were cysts containing pus near the symphysis pubis. The prostate gland was enlarged to nearly twice its natural size; an ovoid mass, distinctly scirrhus, the size of a small nut, projected into the bladder from its upper surface. The left lobe was occupied by a long scirrhus mass; the right lobe appeared healthy. The left vesicula seminalis was diminished in size; and the prostatic plexus of veins contained phlebolites. The left kidney was enlarged and contained much sabulous matter. The tumour was examined microscopically, and found to be true scirrhus.

In the discussion which followed, in which Messrs. BOWMAN, CHARLES HAWKINS, and HOLMES COOTE took part, the rarity of the occurrence of genuine scirrhus in the prostate gland was noticed: while fungous disease of that body was not uncommon. The absence of hæmorrhage was ascribed to the mucous membrane being free from abrasion.

TUESDAY, APRIL 20TH, 1853.

JAMES COPLAND, M.D., President, in the Chair.*

TREATMENT OF STRICTURE OF THE URETHRA BY EXTERNAL INCISION. BY JAMES SYME, ESQ., F.R.S.E.

Mr. SYME commenced by apologizing for venturing to lay his observations before the practitioners of London. The comparatively small field which it had been his province to occupy might appear hardly to warrant such a course. It might also be said that he might have availed himself of the ordinary channels, instead of reading a paper to the Royal Medical and Chirurgical Society. But he would plead as his justification the peculiar circumstances in which he felt himself placed, and his sincere persuasion that he had devised an easy, safe, and effectual mode of relief from one of the most distressing infirmities we are acquainted with. He was desirous that this benefit should be extended; but, as the reception of his proposal had been impeded by the statements which had emanated from metropolitan publications, he believed that, although the truth might and no doubt ultimately would prevail, a long time, must elapse before it could be embraced through the ordinary course of experience. And any attempt to unravel or refute the various statements which had been made concerning the operation, by tracing out their errors, would have been a task no less unpleasant than unprofitable. Under those circumstances, it had seemed to him that the only practical mode of conduct was to come personally before that society, which, more especially, was understood to represent the respectability and intelligence of the practitioners in London; to explain the plan of treatment which he had endeavoured to introduce; and to state the facts upon which he was willing that its credit should rest, and supply any further information which might be required by any member of the society who had entertained a different opinion upon the subject.

It would be unnecessary to detain the society by an account of stricture; the object being to direct attention to certain forms of the disease, which resist the hitherto established means of treatment, and which seem to require some other remedy. In one of these forms of stricture there is extreme irritability, and attempts to effect dilatation are followed often by violent local and constitutional disturbance. In another, the stricture might be dilated, but speedily contracted again, so as to renew the

* The proceedings of this meeting were taken in short-hand, expressly for this Journal, by Mr. G. Cole.

symptoms attending the first stricture; and in the third form the stricture might be dilated sufficiently to admit the insertion of a full-sized instrument, but micturition remained painful, difficult, and uncertain. For the remedy of these three forms of stricture, there were various established means of treatment which might be referred to two heads—dilatation and the use of caustic; these have proved unavailing beyond a temporary amelioration, and have too frequently aggravated the evil. He would not calculate how many lives had been rendered miserable through the vain struggles on the part of surgeons to remedy the disease, but he would simply notice the will of M. Argenteuil, who bequeathed funds sufficient for bestowing periodically a prize of £500 for the greatest practical improvement in the treatment of stricture.

The simple bougie was quite sufficient for the treatment of ordinary strictures; but for the effectual remedy of stricture when it assumed one or other of the peculiar forms to which attention had been directed, he maintained that a free division of the contracted part of the urethra was essentially required. For this purpose, he introduced a grooved director; and he believed that there was no stricture which, through time and care, might not be made to admit an instrument of this kind. The patient being then placed upon his back at the edge of the bed, and the knees held up, an incision of about an inch and a half in length was made in the perineum, sufficient to admit the knife, while the thick texture was freely divided to the extent of an inch or two, or more if necessary. A No. 8 catheter was afterwards retained in the bladder for at least two, but not more than three days. The procedure which was described was extremely simple, and might be accomplished in a very short time. At the same time, no operation demanded a more exact precision of performance, whether regard were had to the attainment of its object or to its immediate effects. Unless the urethra were divided at the proper place, no permanent benefit could result. If the knife were not confined to the middle line of the perineum, there would be the greatest risk of hæmorrhage and extravasation of urine. M. Reybard, who appeared to follow the plan of internal incision, had said that whatever were the form of the stricture, the incision ought always to be directed laterally, so as to avoid the artery of the bulb placed below. But the Academy of Medicine, with regard to the position of the artery of the bulb, had promulgated a great error in the practice of surgery; since the vessel lay at the side of the canal, and could be avoided with certainty only when the incision was made exactly in the middle line. Mr. Syme had heard that in one of the London hospitals the operation had been performed, professedly according to his principles, without any grooved conductor, the only guide being a small silver catheter. He believed it not possible to make a straight, continuous incision through the stricture on such an instrument. He had read of a case in which a catheter, instead of being retained for two, or at most three, days, had been left in for six weeks, notwithstanding the well-established fact, that the presence of such an instrument, so far from promoting, greatly impeded the closure of the fistulous opening into the urethra. With still greater astonishment, he had heard of operations, performed in London and Paris, considered to be in accordance with his principles, but without any instruments at all being introduced through the stricture. For the disastrous results of such proceedings, the operation which he had proposed could not be held responsible. The only sources of danger were hæmorrhage and extravasation of urine. When the knife was properly applied, there could be no bleeding, except from the superficial perineal vessels, and the cells of the corpus spongiosum. There was seldom more than a teaspoonful of blood; and with oozing it hardly amounted to one or two ounces. If the patient were full of blood, the quantity discharged in the regular way might be allowed to go on to the amount of a teaspoonful. This would prove rather salutary than otherwise; and was hardly to be prevented, except the patient were in a nervous state from unnecessary alarm; and this small amount of bleeding could always be restrained by a piece of lint, applied by slight pressure for a few hours.

With regard to the extravasation of urine, there could be no doubt that the circumstances most favourable to its production were openings through the deep fascia of the perineum. Hence arose the danger of the operation for impermeable stricture by making deep incisions into the perineum. According to his (Mr. Syme's) proposal, only the fascia lying immediately under the perineal integument was incised, and the knife was guided with certainty through the whole stricture. As a further precaution, he retained the bougie until the cut surface was sealed up; so that extravasation of urine was less likely to happen than

hæmorrhage. It was this consideration which had originally led him to regard the operation as free from danger; and, as he had performed it upwards of seventy times, without any fatal or alarming consequences, it would be allowed that his anticipations had not been unduly sanguine.

The following was the course of events which usually followed the operation. The patient having been placed in his bed, on awaking from his chloroform sleep, frequently had considerable difficulty in believing that the operation had been accomplished. He then would begin to feel the blessing of constant relief, no trace of suffering appearing; he was tranquil and easily managed, not requiring opiates, or any other treatment, until there should appear to be a greater degree of oozing from the wound than convenient, on which a piece of lint might be applied until the bleeding ceased, which it usually did in a few minutes. The diet should be chiefly farinaceous, as animal food might cause thirst and restlessness. Cooling drinks, according to the patient's taste, should be supplied; while wine and other stimulants were carefully withheld. At the end of forty-eight hours, Mr. Syme generally removed the catheter; but another day's delay on the whole seemed advisable, because the escape of urine through the wound might thus be prevented. In about one-third of those cases, the instrument had remained only a shorter period. A curious train of nervous symptoms, consisting of rigors, bilious vomiting, suppression of urine, and delirium, sometimes appeared, to the consternation of all those who were unaware of their nature. They occurred most frequently after the catheter was withdrawn; and they appeared to depend upon the urine resuming its natural course. They had never lasted more than thirty hours, and seldom little more than half that time. Opium and other remedies had their disciples; but the symptoms only required for their removal time and patience, so that the surgeon might confidently assure himself that there was no ground whatever for the slightest alarm or uneasiness for the cure. Recovery might be considered complete in the course of a few days, when the patient would pass water in a full stream, with ordinary frequency, having nothing to remind him of the operation, except the superficial appearance of a wound which soon contracted and cicatrised. After the withdrawal of the catheter, the urine continued to escape now and then through the wound, but it soon diminished to a few drops, and gradually resumed its proper course. The cure must be maintained by the introduction of a full-sized bougie every three or four weeks, afterwards at more distant intervals, according to the circumstances of the case.

The author then related some cases illustrative of his treatment; they were first, cases of stricture of the urethra which had resisted the established form of treatment: secondly, stricture of the urethra impermeable by surgeons of experience and reputation, but which might, through time and care, permit the introduction of an instrument, and the free division of the thickened and contracted part of the canal upon a grooved director; so that complete and permanent relief, even in the most distressing and obstinate conditions of the stricture, might be afforded. Each case might not contribute evidence on all those points; but the testimony of the whole must be considered.

CASE I. About twelve years ago, Mr. Syme was directed to take charge of a gentleman suffering severely from stricture, which had been contracted upwards of twenty years. During the greater part of this period, it had admitted of such palliation from the use of a bougie, as not to interfere materially with his comfort; but latterly it had become excessively aggravated. Day and night the calls to make water were almost incessant, and in the laborious effort to empty the bladder the patient was constantly exhausted. He was troubled at the same time with an involuntary discharge of urine. The stricture, which was anterior to the bulb, had contracted so as no longer to permit the introduction of an instrument, and the tall and vast frame of the patient was emaciated to a shadow; and he became so sensitive, that the slightest change of weather greatly aggravated his complaint. In these circumstances, Mr. Syme commenced with introducing a bougie of the smallest size; and when in the progress of the case he had arrived at No. 5, he found the stricture obstinately opposed to any further dilatation. The degree already attained had afforded him no relief whatever. Confinement to bed was then tried, with retention of the catheter, until one of the largest capacity was introduced. The patient's health improved, and he evacuated his water with so much more ease, that Mr. Syme expected no more trouble; but the day after the catheter was withdrawn, the symptoms were renewed without any diminution. Soon after this, Mr. Liston having come on a visit to his friends in Edinburgh, Mr. Syme asked him to see this patient; he advised

internal incision with a lanceted catheter. This was accordingly done, so freely, that a full-sized bougie was passed immediately afterwards without the slightest obstruction. As no benefit, however, resulted beyond a partial relief of only one or two days duration, the process was repeated, using two catheters, which cut on two sides, but with no material difference in the effect produced. The patient, who had cheerfully submitted to these long and various efforts to afford relief, now desired Mr. Syme to do something effectual. He suggested the performance of external incision on a grooved director. The patient eagerly caught at this proposal, and from that time, more than ten years, has enjoyed the most perfect local and general health.

CASE II. In 1844, Dr. Wickham of Penrith came to Edinburgh with a case of stricture, which had proved peculiarly obstinate and distressing. Although the patient was under 50, it had existed for twenty-seven years. Latterly, the symptoms having been much more severe, the assistance of a practitioner had been required; but the patient returned home after two months assiduous attempts without ever getting an instrument introduced. There was now a fistula; and such stony hardness as to suggest cartilage. Upon examination, a full-sized instrument could be passed without pain or bleeding. The patient returned home; but in the course of a few months came back with the symptoms of stricture no less urgent than before. Mr. Syme introduced a grooved director into the contracted part, and freely divided it by internal incision; the patient soon felt quite well. More than eight years have elapsed, and he still remains well.

CASE III. A gentleman, aged 80, came from Sunderland to put himself under Mr. Syme's care, on account of a stricture in the urethra. After many abortive efforts, the patient, despairing of relief, resolved to endure the complaint without any attempt at a remedy. Symptoms of frequent incontinence added to difficulty of evacuation set in, and he placed himself under Mr. Syme's charge. At the end of six weeks he returned home in the enjoyment of perfect health; and Mr. Syme had heard recently that he continued to do so.

CASE IV. —, aged 35, married, of correct habits in his mode of life, applied to Mr. Syme in the month of October, with a stricture anterior to the bulb. For the last five years he had been under the treatment successively of three most eminent surgeons in London, who had employed dilatation by bougies with the effect of affording partial relief, but neither complete nor permanent. A director having been passed, an incision was made in the middle line of the perineum, and pushed the knife forwards so as to divide the stricture completely. A No. 8 catheter was passed with perfect facility, and retained in the bladder for forty-eight hours. The nervous state to which reference had been made as a not infrequent occurrence, commenced and continued about the usual period so as to alarm the patient and his friends. To the patient's great comfort, urine flowed copiously in a full stream, very different from that to which he had been so long accustomed; and recovery was in every respect complete.

CASE V. Captain — applied to Mr. Syme in January 1851, on account of a stricture, of which he gave the following history. "In 1829 I was serving on board one of Her Majesty's ships in the Mediterranean when I first observed the stricture. Bougies were then introduced; and in a short time the complaint seemed to be overcome. I continued until 1832 in the East Indies, on board one of Her Majesty's ships, and I suffered very much. I sought relief on board ship, but found none, as the medical man could not pass an instrument. This state of things continued for two years, no instrument having been passed. In 1836 I sailed as Lieutenant in a ship for the Arctic regions, when I suffered great inconvenience in making water. I was there when the ice broke up, exposing the ship to great danger, and obliging the officers, as well as men, to expose themselves to a very low temperature—80° below freezing point upon some occasions. At the end of the voyage, I went to Haslar hospital, where I remained for six weeks. I then went to an eminent surgeon, who succeeded in passing bougies up to No. 6. He then used a catheter with a lancet blade with little benefit. I suffered severely when on the coast of Africa; and on two occasions I felt it necessary to decline offers of appointments in the service."

Upon examination, Mr. Syme found a slight contraction, about three inches from the orifice, anterior to the bulb. He passed bougies up to No. 4, but further dilatation was resisted; and as the patient had experienced no relief from the degree afforded, he divided the contracted part by external incision. After the usual symptoms, he made an excellent recovery, and continues well.

CASE VI. Mr. —, aged 27, from his earliest recollection, had experienced a degree of difficulty in evacuating his urine. In 1843, he went to the East Indies, and there suffered severely from attacks of gonorrhoea. Having returned home, he was exposed to severe cold in Ireland. Next year, a fresh attack of gonorrhoea was followed by aggravated symptoms of stricture, which led to the employment of various measures without success. Being in the public service, he went to Haslar Hospital at Portsmouth, where innumerable attempts were made with all sorts of rigid and flexible instruments; but all in vain. The stricture was in the usual situation, anterior to the bulb. The patient came to Edinburgh; and, at the very first attempt, Mr. Syme passed a metallic bougie. At the end of three weeks, he could introduce a No. 10 instrument. The patient then went home, with instructions to have the instrument passed regularly. Twelve months afterwards, he again applied, complaining that the stricture was as troublesome as ever. Mr. Syme passed small bougies on two different occasions; but as severe rigors were produced, and the symptoms derived no alleviation, he performed the operation. Nothing occurred to impede recovery, and at the end of three weeks the patient returned to London, being able to make water with a degree of freedom he had never known. Wishing to know the present state of this gentleman, Mr. Syme had written to Mr. Henry Thompson, and had been informed by him that the patient had had no return of his old urinary symptoms.

Six other cases were related by Mr. Syme, which, however, we are from want of space compelled to omit.

The cases were selected from Mr. Syme's private practice, as permitting more easy and satisfactory reference. Hospital patients were often lost sight of when they left the hospital. He presumed not to throw blame on his brethren for the employment of other means; but these means were not always sufficient. The operation might be performed with safety; and he ventured to hope that the Society would give him the credit of good intention in bringing the matter under its notice. (Applause.)

Mr. WADE said, that it was well known that surgeons had, previously to Mr. Syme, directed their minds to the performance of the perineal section in intractable cases in which no instrument could be passed; though they had never thought of performing it to the extent recommended by him. There would be differences as to the best mode of managing the more intractable strictures. It probably mattered little to the patient what means were adopted, so that the object was gained without danger: but where there was danger in any proceeding, it was the duty of the surgeon first to employ every other means. The operation was not new; for Sir B. Brodie, in the edition of his work on *Diseases of the Urinary Organs*, published in 1841, in speaking of the difficulty of dilating urethral obstruction, had stated that it would sometimes be necessary to introduce a small grooved staff into the bladder, and divide the cicatrix by an incision through the perineum. Afterwards a gum catheter must be retained for some time. He limited the operation, however, to cases arising from laceration of the urethra.

It was very desirable to ascertain, first, the degree of freedom from danger of this operation; second, the probability of permanent relief which it afforded. In Mr. Syme's hands, the operation appeared to have been remarkably successful; but the results had been so very different in the hands of other surgeons, especially in London, that the subject required a very searching investigation. Perhaps it might all be explained by the more bracing air of Edinburgh. Instead of being a simple means of cure—as it had been represented to be, and no doubt was in the hands of Mr. Syme—it had proved in London nearly, if not quite, as fatal as the operation of lithotomy. The causes of death had been phlebitis and purulent infection; and sometimes alarming hæmorrhage had occurred. Urinary extravasation and abscesses had also been produced. These had occurred too often to be, as had been alleged, the result of accident, and not chargeable to the operation. The patients on whom the operation had been performed had long suffered from intractable strictures; their health was broken; and the parts through which the incision was made had been in a state of long-continued disease: these circumstances, and the condition of hospital patients, might account for the more unfavourable results.

The ultimate effects had certainly not been so satisfactory in London as in Mr. Syme's cases. In the first patient on whom Mr. Fergusson operated by Mr. Syme's method, the stricture returned with nearly its original severity. Not only in London, but in Edinburgh, had there been fatal results; as the case of Dr. Mackenzie in the latter city. In Mr. Miller's case, which

was operated on by Mr. Syme, the patient certainly had a narrow escape with his life. He suffered from abscesses a long time, and was in a very precarious state. Many cases, of the nature of those operated on by Mr. Syme, would be equally restored by a careful use of potassa fusa. With regard to ultimate success, some strictures would recontract, notwithstanding whatever means were employed: and it was not unlikely that contraction would recur in some of Mr. Syme's cases, in two, three, or four years. Sir B. Brodie had stated that, after the performance of this operation for stricture from lacerated urethra, the patient must continue to use a bougie, and must only expect to be able to pass urine by the introduction of a moderate-sized instrument.

Mr. Syme had said that all strictures were tractable in his hands. Mr. Wade would ask how Mr. Syme knows that, in the cases in which he used a small director, the instrument really passed along the natural passage into the bladder? In some cases, the urethra was not only highly contracted, but also almost distorted; and it was very difficult to guide an instrument through such a labyrinth. In cases of entire obliteration of the urethra, with fistulous passage of urine behind the stricture, would Mr. Syme endeavour to force a passage through the obstruction, or have recourse to the old operation for perineal section?

Mr. SOLLY said, that the paper read had appeared to prove the operation to be less dangerous than surgeons were in the habit of considering; but the operation was probably attended with greater danger than Mr. Syme's cases would lead us to suppose. It would be interesting to have the results of Mr. Syme's hospital practice, and to know in what cases he considered the operation necessary. He (Mr. Solly) believed that, as a rule, the bougie alone was sufficient, if patience were exercised. By beginning with a small catgut bougie, and gradually increasing the size, there was scarcely any stricture which might not be overcome. The plan of Mr. Wakley, of passing a small instrument through a larger one, was worthy of attention. Mr. Solly had employed it with advantage. As far as his experience went, when once an instrument could be introduced, division was unnecessary. There were no doubt cases of irritable stricture, in which the perineal operation might be necessary; and in those cases—of the existence of which every London surgeon must be aware—in which the stricture was absolutely impermeable, the operation would be both necessary and advantageous. At the same time, other operations had been performed, as puncturing the urethra posterior to the stricture. He feared that the junior members of the profession would think the operation universally successful, and have recourse to it on insufficient grounds.

Mr. COULSON hoped that we should be able to determine to what class of cases Mr. Syme's operation was proper. The external division of stricture had been recommended in 1811 by Mr. Chevallier; but he confined this practice to cases complicated with perineal fistula, chiefly to those produced by external violence. In 1822, Mr. Arnott read a paper before the Society, advocating the division of stricture from without: he recommended it, not as the means of removing retention of urine, but of curing stricture before it became unmanageable; but only when no reasonable hope of cure from caustic could be expected. In the following year, the late Mr. Shaw recommended that the operation should be had recourse to before the tissues had become so indurated as to render the operation almost useless. It was undeniable that certain forms of stricture resisted all ordinary modes of treatment. Were these to be abandoned to their fate, or were there effectual means of relief? He would not hesitate to have recourse to the plan of Mr. Syme in such instances.

There were three classes of cases in which Mr. Syme's operation was applicable. The first class consisted of those in which the urethra was all but obliterated by chronic inflammation of the mucous and submucous tissues. In the second class, not only was the urethra involved, but the submucous and spongy tissues were converted into a hard fibrous mass. These could not be cured by ordinary means. The third class of cases consisted of those in which there was fibro-elastic tissue, more like India-rubber, where the stricture easily yielded, but immediately returned. Temporary relief might be obtained, but not permanent cure. Attempts at dilatation were followed by severe constitutional irritation, very often by retention of urine.

Much had been said about the severity of the operation. Mr. Coulson had performed it as often as any other surgeon in London. One of his earliest cases had been fatal, from purulent infection; another had nearly died from hæmorrhage. Hæmorrhage he believed to be the only danger to which the operation was exposed; and, if carefully dealt with, this need

not be feared. There might be some little difficulty in introducing the catheter after the operation into the posterior portion of the urethra. To obviate this, he had introduced the director along a small grooved tube, before withdrawing it.

Mr. T. WAKLEY, as a visitor for the evening, was anxious to make a few remarks. They had heard of a family of Blanques treated by Messrs. Blaque, eminent London surgeons. Now, as the results of the operation had been so different in London and in Edinburgh, he thought that a searching inquiry was called for into the circumstances of the cases, and that to enable this to be accomplished, Mr. Syme ought to have stated the names of some of his patients and of all the surgeons to whom he had referred. (Order, order.)

The PRESIDENT stated that the names had been furnished: but he had not judged it proper to allow the usual practice to be departed from by giving names publicly in the society. Surgeons referred to by name in that way in their absence might with justice complain. It would be unusual and improper.

Mr. P. HEWITT said that such a course as that proposed by Mr. Wakley never had been allowed in that society. (Hear.)

Mr. T. WAKLEY: I will, then, ask Mr. Syme if he sent a challenge to the London surgeons — (Order, order.)

The PRESIDENT having again interposed, Mr. Wakley sat down, after remarking that he saw clearly that he was not likely to get a fair hearing.

Mr. HENRY SMITH had seen five cases of perineal section, in which the operation had been skillfully performed. One of them was the case referred to by Mr. Coulson, in which the patient nearly died of hæmorrhage. With reference to contraction of the urethra after the operation; he (Mr. Smith) had last week seen a naval officer, on whom he had assisted in performing the perineal section in November 1848. No bad symptoms followed, and the patient went to sea; and when again seen by Mr. Smith, in September 1851, he stated that "he was nearly as bad as when the operation was performed. He had passed an instrument for a year, remaining perfectly well; but had afterwards neglected it, and the stricture had returned. Only a No. 3 bougie could be passed. Last week, only a No. 4 instrument would enter, and there was much difficulty in passing urine. He had seen two fatal cases.

Mr. GAY thought that the discrepancy between the results of Mr. Syme's operations and those of English surgeons might be accounted for by considering the different conditions of the patients. Mr. Syme's patients were in a better class of society, and more able to bear operation than those of English surgeons, who had been mostly hospital patients, in whom hæmorrhage, inflammation, and all the mishaps of operation were more likely to take place. A more accurate judgment of the value of the operation would be formed from an account of Mr. Syme's hospital cases. It was not necessary that an operation should be always successful to render it a good one, and the occasional fatal results should not lead us to reject the operation in suitable cases. He would also ask in what cases Mr. Syme would not perform the operation, as well as those in which he would do so. Mr. Syme had referred to a case which had been under his (Mr. Gay's) care. The operation had in that case been eminently successful: and he thought it his duty to bear this testimony. He trusted that in future all acrimony would be banished from discussions of this subject.

Mr. SYME begged to express his grateful sense of the kindness with which his communication had been received, and also the extreme satisfaction he had felt from the tone and temper in which the subject had been discussed. It was peculiarly gratifying to him that the gentlemen who had devoted so much attention to the treatment of urethral diseases, as Mr. Coulson and Mr. Gay, should express sentiments so favourable to his proposal. He certainly participated in the wish of the latter gentleman, that for the future the treatment of stricture by external incision should be discussed solely with reference to its own merits, and entirely free from personal considerations. For his own part, he had always been desirous to avoid saying anything personally offensive, and he was not aware of having ever done so. But if a single word or expression could be pointed out to him as admitting of such a construction, he would be most willing, and, indeed, anxious, to withdraw it. He hoped the Society would no longer regard the operation he had proposed as a formidable gash of the perineum, rivalling the wound of lithotomy, and exposing the patient to danger from hæmorrhage as well as extravasation; but, on the contrary, clearly understand that it was an incision always anterior to the bulb, and, therefore, implicating a very inconsiderable thickness of parts, which might be cut with perfect safety. The valuable results of the operation in London were rather

EDITOR'S LETTER BOX.

THE VACCINATION BILL.

LETTER FROM DR. SEATON TO THE EDITOR.

subject for him to enter upon, as he could not avoid attributing them to a want of due attention to the points which he had endeavoured to inculcate for safety and success. If the contraction were not fairly divided, there would be risk of extravasation, even with the protection of a catheter; and if the knife were allowed to glide past the conductor, it might readily cut the artery of the bulb; in which case plugging the wound would become requisite, with a great risk of extravasation. In short, he believed that the operation, if correctly performed, was perfectly safe, but, through a very slight deviation, might place the patient in the greatest danger. But if he had been correctly informed that, in one of the London hospitals, a small silver catheter had been used as a guide, instead of a grooved director, he could not be surprised at the results not being satisfactory.

As to the case operated upon by himself in Edinburgh, and published by Professor Miller as an escape from extreme danger, he believed that the nervous symptoms described in his paper had imposed upon Mr. Miller; who, so far as he knew, had had no further experience of the practice than this single instance which he had witnessed as the family attendant. He did not believe that there had been the slightest ground for serious apprehensions in this case; and as the patient, after being for a year under this treatment by Mr. Liston without relief, had been restored to perfect health by the operation, he thought that, instead of being quoted as an objection to its practice, it should rather be regarded as a very favourable example of success. With regard to the results of his hospital experience, he could assure the Society that they had been in no wise inferior to those he had preferred relating from private practice, on account of the greater facility of reference. He could also assure the gentleman who put the question as to the proportion of cases treated in his practice by dilatation and incision, that the latter bear a very small ratio to the former, in confirmation of which fact he might appeal to one of his colleagues in the Royal Infirmary, Dr. Mackenzie, who was present. As to the treatment of obliterated urethra, when this canal was truly closed through part of its extent, the operation for stricture was not applicable; all that he contended for being, that where the water got out a bougie might be got in. The only case of stricture which he should think beyond the reach of benefit from this operation were those where organic disease existed in some other part of the urinary organs. It was well known that the presence of a stone in the bladder prevented the successful treatment of stricture; and it was therefore reasonable to expect that chronic irritation in the kidneys, or elsewhere, might produce a similar effect. In conclusion, he begged to express his hope that the unmeaning title of "Perineal Section," which had originated with the opponents of the operation, would be banished from surgery. He had no objection to the terms "urethrotomy" or "operation by external incision".

CREWKERNE AND YEOVIL DISTRICT MEDICAL ASSOCIATION.

The FIFTH GENERAL MEETING of the Crewkerne and Yeovil District Medical Association was held at Crewkerne, on the 14th instant. The general business was transacted, and the finances shown to be in a flourishing condition.

VACCINATION BILL.

The Vaccination Bill was discussed, and its principle as a whole approved; the members deeming compulsory vaccination desirable. It was considered, that if the fee payable to the public vaccinator were raised to a minimum of half a crown for each successful case, the operation would be more satisfactorily performed and more generally extended; and that it would be a more fair remuneration for the time and trouble required in country districts, where the vaccinator has to make a house-to-house visitation in order to see the cases. It was also considered that the registrar would not be sufficiently paid by the fee of one penny for each notice. There was some complaint of the impropriety of the public vaccinator being compelled to vaccinate the children of respectable persons (not being his own patients) gratuitously.

ILLEGAL PRACTICE.

The members of the Association were requested to report to the Honorary Secretary any cases of illegal practice which might come under their notice, as the Society is about to take proceedings under the Apothecaries' Act, in order to check the increasing evil of prescribing by unlicensed persons.

ELECTION OF OFFICERS.

The late officers were re-elected; Dr. Tomkins, of Yeovil, as President, and Mr. G. F. Wills, of Crewkerne, as Honorary Secretary.

SIR,—As it appears from the leading article in your Journal of the 22nd instant, that you have not been correctly informed as to the proceedings of the Small-pox and Vaccination Committee of the Epidemiological Society, with regard to the Vaccination Extension Act now before Parliament, I am requested, on the part of the Committee, to explain that their exertions have not, as you suppose, "been limited to endeavours to improve Lord Lyttelton's measure", but they *have* been used, and mainly used, for the purpose of retarding the Bill till the Report which they were preparing should have appeared and have been discussed by the medical profession.

It was, indeed, in consequence of the representations made by the Committee, as soon as they became cognizant of a Bill on the subject having been introduced into Parliament at all, that the second reading of that measure, *which otherwise would have taken place on the 14th March*, was postponed until the 5th April; and although the Bill, with various amendments, has subsequently gone through all its stages in the House of Lords, without any further application for delay on the part of the Committee, it has been with the understanding throughout, that no step would be taken in the House of Commons till after the publication of their report. The course adopted by the Committee, of not requesting any further postponement in the House of Lords, appeared to them the right one to pursue: first, because the principle of the measure (that of making vaccination compulsory), and the question of medical remuneration were, both of them, subjects which it seemed more particularly the province of the House of Commons to discuss; and, secondly, because, unless the Bill had reached the Lower House at this period of the session, there was little chance (from the multiplicity of business with which that House is oppressed later in the year) that it would have received the attention and discussion, which the importance and, I will add, the urgency of the subject demand; for the Committee, looking at the results of the present system in this country, as exhibited in their Report, do not by any means deem it an unimportant matter whether an effort be made at once to correct them, or whether this be postponed even for a single session. It is sufficient to state, that there are in England and Wales nearly 8,000 deaths a-year from small-pox, in the immense majority of which there has neither been vaccination, nor attempt at vaccination, to show that the view which the Committee take is not an exaggerated one.

The Report is now ready to be submitted to the judgment of the profession, and the Committee are rejoiced to bring it before the Provincial Medical Association, of whose former labours in the cause of vaccination they entertain the highest appreciation, and from whose Report they have, in many parts of their inquiry, derived the greatest assistance and instruction. They anxiously await the verdict that shall be passed upon this first result of their labours. But if any notion should have got abroad that it is a document hastily got up, I have only to assure you that it is a most careful digest, much of it prepared months ago, of information derived from authoritative sources at home and abroad, and from correspondence with upwards of two thousand of our medical brethren; that it was submitted in due form to the Council of the Society, and approved by them; and that afterwards, by their desire, a copy was transmitted to the Home Secretary. And I have further to state, that in the personal communications which the Committee have had with members of the government, or with Lord Lyttelton, they have never pretended to be other than a committee of scientific inquiry; they have not wished nor presumed, on any occasion, to put themselves forward as the political representatives of the medical profession, nor as arbitrators between the profession and the legislature.

In conclusion, while the Committee are not responsible in any way, as will have been seen by this statement, either for the original, or for the amended bill of Lord Lyttelton. While, indeed, they consider even that the latter is, in many respects, highly objectionable, they concur entirely with his Lordship in the necessity for an act to make Vaccination compulsory; and they deem it but due to him to state, that he has invariably represented this, *and this alone*, as the principle on which he meant to take his stand, and has always expressed his readiness

to adopt any suggestion which should not endanger the acknowledgment of that principle by the legislature.

I am, etc.,
EDWARD C. SEATON, M.D.,
Hon. Sec. to the Committee.

33, Sloane Street, April 26th, 1853.

[The doctrine of extreme urgency—the idea that a Bill must at all hazards be passed during the present session,—appeared to have taken possession of the Epidemiological Society. It was this doctrine that we formerly protested against, and now again protest against, on behalf of the medical profession. The Epidemiological Society would, we fear, be contented to make Lord Lyttelton's Bill a tolerable measure, while we would rather set it aside in the meantime, and struggle for enlightened legislation next session on the whole subject of Small-pox and Vaccination. EDITOR.]

PROBABLE EFFECTS OF THE VACCINATION BILL.

LETTER FROM J. A. HINGESTON, Esq., TO THE EDITOR.

SIR,—If Lord Lyttelton's Vaccination Bill should be passed into an Act in its present printed form, there can be little doubt that one of the effects of its operation would be to throw the practice of vaccination into the hands of the most needy—the lowest, and, therefore, the least estimable members of the medical profession. It is not likely that the legally appointed officer would be any other than a youngster, a novice, or some one who, from infirmity of mind or body, or some other less excusable reason, might be unable to obtain the favour and confidence of the public in private practice. Although the nominal fee or reward would, in most instances, be superseded by the gratuitous generosity of the better classes of society, yet it would be unpleasant to any right minded practitioner to receive what he could not legitimately demand, while it would not be long before the mass of the community would agree in withholding that which, according to law, they were not required to bestow. The usages of the world quickly conform themselves to the order of the day; and the performance of medical services would not fail, in a very short time, to be called for and insisted upon, as in this case enacted, without fee or reward. The result would be, apathy on the side of the medical practitioners, and petty exaction on that of the public. In the end, the best practitioners would relinquish vaccination altogether, and refer the care of it entirely to the medical officer appointed according to the provisions of the act. Thus, one of the most interesting points of pathology ever yet broached would be abandoned, and passed over to the caprice and zeal of such individuals as might have the leisure to prosecute the study of it, for their own satisfaction or amusement.

At present, the failure of vaccine lymph is acknowledged, and the chief object ought to be that of ensuring a fresh supply of it in its genuine form. In default of this supply, Lord Lyttelton's compulsory bill runs the risk of becoming nugatory, fallacious, and ridiculous.

His lordship lays much too great a stress on the authority of the Epidemiological Society—"A new society," says his lordship, (House of Lords, Tuesday, April 12th.) "of which Sir B. Brodie, Dr. Babington, Dr. Southwood Smith, Dr. Bright, and other eminent medical men, are members." But, in self-defence, we are forced to declare that the Epidemiological Society does not represent the mind of the medical profession at large, neither are the distinguished names just quoted of any weight in regard to the point in question. For instance, in a case of doubtful vaccination, I, for my part, own that I should not place the slightest confidence in the opinion of Sir B. Brodie, Dr. Babington, or Dr. Bright, because it relates to a matter in which they do not profess to be experienced. Hitherto, the humble but important service of vaccination has been deputed to the conscientious care of the family apothecary; nor have any of the learned bodies in medicine, surgery, or pharmacy, as yet recognised even so much as its existence at any of their several boards of examination. There is no certificate for a knowledge of it. It is not taught in the medical schools; it is left to the good sense and personal intelligence of each practitioner professing it. And now, after having been thus neglected, it is, all of a sudden, about to be legislated upon; and we are directed to look up to the members of a society only just starting into notice of their own accord, whose chief members are not vaccinators, while those practitioners actually skilled in vaccination are passed by unheeded, unnoticed, unconsulted, and not so much as respected for their testimony concerning those facts which they, and they

alone, are cognisant. Hasty and imperative legislation of this description can never be productive of any lasting and substantial good to the community.

I am, etc.,
J. A. HINGESTON.

Brighton, April 18th, 1853.

EVERY SURGEON HIS OWN VETERINARY IN CASE OF NEED.

LETTER TO THE EDITOR FROM J. I. IKIN, Esq.

SIR,—That noble and useful animal, the horse, so essential a part of the establishment of a medical man, well merits every care and the kindest treatment at his hands. The diseases and ailments of the horse should be studied by all young professional men, as they may become wanted in country districts where a skilful veterinary is not attainable; a *learned* blacksmith alone officiating in this capacity. We have the very highest professional precedents for the study of the anatomy and diseases of the horse, and for carrying our knowledge on this subject into practice. I need only name Sir Astley Cooper and Mr. Liston, both of whom had a thorough knowledge of the veterinary art, loved a good horse, and appreciated his value.

Sir Astley Cooper, as is well known by his old pupils, and the readers of his interesting Life and Memoirs, practised the veterinary art on a somewhat large scale, and bought up many castaways, or, as they are vulgarly but correctly termed, "dog horses", gave them a run out at grass, treated them skilfully, and thus in a number of cases obtained for himself many useful, if not valuable animals. Some of the best surgeons I have the pleasure of knowing have this *penchant* for doctoring their own beasts, as well as for enjoying the use of them. I would encourage this taste in the young surgeon, as a knowledge of the structure of any of the lower animals is never thrown away. A man who will ill-use a willing animal like the horse, ride or work him almost to death, and then neglect him if he is ill or happens an accident, or allow him to be neglected or summarily got rid of, is unworthy to have a good animal in his possession, and will be generally found to be a selfish, or, in plain English, a "bad fellow". Princes, nobles, judges, and even bishops and other church dignitaries, have not thought it derogatory to attend to the wants and superintend the *ménage* of their studs; so ought surgeons, especially young ones, in order to be able to *treat* a horse efficiently, and *buy* a horse at his value, or rather, which is more satisfactory, at a price *below* his value, without calling in the veterinary to pass and examine him, or feeling himself dependent upon the *wisdom* and judgment of a conceited groom.

Now for a case illustrative of these remarks:—

About three months ago, my servant was, contrary to orders, riding a five years old mare in the street, when she took fright at an omnibus, jumped sideways on to the causeway, and got her hind leg between the bars of an iron grating above a cellar window, her leg slipping down as far as above the hock, and she falling on her side, and the groom with her (he was not injured). In the mare's struggles to disentangle the leg, she stripped the integument off the leg from above the hock to near the fetlock joint; and the sharp edge of the grating, or the pieces of thick broken window glass (six squares of which were smashed) inflicted deep wounds in different directions, dividing a large artery above the hock on the inner side, a second branch just over the hock, and a third in the fetlock-joint below; and the latter spouted out through a small, round, but deep perforated wound, into which I could just insert the end of the little finger down to the bone over which the wounded artery appeared to run.

By raising the grate with a crow-bar, the mare, after some delay, was released, and with difficulty led to her stable, which luckily was close at hand. I was sought for, and soon on the spot, and found the poor creature in a sad plight, three jets of arterial blood spouting away across the stable from the wounded limb, above a quarter of a yard of lacerated integument flapping down with ragged edges, and deep wounds in different parts; the mare trembling, in a perfect clammy perspiration, with cold ears and cold extremities, and her heart beating with a quick, tremulous action. Not a moment was to be lost. I sent for another surgeon close at hand (my friend Mr. C. G. Wheelhouse), to aid me in tying the wounded vessels; and obtaining a helper or two to hold the mare (one the head, the other holding up the fore-leg), we stripped off our coats, turned up our sleeves, and proceeded to search for the wounded vessels.

finding the orifice, I seized the artery with a tenaculum (a strong one, of course, with a long handle—not a little jimcrack one, like those generally carried in a pocket-case), and with some difficulty we succeeded in tying the vessels at the above named three points. We then drew the integuments together as well as we could, and inserted a few sutures to keep the edges together if possible. This was a more difficult and even dangerous proceeding than the former, as the mare plunged violently when the wounded skin was pricked with the needle; and as we had no time, or the means at hand, to hopple her, the whole business was by no means either safe, easy, or pleasant. She was rubbed warm, bedded down, washed, the wounded limb enveloped in cold-water bandages, etc. I left. During the day and night, no hæmorrhage broke out, and I felt satisfied we had done all that could be done.

She never put her injured leg to the ground at all for some days; her general health suffered; and she, in the course of a few weeks, became a mere bag of bones. A veterinary saw her about a month after the accident, and gave it as his opinion that she was not worth keeping; and recommended me to be rid of her for what she would fetch. I did not act on this advice. I have kept her, and, though the sutures soon burst, and the wounds gaped, and had to heal from the bottom, and the supuration was most profuse, and we were a good deal teased with a large mass of proud flesh which sprouted up, and which required the persevering use of caustic and nitric acid to reduce, a cure was effected. The hair is growing nicely; the cicatrices of the wounds do not much disfigure her; for, from being inside the thigh and hock, they are not much seen. The use of the hock is regained, and, with the exception of a slight stiffness for the first five minutes after coming out of the stable, the mare goes well and soundly, and has been sold at more than I gave for her, but was taken back the same day she was bought, to oblige the purchaser, because he thought her too *gay* in harness. I have now ridden her several journeys, varying from five to thirty miles each; and she is as good a hack as need be ridden, and, with a little more condition, will be a very useful if not valuable mare.

If in this case delay or indecision had taken place, the mare must inevitably have bled to death (for she lost pools of blood as it was); or, along with the bleeding, have sunk from the effects of the shock from the fall and fright, both of which had to be overcome.

As I have had a good deal of experience with horses, and like them, I may be induced to give you a few other cases at some time, if it is not thought *infra dig.* to hold the opinion, and act upon it, that every surgeon should be his own veterinary in case of need.

I am, etc.,

J. INGHAM ILLIN, F.R.C.S., etc.

Leeds, March 26th, 1853.

ABUSE OF HOSPITAL RELIEF:—HOW PREVENTED AT THE MANCHESTER LYING-IN HOSPITAL.

LETTER FROM G. B. MARFEN, Esq., TO THE EDITOR.

SIR,—The abuse of hospital relief is now becoming so frequent, that the following suggestion of a means of preventing it, may not, perhaps, be *mal-apropos*. It is a plan which has been adopted at the Manchester Lying-in Hospital for some time with considerable success.

The patients are there admitted by recommendations, which, when presented, are registered by the secretary, and an officer of the District Provident Society is immediately sent to the residence of the applicant, to ascertain whether she is a proper person for admission. If he finds her family are in the receipt of not more than fifteen shillings per week, and that she is in other respects an admissible case, he acquaints the secretary therewith, and the patient is admitted accordingly; if otherwise, he tells her she cannot be relieved at this hospital, and the secretary returns the ticket to the recommender, with a notice to that effect.

This plan would of course require modification in different hospitals, according to the class of cases treated in them, but it may serve as a hint for some similar plan, which should materially diminish the indiscriminate dispensation of charity to persons well able to pay for medical advice and attendance.

I am, etc.,

GEORGE BELLARIS MARFEN,

Surgeon to the Manchester Lying-in Hospital.

Manchester, April 18, 1853.

PALPEBRAL TUMOURS.

LETTER FROM S. D. LEES, M.D., TO THE EDITOR.

SIR,—The volume of *Transactions of the Provincial Medical and Surgical Association*, lately published, contains a paper on "Palpebral Tumours", by Mr. Windsor, of Manchester. Some of these will no doubt be removed by suppuration; but gelatinous sacs, situated betwixt the orbicularis muscle and the conjunctiva, generally form a permanent deformity, unless removed by operation. I object to his plan of operating from the inside of the eyelid, as inflammation of the conjunctiva and fungous granulations will frequently ensue. I have been very successful in removing these tumours in the following manner:—Make a free incision of the skin along the upper margin of the tarsal cartilage, or over the centre of the tumour; separate the fibres of the orbicularis longitudinally; draw the cartilage downwards; transfix the sac with a tenaculum, and remove all the conical portion, with the contents, leaving the flattened base, which is firmly adherent to the conjunctiva, to be removed by absorption—a process soon effected; close the wound with fine sutures, and a narrow stripe of tissue plaster. In a week, the wound heals; and the cicatrix being in the line of corrugation, no deformity remains.

I am, etc.,

S. D. LEES, M.D., F.R.C.P. Edin.

Ashton-under-Line, April 9th, 1853

NEWS AND TOPICS OF THE DAY.

THE ROYAL COLLEGE OF PHYSICIANS AND THE UNIVERSITIES.

THE following letter has recently been addressed by Dr. HAWKINS, the Registrar of the Royal College of Physicians, to H. WADDINGTON, Esq., the Under Secretary of State for the Home Department:—

Royal College of Physicians, April 18th, 1853.

SIR,—I am directed by the President and Charter Committee of the Royal College of Physicians, to request that you would be pleased to lay before Viscount Palmerston the following observations upon a letter from the vice-rector of the University of St. Andrew's, a copy of which you have been good enough to transmit to them, by his Lordship's direction.

They cannot admit that the clause cited in that letter, from the proposed New Charter for the College of Physicians, will affect the *just* rights and privileges of the Universities, or their *legitimate* revenue.

The clause consists of two parts: the first of which states that it shall be lawful for the College to admit as a member, any person who shall have exceeded the age of forty years, on the production of satisfactory testimonials, and on his passing a sufficient examination; the second part enacts, that such person shall, after his admission, be entitled to have and to use the degree and designation of Doctor of Medicine. Strictly speaking, the clause cannot be said to confer any *new* power upon the College of Physicians. It was not, in fact, intended for the benefit of the College, but for that of a meritorious class of persons, to whom, when the College, in the exercise of powers which always belonged to it, shall have found them competent to practise as physicians, this clause concedes the designation or title by which physicians are usually known and addressed in this country. But the concession is limited to persons who have not had, and have no longer the power of obtaining, the advantages of an academical education, and who have no claim therefore to a University degree (which ought to imply that the holder of it has had that advantage), but who have established a claim to the rank of physician by their long experience, and by their eminent science and skill.

In a practical profession like that of medicine, it is always right that those who, by superior talents and industry, have raised themselves in public estimation, should have the power of rising from a lower even to the highest rank in the profession. It seems reasonable, that together with the legal authority to practise as physicians, for which such persons must apply to the College, the title should be granted which, through common usage, is necessary to render the license intelligible by the public, and useful therefore to the possessor of it. In this way, a want which is in some cases felt in the profession, may be supplied, and that too without substantial detriment to the Universities. For it is the earnest wish of the College that

such cases should be exceptional only; and that, as the rule, physicians should be induced, indeed compelled (as they will be by the New Charter), to resort to the Universities for their preliminary and general education.

In furtherance of this object, the College offers voluntarily to surrender, by the sixth clause of its New Charter, a portion of the powers which it has hitherto possessed, and to debar itself in future from licensing as physicians (except in the case above mentioned, of persons of advanced years and unusual attainments), any person whomsoever who shall not previously have obtained University degrees. A concession on the part of the College so important as this in favour of the Universities, ought in fairness to be taken into account, in connexion with the clause of the Charter which has been objected to. It may be allowable perhaps to mention that the College did not of itself propose or ask for this clause. It was spontaneously offered by Sir James Graham, when Secretary of State for the Home Department, on the ground that it is right and necessary that the rank of physician should be attainable by distinguished general practitioners; but that its attainment would be of little use to them, unless accompanied with the ordinary designation of doctor.

Of the deputation from the College of Physicians, which had recently the honour of waiting upon Viscount Palmerston, some members ventured to express to his Lordship a strong opinion, that no opposition was likely to be offered to the granting of the New Charter to the College. They did so with the greater confidence, because it has been understood that persons of authority in the English Universities, who were at first disposed to look with suspicion on this clause now brought into question, had, as soon as they understood its nature and object, readily withdrawn their opposition. The Committee of the College did not, therefore, anticipate any further objections to this clause, it being their sincere conviction that the New Charter, from its general tendency, and from the important concessions which it makes, is consistent with the just rights of the Universities, and favourable to their true interests.

I am further requested to direct that you would be pleased to lay before Viscount Palmerston the following observations on "The Memorial of the Members of the Gloucestershire Medical and Surgical Association", which his Lordship has referred to the President of the College of Physicians.

The President and Committee of the College cannot but agree with the memorialists, in considering the stamp duty charged on the licences of the College unfairly and disproportionately high. The duty on the licence of an apothecary, and on the diploma of a member, and that of a fellow of the College of Surgeons, is one pound only: whilst on the licence of the College of Physicians a stamp duty of £15 is imposed; and on the diploma of a fellow, a further duty of £25. They are utterly at a loss to understand why the difference should be so great. They have reason to know that the serious expense of a licence has deterred many persons from qualifying themselves according to law, and has tempted them to practise as physicians without being duly licensed thereto. Hence it may be safely concluded, that if the duty on the licences were lowered, many more persons would apply for them, so that a great public evil might be abated without loss to the revenue. They earnestly hope, therefore, that a considerable reduction will be effected by Government in the stamp duty imposed on the licences and diplomas of the College of Physicians, this being a measure which justice and policy seem both alike to dictate.

HEALTH OF WORKMEN.

It is well known to those who are alive to such matters, that a series of most important plans for the benefit of the workmen are carried out in Price's Patent Candle Manufactories, at Vauxhall and elsewhere, by the resident directors, the Messrs. Wilson, who manage the establishments for a company. These works employ a large number of men and boys in operations requiring care and delicacy; and the Messrs. Wilson have for several years been engaged in educating, religiously, intellectually, and physically, those employed by them, so as not only to make them better and happier men, but more conscientious and diligent workmen; and the result has been, that the plans have succeeded financially to an extent not anticipated. The public, since being acquainted with them, especially by an article in the *Quarterly Review*, have patronised these laudable exertions by buying more candles; so that the business has greatly increased, and the boys and men, who have been treated with such considerate kindness, have done their work better, and worked with greater spirit and diligence.

We write this by way of introduction to a part of a proposal, in a recent report, for giving the men more holidays, in order to improve their health and increase their powers of work. In proposing to the company a fortnight's holiday in summer for those workmen who cannot, from the nature of their work, get the half-holiday on Saturday, Mr. J. Wilson says:—

"It would be almost the making of a man or boy, after a year's hard work, to pay him a fortnight's wages, and to let him go for that time to friends in the country, if he has any, or if he has not, then to the sea-side. He comes back, especially if a boy, a different creature from what he was when he went away, in point of vigour of body and mind, and fitness for another year's hard work; and for such hard work as ours is at present, a man or a boy at his best, in these respects, will not find that he has much vigour to spare. We have sometimes seen a valuable man flagging at his work, being evidently in a state in which it was too much for him; and we have, as a matter of pecuniary interest to the company, sent him off for a holiday for a week or two, without stopping his wages; and the experiment, considered as an economical speculation, has completely succeeded.

"Upon this proposal of a fortnight's holiday in summer to some of those deprived by the nature of the work of the weekly half-holiday, we would remark, in deprecation of our being thought to propose something too much out of the course of common factory management, that all engaged in the counting-house have, as a matter of course, three weeks' holiday in each year, and that we ourselves get holidays as we can; and this without any doubt in our mind that holiday-making is a positive saving of time in the long run, from the greater power of work given by it. And we would state, that the result of our observation here, both in such little chance opportunities of observation as those above noticed, and on such others as are afforded us by those of our men who are able to make visits to the country on their own funds, is, that the value of holiday and changes, so generally admitted in the case of those who work with their heads, holds good also, although not generally thought to do so, in the case of those whose work is chiefly bodily. We believe that such holiday-makings as are here proposed, whether the weekly or the Saturday half-holiday, in all cases where the people are already far enough advanced to be out of danger of mis-spending the time so given them, would be one important means of arresting the sad physical degeneration notorious in city working people, and which made a recruiting officer assert that it would be impossible in all Manchester to raise a regiment of dragoons: and if this be so, then our point is proved, that holiday-making is as much saving of time to body-workers as to mind-workers.

"It is possible that, for the many cases of boys weakened through sickness so as to need change, and yet without friends in the country, and not themselves such as could well be trusted alone, the best and cheapest way of carrying the plan out will be, that the company should have some place at Margate or elsewhere, with a trustworthy person in charge of it, to receive and look after them."

We feel that no apology is necessary for the length of these quotations, full as they are of practical experience and of good sense; as so many of our readers must be in the condition to give similar advice to master-manufacturers, as to the importance economically of attending in this way to the health of their workmen.

METROPOLITAN CHURCHYARDS. "Experience proves that burial in large towns cannot be confided to the parochial authorities; and if Government could enforce good management on their part, it cannot find 200 convenient spots to replace the 200 which must be closed. If the parish authorities and the clergy cannot be trusted, how can private individuals and joint-stock companies? Nothing then remains but for Government to take the matter in hand, and, as in other countries, to ensure a dignified and a sanitary burial to all classes at reduced rates, in one or in several large cemeteries, according to the scheme reported on by the Board of Health. All metropolitan churchyards might then at last be closed; and with regard to those receptacles of corruption called vaults, for three months the friends of those deposited there might be allowed a faculty to remove the remains free of expense. After which period, vegetable charcoal and lime might be thrown within them, and all ventilation and communication between them and the superposed churches should be prevented—Westminster Abbey and St. Paul's being the sole exceptions to this law."—*Lancet*, 10th April 1853.

PRESENTATION OF PLATE. On Tuesday, the 14th instant, Dr. Babington gave a *conversazione* to the members of the Epidemiological Society and their friends. In the course of the evening, Dr. Babington presented to Mr. Tucker a silver plate, with an appropriate inscription, intended to be affixed to a *secretaire*, as a testimonial of the sense entertained by the President and other members of the society of the value of Mr. Tucker's services as one of the honorary secretaries, and especially of the honour due to that gentleman as the founder of so important a society. In presenting this testimonial, Dr. Babington expressed himself as follows:—

"A few friends, including myself, being deeply impressed with the zeal and ability which you evinced, first in originating, and subsequently in establishing the Epidemiological Society, and admiring the untiring energy which you have since exerted in endeavouring to promote its objects,—have felt anxious to manifest their sense of your merits and services by requesting your acceptance of some token of their regard.

"It is with much pleasure, therefore, that, in fulfilment of their wishes and my own, I present you with this inscription, to be affixed to a *secretaire* which, however small its intrinsic value, we have selected as an appropriate offering for one who has so efficiently fulfilled the very arduous duties of honorary secretary to our society."

To which Mr. Tucker replied:—

"I accept with much pleasure the testimonial of approbation for the services it has been my pride to render to the cause in which you and others are so warmly interested: it is the cause of suffering humanity. I shall always look back with great satisfaction at having been the originator of a society which has displayed, even in its very infancy, its capability of doing great good.

"To those friends who have joined with you, Mr. President, in presenting me with this mark of their esteem, I hope you will convey my sincere and heartfelt thanks, and I beg you to accept the same yourself, sir, for the very kind and flattering expressions which you have been pleased to use in presenting it."

ACCIDENT TO PROFESSOR LIEBIG. The *Augsburgh Gazette* has the following from Munich, dated the 10th:—"Professor Liebig was last night giving a lecture on Chemistry at the palace, before Queen Maria, Queen Theresa, King Louis, the younger branches of the royal family, and some persons belonging to the court, when a bottle of oxygen gas, being improperly handed to him by his assistant, who took it for another bottle, an explosion took place, and the bottle flew into a thousand pieces. Fortunately, the explosion occurred in an inner room, the door of which was open; still some fragments of the glass passed through the door, and slightly wounded some members of the royal party who were sitting in the front rank. Queen Theresa was cut in the cheek, and the blood flowed in abundance; Prince Luitpold was slightly wounded in the forehead, Countess Luxemburg in the chin, and Countess Sandizell in the head. None of these wounds will be of any consequence. The professor was also slightly injured, having escaped with his life by a sort of miracle."

INQUEST ON DR. RICHARD CHAMBERS. On April 19, Mr. Wakley held an inquest at the Weymouth Arms, Weymouth Street, Portland Place, on the body of Dr. R. Chambers, late of Wimpole Street. Dr. Marris Wilson, of Upper Charlotte Street, Fitzroy Square, who had made the *post mortem* examination, stated that on opening the body he was struck, as were other medical gentlemen present, with the odour of prussic acid. He found the right ventricle of the heart double its natural size. The phial found by the side of the deceased smelt strongly of prussic acid, and upon reference to the prescription from which its contents had been compounded, he found that the deceased had prescribed for himself six drops of prussic acid, of Scheele's strength, with ten drops of Battley's solution of opium, one drachm of colchicum, two of acetate of ammonia, and an ounce and a half of water. He believed that the deceased had taken this as a medicine, and that owing to the disease of the heart the prussic acid had caused death. The jury, after hearing other evidence, found—"That the death of the deceased was caused by a diseased heart, under the influence possibly of prussic acid taken medicinally."

UNIVERSITY OF LONDON. The Senate has recommended the appointment of a special Examiner for Forensic Medicine; and of a second Examiner for Midwifery. A second Examinership in *Materia Medica* is also talked of.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 15th instant:—Messrs. Frederic Savignac Stedman, Great Brookham, Surrey; Thomas Chambers Palmer, St. Kitt's, West Indies; William Robert F. Marchant, North Curry, Somersetshire; William Steventon, Cheadle, Staffordshire; William Gabb Jenkins, Aberystwith, Cardiganshire; James Robert Tunmer, Ipswich, Suffolk; Thomas Howarth Cockcraft, Keighley, Yorkshire; William Hogarth Adam, Royal Navy; John Brake, Tottenham; Thomas Francis Edwards, Denbigh, Denbighshire; Harry Leigh Aikinson, Weaverthorpe, Yorkshire; and Thomas William John Goldsborough, Welchpool, Montgomeryshire.

On the 18th instant.—George Pigott Barton, Rolands Castle, Hants; David Cremen, Cork; Wynne Peyton Frazer, Dublin; Marcus William Mott, Church Stretton, Shropshire; Charles Turner, Grantham, Lincolnshire.

The following gentlemen, having undergone the necessary examinations, were admitted licentiates in midwifery at the meeting of the board on the 13th instant:—Messrs. John Edmunds, Wrexham, diploma of membership dated August 4, 1852; Thomas George David Davies, St. Andrew's Court, Holborn, March 23, 1853; John Vinal, Hackney, April 29, 1839; James Nicholls, Trekenning, October 15, 1852; Octavius William Hoffman, Reading, March 23, 1853; John Tibbitts, Warwick, March 23, 1853; John Thomas Muriel, Ely, July 2, 1852; Oscar Byrne, Newcastle-under-Lyme, April 4, 1853; John Humphry, Birmingham, March 30, 1849; Thomas Lawes Rogers, Alvediston, Wilts, April 8, 1853; Frederick Augustus Stutter, Wickhambrook, April 11, 1853; Samuel William North, York, December 3, 1852; and Thomas Fisher, Buckfastleigh, Devon, April 18, 1845.

The Jacksonian prize has been awarded to Mr. H. Thompson, Surgeon to the Blenheim Dispensary, for his essay on Stricture.

APOTHECARIES' HALL:—PASS LIST. Thursday, April 7th, 1853. Slade James Baker, Upper Hayford, Oxon; Robert Bianchi, Como, Italy; Samuel Cardozo, Australia; Maurice Griffith Evans, Bleanafon, Carmarthenshire; William Harrison, Gargrave, Yorkshire; Charles Hemming, Kimbolton, Huntingdonshire; Thomas Lewis, Llandilo, Carmarthenshire; Arthur Edwin Temple Longhurst, Kirkby Mallory, Leicestershire; Thomas Alexander Moore, Preston, Lancashire; Charles Sedgwick, Maidstone; David Augustus Martin Talbot, Wraxall, Somersetshire; Frederick William Teanby, Stert, near Bridgewater; William Edward Wedge Vaughan, Crewe; Joseph Haydon Ward, Epsom.

April 14th. John Archer, Saffron Walden; H. L. Atkinson, Weaverthorpe, Malton, York; Thomas Henry Cheate, Burford, Oxon; Edward James, Exeter; Charles Watson Kitching, Smarden, Kent; David Mathias, Cardigan; Fred. Northover, Winchester; William Parker, Brightlingsea, Essex; Edward Prentice, North Walsham, Norfolk; Richard Thomas, Llanelly; W. Walker, London; John Wright, Mountsorrell, Leicestershire.

DR. HENRY HOLLAND. The Queen has conferred a Baronetcy upon this distinguished physician, one of Her Majesty's Physicians Extraordinary.

LETTSOMIAN LECTURES. Mr. Pilcher will deliver his Lettsoman Lectures before the Medical Society of London, on May 9th, 16th, and 23rd. The subject of the lectures will be "Observations on the Nervous System."

MEDICAL BENEVOLENT COLLEGE. It is with much pleasure that we notice the influential list of stewards which appeared in our advertising columns of last week, for the forthcoming festival. A great deal has already been done towards the attainment of the objects contemplated; but the support and co-operation of the profession are still necessary to ensure their speedy consummation. We hope to meet on the festival many of our provincial brethren, several of whom, we are glad to observe, have volunteered their services as stewards. The amount already subscribed is upwards of £13,000.

OBITUARY.

(*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.)

AFFLECK, Duncan, Esq., Staff-Surgeon, at St. Vincent, West Indies, of Yellow Fever, on March 7th.

BLAIR, Thomas, M.D., at Brighton, on April 15th, aged 89.

BULLIN, Francis, Esq., Surgeon, at 26, Farringdon Street, on March 29, aged 66.

***CREASY, William, Esq.,** Surgeon, of Edenbridge, Kent, recently.

GALE, Gabriel Joseph, Esq., Surgeon, at Newington, Surrey, on March 27, aged 52.

GRANT, Augustus, Esq., Surgeon to St. Marylebone Workhouse, at 21, Thayer St., Manchester Sq., on March 28, aged 28.
 HORLEY, William, Esq., Surgeon, at Hoddesdon, Herts, on April 25th, aged 55.
 KITTERMSTER, H. F. G., Esq., Surgeon, eldest son of Dr. Kittermaster, of Meriden, Warwickshire, at Warwick, Canada West, on March 10th.
 LEGGATT, Richard S. Esq., Surgeon, at Eastry, Kent, on March 13, aged 67.
 MARTER, William, Esq., Surgeon, at Worthing, Surrey, on April 2, aged 65.
 M'BAN, J. A., Esq., Staff-Surgeon, eldest son of the late Lieutenant-Colonel James M'Ban, 78th Highlanders, at Lucoa, Jamaica, on January 17th.
 SEWELL, George, Esq., of Castle-Hedingham, Essex, on March 12, aged 52.
 THOMPSON, William Henry, M.D., at 28, Osnaburg Street, Regent's Park, London, on March 29, aged 92.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BROOKE, Charles, Esq., elected Surgeon to the Westminster Hospital.
 DAVIS, George Millett, Esq., elected Surgeon to the Liverpool Northern Hospital.
 HILLMAN, Wm. Augustus, Esq., elected Assistant Surgeon to the Westminster Hospital.
 JOHNSON, Athol A., Esq., elected Surgeon to the Hospital for Sick Children (Great Ormond Street), vacant by the resignation of G. D. Pollock, Esq.
 WOODFALL, J. W., M.D., elected Physician to the West Kent Infirmary, in the room of the late Dr. Sibbald.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

ALBION, S. Scott, M.D. THE MEDICATION OF THE LARYNX AND TRACHEA. pp. 49. London: 1853.
 BENNETT, John Hughes, M.D. LECTURES ON CLINICAL MEDICINE. No. VIII. 8vo. From p. 337 to p. 388. Edinburgh: 1853.
 COMFORT, J. W., M.D. PRACTICE OF MEDICINE ON THOMSONIAN PRINCIPLES; containing a Biographical Sketch of Dr. Thomson; and a Materia Medica adapted to the Work. Fourth edition. 8vo. pp. 582. Philadelphia: 1853.
 COURTENAY, F. B. LETTER TO JAMES SYME, Esq., on a case of STRICTURE OF THE URETHRA. Pamphlet, pp. 32. London: 1852.
 GREAM, G. T., M.D. RETENTION OF THE MENTAL FUNCTIONS DURING THE EMPLOYMENT OF CHLOROFORM. 8vo. pp. 15. London: 1853.
 *HESTER, James Torry, Esq. A NEW METHOD OF MANAGING FRACTURES. pp. 11. Woodcuts. London and Worcester: 1853.
 *KENNION, George, M.D. OBSERVATIONS ON THE MEDICINAL SPRINGS OF HARROGATE. pp. 31. London and Harrogate: 1853.
 MAHONY, O'B. TREATISE ON CHOLERA. pp. 100. London: 1853.
 *MARSHALL, John, Esq. VACCINATION IN RELATION TO THE PUBLIC HEALTH. 8vo. pp. 34. London: 1847.
 SCOFFERN, J., M.B. PROFESSOR FARADAY'S LECTURES ON THE NON-METALLIC ELEMENTS. Pages 293. London: 1853.
 *SIMPSON, James Y., M.D. MODERN ADVANCEMENT OF PRACTICAL MEDICINE AND SURGERY: an Inaugural Address to the Medico-Chirurgical Society. 8vo. pp. 18. Edinburgh: 1853.
 *SNOW, John, M.D. CONTINUOUS MOLECULAR CHANGES, more particularly in their Relation to EPIDEMIC DISEASES; being the Oration delivered at the 80th Anniversary of the Medical Society of London. 8vo. pp. 38. London: 1853.
 TRAVERSE OLFIELD. "TO DAIMONION", or the SPIRITUAL MEDIUM: its nature illustrated by the History of its Uniform Mysterious Manifestation, when unduly excited. 12mo. pp. 157. Boston: 1853.
 *WALKER, Edward Dering, M.D. HINTS ON SEA-BATHING. 8vo. pp. 46. Teignmouth: no date.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ADVERTISEMENTS.

Now ready, price One Shilling.
On Syphilization. By Victor de MERIC, Esq., M.R.C.S., Editor of M. RICORD'S Lectures on Venereal Diseases, in THE LANCET.

Shortly will be published,
A Course of Lectures on Venereal Diseases. By M. RICORD. Delivered at the Hôpital du Midi of Paris. Edited, with Notes, by VICTOR DE MERIC, Esq., M.R.C.S.
 London: JOHN CHURCHILL, Princes-street, Soho.

PROFESSOR FARADAY'S LECTURES ON THE NON-METALLIC ELEMENTS.

Just published, in fcp. 8vo. price 5s. 6d. cloth,
THE SUBJECT-MATTER OF A COURSE OF SIX Lectures on the Non-Metallic Elements. delivered before the Members of the Royal Institution in the Spring and Summer of 1853, by Professor FARADAY, D.C.L., F.R.S., etc. Arranged by permission from the Lecturer's Notes by J. SCOFFERN, M.B., late Professor of Chemistry in the Aldersgate College of Medicine. To which are appended, Remarks on the Quality and Tendencies of Chemical Philosophy, on Allotropy, and on Ozone; together with Manipulative Details relating to the Performance of Experiments indicated by Professor Faraday.

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The Dublin Quarterly Journal of MEDICAL SCIENCE, No. XXX.

containing the following articles, illustrated with several Lithographic Drawings and Woodcuts, and embellished with
 I. A PORTRAIT of SIR PHILIP CRAMPTON, Bart., Surgeon-General to the Forces.

II. ORIGINAL COMMUNICATIONS.

Dr. Montgomery on Double Monsters.
 Selections from the unpublished Manuscripts of the late Abraham Colles.
 Dr. Popham on the Climate and Diseases of Cork.
 Mr. Houghton on Prolapsus of the Uterus and Vagina during Pregnancy and Labour.
 Mr. Harrison on Sore Throats in Relation to Scarlet Fever.
 Dr. Osborne on the Poison used in the Case of Socrates.
 Dr. Smith on Rheumatic Arthritis of the Shoulder.
 Dr. Gordon's Clinical Reports.
 Mr. Tufnell on Vegetation of the Heart as productive of Arterial Disease.
 Mr. Butcher on Dislocation of the Cervical Vertebra.

III. REVIEWS.

French and English Surgery.
 Corrigan on Fever.
 Simpson's Contributions to Obstetrics.
 Headland on the Action of Medicines.
 Christophers on Syphilis.
 Coulson on Lithotomy and Lithotomy.
 Roberts on Recruiting.
 Phillippe's History of Apothecaries.
 Wade on Stricture.
 Dietetics of the Soul and Vital Statistics.
 Carter on Hysteria.
 Cooper on Near Sight, Aged Sight, etc.

IV. MEDICAL MISCELLANY.

Reports of the Dublin Pathological Society.
 Reports of the Dublin Obstetrical Society.
 Dr. Harvey's Case of Maniacal Delirium, in which Chloroform was administered internally.
 Dr. Gelson's Case of Abscess in the Head of the Tibia.
 Dr. Davy's new Test for Strychnia.
 Fourde's Case of Laryngeal Polypus.
 Marier on Pellagra.
 Fabri on the Albuminate of Iron and Soda as a Therapeutic Agent.
 Pravaz on Producing Instantaneous Coagulation of Blood in the Arteries.
 Chassaignac on the Anti-Hæmorrhagic Effect of Chloroform during Operations.
 Martinez on Pellagra.

V. INDEX.

. The Number for February last contained a Portrait of the late Dr. R. J. GRAVES.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XVIII.

LONDON: FRIDAY EVENING, MAY 6, 1853.

NEW SERIES.

BRANCH MEETINGS. The Metropolitan Counties Branch meets on Tuesday, the 10th, at 37, Great Queen Street, when Medical Reform, the Vaccination Bill, and other matters of importance, are to be brought forward. Vide p. 407.

THE YORKSHIRE BRANCH meets on Thursday, the 12th, at York, when Medical Reform and other questions will be considered. Vide p. 400.

THE EXCISE ON SPIRITS A TAX ON MEDICINE.

OF the minor changes proposed by the Chancellor of the Exchequer and forming a portion of a Budget, which, be its merits or faults what they may, lacks not variety, those affecting the spirit duties in Scotland and Ireland are not the least significant; since they evince a desire to grapple with the evil of differential excise duties within what must, in this matter by courtesy alone, be termed the United Kingdom. The right honourable gentleman also yields to importunity, what has long been denied to a just claim. He proposes "to relieve the distiller, and likewise the time of the House, by making an allowance for waste upon spirits in bond"; a concession which should encourage us, who form no inconsiderable a fraction of that unhappy "twenty-second part of those whose case appeals to the sympathies, but which is so limited in comparison to the whole range of the income tax that it would be a pity to be compelled to break up the tax on their account", to call (both in season and out of season) for relief from this iniquitous burden, until like the importunate widow in the parable, we wring from the annoyance and weariness of our rulers the justice denied to our wrongs. Moreover, this alteration of the spirit duties in the sister kingdoms manifests a determination on the part of the Chancellor of the Exchequer to advance in the right direction, and in accordance with his declaration that "one great object of our financial policy would be the equalization of the spirit duties between the three countries". It shows that he is undeterred by the failure of his predecessor, who after raising the Irish duty on spirits a shilling per gallon in 1842, was forced to return next year to the old duty—an actual loss to the revenue having accrued, together with an increase of persons committed to gaol for illicit distillation, in the ratio of nearly ten to one.

It is much to be desired that this policy of equalizing the spirit duties be persevered in by the Government until they are assimilated to those of England, since nothing, we are convinced, is more essential to the commonweal than that the consumption of spirits should be checked as much as possible in this kingdom, and the use of other beverages, whether fermented or not, encouraged in their place. A measure tending to check this consumption is a subject of congratulation, especially when we see wages rising, and when we see increasing amongst artizans and labourers unthrift and drunkenness, the too common concomitants of a high rate of wages. And we look forward with anxiety to the completion of the great object announced by Mr.

Gladstone, the equalization of the spirit duties between the three countries, as one deeply involving the health and morals of the population.

When this equalization has been effected, it would be a source of still further satisfaction to us were even a higher rate of duty than now exists on distilled spirits in England levied throughout the kingdom; especially, were this accompanied with such a modification of the malt and wine duties as to make beer and wine decidedly the cheaper excitants,—since men will drink, let us say what we will,—and thus to discourage the use of the more injurious stimulants. An efficient check to the consumption of spirits would strike a heavier blow at pauperism, disease, and crime, and raise the condition of the people far more quickly than any educational or sanitary measures within the ability of the Government to pass in a country like ours, where so great an amount of liberty and self-regulation is confided to the citizen, both in his individual and in his corporate capacity.

A minor benefit arising from the future equalization of these duties will be the riddance from the vexatious restrictions now requisite to prevent the smuggling of spirits or their products made in one part of the kingdom into another; a system of *octroi* no less opposed to our present commercial policy than it is to our national habits.

Beneficial, however, as the spirit duties unquestionably are, they involve, as now levied, injustice to particular classes, which reacts on the community; an injustice which Mr. Gladstone has acknowledged in the proposed remission of duty on the waste suffered by the spirits kept in store by the Scotch and Irish distillers. This remission, we submit, should be extended to all who use spirit for purposes of manufacture. Far more should this exception be made in favour of those under whose administration it oftentimes truly becomes *aqua vita*, whether employed directly as the fittest vehicle in which to administer a drug, or as a medicine to rally the energies of the sinking frame; or, indirectly by the manufacturing chemist in the preparation of the more valuable of our therapeutic agents, or by the analyst in wresting from nature that knowledge which has an immediate and enduring influence on the healing art.

To levy a duty upon the raw material of a manufacture is in direct opposition both to our present free trade policy and practice. The expiring excise on soap is a case in point, the duty on this article of manufacture having been remitted to the makers of woollen cloths and the kindred trades; and we contend that this principle should be extended to the parallel case of distilled spirits. Varnish-makers, hatters, etc., have been enabled to substitute in most cases wood-spirit for alcohol; a replacement impossible alike to the retail druggist, the perfumer, the manufacturing chemist, the analyst, and the medical practitioner. To the first, the injury is little if any, since he must and does charge the consumer both with the duty and the waste of spirits. This remark equally applies to the wholesale druggist; but this duty amounts almost to a prohibition

of an important branch of his business, for the manufacturing chemist who, could he obtain spirit duty free, would make the alkaloids and other delicate preparations requiring enormous quantities of alcohol and ether to extract them advantageously; whereas now, with a few exceptions where the processes are kept secret, the British manufacturer is forced out of the home market which he is compelled to abandon to his foreign rival, not through his own incapacity or inability to meet this competitor, but, because he is unfairly weighted in the race, in the shape of an enormous tax upon the most important article he would employ in his manufacture.

On the progress of scientific chemistry in these kingdoms, this duty is an incubus which has succeeded in stifling many a valuable discovery having most important bearings upon medicine, agriculture, and the arts of life; for the British analysts are so trammelled with this enormous tax on science, that, as a body, they almost abandon these vast fields of research to their continental brethren, simply because they cannot afford to use the alcohol and ether, essential to such investigations, in the abundance and profusion required. Thus British chemistry is paralyzed by the pressure of this excise, and forced to occupy a rearward position in the progress of science.

With regard to its action on ourselves. To the young practitioner, or union doctor, whether in town or country, whose patients are almost or altogether of the poorer class, the druggist's bill is a serious item. The remembrance of this inevitable visitor does and must influence him in dispensing; it leads him to seek for less expensive forms of medicine than tinctures, ethers, salts of quinine, etc., for those cases where, he too well knows, the probability of payment of any kind is always slight, and is never on a scale to justify the use of costly medicines if he can possibly employ cheaper ones, unless he is content to lose, not only time and labour, but also such an amount of money into the bargain as he is neither called on nor is able to afford.

A remission of the duty on spirit used in science and medicine, would not merely be a pecuniary advantage, and to its extent a compensation for undue taxation to many of us, but also, by the impetus given both to scientific and technical chemistry, it would enable our country to regain its once proud position in these departments of science and art. We see but little difficulty in carrying out the abatement which we propose, since the same machinery now in action with respect to the remission of the excise on soap to the makers of woollens, might be adapted to the excise on spirit employed either for scientific or medicinal purposes.

THE MEDICAL REFORM BILL.

We mentioned in our last number, that Mr. Hastings had communicated with Lord Palmerston on the subject of the Bill of the Association, and we are now in a position to report the result of that communication. Though not of a nature to discourage the advocates of Medical Reform, it is sufficient to rouse them to every exertion, lest the present favourable opportunity of settling the question should be lost.

Lord Palmerston, it appears, has hitherto found his hands so fully occupied, that he has not had time to take up the Bill; nor is it probable, considering the overburdened state of the Commons' House of Parliament, that the Bill, if introduced

there late in the session, would pass into law. Under these circumstances, Mr. Hastings (who is in constant communication with the rest of the Committee), has thought it best to make an effort to introduce the Bill into the House of Lords. We believe that arrangements with that object are being made for a deputation to wait on Lord Aberdeen on an early day, probably on Thursday the 12th.

But it is evident that this is not all that must be done. The profession must help themselves, and that immediately. By forwarding petitions to Parliament we shall best call the attention of Government to the nature of our grievances, and prove to them the strong feeling that exists on the subject. Let a meeting of medical men be convened as soon as possible in every town; let a petition be adopted, signed, and forwarded to the member for the district for presentation to the Commons, and to some noble lord for the Upper House. Numbers of petitions, from various places, produce much more effect than a few numerously signed. The time for vigorous action has now arrived; and we trust that every member of the Association will remember this, and do his duty.

In another part of this number will be found a report of a meeting of the South Western Branch, at which considerable hostility was expressed to the Bill. So far as we understand the subject, the gentlemen of the South-Western Branch object to some of those portions of the Bill which have commanded most general assent. They object to the third clause, because it does not compel the election to the Council of a certain number of provincial practitioners. But formally to stipulate for this would be to perpetuate division, and to indefinitely postpone that harmony and merging of antagonistic classes which the profession so much requires. They complain that no superintendence over the funds is provided for; forgetting that there is a clause requiring a yearly audit. They complain that every practitioner is, *in futuro*, to be a member of one of the Colleges; but this, so far as our correspondence enables us to judge, is one of the most approved features of the Bill, inasmuch as it will do away with any third class in the profession. It will raise many, and degrade none.

When the Bill is before Parliament, the profession can freely express its opinions upon matters of detail. In the mean time no one will compromise his individual opinions by signing such a petition as that which we subjoin; and, as we have already said, unless Parliament and Government be thoroughly satisfied that the medical profession are in earnest in their entreaties for Medical Reform, it is very certain that no such measure will ever receive the sanction of the legislature.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled: the humble Petition of the undersigned Members of the Medical Profession, residing in

SHREWETH,—

That the laws at present in force relating to the practice of medicine in this kingdom are in a confused and unsatisfactory state, and that your petitioners are thereby hindered in the lawful pursuit of their calling, and in their investigations of medical science.

And your petitioners therefore humbly pray your honours the House to take such immediate measures as in your wisdom may seem expedient, for the better regulation of the Medical Profession.

And your petitioners will ever pray,
(Signatures.)

We understand that the subject of Medical Reform is to be brought forward at the meeting of the Association

Counties Branch upon the 10th, and at the meeting of the Yorkshire Branch on the 12th current. It is very important that these meetings should be well attended, so that all shades of opinion be represented in fair and free discussion. It will then be discovered whether the Bill now in the hands of Lord Palmerston has or has not obtained the support of the profession. So far as has yet transpired, the Bill has received an unparalleled amount of support from the profession. It is supported by the College of Physicians of London, by all the Scottish Colleges, and what is of more importance than Corporation patronage, it appears to be in favour with the general body of the profession throughout the kingdom. Is such a measure to be allowed to fail for lack of timely aid? This cannot be, if the ASSOCIATION rouse itself to an effort worthy of the power which it possesses, and support its founder and his colleagues of the Reform Committee in fighting what may be a hard fight, though it be one which must ultimately be crowned by a victory.

THE JENNER MONUMENT.

OUR attention has been directed to a recently published list of subscriptions towards the erection, in bronze, of Mr. Calder Marshall's statue, as a monument to Jenner. This admirable work of art is, doubtless, familiar to many of our readers, as it was a prominent object of interest (near the crystal fountain) in the Great Exhibition of 1851. The list to which we refer has once appeared in our advertising columns; and to day a summary of the former advertisement is inserted, from which we derive the following information.

America	£329 12 8
Sweden and Norway	83 10 4
Russia	100 0 0
Other Nations	29 11 0
Great Britain and Ireland	153 2 5

The position which our countrymen here occupy is unworthy of the compatriots of Jenner. Much of the blame, however, must be traced to the energies of the Committee having been exerted fitfully over a long period, and not concentrated within a short space of time, as is essential for the success of collections of money. The exertions must be vigorous and unceasing, for if public interest be allowed to cool, the rekindling of it is always difficult; and the best schemes, be they literary, political, scientific, commercial, or philanthropic, are apt to be permanently injured when languidly promoted in any part of their career. Now we complain that the Jenner Monument Subscription has not been kept with sufficient steadiness before the profession and the public. An amount of money sufficient not only to erect Mr. Marshall's statue, but to endow professorships and scholarships in honour of Jenner, might, we feel convinced, have been collected long ere now, had the agitation, which is usual and necessary in such cases been adequately maintained. We trust that as the subscription has been recommenced, it may now be carried on with the vigour and success which it deserves.

The appeal of the Committee is very properly addressed to "all nations, and to persons in every station of society", who have felt the obligations they owe to the discoverer of vaccination: and we may well ask, Who has not? Still, the appeal comes home with peculiar force to members of the medical profession. Jenner was a medical prac-

titioner in a country village; but nevertheless his name is the greatest and the most effulgent in the annals of medicine. When men of all nations, and of every position in society, are uniting to honour his memory, it is especially right for us, as his brethren of the healing art, and as better able than other classes of society to appreciate the vastness of the boon which he conferred upon humanity, to be foremost in aiding the Committee, not only by bestowing contributions to the fund, but likewise by collecting the donations of such friends and patients as may wish to assist in furnishing the very moderate sum which is yet unprovided. The smallest and the most liberal donations are equally acceptable to the Committee; and we are inclined to recommend collectors to solicit small sums from everybody, rather than to be anxious to obtain large sums from the wealthy. A good example of the policy of asking small contributions is afforded by what was done in Boston by Drs. Jackson, Ware, and Warren; where, although the maximum subscription was limited to one dollar, the aggregate of the dollars amounted to £200, the largest amount yet received from any country or district.

MEDICAL FEES AND LIFE INSURANCE COMPANIES.

THE following paragraph in a recent number of the *Glasgow Herald* has attracted our attention. Surely, the refractory Insurance Companies, now that law as well as justice declares against them, must at last give in.

On Thursday last a case was called in the Glasgow Sheriff Small Debt Court (Sheriff Skene presiding), involving a long-disputed point between the medical profession and certain Life Assurance Companies. The parties were Dr. Matthew Wylie, and Mr. W. L. M'Phun, agent for an English Life Insurance Company. The amount sued for was 10s. 6d., being the usual fee (?) in such cases. Dr. Wylie stated that the schedule (which he handed to the Court) for examination was sent to him blank by Mr. M'Phun. He had filled it up, and returned it, with an intimation that his charge for so doing was 10s. 6d. The schedule was sent to London, and had been retained four days, being quite sufficient time to make use of it, when it was returned with an intimation that the company did not recognize the claim of any medical man, referred to by a party proposing to insure his life with them, to remuneration for filling up the schedule sent in consequence of such reference. In order to try the point, he (the Doctor) had summoned the company's agent. For Mr. M'Phun, it was said that he had not employed Dr. Wylie—that the company never did pay the fees of medical referees, and that this had been mentioned at the time the schedule was left at his office. Sheriff Bell gave his decision in favour of the claim of Dr. Wylie.

We regret that the name of the shabby and dishonest company represented by Mr. M'Phun is not mentioned. Nothing short of a dread of losing business produces any effect.

ORIGINAL COMMUNICATIONS.

ABNORMAL MENSTRUATION.

By W. S. OKE, M.D., Senior Physician of the Royal South Hants Infirmary.

DEFICIENT MENSTRUATION, NOSOLOGICALLY TERMED CHLOROSIS.

THIS disease for the most part occurs in unmarried females, at any time from puberty to about the age of twenty-eight. It generally arises from want of the open air and exercise: hence, it is more frequently met with in domestics employed in close apartments, and in persons constantly seated at needlework. It is rarely observed in married women.

The aspect of the patient is pallid or pale, and the lips have little or no colour. There is a total absence, diminution, or unhealthy condition of the menstrual secretion; and often leucorrhœa. The pulse is feeble, and the tongue clean and flabby. There is palpitation of the heart upon the slightest excitement; and on placing the stethoscope over the right internal jugular vein, a little above the clavicle, a peculiar humming sound is heard. The respiration is embarrassed by the least exertion, especially on going quickly up stairs. The digestive organs are disordered; there is pain of the chest under the sternum, or of the left hypochondriac region; and there is sometimes giddiness, at other times severe neuralgia of the head or face. There may be also a depraved appetite; but I have not found this a frequent association. The bowels are costive or relaxed; and the urine either high coloured and scanty, or pale and copious. There is weariness and coldness of the lower extremities, and perhaps œdema of the ankles, great inactivity, depression of the spirits, and a disposition to shed tears.

With regard to the pathology of chlorosis, it would appear that the insufficiency of the menstrual secretion, the want of colour of the skin, and, in short, the languor of the vascular and nervous system, are the results of a low condition of the blood, caused by a deficiency of iron in its globules, which is probably necessary to their normal colour and invigoration. That iron is a constituent part of the blood-globules, is shown by Berzelius, in the third volume of the *Med.-Chir. Transactions*. At page 215, he writes: "I incinerated 20 grammes (400 grains) of colouring matter (crassamentum) till the charcoal was completely destroyed, and obtained 0.25 grammes (5 grains) of ashes, having a yellowish red colour. By an accurate analysis, I found it composed of

Oxide of iron	50.0
Subphosphate of iron	7.5
Phosphate of lime with a small quantity of magnesia	6.0
Pure lime	20.0
Carbonic acid and Loss	16.5

100.0"

Liebig also states, "that the leading characteristic of the red globules is, that they contain a compound of iron found in no other constituent of the body, and that they have the power of combining with gases, as evidenced by the change of properties which they suffer when exposed to their action".* And that iron is also conducive to the colour as well as to the vigour of the blood-globules, may be inferred from the fact that no disease can be more certainly and directly cured by the efficacy of medicine, than chlorosis by the internal adhibition of some of the preparations of this metal.

It has fallen to my lot to have had extensive experience in the treatment of this disease; and I can confidently affirm that, where this atonic condition of the system is not complicated with any co-existing organic disease, the fol-

lowing simple treatment has seldom if ever failed of complete success. One of the pills (a) is to be taken every other night, and two of the pills (b) three times a day:—

- (a) R Hydrargyri chloridi gr. xij.
Pilulæ aloes cum myrrha gr. xlvij.
Syrupi, q. s.

Misce et divide in pilulas xij.

- (b) R Pilulæ ferri comp. 3ijj.

Divide in pil. xxxvj.

If there be diarrhœa, the pills (c) are to be taken instead, leaving out of course the aperient:—

- (c) R Pilulæ ferri comp. 3ijj.
Pulveris opii gr. iv.
Syrupi q. s.

Misce et divide in pilulas xxxvj, quarum capiat duas ter die.

It occasionally happens that an individual cannot swallow medicine in the form of pills, in which case (d) may be prescribed with equal success:—

- (d) R Misturæ ferri comp. ʒviii.
Decocti aloes comp. ʒiv.

Misce. Capiat ʒiss. ter quotidie.

If necessary, the bowels may be regulated by the powder (e), taken in jelly:—

- (e) R Hydrargyri chloridi gr. j.
Aloes socot. pulv. gr. iij.
Pulv. cinnamomi comp. gr. ij.

Misce. Fiat pulvis noctibus alternis sumendus.

Amongst the better classes of society, the patient is often sent to the sea-side, or some other place, for change of air, without the aid of medicine; but this is at best a tedious remedy, if it be a remedy at all: whilst the treatment above recommended will bring about convalescence in six weeks or two months, without any change of locality.

CASE. A married lady, aged 26, who had never been pregnant, having been for a considerable time deficient in her monthly secretion, and having lost all her colour, was sent to Italy for the improvement of her health. After many months, she returned without the slightest benefit, and as pale as death. Being placed under my care, she was directed to take the mixture (d); and, as her stomach was very irritable, she was restricted to the lightest nutriment, with weak brandy and water as a beverage. Under this treatment she soon began to mend, and in about three months regained her strength and colour.

In chlorosis, the diet should be light and nutritive, with one glass of wine daily. Walking or riding exercise should be taken in the open air; and the warmth of the body, especially of the lower extremities, should be maintained by adequate clothing.

NEURALGIC MENSTRUATION, NOSOLOGICALLY CALLED DYSMENORRHOEA.

The menstrual secretion is sometimes commenced and accompanied with severe neuralgic or spasmodic pain of the lower part of the abdomen, back, and hips. The amount of suffering varies in different individuals; and it appears to be caused by a morbidly sensible condition of the uterine nerves, which arise from the sympathetics and sacral. This disease usually affects the unmarried, and may be excited by moral as well as physical causes. There is generally a deficiency of the menstrual secretion; but, unlike the foregoing affection, it is not characterized by pallor of the countenance, nor is it by any means so readily cured. In some cases, it is true, the pain may be alleviated by the hip-bath, by opiates, belladonna, digitalis, purgatives, electricity, and, especially if it be of an inflammatory character, by cupping over the sacrum; but in others the pain is so severe as to admit of scarce any relief during the period. This at least had been the result of my own experience for many years, till a most inveterate case at length yielded to treatment.

CASE. A lady, aged 26, well formed, and of dark complexion, from a disappointed attachment had become deficient in her menstruation; and the diminution was accompanied with hysterical paroxysms, and the most intense pain of the uterine region, as soon as the secretion commenced.

* As quoted by Brande, in his *Manual of Chemistry*.

This state of extreme suffering continued for some years, and rendered her existence quite wretched. She had consulted a variety of medical men, and many remedies had been tried, to remove or alleviate her pains. She had been locally bled, had frequently used the warm hip-bath, with purgatives, opiates, antispasmodics, etc.; but all these means had fallen short of any permanent relief. The only remedy which had given her any respite was large doses of the liquor opii sedativus, although it always disordered her system. In such a case as this, as all ordinary remedies had been found unsuccessful, and reflecting that the indication of cure was clearly to subdue the morbid action of the uterus, and restore its normal secretion, I resolved to combine some preparation of iron with a sedative which would not contract the secretory cavity of the uterus; accordingly, she was immediately placed under the following treatment:—

Rx Pilulæ ferri compos. 3ij.
Extracti conii 3j.

Misce et divide in pilul. xl, quarum capiat duas ter quotidie.

This plan was steadily observed through the interval up to the next period, after which she wrote to me, stating that it had passed with an increased secretion, and without suffering or hysteria. The treatment was persisted in for some months with complete success; and two years have elapsed without any return of suffering. I considered this an important case; and, as others of a similar character came under my notice, they were placed under the same treatment, and almost always with a successful result. Opium, in one shape or another, will doubtless, in large doses, afford temporary relief to the severity of the pain in dysmenorrhœa; but as it tends to cause contraction of the uterine cavity, and therefore rather restrains than encourages the menstrual discharge, it is not a desirable remedy.

I do not wish it to be understood that the above treatment is recommended for the relief of all cases of dysmenorrhœa. When the symptoms indicate an inflamed condition of the internal membrane of the uterus, manifested by the discharge of fibrinous shreds and febrile disturbance of the system, such treatment is of course inadmissible, and the case must be treated according to its indications by local bleeding, by the warm hip-bath, digitalis, saline aperients, etc.

Dysmenorrhœa, as well as leucorrhœa, may be sometimes also caused by the local irritation of ulcers, either within or near the os uteri; and has been successfully treated by the application of the nitrate of silver through the speculum—an instrument which has brought to light local causes of uterine disease, which had long escaped detection by the ordinary means. When, therefore, in dysmenorrhœa, the symptoms are found to resist general methods of cure, and when the intermenstrual mucous discharge from the vagina is ascertained to be purulent and mixed with streaks of blood, it may be fairly inferred that the painful character of the menstrual period is kept up by epithelial ulceration, too far within to be discovered by common observation, and too superficial to be detected by the finger. In such a case, the speculum should be employed without hesitation, in order to decide the question, and allow of the application of such local remedies as may be required. The speculum is undoubtedly a most useful instrument for the diagnosis and treatment of diseases of the distal end of the vagina and the os uteri; but where the symptoms are derived from induration and enlargement of the cervix uteri, the speculum might overlook what the finger will not fail to discover. Such cases are of no uncommon occurrence. The enlargement is most frequently found on the posterior part of the cervix, and in my experience is very difficult of cure, even when it is not of a malignant character. On the other hand, the practice of frequently introducing the speculum, to have ocular proof of the condition of the os uteri, before a fair trial of other remedies has been made, whatever may be the patient's class in society—whether she be in her own dwelling, or in a public institution—whether in a mansion or in a cottage,—ought, in my judgment, to be

considered an abuse of a most useful instrument, and condemned as a demoralizing procedure.

PROFUSE MENSTRUATION, NOSOLOGICALLY CALLED MENORRHAGIA.

An immoderate flow of the catamenia may occur at any period of menstrual life; but it more commonly takes place at its commencement and towards its termination. It may be caused by a plethoric or a debilitated condition of the system; or by some local irritation of the uterus—such as a polypous growth. The two first causes are manifested by the appearance of the patient; the last is ascertained by a digital examination.

Plethora of the system is indicated by a heavy, sanguine and congested aspect; injected conjunctivæ; drowsiness with snoring; vertigo; misty vision; and a full pulse.

Debility, on the contrary, is characterized by an attenuated and anæmic aspect; by a fluttering sensation of the breast; by faintness; sweating upon the slightest exertion; loss of appetite; pale urine; and a small irregular pulse.

It may be proper here to observe, that the menstrual discharge does not appear to be a specific secretion, but in great measure has the character of blood. Dr. Kirkes makes the following remark on the subject: "The menstrual discharge consists of blood effused from the inner surface of the uterus, and mixed with mucus from the uterus, vagina, and external parts of the generative apparatus. Being diluted by this admixture, the menstrual blood coagulates less perfectly than ordinary blood; and the frequent acidity of the vaginal mucus tends still further to diminish its coagulability. This has led to the supposition that the menstrual blood contains an unusually small quantity of fibrine, or none at all. The blood-corpuscles exist in it in their natural state: mixed with them may also be found numerous scales of epithelium derived from the mucous passages along which the discharge flows."*

It is on this account, that profuse and continued catamenial discharge produces such an anæmic condition of the system, which would not be so produced were the discharge a distinct secretion of the uterus, and not an effusion for the most part of the blood itself.

When menorrhagia takes place in plethoric habits, it is manifestly remedial, and ought not to be hastily restrained. In such a case the plethora is the object to be kept in view rather than the discharge; and it will be best treated by a cooling diet, the recumbent position, and the mixture (a).

(a).—Rx Magnesie sulphatis 3vj.
Infusi rosæ comp. 3vss.
Syrupi simplicis 3ss.
Acidi sulphurici diluti 3ss.

Misce. Fiat mistura, cujus capiatur fluiduncia ter quotidie.

But when the discharge has continued for a considerable length of time, producing an anæmic condition and great debility, the indication of cure will clearly be to restrain the uterine flux as speedily as possible by general and local means.

The system may be strengthened by (b).

(b).—Rx Confectionis rosæ 3ss.
Infusi rosæ comp. 3iij.
Decocti cinchonæ 3iij. Misce et cola.
Colaturæ adde,
Acidi sulphurici diluti 3j.
Tincturæ opii ℞ xxx.

Fiat mistura, cujus capiatur quartam partem ter quotidie.

Opium, in menorrhagia from this cause, is a valuable remedy, as it is found to increase the force of circular muscles; whilst henbane, hemlock, and belladonna relax them. Hence it is that the former contracts whilst the latter dilate the iris; and hence, also, the great use of opium in restraining profuse and dangerous hæmorrhage after parturition, by causing contractions of the muscular walls of the uterus.

The bowels, if necessary, should be regulated by gentle aperients, such as the following.

* Hand-book of Physiology, page 608

R Pulveris rhei,
Balsami copaibæ, aa 3 ss.

Misce; et divide in pilulas xij, quarum capiat duas horâ somni pro re natâ.

Turpentine and the secale cornutum have also been found efficacious in restraining menorrhagic discharge.

The best local remedy is the sulphate of alum hip-bath, which may be made in the proportions of twelve ounces of alum to two gallons of water. It may be used daily for about twenty minutes, first tepid, thence gradually reducing it to the normal temperature.

Should the discharge continue unabated, notwithstanding the use of the above remedies, a polypous growth or some morbid condition of the uterus is to be suspected; and the uterus must then be examined.

CASE. An unmarried lady, aged 33, became greatly debilitated and blanched by a profuse flow of the catamenia, which continued every month for about eight days. Various remedies were tried for a considerable time to moderate the discharge; but in vain. As her debility became alarming, the condition of the os uteri was examined; when a small polypus of the size of a nutmeg was found attached by its stem to the internal part of the cervix. This growth was at once removed by ligature, and the menorrhagia ceased.

When profuse red discharge takes place at that period of life when menstruation usually subsides, it is often attributed by unprofessional persons to what is vulgarly termed "a change of life", whilst in truth it is more frequently caused by some organic lesion of the uterus. There is seldom any difficulty in diagnosing such a disease as the cause of uterine discharge. In this case the hæmorrhage is sudden, profuse, clotty and irregular; and when it subsides it is followed by a watery, foul, and offensive discharge. There is almost constant and distressing pain around the pelvic region, extending through the external spermatic nerves half way down the anterior part of the thighs. Sitting upon a hard seat will occasion severe pain of the uterus through the perineum, as also the passage of the contents of the rectum. Besides all this, the mere aspect of the patient, without a vaginal examination, will at once show the wear and tear of carcinomatous disease. Here nothing can be attempted beyond alleviation; and this will best be afforded by opiates, styptics, and rest in the horizontal posture.

Southampton, April 25th, 1853.

CASE OF SCIRRHOUS CONTRACTION OF THE RECTUM; ARTIFICIAL ANUS: DEATH.

By GEORGE MAY, Esq., Surgeon.

CASE. A widow lady, aged 63 years, of peculiarly active habits, enjoying good general health, performing the animal functions naturally without difficulty, and being totally unaware and unsuspecting of local disease, on March 10th, 1853, felt slight irritation of the lower bowel, with desire for relief, but without result. This induced her to take a dose of pills, to which she had been accustomed to resort occasionally. As these pills did not act, she consulted me March 13th, expressing a desire to have a more active aperient. I prescribed ʒiiss of compound senna mixture, to be repeated after six hours, if needful. As these medicines also did not act, and some sickness resulted, a more extended investigation of her symptoms was made. I examined the abdomen with reference to the existence of hernia, but did not discover any. She was now ordered pills with calomel and colocynth, which also occasioned sickness, and failed to act on the bowels. I made another examination of the abdomen, and detected a small tumour in the situation of a right femoral hernia, but without tenderness or pain; the umbilicus also felt slightly full. Not being confident of the existence of hernia, we determined on an immediate operative exploration of these parts. I divided the integuments on the inner side of the femoral

tumour, with a view to reduce the hernia, if present, without opening the sac. The femoral ring was exposed, without discovering hernia, and the tumour lay above it. I now exposed the external abdominal ring by an incision at right angles to the first, and found the tumour to be adipose, and attached by a narrow peduncle to the inguinal canal; but hernia did not exist. The umbilicus was now explored in a similar way, without discovering hernia. Another small swelling was discovered at the outer edge of the right rectus muscle; but we were satisfied, without incision, that it was also adipose. An examination of the lower bowel was made with the œsophageal tube, which passed twenty inches without obstruction, but was slightly grasped as it was withdrawn. She stated that its introduction did not cause pain. About half a pint of water was injected through the tube, and returned unstained by fæces. The sickness which, for the first three or four days, was frequent, and on one occasion of a dark coffee colour (but not at any time fecal), now subsided. The abdomen was generally full, and moderately tympanitic, without special prominence of either portion of the intestinal tube. She suffered occasional pain, with flatulent distension, chiefly in the centre, mid-way between the umbilicus and pubes; but there was no tenderness on pressure. Flatus passed *per anum* occasionally, but no fecal matter. She had a frequent desire for relief by stool, and felt throughout a strong conviction that she should eventually succeed in obtaining it. From the third day of my attendance until her death, the treatment consisted chiefly of calomel and opium, also a dose (gtts. xxv) of Battley's sedative solution occasionally, when she was distressed by painful flatulency. This always gave considerable relief. Various injections, as warm water, gruel, linseed oil, aloe, etc., were also employed. She experienced comfort from the use of warm water, which was exhibited whenever she desired. Her pulse was frequent, ranging from 120 to 140; her countenance was without marked anxiety. She took and retained small quantities of liquid nourishment.

On March 23rd, being the tenth day after my first visit, and probably the fourteenth day since the last fecal evacuation, it became evident that no medicinal means would prove successful; and the constitutional distress having become more urgent, an operation for artificial anus in some portion of the tube above the presumed seat of stricture was proposed. After a delay of thirty-six hours longer, it was performed. Chloroform was not used, being objected to by the patient.

An opening, three inches in length, was made through the integuments, on the right side of the abdomen, over the cæcum; and the latter was opened to about an inch in extent. The edges of the bowel were attached to the integuments by several stitches, and extravasation of blood and fecal matter into the abdominal cavity carefully prevented. The operation was performed without difficulty, and she expressed herself as somewhat relieved. A small quantity of liquid fæces continued to ooze through the wound for three or four hours.

She suffered considerable pain a few hours later, which was relieved by opiates. The exhaustion, which had existed to some extent before the operation, continued to increase; and she died about twenty-eight hours after the operation.

EXAMINATION OF THE BODY, seventeen hours after death. The small intestines were generally but moderately distended. The descending colon was distended with flatus and fæces. A firm stricture from scirrhus carcinomatous deposit existed in the rectum, about six inches from the anus, scarcely permitting the point of the finger to pass within it superiorly. Its extent was about three inches; it was annular, but was chiefly situated in the anterior wall; it was stratiform, and about one inch in thickness; it closely adhered to the fundus of the uterus. The mucous membrane was ulcerated, and about four inches of the tube above the stricture had overlapped the strictured portion, considerably augmenting the obstruction. The ascending and transverse portions of the colon were less distended.

The small intestines, near the wound, were agglutinated by recent peritonitis. No secondary carcinomatous deposits were found in the abdomen, and no other part was examined. Several calculi were found in the gall bladder, and one was impacted in the cystic duct.

REMARKS. The peculiarities of this important case consisted in the absence of premonitory evidence of stricture, in the sudden supervention of symptoms of obstruction, and in the capability of passing an œsophageal tube high up in the bowel without obstruction, and without any complaint of pain, although the mucous membrane was found to be ulcerated. A correct diagnosis was therefore extremely difficult—perhaps impossible. The absence of persisting sickness, and the duration of the symptoms, seemed to justify the inference that obstruction existed in some portion of the large intestine; while the ready passage of the œsophageal tube forbade the presumption of its existence in any part of the left side.

The choice of operation for artificial anus lay between an opening into the cæcum through the loin, external to the peritoneum, or anteriorly through it. The latter was preferred, as giving the opportunity of opening into any part of the intestinal canal, should circumstances require it. The cæcum was found to be moderately distended, and also the ileum at its cæcal termination. The ascending colon was contracted above; an opening was therefore made into the cæcum.

Since the operation for artificial anus was first performed by Pillore, in 1776, forty-eight cases have been recorded; and are embodied in an interesting and valuable communication by Mr. Caesar Hawkins, published in the *Medico-Chirurgical Transactions*, vol. xxxv. From this table, it appears that an opening into the cæcum by Littre's operation on the right side, has been performed four times before the present case; and that all these cases were fatal. The small intestine has been opened twice, both cases being fatal. A similar operation has been performed on the left side, also through the peritoneum, in eight cases, five of which recovered, and three died. I am not aware of any reason, anatomical or otherwise, which can account for these comparative results; and must presume death to have arisen from other causes than injury to the peritoneum.

Had we been able rightly to diagnose this case, an opening in the left loin, if made sufficiently early, would probably have been successful. The existence of cancer would not have barred its chance of success, as is proved by the recorded results of former cases.

I had the satisfaction to be associated in the conduct of this case with Dr. Burnie, of Guildford Street, London, a friend of the patient; and also, at the operations, with my partner Mr. Harrington, and my son.

Reading, April 1853.

CASE OF SIMULTANEOUS DISLOCATION OF BOTH HUMERI.

By C. ROBERT THOMPSON, Esq., Surgeon.

CASE. Mr. K., aged about 62, a tall, well-made, muscular man, but with a constitution much impaired by intemperance, met with the following accident on March 30th.

He had been for some time invalided, but ventured to walk out alone to visit a friend about a mile and a half from his home. He said that he felt inclined to "pitch ahead" more than once on his journey; but managed to reach within a few yards of the door, when he became suddenly giddy, and fell flat on his chest and face, on a hard uneven path. He stated that he felt an utter inability to help himself, or to make an effort to prevent the fall; at the same time, he did not lose consciousness.

Assistance was at hand; and on getting him up, he complained of loss of the use of both arms, and violent pain in

the shoulders; his face was slightly contused, and cut about the nose and brow, and he seemed very faint.

I saw him about an hour after the accident; and, on undressing him, had no difficulty in deciding that both humeri were dislocated: on the right side forwards, the head of the bone making a very perceptible prominence below the clavicle; on the left side directly downwards into the axilla, presenting all the characteristics of that displacement in a very marked manner. I reduced the left dislocation, with the heel in the axilla: the right was more obstinate, but was reduced in the same manner, after a time, by Mr. Rathill, of Westerham, who was so good as to assist me.

The patient complained much for some days of pains about the shoulders and upper part of the chest; but went on quite well, and has recovered the use of both arms.

REMARKS. In considering the cause of this unusual double dislocation, the most evident explanation appeared to be, that the patient endeavoured to save himself by throwing forwards both hands, and the whole stress of the weight of the body coming on the capsules of the joints, they gave way. But he states positively that he had no power at the time to make any effort, and that he fell flat on the chest and face. Moreover, had he fallen with his hands forwards, probably the head of the bone would have been displaced backwards on the dorsum scapulæ, certainly not forwards, as one was, into the subclavicular fossa.

The only way then in which I can attempt to explain the dislocation is, that falling as he did, heavily and suddenly on his chest, with the nervous and muscular energy paralysed for the time either by syncope or a slight apoplectic seizure, the force of the jolt, and the power of gravitation (which would act with particular impetus on the head of the humerus in a man of large prominent chest) were sufficient to dislocate both bones from their normal situation.

In looking for instances of a similar accident, I find mention of six cases in different numbers of the *Lancet* of last year.*

In one case, related by Mr. W. H. Smith, the accident may probably be attributed to the cause I have suggested in my case; the patient falling heavily forwards in a state of helpless intoxication, and both shoulders being found dislocated.

Mr. Greenwood, of Bradford, relates the case of a man, whose shoulders were both displaced by slipping on to his back when intoxicated. Here one arm had been dislocated ten times, the other once before. In this instance, I imagine the concussion of the body was sufficient to dislocate the joints.

Two cases, where this accident was caused by direct force, applied to both shoulders at once, are recorded: one by Sir A. Cooper, of a man who threw himself off a bridge into the river with the arms extended horizontally, and was found afterwards with double dislocation into the axillæ; the other by Mr. C. Webber, whose patient fell between two stacks of timber, so that both arms were struck upwards in his descent.

In the remaining two cases, the dislocations were caused by force at the hands, acting with immense leverage on the shoulder joints.

One is mentioned by Mr. Skey,† of a butcher, who was raising a calf, when it fell backwards over his head; the other by Mr. Thompson, of Brandon, also of a butcher, who was pitched out of a cart, and came head foremost with great force on his hands.

These are the only instances which I have been able to find; but I have not the means at hand of consulting many authorities on surgery.

Oxley, Surrey, April 25th, 1853.

* *Lancet*, April 10th, 17th, 24th, &c.
† *Operative Surgery*, p. 81.

BIBLIOGRAPHICAL NOTICES.

HOMŒOPATHY: ITS TENETS AND TENDENCIES, THEORETICAL, THEOLOGICAL, AND THERAPEUTICAL. By J. Y. SIMPSON, M.D., F.R.S.E., Professor of Midwifery in the University of Edinburgh, and Physician Accoucheur to the Queen for Scotland. Third edition. 8vo. pp. 292. Edinburgh: 1853.

THIS is an enlarged edition of a former work. It is a complete examination of a hydra-headed system of delusion and swindling, recently and still in vogue. The untenable nature of the homœopathic dogma, the blasphemous character of many of the subsidiary tenets, and the impossibility of the infinitesimal quantities, are elaborately and thoroughly exposed. In every instance, the confuted opinions are fully stated in the exact words of authorized homœopathic writers. Perhaps some members of the medical profession may think that Dr. Simpson has brought an unnecessary amount of logic, truth, and common sense into the field; and that the demolition of homœopathy hardly required to be executed by the unsparing use of such powerful weapons. We are not inclined to take this view of the case. Whatever is worth doing at all, is worth doing well: and it was therefore right in Dr. Simpson, if he undertook it at all, to use his learning and his talents to the best advantage in presenting to the public, to his pupils, and to the profession, a perfect account of the whole subject, in its various aspects of delusion and iniquity. In this he has succeeded. The value of such works in checking delusion, and preventing the quack from levying toll upon popular ignorance, is, we believe, very small; because it is only by disciplined minds that such works can be appreciated and understood. The chief importance of Dr. Simpson's volume lies, therefore, in the fact that it aids in detaching from legitimate medicine the various deceptions and delusions which constitute homœopathy as known among us. To suppress the "hygeian system", the "Thomsonian system", the homœopathic system, or any other system of quackery by law or by argument is impossible; for there is always a very large body in the community who form a ready prey to the specious simplicity of charlatanism, in whatever form it may be brought forward. Dr. Simpson evidently entertains the same views with ourselves on these points.

The following passage is a commentary upon the rules adopted by the different colleges and medical societies with reference to homœopathy.

"It is, perhaps, proper that it should be distinctly explained and understood, that the practitioners of homœopathy, particularly those in Great Britain, have generally sought to derive advantage from the assertion that the doctrines of Hahnemann regarding infinitesimal doses, etc., formed merely additions to and improvements upon that system of medicine, 'which had hitherto occupied the minds of men, and been tested and confirmed by the experience of ages'; and that these doctrines were not fundamentally and entirely opposed to the established system in its principles and practice. Homœopaths fortified the belief of the public in this misconception, by pointing to the fact that they possessed the same medical licenses and degrees, and belonged to the same medical colleges, societies, etc., as the practitioners of legitimate medicine.

"Long, and as I conceive properly, the common law of England and Scotland has been such as to allow British subjects the most perfect freedom as to patronizing or practising any form whatever of medical superstition and pretension; and the late resolutions of our medical corporations and societies were not therefore intended to interfere in any degree with homœopaths continuing to treat all those who applied to them, according to their own peculiar creed. But the resolutions were intended to show that the differences between the doctrines and practices of legitimate physicians, and the doctrines and practices of homœopaths, were so great as to render any farther intercourse and cooperation between them impossible in the conduct of professional matters, and in the duties of professional life. Indeed, Hahnemann himself had long before pronounced precisely a similar opinion regarding the proper relations of homœopaths to legitimate practitioners, and the impossibility

of the disciples of homœopathy countenancing the doctrines and practices of legitimate physicians, or as he opprobriously and foolishly styled them—"allopaths." (p. 2.)

This volume is one which it is impossible to peruse without profit and satisfaction. It is more than a refutation of homœopathy. The general character of medical imposture is illustrated throughout its pages. In particular, it is shown that every form of charlatanism claims the test of experience, and that notwithstanding all that is said about the advanced knowledge of the nineteenth century, the credulity of thousands of men and women, calling themselves educated rises up around us with luxuriant growth, in defiance of indisputable physical laws.

MODERN ADVANCEMENT OF PRACTICAL MEDICINE AND SURGERY: an Inaugural Address to the Medico-Chirurgical Society of Edinburgh. By JAMES Y. SIMPSON, M.D. 8vo. pp. 18. Edinburgh: 1853.

THE author passes before us in rapid and luminous review the advances which have been made during the last fifty or sixty years in morbid anatomy, histological anatomy, pathological chemistry, physical diagnosis, materia medica, operative surgery, and practical medicine.

The following passage graphically depicts what medical science has done for the human race, and encouragingly suggests the path to other fields of victory.

"It is now some two hundred years since Sydenham wrote and practised in London. Consider for a moment what this father of English medicine described as the most fatal diseases in England at that time. Six of the most destructive diseases, or classes of diseases, to human life in that age were, according to Short's mortality bill, plague, ague, dysentery, scurvy, child-birth, and small-pox. These maladies, however, enjoy their fatal pre-eminence no longer. We have banished the plague, which in the olden times often destroyed in London more lives than all other maladies counted together. We have rooted out and modified the ague, so that it is rarely a fatal affection now, while every year it destroyed thousands formerly. Scurvy has almost disappeared from our mortality bills. Dysentery, though still sometimes a fatal disease, is infinitely less common, and infinitely more under medical treatment, than it was at the time of Sydenham. At that date, or in the middle of the seventeenth century, about one in every forty or fifty women delivered in London died of childbirth or its consequences; but gradually, as medical science has advanced, that mortality has decreased, till now not above one in 150 or 200 die. We have in Great Britain about 600,000 deliveries annually, and still above 3000 of the mothers perish in child-birth. If the old mortality, however, of the seventeenth century yet held good, and this department of practice had not greatly progressed and improved, not less than 11,000 or 12,000 maternal lives would now be lost by the present proportion of annual births: the advancements of modern science thus effecting in this item alone a saving of the lives of 7000 or 8000 mothers every year. And as for small-pox—another of the great sources of human death in the days of Sydenham—this fearful and most destructive malady has, as we have just stated, been almost entirely destroyed by the discovery of Jenner. These most formidable and fatal diseases of Sydenham's time sustain the pre-eminence of their formidable and fatal character no longer. And may we not hope that, a couple of centuries hence, the very same fact may hold true of some of those diseases that are at present most destructive and deadly in their effects upon our population? Does not the history of the past suffice to encourage within us a bold belief that perhaps in half a century or a century hence, our present most fatal diseases may, by the advancement of hygienic and medical means, be our most fatal diseases no longer? At the present day we have, according to the registrars' official returns for England and Wales, consumption producing above 50,000 deaths a-year; convulsions above 30,000 deaths; pneumonia and bronchitis above 30,000 deaths a-year; typhus fever and scarlet fever generally above 20,000 deaths each; and measles, whooping-cough, rheumatism, diarrhoea, hydrocephalus, etc., destroying human life among us in still in fearful numbers. These several diseases at the present time as the highest on the roll of destruction that prevail in British practice. For one, I cannot but not but entertain an ardent belief that medicine will devise measures, prophylactic perhaps, rather than

stay the great destruction of human life prevailing amongst us from the first, for example, of these affections, phthisis. Perhaps a more advanced pathology and chemistry may yet ere long furnish us with more enlightened and practical views of pneumonia and other inflammatory disorders than we yet possess, and arm us with more sure and potent medicinal weapons and resources against them. We have, from the experience of the last few years, every reason to hope that the whole class of zymotic diseases will be greatly subdued betimes in intensity and violence, when the investigation of the physical causes predisposing to them, or even actually exciting them, is more fully explicated. If medicine has devised means to arrest the ravages of small-pox, may it not yet devise some means also, by inoculation or otherwise, to arrest the ravages of scarlet fever and measles, of hooping-cough, of typhus fever, and perhaps of the whole class of non-recurrent diseases? And even if we fail to arrest them, we may possibly find out for the varying animal poisons producing these diseases, antidotes as certain as quinine is against the poison of marsh fever."

ATLAS OF THE FORMATION OF THE HUMAN BODY, in the Earliest Stages of its Development: compiled from the Researches of the late PROFESSOR DR. M. P. ERDL. By JOSEPH KAHN, M.D. (Vienna). Illustrated by sixty figures contained in thirteen plates.

DR. KAHN lately exhibited in London and the provinces a very beautiful collection of anatomical models. The work before us contains accurate drawings of those by which he illustrated microscopic embryology, accompanied by short descriptions adapted to the junior student and the non-professional inquirer into the mysterious subject of generation. As an easy introduction to the study of embryology, Dr. Kahn's Atlas will be found useful.

HINTS ON SEA BATHING. By EDWARD D. WALKER, Extra-Urbem Licentiate of the College of Physicians of London. 12mo. pp. 46. Teignmouth: 1853.

This is a tract for sea-bathers. The hints are useful, and interestingly expressed.

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

HYDROCHLORATE OF AMMONIA IN CASES OF ENLARGEMENT OF THE PROSTATE GLAND.

M. VANOYE, in the *Annales Médicales de la Flandre Occidentale*, speaks favourably of the use of hydrochlorate of ammonia as an internal remedy in cases of engorgement of the prostate. An abstract of his essay is given in the *Gazette Médicale de Paris* for February 26th, 1853.

In illustration of the effects of this medicine, he relates the two following cases:—

CASE I. A labourer, aged 58, who had several times had gonorrhoea, began in 1847 to experience dysuria, which was at first relieved by palliative remedies; but it soon reappeared in a more intense form. When the patient consulted M. Vanoye, in March 1848, this surgeon convinced himself, by examination with the catheter and *per anum*, that the impediment was caused by enlargement of the prostate, principally of the left lobe. Leeches, baths, rest, etc., gave relief; but the cause of the disorder still continued, in spite of the employment of the usual remedies. M. Vanoye then administered the hydrochlorate of ammonia, as recommended by Fischer. He first gave four *grammes* (one drachm) daily; in eight days he increased the dose to eight *grammes*, and soon afterwards to twelve *grammes*. It was given in a mucilaginous vehicle. As no improvement was produced, the dose was increased to sixteen *grammes* daily (half an ounce); but this gave rise to diarrhoea, anorexia, and some symptoms of scurvy. The prostate, however, had begun to diminish in size; and the patient, although weakened by the effects of the medicine, felt considerably better.

After suspending the use of the remedy for twelve days, M. Vanoye resumed it in doses of eight *grammes* (two drachms) daily. At the end of a month, micturition was performed more easily than it had been for some years; and the prostate was of comparatively insignificant size, and incapable of offering any great impediment to the passage of urine. The patient has since been seen, and continues to enjoy good health. When he indulges in an excess of spirituous liquors, there is dysuria for some days; but this has never yet required any energetic treatment.

CASE II. A man, aged 64, who had had vesical catarrh for two years, consulted M. Vanoye in February 1850. A catheter passed freely through the canal. The symptoms were relieved by injection of tar-water; but, at the end of ten weeks, the patient returned with the same disorder, accompanied by incomplete retention of urine. He had evident enlargement of the prostate. The symptoms being unchecked by injections, the internal use of turpentine, uva ursi, and copaiba, M. Vanoye administered at first two, then four *grammes* of hydrochlorate of ammonia daily: he afterwards increased the dose to eight *grammes*. In six weeks, a miliary symptom appeared, on account of which the use of the medicine was suspended. At this time the patient, whose sufferings had gradually diminished, believed himself cured. The urgent desire for micturition was no longer felt; the urine passed freely; and examination *per anum* showed only slight swelling of the prostate. The treatment, however, was continued for nearly two months. The patient, when recently seen, asserted that, except that he passed urine rather frequently, this function was performed as well as it had been when he was in health.

Since the experiments made by Fischer in 1821, and repeated by several German practitioners, no well authenticated account of the action of hydrochlorate of ammonia in urinary diseases has been published. The conclusions drawn by M. Vanoye do not exceed the legitimate deductions from the two preceding cases; and he is far from attributing to this remedy a sovereign and constant power. On the contrary, he acknowledges that it has once failed, although employed under apparently the most favourable conditions.

The hydrochlorate of ammonia must be given in full doses, and continued for some time. It is best borne by the stomach when given in a mucilaginous vehicle, or combined with a bitter extract. It is also very advantageous to employ tonics, diet of soup, wine, and roast meat.

Independently of the reaction of the digestive canal, there are other symptoms by which it may be ascertained that the system is saturated with the hydrochlorate of ammonia, and that its continued use would be productive of disadvantage. From the cases already observed, it appears that these symptoms are a miliary eruption, profuse sweats, and especially symptoms of a scorbutic character, as sanguineous spots, hæmorrhage, and aphthæ. Fischer asserts that the miliary eruption indicates the necessity of discontinuance, or at least temporary interruption, of the use of the medicine.

BUTTER A SUBSTITUTE FOR COD-LIVER OIL.

The *Union Médicale* for May 3rd, quotes the following from the *Répertoire de Pharmacie*.

Cod-liver oil is an aliment which restores and reconstitutes the tissues: in a word, it is an analeptic medicine, by the aid of which the disorganizing action of tubercle is combated. The only inconvenience attending its use is, that it is sometimes difficult of digestion. In this case, M. TROUSSEAU substitutes with advantage for it, the following compound:—

Fresh butter	3 iv.
Iodide of potassium	gr. ʒ.
Bromide of potassium	gr. iij.
Common salt	3 ss.

This butter is eaten during the day on very thin slices of bread.

ALBUMINATE OF IRON AND SODA.

In the *Bulletino delle Scienze Mediche di Bologna* for Nov. and Dec. 1852, as quoted in the *Dublin Quarterly Journal of Medical Science* for this month, M. A. FABBRI suggests a method of meeting the difficulty often experienced in administering iron in the manner most suitable to the organism, and which has led to its being given by some in the metallic or oxidised state, and by others in compounds with inorganic or organic acids. He recommends the use of a compound of albumen (white of eggs), caustic soda, and sulphate of iron. It is prepared so that each ounce contains about four grains of the albuminate, plus an excess of albumen and soda.

MIDWIFERY AND DISEASES OF WOMEN.

MENSTRUATION DURING THE EARLY MONTHS OF PREGNANCY.—SUPERFETATION.

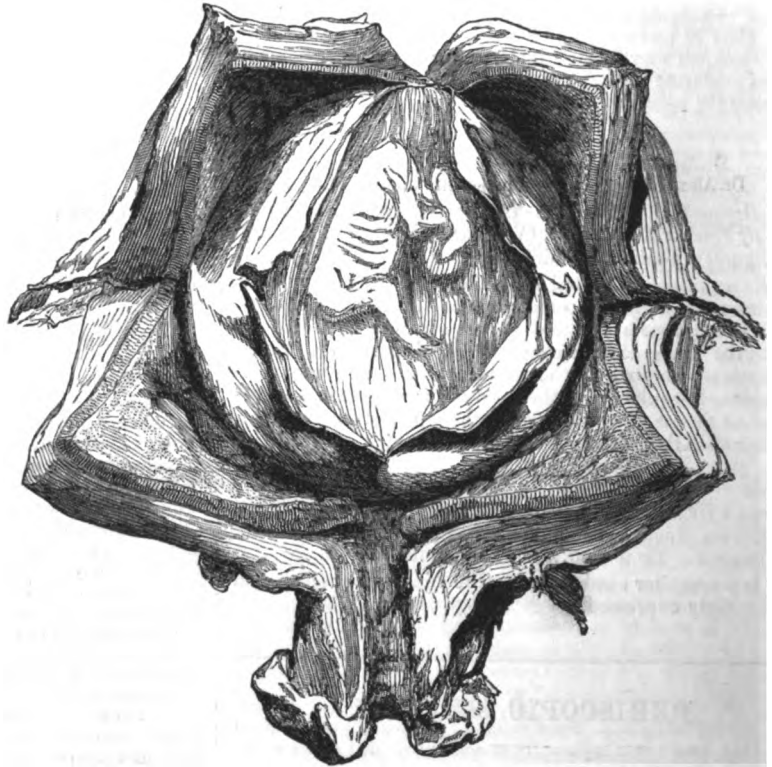
In the *Monthly Journal of Medical Science* for April 1853, Dr. J. MATTHEWS DUNCAN, after stating the views of authors on the nature of the decidua, says:—

Seiler, C. Weber, and other continental physiologists, were the first to lead the way to correct views of the nature of the decidua. They opposed the opinion of John Hunter and his numerous followers, that it resembled coagulable lymph in

its formation, and described it as a peculiar development of the internal membrane of the uterus. Subsequently, E. Weber, Sharpey, Reid, Goodsir, and others, demonstrated the glandular structure of the decidua; and Dr. Sharpey, in particular, threw much light on the whole subject by his investigations into the anatomy of the corresponding parts in the bitch. It is from 1842, however, when M. Coste communicated to the Academy of Sciences the results of his investigations, that we date the complete remodelling of our views on this subject.

The preparation (figured in the woodcut) beautifully illustrates several points in regard to the decidua.

The decidua reflexa has been opened by a crucial incision, and the four flaps turned aside. The fœtus is seen through the membranes; its superior and inferior extremities are well developed. The cavity of the cervix is filled up with the mucous plug.



The woman from whom this preparation was taken, died from causes quite unconnected with the uterus or its functions. Judging from the development of the fœtus, she had arrived at least at the eighth week of pregnancy. The mucous membrane lining the uterus or the decidua vera, is seen to be of great thickness; that lining the cervix is unchanged. The openings of the cervix uteri, and of the Fallopian tube of the left side, are easily seen; that of the right tube has been destroyed in dissection. The decidua reflexa completely covers the ovum, being a thin layer without glands springing from the decidua vera. The cavity of the uterus is still not closed, there being ample space all around the ovum between the two parts of the decidua, from the os uteri to the tubes.

On examining the uterus of a woman dying during or soon after menstruation, we find the mucous membrane of its cavity vascular, much injected, red in colour, soft and permeated by its numerous tubular follicles, having the appearance of white lines in a cross section. It is, in fact, not capable of being distinguished, except by the minor degree of its evolution, from the decidua of pregnancy. We have thus, at every menstrual period, a nidus prepared for the ovum about to be expelled. The human female, thus, at every menstrual period, passes through the first or initial processes of pregnancy.

Most obstetric authors of repute have with great reason doubted or denied the occasional presence of real menstruation during the latter months of pregnancy; but they have very generally admitted its occurrence, very frequently once, more rarely twice, or thrice, after conception. At the same time, they have felt difficulty in admitting its derivation in any case from its ordinary source, seeing that they believed the uterus to become sealed up by the decidua, or otherwise, immediately

after conception. But I have seen anatomical proof of the possibility of this secretion being derived from the lining membrane of the cavity of the uterus, up till the end, at least, of the second month of pregnancy. It would only be necessary to have the mucous plug in the cervix displaced. Now it is quite possible, nay, probable, that the persistence of this plug may sometimes be even injurious, by retaining the sanious or other fluids (hydropertione) which may accumulate above it to an injurious extent; and there is certainly no reason to think that its displacement should involve the ovum in any danger. My dissections of virgin and unimpregnated uteri have frequently, indeed generally, demonstrated the existence of this firm and adherent plug of mucus in the non-menstrual state. From these considerations, it is manifest that the secretion of the menstrual fluid from its ordinary source, and its subsequent discharge, are in no manner impossible in early pregnancy.

Now menstruation proper is a generally received indication that conception is possible. And there is no reason to believe that this does not hold good of the menstruation occurring in early pregnancy. Physiologists have found no difficulty in admitting the possibility of superfetation during the first few days after conception; or, as Velpeau,* Allen Thomson,† and others, specially point out, till the uterus becomes closed up by the decidua. Of this, the authentic instances of twin-births, where one child has been born black and the other white, in accordance with successive impregnations by black and white males, form incontrovertible illustrations. But the uterus is not closed up till about the third month, and then it is so much

* *Traité complet des Accouch.* (Bruxelles, 1840), p. 444.

† *Cyclop. of Anatomy and Physiology*, vol. II, p. 444.

to think superfetation impossible till this takes place.* The uterus does not become closed, and repeated impregnation is not impossible, till the ovum is so large as to force the decidua reflexa into close and firm opposition to the decidua vera. Up till this time (in the third month), there is a sufficiently free communication between the ovary and the vagina, or between the ova and the semen. Numerous physiologists adduce the plug of viscid cervical mucus as an impediment to impregnation during pregnancy; but frequent examinations have convinced me that this plug is dense and well developed, and apparently impassable in the non-menstruating unimpregnated uterus, and as it does not prevent conception then, so there is no reason to ascribe to it this function in early pregnancy.

Without going over the numerous cases of superfetation which are recorded, it may be stated that this explanation will account for all the authentic cases. For if we suppose that the first child is born prematurely, but within the limits of viability, we thus gain two months; and if impregnation may take place between two and three months after conception, we have thus four or five months of interval accounted for between the births of successive viable infants.

Dr. Duncan's view agrees in the main with that advocated by Dr. Alexander Henry, in a paper on superfetation, published in the *London Journal of Medicine* for December 1849. After citing authorities in proof of the occurrence of menstruation during the early months of pregnancy, Dr. Henry writes as follows:—

Admitting the possibility of menstruation taking place during pregnancy, we may inquire under what circumstances it occurs? Many of those who admit its possibility say, with Dr. Davis (who denies that the fluid is menstrual), that the discharge may be furnished by the vessels of the exterior of the cervix and vagina, which assume a periodical catamenial function. It is probable that many cases are of this kind; and that if the menses flow during the later months of pregnancy, they may arise from the vaginal portion of the uterus; but it is unnecessary to ascribe the flow to an extra-uterine source in all cases. The uterus may furnish it from its inner surface. In cases of double uterus, the unoccupied cornu may furnish the secretion. As for the plug at the os uteri opposing its exit, I do not think this is at all a difficulty; for the secretion may remove an imperfectly formed plug.

The periodical occurrence of the catamenial flow during pregnancy, must be considered as a proof of its being connected with ovarian excitement, and consequently with an aptitude for conception. It evidently obeys the same laws as those which usually regulate the appearance of the menstrual secretion.

It may not even be necessary that obvious menstruation should take place. Some women have become pregnant, though they have never apparently menstruated: and it is very possible that the essential phenomenon of menstruation—ovarian excitement—may be present to such a degree, as to allow the possibility of superfetation, provided that no other impediment exist.

CASE OF DOUBLE UTERUS (UTERUS BICORNIS): TWIN PREGNANCY: PLACENTA PREVIA.

This case is related by Professor HOHL, of Halle, in the *Deutsche Klinik* for January 1st and 8th, 1853.

CASE. J. S. N., aged 30, was admitted on May 5th, 1850, into the Lying-in Hospital at Halle. She had walked thirteen miles before reaching the institution. When admitted, she was exhausted, pale, and suffering from violent cough. She had had hæmorrhage from the uterus. Restoratives and rest in bed were ordered.

On the next day, the following history was obtained. The catamenia had first appeared at seventeen and a half years of age, and had recurred regularly and abundantly until her first pregnancy in 1848. On this occasion, the abdomen was enlarged, and the fetal movements felt, only on the right side. At the full period, she was easily delivered of a female child. In the middle of September 1851, menstruation ceased. She felt fetal movements at the end of January 1852; they were stronger and more frequent than in her previous pregnancy, especially in

the horizontal position. During the first three months of her pregnancy, she had periodically a slight hæmorrhage. This went on increasing, and recurred on April 18th, when she was in the seventh month of gestation, being then accompanied with slight pains in the loins; it was more severe, and lasted three days. In the beginning of May the hæmorrhage returned.

On May 6th, the following was her condition. The abdomen was strongly distended on both sides, but flatter in the middle, and somewhat depressed from the umbilicus to the pubes. Here there was a space, measuring below from an inch to an inch and a half, above rather more than four inches in breadth, where percussion gave a clear sound; while there was dullness on each side in a direction from below upwards and outwards. The uterus was felt above the horizontal rami of the pubic bones; and, about an inch or an inch and a half above the pubes, at the point where the clear intestine-sound was heard, it divided into two parts, of which the right was somewhat larger than the left. Each portion was convex on the inner, and somewhat concave on the outer border. Each division reached above the umbilical region, and in each the parts of a child could be felt; in each the sound of the fetal heart was heard, rather higher than usual; and above each horizontal ramus of the pubic bones, the placental sound was heard, somewhat higher on the left side than on the right.

On internal examination, the vagina and pelvis were found normal. The spaces between the cervix uteri and vagina were deeper than usual, resembling two blind canals. The cervix uteri was short, and much larger in circumference than is common; it was of equal width above and below, both externally and internally. The os was open to the extent of an inch; and at the upper part there was an opening on each side, of about half an inch. A placenta lay at the orifice on the right side; it was detached from the uterus in a semicircular direction from before to the right and backwards, as high as the finger could reach. On the left side, also, a placenta hung from the os uteri, and had to be pushed up before the finger could reach the point where the internal orifices met. At this part, the union of the inner walls of the horns of the uterus was felt.

Some hæmorrhage followed the examination, but gradually ceased, and did not recur until next morning, being accompanied with slight pain and cramp. The external os was distensible; the internal orifices, though more distended, were unyielding.

As there was extensive separation of the placenta on the right side, and it was feared that, if delivery were first attempted in the left division, it would become entirely separated, and be expelled before the child, whose heart could still be heard, delivery was first effected, without much difficulty, in the right horn. This division contracted at once, while the left remained unchanged. During the short period during which the patient was allowed to rest, the utero-placental murmur, which had disappeared on the right side, was heard on the left. On the left side, also, delivery was easily performed. The placenta was adherent to the outer wall, and had to be removed. Both children were males, of equal size, weighing each three pounds. The first was apparently dead: it breathed a few times, and died. The second was also dead.

The patient was attacked with pleurisy of the right side on the sixth day; it was followed by effusion. She recovered slowly, and was discharged cured on June 23rd.

In the early period after labour, the correctness of the diagnosis which had been formed—that the case was one of *uterus bicornis*—was confirmed by manual examination, palpation, and percussion, as well as by the introduction of the uterine sound. In fact, the character of the uterus was better marked during this period than it had been during pregnancy. During the return of the uterus to its unimpregnated size, the gradual divergence of the horns could be felt at the upper part. The point where the horns met was scarcely an inch above the orifice; and while the internal orifices slowly closed, the os uteri remained open.

Arnoldi (*Casper's Wochenschrift*, 1839, p. 834) relates a case of double uterus, in which the patient had placenta prævia in three pregnancies. In the third, the midwife found an arm presenting, and Arnoldi was called in six hours after. The patient died.

Meckel, Carus, and Rokitsky have asserted pregnancy in a double uterus to be generally unfavourable, from abortion, hæmorrhage, or rupture of the uterus. But if the cases of pregnancy in double uterus be examined, it will be found that women have borne from three to fourteen children; and the causes of death in fatal cases have been those which occur when the uterus is single. Carus relates a case in which the woman died on the twenty-first day; but she had uterine phlebitis.

* It is now established, chiefly by the researches of Pouchet, Raciborski, and Bischoff, that a mature ovum is ordinarily expelled after every menstrual period. On the occurrence of pregnancy, the maturation of ova in the Graafian vesicles, and their expulsion, are generally arrested till the end of the period of suckling. But this is not invariably the case. In the human female, the sign of ovulation being about to take place is the occurrence of menstruation. The discharge of the menstrual fluid necessarily displaces the mucous plug in the cervix of the pregnant as of the unimpregnated uterus, and thus clears a passage for the conjunction of the ovum of the female with the spermatozoon of the male.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, MARCH 26TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

FIBRINOUS COAGULA EXPELLED AT THE MENSTRUAL PERIODS.

BY EDWARDS CRISP, M.D.

A delicate woman, aged 30, who had been twice pregnant, had leucorrhœa and vaginal discharge, accompanied with pain in the back and loins, and tenderness in the uterine and ovarian regions, sometimes with bearing-down sensations. Menstruation was painful, and often attended with expulsive efforts. Occasionally, clots of coloured fibrin, about the size of almonds, were discharged. Under the microscope, these bodies were found to consist of a net-work of fibrin, in the meshes of which were stellate or granular red corpuscles. Dr. Bence Jones and Dr. Tyler Smith had exhibited to the Pathological Society similar bodies. In Dr. Smith's case, the mass was mostly composed of epithelium.

PROLAPSUS OF THE ANTERIOR WALL OF THE VAGINA AND BLADDER; AND A NEW OPERATION FOR ITS CURE. BY L. B. BROWN, ESQ.

This disease is not uncommon, and is sometimes mistaken for prolapsus uteri; it is generally met with in females who have passed the middle age, and have borne children.

There are three modifications of prolapsus of the vagina, viz.: prolapse of the anterior or posterior parietes of the vagina, or of its entire circumference: the two first are connected with other organs; the third occurs independently. Prolapsus of the anterior parietes of the vagina and of the bladder, or, as it is also called, prolapsus vesicæ, or vaginal cystocele, was the subject of Mr. Brown's paper. Here the vagina, or more properly speaking, the inner membrane only, becomes relaxed, generally from repeated child-bearing; and the urine, having been allowed to accumulate, distends the bladder, and, pushing it downwards, protrudes the yielding vagina. Every fresh accumulation increases the distension, and complete prolapse is the result.

Symptoms. The patient complains of weight and bearing down, and sensations of dragging in the lower part of the abdomen, unpleasantness in walking, and more or less dysuria,—the bladder having, to a great degree, lost its power of contraction. Some patients are obliged to replace the bladder before they can evacuate the urine. On examination, a soft, elastic, fluctuating tumour is felt at the orifice of the vagina; it is of a red or bluish-red colour; and this tumour can be greatly diminished by catheterism; the finger can be passed into the vagina below the tumour, and the os uteri can be felt behind, nearly in its natural situation. The surface of the tumour, when distended, is smooth, moist, and shining; but, when the bladder is empty, it is thrown into transverse folds. There is always very considerable mucous discharge, which is exceedingly irritating to the labia and soft parts; and there is sometimes a very distressing irritability of the bladder, and the urine, when passed, is fetid, and contains muchropy mucous. This arises from a small portion of the urine being always left in the bladder, and, consequently, decomposition of that secretion. This subject has been lately dwelt on in an excellent paper, by Dr. Golding Bird, in the *Medical Times and Gazette*, Jan 1st of this year, headed, "Remarks on Prolapsus of the Anterior Wall of the Vagina, as an Occasional Cause of Fetid Phosphatic Mucous Urine."

This condition may be easily distinguished from prolapsus of the uterus; it is soft and yielding to the touch, and on introducing the catheter, the point will be felt through the walls of the tumour, towards the anus; and, on passing the finger upwards, the os uteri can be felt in its natural position; it can also be distinguished easily from prolapsus of the posterior wall of the vagina, or rectocele, or from inversion of the uterus; that condition preventing the passing of the finger into the vagina at all.

Treatment. This will depend on the extent and duration of the prolapsus. If it be of recent date, and occurring in young females, the treatment should be frequent catheterism, recumbent posture, astringent injections within the vagina, such as alum, oak-bark, infusion of galls, sulphate of iron, cold water, etc., or keeping a bent metallic catheter constantly in the bladder, to which is attached an elastic bag, so that the bladder is constantly empty, and, at the same time, keeping a sponge tent within the vagina, so as to uphold the bladder. Mr. Brown had

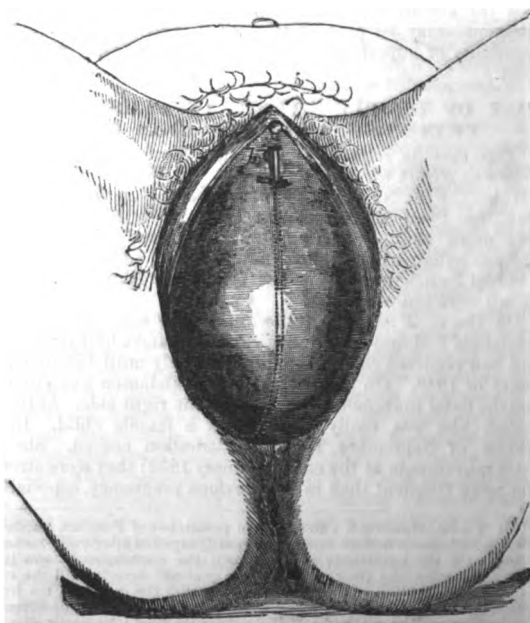
under his care a young lady of twenty-four, the mother of two children, who came up from the country, on account of supposed prolapsus of the womb. This patient was considerably improved by the above-mentioned treatment.

If, however, the prolapsus be of long standing, and occur in females beyond the period of child-bearing, the treatment should be more severe and radical. Some recommend plugging the vagina with pessaries, made especially for this condition. These, however, frequently produce much irritation, and hence the necessity for a surgical procedure. It has been recommended to remove a triangular slip of the mucous membrane, the base being towards the orifice of the vagina, and bringing the edges together by sutures, thus contracting the calibre of the vagina. Others recommend the use of the actual cautery so as to produce a slough, and subsequent cicatrization. M. Jobert, of Paris, encloses within two curved transverse lines, an oval space, more or less considerable, in the posterior surface of the vagina, by means of caustic, so as to form an isolated spot, repeating the application of the caustic till the mucous membrane is destroyed. He then pares the edges with scissors or a bistoury, draws them together, and maintains them in apposition by means of straight needles (the points of which are removed) and a twisted suture. He operated thus on a patient in July 23, 1838, and on two others subsequently, with success.

Mr. Brown proceeded to show the results of a new operation which he had devised for this condition, and related the following case in illustration.

CASE. Martha Triggs, aged 52, had had ten children. She was admitted into St. Mary's Hospital, February 14, 1853, suffering from severe prolapsus of the vagina and bladder, which first began to trouble her nine years ago, after her last child. On the least exertion of walking, or standing even, or coughing in the recumbent position, the tumour came down and protruded through the external orifice of the vagina, to the size of a large fist. On lifting up this tumour, when so extruded, there were seen on the under and posterior surface of the os-uteri, which was dragged down by the vagina, two or three ulcerated spots produced by friction against the posterior walls of the vagina. The patient could, when reclining on her back, replace the tumour. She had a cough from chronic bronchitis, which she generally had in winter, complained of feeling weak, and her appetite was capricious.

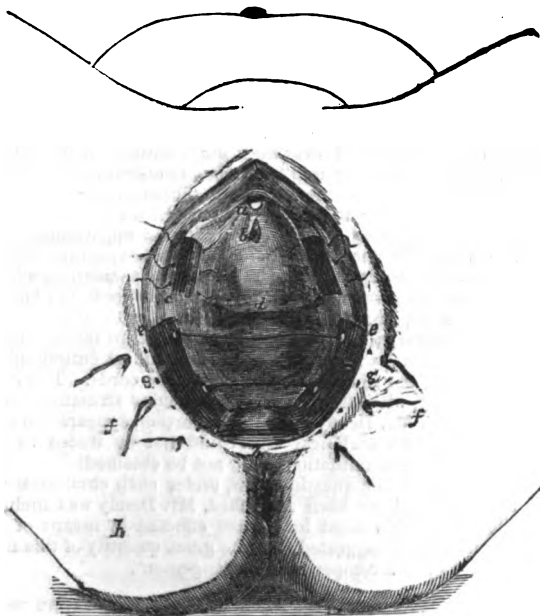
This patient being a servant in place, suffered greatly from her condition, and was obliged always to wear a bandage or napkin to prevent the extrusion of the tumour; and this very support, by the friction and heat, rather increased than diminished the suffering. Her spirits were depressed, and the poor woman became an object of great pity and commiseration. Mr. Clarke, of Gerard Street, recommended her to place herself under the care of Mr. Brown.



a, meatus; b, catheter introduced and seen by dotted lines of tumour.

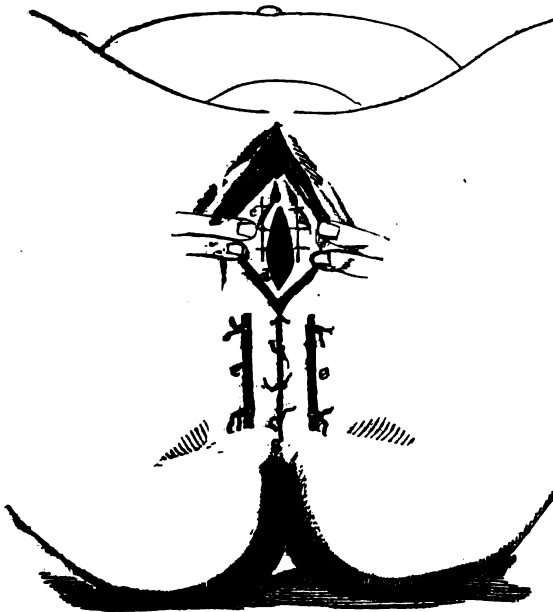
* Vide ASSOCIATION MEDICAL JOURNAL for February 18th, p. 164.

Operation. The patient having been prepared, by emptying the bowels, was on February 15th placed under the influence of chloroform, and then put in the position for lithotomy, each leg being held by an assistant, a third assistant holding up the tumour with Jobert's bent speculum, and pressing it under the pubis in its natural position. A piece of mucous membrane, about one and a quarter inch long and three quarters of an inch broad, was dissected off longitudinally, just within the lips of the vagina. The upper edge of the denuded part being on a level with the meatus urinarius, the edges were drawn together by three interrupted sutures, this being repeated on the other



a, clitoris; b, meatus; c c, lateral incision; d, entrance of vagina; e e, horns of perineal incision; f f, perineal sutures; h, rectum denuded of its vaginal (mucous?) covering; g g, four points of interrupted sutures.

side of the vagina. The next stage of the operation consisted in dissecting off the mucous membrane laterally and posteriorly in the shape of a horse-shoe, the upper edge of the shoe commencing half an inch below the lateral points of denudation, taking care to remove all the mucous membrane up to the edge of the vagina where the skin joined it. Two deep sutures



c c, lateral interrupted sutures; d, orifice of vagina; e e, quill sutures; g, interrupted perineal sutures.

of twine were then introduced about an inch from the margin of the left side of the vagina, and brought out at the inner edge of the denuded surface of one side, and introduced at the inner edge of the other denuded side, and brought out an inch from the margin of the right side of the vagina, thus bringing the two denuded surfaces together, and keeping them so by means of quills, as in the operation for ruptured perineum. The edges of the new perineum were then brought together by interrupted sutures, and the patient placed in bed on a water-cushion; two grains of opium were given directly, and one grain every six hours; simple water dressing applied to the parts; beef-tea and wine for diet. A bent metallic catheter was introduced in the bladder, to which was attached an elastic bag to catch the urine. By this means, the bladder was constantly kept empty. This patient progressed satisfactorily from day to day without a single bad symptom; and on the 22nd, the deep sutures were removed, and the parts found firmly united. The lateral interrupted sutures were gradually removed, and firm union found to have resulted.

February 26th. The deep union was perfectly sound, about three-quarters of an inch thick, the lateral wounds well contracted; the tumour could not be brought down by coughing.

March 8th. The parts were all firmly healed; the patient was much improved in health, with a very cheerful aspect of countenance. She could walk about without inconvenience, and no amount of exertion produced any prolapse. She could empty her bladder with comfort; and all the leucorrhœal discharge, which was so distressing before the operation, had entirely subsided; the offensive smell of the urine had also disappeared. On passing the finger into the vagina, the os uteri could be felt easily in its normal position, and the ulcerated spots which formerly existed on its surface are healed.

On the 10th, she was discharged cured, and resumed her duties as domestic servant.



a, clitoris; b, meatus; c c, lateral vaginal sutures; d, orifice of vagina; e e, perineal sutures; f, new perineum; g, true clito.

REMARKS. The object sought in this operation was the contraction of the calibre of the vagina, which, as may be imagined, was exceedingly enlarged and flabby. The first step of the operation was the contraction of the vagina laterally, so as to prevent the tumour from falling down from above; the second step of the operation was for the purpose of contracting the vagina posteriorly as well as laterally; and, finally, adding to the extent of the perineum, by contracting the orifice of the vagina at least two-thirds, so that, should the prolapse not be restrained by the lateral contractions, it could not extrude beyond the orifice of the vagina, but must necessarily fall upon the new perineum. As was proved by the result, all the objects

sought had been fully attained; and it was scarcely possible to imagine a more satisfactory result from any operative procedure. It will also be observed, that the benefits derived from this operation for vaginal cystocele, will be equally, if not more applicable to vaginal rectocele, as well as to prolapsus of the entire vagina, and also, with some slight modifications, as to the denudation of the mucous membrane, to prolapsus uteri.

DIPHTHERITIC EXUDATION CONFINED TO THE LARYNX.

BY W. H. WILLSHIRE, M.D.

Dr. WILLSHIRE exhibited the larynx and trachea of a child who had died of croup. The exudation was confined to the larynx: there was some tracheitis. Permission could not be obtained to examine the lungs; but during life they had seemed healthy. He thought that, under favourable hygienic circumstances, tracheotomy might have been successfully performed.

DELIRIUM TREMENS. BY W. CAMPS, M.D.

Dr. CAMPS, referring to the diversity of opinion among authors as to the treatment of delirium tremens, believed that this arose from phenomena having been described under this name, which were indeed similar, but which arose from different causes, and required very different modes of treatment. By the term delirium tremens, he meant those symptoms which occurred in persons long addicted to the abuse of intoxicating liquors, which acted on the nervous system, probably through the blood. The principal symptoms were delirium and tremor; the former being most constant. The disease was divisible into three stages. In the first stage, there were lowness of the pulse; coldness and clamminess of the hands and feet; general debility; diminished temperature; giddiness; nausea (sometimes vomiting); the bowels sometimes relaxed, sometimes constipated; nervous tremors of the hands and tongue; depression of spirits; frequent sighing; anxiety of countenance; restless slumbers. In the second stage, the symptoms were increased: the countenance was wild; the patient was troubled with mental and optical delusions, imagining the presence of things round his bed; he was restless and talkative, especially on the objects of his delirium; the temperature of the body might be increased, while that of the extremities continued low; the tongue was coated, moist, and tremulous; the pulse mostly frequent; the urine scanty; the patient would be free from pain, and in answer to inquiries, would frequently reply that he was "quite well". In the third stage, if the case were about to terminate favourably, there was a disposition to sleep, which was often long and critical. In fatal cases, the symptoms increased in violence: the patient struggled violently; and the depression of the nervous and muscular power became increased, attended with low delirium. Death sometimes occurred during convulsions; sometimes was preceded by a diminution of the general symptoms.

In the treatment, general blood-letting was inadmissible. Local depletion by leeches, or cupping, might be sometimes useful. Emetics might be of service in some cases; and an important indication was to attend to the secretions. Dr. Camps referred to several cases which had been successfully treated with chloroform.

Dr. SEMPLE thought that the author of the paper had made a clear subject obscure. He believed delirium tremens to be a well marked disease; and that some cases described under this name, especially one described by Dr. Pratt, of Baltimore, in the *Amer. Journ. of Med. Science* for Jan. 1852, were really cases of ferocious mania, very different from the quiet bustling delirium in the disease under consideration. Delirium tremens was evidently a disease of irritation; it arose from drink, and also from the influence of depressing psychical or other agencies, as despondency, sudden vicissitudes of fortune, etc. In the treatment, the use of bleeding and leeches was absurd: we must employ opium, or morphia, and stimulants.

Mr. WEEDEN COOKE had administered chloroform by inhalation successfully in several cases; and would henceforward at once proceed to its use.

Dr. BOON HAYES had treated five cases of delirium tremens from laudanum drinking, which is frequently practised in large manufacturing towns to the extent of an ounce or an ounce and a half daily. These cases are most difficult to treat; and yet laudanum must be given if any success is expected. He had also seen cases arising from the abuse of tobacco: as in sailors, who would fill a teapot, and smoke through the spout. He had seen a dry tongue from the outset in delirium tremens. In cases where the patient showed a tendency to injure himself or others, he might be overawed. In the use of chloroform, precaution was necessary, on account of the frequent flabby condition of the heart, as shown by *post mortem* examinations of cases

of delirium tremens. He was, however, not afraid to give chloroform, and had seen it used successfully.

Dr. RADCLIFFE alluded to the sensibility of patients to external influences. A less amount of stimulants could be borne at morning than at night; less in the summer than in the winter. Under these circumstances, twelve hours might produce a difference involving a change from a moist to a dry tongue. He had seen two cases in which chloroform had been given in half-drachm doses, frequently repeated, without opium.

The PRESIDENT, Dr. RYAN, Dr. WINN, and Mr. BULLOCK, briefly addressed the Society on the subject of Dr. Camps' paper.

SATURDAY, APRIL 2ND, 1853.

TYLER SMITH, M.D., Vice-President, in the Chair.

CASE OF MONSTROUS BIRTH: FUNIS WITHOUT UMBILICAL VEIN. BY W. C. DENDY, ESQ.

Mr. DENDY exhibited drawings illustrative of a monstrous fœtus, of which a lady of highly nervous temperament had been delivered on the preceding Monday. There was an enormous gush of liquor amnii; the fœtus was born in half an hour, cried for three or four seconds, and died. It was apparently of the seventh or eighth month. The head was a specimen of the class cat's-head (*katzenkopf* of the Germans); it was thrown back, so that the face looked upwards. From the vertex to the lumbar region extended a red bloody fungous mass, with slight disposition to the formation of a spine. The abdomen felt distended and hard; when it was open, it was found almost entirely filled with the liver; the small intestines being like cords. The anus was a mere slit, without any trace of muscular structure. The funis, of which Mr. Dendy exhibited a portion, appeared to contain no vein. An umbilical vein could not be traced to the liver. A minute examination could not be obtained.

With regard to the question, how, under such circumstances, the fœtus could have been nourished, Mr. Dendy was inclined to believe that this must have been effected by means of the liquor amnii; and suggested that the great quantity of this fluid might have been a compensatory arrangement.

EPITHELIAL CANCER OF THE HAND IN A MAN SIXTY-EIGHT YEARS OF AGE: AMPUTATION: RECOVERY. BY WEEDEN COOKE, ESQ.

The patient, a tall, well-built agricultural labourer, came under Mr. COOKE's care in the Cancer Hospital, suffering from epithelial cancer extending over nearly the whole of the back of the hand, attended with ulceration and profuse purulent discharge. The arm was amputated three inches below the elbow. The case went on well for a week, when inflammation of the stump set in, accompanied with separation of the flaps. At the same time, phlebitis—which Mr. Cooke attributed to the tying of a vein during the operation—appeared in the right leg and foot; but this subsided in a fortnight. The treatment consisted in generous diet, with porter, and cinchona with acids. The stump was healed in a month. Three months after the operation, the stump was looking healthy, and there was only some weakness of the leg.

Mr. Cooke remarked on the tolerance of operations in old persons, some of whom appear to have more vigour at seventy years of age than others have at forty. Such subjects, as a rule, must be well supported and carefully watched; while in the young the inflammation and fever would require to be controlled by antiphlogistics.

THE IMPROPRIETY OF PERFORMING TRACHEOTOMY IN CASES OF EPILEPSY. BY C. B. RADCLIFFE, M.D.

Dr. RADCLIFFE read and commented on the histories of six patients in whom tracheotomy had been performed for the relief of epilepsy, in accordance with the suggestion of Dr. Marshall Hall; and also referred to a case mentioned in *Schmidt's Jahrbücher*, in which a fistulous opening existed in the trachea, from an attempt at suicide made by an epileptic patient. In this case, the fits were equally frequent and violent, whether the aperture were closed or open.

One of the patients, whose case has been related by Mr. Anderson, had died in an attack of epilepsy. On *post mortem* examination, there were found some osteophytic growths on the skull, much congestion of the vessels of the scalp and brain; collapse of the lungs; and the heart was full of blood, and surrounded with fat. Before death, the fits had been more severe than usual.

In some of the cases, the relief after operation was attributable to the occurrence of bronchitis or fever; and it might have been nothing more than the freedom of the

for a time, which previously existed. Epileptic fits are often absent for a time without obvious cause. In six out of the seven cases referred to, the attacks had returned.

Dr. Radcliffe did not believe that there was any proof of the existence of laryngismus. There was no stridulous inspiration following the restoration of the power of breathing, which ought to occur. The laryngismus stridulus of children showed that closure of the larynx might occur without the production of convulsions. It was doubtful, also, whether laryngismus could occur in the adult, on account of the change in the anatomical structure of the parts concerned.

Dr. R. BARNES said that, in the fatal case alluded to by Dr. Radcliffe, a portion of the heart had been found by Dr. Jenner to be in a state of fatty degeneration. Dr. Marshall Hall had not recommended tracheotomy as a cure for epilepsy, but as a means of relieving a symptom which occurred in epilepsy and other diseases. It was not fair to suppose that Dr. Hall had asserted laryngismus to exist in all cases: the recurrence of the fits after operation showed that there was some other cause.

Dr. TYLER SMITH said, that stridulous inspiration would not be expected to occur as in infants. Perhaps, however, the peculiar cry attending epilepsy, and the hissing noise in puerperal convulsions, were of this nature. Lividity of the face, which had been referred to by Dr. Radcliffe, might be produced from other causes than laryngismus—by spasms of the muscles of the neck.

Mr. DENDY was unfavourable to the performance of tracheotomy: the constitutional treatment was the chief point to be attended to.

Mr. HENRY THOMPSON referred to a case on which he had operated three months ago. On visiting the patient this day, he for the first time witnessed him in an epileptic fit. There was loss of consciousness, and slight convulsions; but the patient had recovered in ten minutes. Previously to the operation, coma used to continue for four or six hours. The patient was formerly in a state approaching idiocy; but his countenance had become much improved.

SATURDAY, APRIL 9TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

CHRONIC RHEUMATIC ARTHRITIS. BY EDWIN CANTON, ESQ.

This disease affected both the small and the large joints, producing deformity and impairment of functions. It had also been observed in the articulation of the lower jaw, impairing mastication and speech; and in the spine, producing deformity, and interfering with the functions of the viscera. In the joints, exostoses were formed, and ossific deposits in the tendons, irritating the nerves, and impeding motion. It was possible that the ossicles of the ear might be affected. According to Dr. Fuller, the disease attacked weak or unhealthy subjects, or robust persons who have been enfeebled by disease. No age or sex was free; but it mostly occurred from the age of thirty-five upwards. In the female sex, it frequently occurred in connexion with suppressed menstruation.

The morbid appearances were loss of the articular cartilages, and denseness and porcellaneous structure of the bones. This was formerly thought to be due to new deposit; but Mr. Quekett had shown that the extremities of the Haversian canals became filled up and polished by friction. The interarticular ligaments were largely absorbed; and the fringes of synovial membrane much hypertrophied, becoming villous, shaggy, and vascular. Loose bodies, either free or pedunculated, were often present in the joints. The round end of the bone was often expanded, and its socket spread out in proportion; and both were surrounded by irregular osseous growths. The ligaments were partly absorbed, and partly hypertrophied; and the muscles of the limb were atrophied, and often in a state of fatty degeneration. The great distinction between this chronic rheumatic arthritis and inflammation lay in the deposition of bone, as well as removal, in the former disease.

The symptoms were dull, heavy, wearisome pain, stiffness, and impaired motion. The pain was most severe at night; the stiffness in the morning. There was no redness nor heat; but the joint slowly enlarged. Pressure produced no pain; but, as the disease advanced, rotation of the limb gave rise to pain, and was attended with a grating sound, from removal of the cartilages. There was little or no constitutional reaction; the bowels were generally costive. Ulceration, suppuration, or ankylosis, did not occur in the affected joints.

An attack sometimes appeared referrible to violence; and such instances, occurring in the hip-joint, had often, without doubt, given rise to unjust impeachment of the skill of the surgeon for not detecting an intracapsular fracture of the neck of the bone. The case of the late Mr. Matthews, the comedian, related by Mr. (now Sir William) Snow Harris at the meeting of the British Association in 1836, was adduced in example.

Again, a patient already labouring under chronic rheumatic arthritis, may, from injury, have symptoms closely resembling those of fracture of the neck of the femur within the capsule.

Errors of diagnosis, Mr. Canton believed, were more frequently committed in the shoulder-joint, where dislocation upwards was, by some writers, as Mr. Fergusson, said to be common. In these cases, the intra-articular tendon of the biceps muscle was lost, and the head of the bone was hence drawn up against the acromion. Mr. Gregory Smith and Mr. Curling had described alleged cases of dislocation of the joint upwards; but had subsequently admitted the justice of Mr. Canton's explanation.

The indications of treatment were, 1, to correct the faulty state of the assimilating function; 2, to attend to the excretory organs; 3, to employ means to remove and arrest morbid deposits. Imperfect assimilation being the *fons et origo mali*, the diet must be attended to. Blue pill, colchicum, and taraxacum, must be given to improve the function of the liver; and the skin and kidneys must be acted on. Bitter infusions, iron, iodide of potassium, and quinine, should be employed. Local applications, as blisters, dry cupping, and the establishment of discharge in the neighbourhood of the joint, should be more employed than they are at present.

Mr. PILCHER had observed cases of apparent dislocation of the shoulder-joint in old women, and referred them to over-use of the limb and imperfect nourishment. He referred also to the occurrence of pain in the shoulder in persons apparently in health, and without any other indication of rheumatism. It might last for weeks or for years—even through life; and sometimes it subsided in consequence of, sometimes without, treatment.

Dr. OGIER WARD inquired whether Mr. Canton had in these cases found deposits, as in gouty subjects.

Dr. FULLER believed that many cases of enlarged joint could not be referred to rheumatic arthritis, although after death there was no difference in the appearances when rheumatism had previously existed, and when it had been absent. In the treatment, local applications were too much neglected. He had found ointment of iodide of potassium, or of biniodide of mercury, very useful. He had ascribed these cases to defective excretions, as contrasted with those arising from excessive formation of morbid matter. The tongue is often clean, the urine of low specific gravity, and the secretions generally defective; and we must improve the general health, and then stimulate the excretory organs.

Mr. RICHARDSON suggested that the dyspepsia, instead of acting as a cause of the disease, might rather be an effect of the incapacity for exercise resulting from rheumatism.

Mr. ROBINSON recommended attention to the diathesis of the patients in whom rheumatic arthritis occurred. In the phosphatic diathesis, there was great proneness to osseous deposits. The treatment was very difficult, because the disease may have existed for years before revealing its presence by pain. Besides, patients did not often allow sufficient time for treatment to have a chance of doing good.

Dr. RADCLIFFE had found attention to hygienic rules of great service. He had seen several cases relieved by being removed to a light and airy apartment.

Dr. DANIELL had found the most intractable cases of rheumatism in the Bath Hospital to be those which had previously been treated with colchicum and calomel. He had observed great benefit produced by the external application of equal parts of wine of colchicum and compound tincture of camphor.

Mr. CANTON had in all cases found evidence of rheumatic disease in more than one joint. He had not found gouty deposits; but the deposits in the joints and tendons might be their analogues. In intracapsular fracture, there was no change in the head of the bone; and this would in examination of specimens distinguish this injury from a case of rheumatic arthritis.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, MAY 2ND, 1853.

JAMES BIRD, M.D., in the Chair.

COMPARATIVE MORTALITY OF LARGE TOWNS AND RURAL DISTRICTS,
AND THE CAUSES BY WHICH IT IS INFLUENCED.

BY JOHN SNOW, M.D.

The shorter average duration of life in large towns, as compared with rural districts, depends on the greater mortality in early childhood, and the smaller number of adults who attain to old age. In Liverpool and Manchester, half the children born die before they are five years of age, the numbers being 52 and 51 per cent. In Birmingham, 48 per cent. of the deaths occur before this age, and in London rather more than 40 per cent.; but in Wiltshire and Surrey only 31 per cent. The greatest number of deaths in any decennial period after the age of five occur, in Surrey, from 65 to 75 in males, and from 75 to 85 in females. In Manchester, Liverpool, and Sheffield, the highest mortality after early childhood is from 35 to 45 in males, and from 25 to 35 in females, or forty years earlier than in the same sex in London. In Leeds, Blackburn, Preston, Stockport, Macclesfield, and some other towns in which textile fabrics are manufactured, the greatest mortality in both sexes, after infancy is passed, occurs from 15 to 25; although in two registration districts, not more than twenty miles from Leeds, the highest mortality in both sexes is from 75 to 85, or sixty years later than in these towns. In London, however, the mortality, at the period immediately succeeding to puberty, is lower even than in the rural districts, more especially in the female sex. This is shown by the tables suspended in the room, which are compiled from the Ninth Annual Report of the Registrar General, and exhibit the deaths in London and Surrey at different ages, in relation to the deaths at all ages to the whole population, and also to the numbers living at each of the ages specified. On comparing some of the worst districts of London, such as St. Giles' and Clerkenwell, with the more distant and rural part of Surrey, the advantage of the town over the country in the small number of deaths at this period of life is more striking. In St. Giles', the annual mortality in the seven years 1838 to 1844, between the ages of 15 and 25, was 50 males and 68 females to 10,000 of each sex living at that period of life, whilst in the Guildford district the numbers were 77 males and 90 females.

On examining the Tenth Annual Report of the Registrar General, all the chief diseases of infancy are found to be more fatal in London than in the adjoining rural districts. Convulsions, hydrocephalus, and diarrhoea, probably owe their greater fatality to improper food and general treatment, whilst the constant presence of various infectious diseases in London increases the mortality by affecting the children at an earlier average age than in the country, where they pay only occasional visits, and thus enable many of the children to escape till a later period, when certain of them, as whooping cough and measles, are hardly ever fatal. A proof of the frequently later attacks of these diseases in the country, is the fact that the mortality from scarlet fever in the South Midland district, from the age of 10 to 20, is much higher than in London, although under 5 years, when the chief mortality occurs, it is greatest in London.

The diseases which cause the mortality of the rural districts to exceed that of London, from fifteen to twenty-five years of age, are phthisis and typhus, which are more fatal at this period of life in the country than in London. Typhus indeed is more fatal at all ages, and in both sexes, and phthisis is much more fatal in the female sex, in whom it occurs also at an earlier period of life than in London. The probable cause of the great fatality of phthisis amongst young females in the rural districts is deficient nourishment, consequent on the difficulty of obtaining employment. Typhoid fever is probably less fatal in London than in the country, on account of the numbers who gain an immunity from it in after life, by passing through it in childhood, when it is less fatal, and generally goes by the name of infantile remittent. It is chiefly to phthisis that the great mortality of both sexes between the ages of fifteen and twenty-five in certain manufacturing towns is due.

The above circumstances show that the high mortality which prevails in most large towns is caused more by the habits and occupations of the people, than by the mere fact of their living in towns. Dr. James Bird, Mr. Pilcher, Mr. Walsh, Dr. Chowne, Dr. Camps, Dr. Burford Carhill, and the author, took part in a discussion which followed the reading of the paper.

ASSOCIATION INTELLIGENCE.

SOUTH WESTERN BRANCH.

On Tuesday, April 26th, a meeting was held at the Devon and Exeter Hospital, for the purpose of receiving the report of the committee appointed by the South Western Branch of the Provincial Medical and Surgical Association, to confer with the promoters of the Medical Reform Bill. The attendance of the profession generally had been requested; and, accordingly, a considerable number of gentlemen interested in the measure were present.

Mr. DE LA GARDE having been called to the chair, said:—I have convened this meeting with the entire concurrence of the committee appointed by you at our last annual meeting, to confer with the central committee, who have taken in hand a Bill for Medical Reform. I have called you together reluctantly, because I know with how great a sacrifice of feeling each individual of our profession quits for a few hours the field of his practice; and I fear you will think I have done so on insufficient grounds, should you judge from the little you may have collected from the organ of the Association. You have, doubtless, seen short editorial notes in our Journal, which, I perceive, has very properly ceased to call itself provincial, leading you to this conclusion, that cordiality alone prevails between ourselves and the central committee. Our suggestions have been so gracefully received, our objections so blandly met, that you could not feel otherwise than satisfied: and you have, probably, said within your own hearts, "here is peace at last—differences end—all are agreed—they leap to anticipate each other's views—*les beaux esprits se rencontrent*". Gentlemen, I must undeceive you. I have to announce with deep regret, that the correspondence has been most unsatisfactory throughout. We found a Bill, the proper title for which would have been "A Bill to authorize certain persons (to be nominated hereafter by some authority as yet undetermined) to levy on medical men sundry taxes, and to apply, or otherwise distribute, the proceeds of the said taxes in such manner as, to them, shall seem best, and for other purposes." I will not allow myself to entertain a doubt of the integrity and benevolence of those who framed that Bill; but such guileless men can hardly legislate for a hard-hearted and censorious world. I really doubt whether they were themselves aware of the oddity of their own scheme, until we drew their attention to this, its characteristic feature, for they gave it up at once. And here terminated the success of our negotiation. Let me ask you to give your earnest attention to the report which will presently be read, and more especially to the following subjects:—A registration, right in its general principle, but vexatious, harassing, and inefficient, is to be maintained.—A scheme of education wholly unadapted to ordinary practice: a scheme which we feel certain will, at an early day, call unqualified persons into open practice, the penalties of this Bill notwithstanding: a scheme which will not so much as inquire whether any instruction can be given, save in colleges, which are to have a monopoly of teaching that which we assert they are not qualified to teach—this is to be maintained. A board whose very inquiry will oppress, and, perchance, ruin the practitioner, whose merited success renders him an object of jealousy; but which will be wholly unable to cope with the supple licentiate who adopts the fashionable delusion of the day: a board which may suppress a failing, but which will itself quail before a thriving quackery—this is to be maintained. As regards the composition of the council itself: the circumstances of medical men in the country differ so widely amongst themselves, and more particularly from those practising in London, that we thought a certain proportion of the council ought to be derived from districts remote from each other and from the metropolis. You will only render me common justice in supposing, that I for one never contemplated that silliest of fantasies, a Medical Parliament, which has, indeed, found vehement partisans, but which must have resulted in our confiding our affairs to those in whom no patient would confide; but I do concur with others in thinking that no bye-law should be passed, no course of instruction established, without consulting those eminent physicians and surgeons who are to be found here and there throughout the land, and whose daily, cordial, and most confidential intercourse with other practitioners—whose high position, and whose independence of those ordinary circumstances which make or mar our prosperity, would render them no less invaluable as advisers in the council than as advocates and expositors of the wishes and requirements of their less dis-

tinguished—perhaps, in some degree, of their less fortunate neighbours. In this matter some little concession has been made. Soft words, fond hopes; but no guarantee, no assurance—we understand such blandishments. Let me entreat you, for the sake of those who come after us, to attend to another and a stranger regulation of this Bill. The candidate, after a collegiate curriculum, determined on all points by the sole authority of the Medical Council, will be required to appear before a Board of Examiners appointed by that Council out of the College of Physicians and the College of Surgeons. By that Board he will be examined as to his fitness to practise medicine, surgery, and midwifery. From that Board he will obtain a license (for which he will pay) declaring him fully qualified to practise those several branches of medicine. But this license will not entitle him to practise without incurring all the penalties of the registration clauses, unless he be registered. Well, then, let him go to the registrar, produce his license, and tender his fee for registration. The registrar's duty is to decline that fee, and to inform him that the license acquired by his examination before the united Board of Physicians and Surgeons, under the authority of an irresponsible Medical Council, is worthless and invalid until he has undergone another examination, at which he may be declared incompetent, either at the College of Physicians or the College of Surgeons, the very bodies whose representatives in the Council's Board of Examiners have already pronounced him qualified to practise. I need not observe that this is an unworthy device to extort a second fee. It was admitted to our committee, when I was present, that this second examination is superfluous and indefensible except on the score of expediency: but that it was necessary to conciliate the College of Physicians and the College of Surgeons, as those time-honoured bodies were found to stand too high in public estimation to be set aside by any medical council that is to be. I think those learned and influential bodies are quite justified in thus resisting any invasion of their rights. They simply perform their duty in defending that which they were constituted to defend; but recollect, the individuals who are hereafter to enter our profession are to be the victims of this compromise. This vexatious and anomalous proposal is to be maintained. There are other and serious objections, but we are less personally concerned in them. Yet, in the face of our protest—and bear in mind, gentlemen, all the principles of that protest were unanimously affirmed at our general meeting, last summer, in this very room (when there were present sixty members, none of whom so much as knew that medical reform would be mentioned—men from all parts of Devon and Cornwall, and of whom seventeen were practising physicians)—in the face of that protest, Lord Palmerston has been assured that “the Bill had received an unparalleled amount of support”—“that it was warmly supported by a vast majority of medical practitioners throughout the kingdom”—a vast majority of those practitioners never having thought, or cared, one iota about the matter; and that, “in fact, no opposition had been made to its principles, though some exceptions might have been taken to its details”. A curious and instructive example how far a sanguine temperament may mislead a mind—kind, candid, and just, I will assume it to be—thus occupied by its own notions to the exclusion of all others. That there are anomalies in our profession, all must admit; though I suspect, as personal grievances, they rarely affect us. Still they ought to be corrected; but they will not be corrected by the present Bill, whilst they would have been by that of Sir James Graham. But his Bill, unhappily, comprised a gratuitous affront, which was resented by the mass of the profession with startling unanimity. Instead of erasing the offensive part (which was merely an excrescence attached to the Bill, and scarcely connected with it), crotchety men interposed with their stupid advice, and soon made it so ridiculous, that its author, like a high-spirited gentleman, withdrew it in disgust—never, we may fear, to be again revived. With the present authorities we have some cause to be dissatisfied. The College of Physicians refused, greatly to their discredit, to superintend the profession when invited to do so; and so it happened that the charge of directing medical education was assigned to a civic corporation in London. As regards the encouragement of medical science and literature, the College of Surgeons have amply redeemed every pledge by their museum, their library, and their lectures; but they have shown little sympathy towards the members of their college generally. Will the new Council show more? Will they not be powerful to annoy, and powerless to protect? Beware of change; remember King Log and King Stork.

Dr. SHAFER, having been called on to read the report, explained that the committee had been appointed at the annual

meeting of the Association at Exeter, in September, to consider a draft bill of Medical Reform, which had been published in the Journal of the Association. The committee had presented a report to the council; and on the 10th November an amended draft appeared in the Journal. On the 24th Nov. the report was also published there, accompanied by a remark from the editor, that the objections it contained had been met in the new draft. The committee were not of this opinion, and had, therefore, drawn up another report, which they now presented. Dr. S. then read the report. After stating that the most objectionable parts of the bill appeared to be still retained, and that, as the construction and management was now removed from the Association to Lord Palmerston, it was necessary that any objections should be submitted to his lordship, the report proceeded to enumerate the objections entertained, which were, in substance, as follow:—

“That the 3rd clause of the draft Bill is deemed objectionable, because, in the appointment of the Medical Council for England, no adequate representation of the provincial medical practitioners is ensured, since it does not direct the appointment of any provincial medical practitioners. It would obviously be useful to the general interests of the profession, that perhaps not less than one-third of the members of the Medical Council should be selected (as equally and fairly as may be) from amongst those medical practitioners who are resident in the various counties of the kingdom. This clause is also objectionable from its entirely passing by all consideration of, and representation by, the Company of Apothecaries.

“That the 12th clause is objectionable, from its not sufficiently securing the monies to be derived directly from the whole mass of the profession; these being, as the clause now stands, vested solely in the council instead of in trustees thereto specially appointed, and separate from the council and examining board.

“That the 14th clause is objectionable, inasmuch as, while (together with schedule A) it confers the name and title of a ‘licentiate in medicine’, and grants a ‘license to practice medicine’, with the express statement that the person so designated and so licensed is ‘duly qualified to practise medicine’; both the title and the license to practise are, by subsequent enactments of the Bill, practically set aside.

“That the 15th clause is objectionable, from its omitting to direct, previously to the commencing of the required collegiate education, some time or form of studentship, together with a matriculation examination, whereby the possession of a previous sufficient elementary medical and general knowledge may be ensured. This clause is also objectionable from its neither recognising nor giving any special privilege to the extensive means of education afforded by provincial hospitals, with the exception of those few to which ‘medical schools’ may be attached. The effect of this enactment and of these omissions cannot fail eventually greatly to retard the attainment of sound practical information, as well as to be prejudicial to the personal interests of the profession at large. Medical education will thus be virtually, if not actually, transferred to the universities, or medical schools, to the subversion of that excellent and extensive means of practical medical instruction afforded by pupilage in provincial hospitals and apprenticeship under private practitioners, which has so long existed, and which has mainly contributed to form the useful and intelligent class of medical men now practising throughout the country. Doubtless ‘universities’ and ‘medical schools’ are most admirably adapted to convey information in medical science; but they must not be deemed the only sources whence early medical information is to be obtained, and if relied on solely, or even mainly, will fail to produce a useful and practically instructed class of medical men, trained to those habits of business which, in the general private practice of this country, are no less indispensable to the success of the practitioner than to the safety and satisfaction of the sick he has in charge.

“That the 17th clause is objectionable from its peremptorily obliging those who have been examined and licensed by the council (under the 14th clause), to undergo, in order to registration, a further examination by the College of Physicians or by the College of Surgeons; especially as the Bill in no way provides that these bodies shall be satisfied with the ‘curriculum’ prescribed by the council as necessary to their own examination. Moreover, by forcibly obliging the ‘licentiate in medicine’ to attach himself to one or the other of these bodies, it subverts the usage of this country, which has established, both nominally and practically, three divisions of the medical faculty, viz., the general practitioner, the surgeon, and the physician. Again, this clause is objectionable from its omitting in

any way to allude to, or to define the position of those who may, subsequently to the passing of this Act, have medical degrees conferred on them by the London or other British universities, with the exception of those of Oxford and Cambridge. The degrees thus derived are treated by this proposed Bill, apparently as regards title, and certainly as regards qualification, as worthless; those holding them being actually disqualified from practice, unless they shall be registered under this Bill, which can only be after an examination by the council, and by the Colleges of Physicians or Surgeons. On reviewing the whole bearings of this clause, it cannot but be regarded as anomalous and unjust; and though its provisions may probably be a means of averting opposition to the Bill generally, on the part of the College of Physicians or Surgeons, by guaranteeing to these bodies their present, or an increased source of income, yet this will be done at the expense of the future candidates for practice.

"That the 18th clause is objectionable, from its obliging medical practitioners annually to apply for, and to pay for, the certificate."

The portions of the report relating to the various clauses were then read over separately, and, after a few remarks, unanimously agreed to.

Mr. JAMES moved as a rider to that part relating to the 17th clause, that "the meeting are of opinion that, in dealing with the preceding objection, the purposes intended now would be much facilitated if the College of Surgeons were relieved from the burden of maintaining the Hunterian Museum, which they should still continue to superintend and govern as they have hitherto so ably done; and a very moderate assistance from the legislature would provide for this."

Mr. EMPSON having seconded the motion, it was agreed to.

Dr. SHAPTER proposed a resolution, expressing the satisfaction of the meeting at the introduction of a measure for the due regulation of medical education, and requesting the chairman to forward the resolution and the objections entertained against the proposed Bill to Lord Palmerston.

The motion was adopted.

On the proposal of Mr. Empson, the following motion was also passed:—"That Dr. Pennell, Dr. Shapter, Mr. Barnes, Mr. James, Mr. De la Garde, Mr. Pridham, Mr. Empson, Mr. Howard, and Mr. Kempe, be appointed a committee to watch the progress of the Bill."

A vote of thanks to the Governors of the Hospital for the use of the room terminated the proceedings.

YORKSHIRE BRANCH.

THE Annual Meeting of the Yorkshire Branch of the Provincial Medical and Surgical Association will be held at the Museum of the Yorkshire Philosophical Society, on Thursday, May 12th, under the presidency of R. Hey, Esq. The members and visitors will dine together after the meeting.

WM. MATTERSON, JUN., *Secretary*.

York, April 25th, 1853.

MEDICAL BENEVOLENT FUND.

THE monthly meeting of the Committee was held on Tuesday, April 26th. Two new annuitants were elected at £15 a-year.

The following cases were presented:—

- I. A general practitioner in the north of England in great distress. Voted £5.
- II. The father of the family is insane, and his children, eleven in number, are reduced to very straitened circumstances. Voted £10, to be placed in the hands of a judicious friend, so that it may be applied as circumstances indicate.
- III. A literary medical man in the country, well known and highly esteemed, reduced to the greatest distress and privation, and having a large family. Voted £15.
- IV. A young man, an assistant, with a very high character, who is obliged to leave his situation, and make a voyage to a milder climate. Voted £10.
- V. An aged medical man of high character, in reduced circumstances, requiring aid to enable him to carry on the battle of life. Voted £5.
- VI. The widow of a highly respectable medical man in the country, with a very large family, five of whom are entirely dependent upon her, and her own health not being good. Voted £10.

Several other cases were discussed and dismissed, some from

a failure of the proper recommendations, others from the absence or deficient evidence of unexceptionable moral character.

Since July 1st, 1852, the sum of £539:15:0 has been received in subscriptions, and £354:16:0 in donations, inclusive of dividends; there has been paid for benevolent aid £519, and in expenses £51:12:5, together £570:12:5, leaving the sum of about £30 due to the Treasurer, which by the grants at the meeting was increased to about £85. It is hoped that the friends and subscribers to the Fund will do their best towards liquidating this debt.

EDITOR'S LETTER BOX.

PRESSURE OF THE ASSESSED AND INCOME TAXES ON MEDICAL MEN.

LETTER TO THE EDITOR.

SIR,—Will you permit me to place before the readers of the ASSOCIATION JOURNAL the case of my friend Mr. James Fagg, surgeon, etc., practising at Pitside, in the parish of Drainless, Cheshire, as I know it is one among hundreds which might be brought forward to prove how unequally the assessed and income taxes press on medical men, compared with those who draw their incomes from property? The following statement is in Mr. Fagg's own words. I am, etc., J. R.

Manchester, April 30th, 1853.

"I am thirty-eight last birthday, thirteen years married, have seven children, and have been a practitioner of medicine at Pitside seventeen years and a few months. As my duties lie over a wide circuit, I have to keep a man servant, a gig, and two horses, one of them partly for the saddle; and the sum on which I have paid income tax, on the average of the last three years, is £505:10. As neither my wife nor myself has private fortune, it was deemed prudent, as children came very fast, that I should assure my life, which I accordingly did, five years ago, for £2,000, the annual payment on which is £52. Besides my man, gig, and horses, on which I pay the assessed taxes as if I were a squire (notwithstanding they are essential to my business), I pay a heavy house tax for a large, straggling dwelling, the only convenient one I can obtain, though double the size I should think of occupying except on account of business. The tax-gatherer, you will observe, makes no difference between what is *necessary* for myself and family merely, and what is necessary, in addition, for business. Moreover, no one, seemingly, takes the trouble to consider that my income is not only not from property, but that it is not even a life-interest—that, while the rector of our parish has his £500, which he holds for life, my income depends on my health and strength: supposing accident or illness, it terminates at once. In speaking of my paying the tax on an income of £505:10, you must observe that I have had to take £52 from this sum for life assurance, and that the £1:10:4 income tax on the £52 is not deducted, but that I pay on the whole of the income.

"Some of these things have galled me a great deal. Before the abolition of the window tax, I was in the habit of paying for twenty-one windows, four of which lighted my consultation-room and surgery; yet these latter were for business purposes alone; whereas our neighbour the grocer, whose corner shop (a part of his house) has three windows, paid no window tax on these. And in like manner I have been reminded of the unequal pressure of the other assessed taxes, when I have seen a number of my patients, opulent farmers, sporting their riding-horses and dog-carts, on which, because they were kept for business, there was no tax. You will perceive, therefore, that the surgeon, whatever his income turns out to be, has to pay the tax upon it, as also too upon the means or implements whereby alone he can earn an income, to be thus taxed, viz., his groom, his vehicle, horses, and house; upon these he has to pay the assessed taxes precisely as if he were an independent gentleman, the squire of the parish himself. Surely this is unjust on the part of government. I am a loyal man, and always will be; but this unequal dealing is very trying to the feelings.

"I have been thus particular in stating the items of my taxation, on purpose to contrast therewith the taxes of a neighbour, Mr. Stockton. This gentleman, formerly a steward, but now retired, fell heir, on the death of an uncle, to £17,000 in three per cents.; and now, with his wife and five children, lives, my respected neighbour, in a tasteful cottage, surrounded by an ample, fruitful garden. I may just remark, that being of a

cautious temper, he allows the money to remain in the funds as his uncle invested it.

"Now what are Mr. Stockton's taxes do you think? For his cottage he does not pay half the house tax I do on my house; his income, from the funds, being £510, he pays only about three shillings more income tax than I; and, besides a dog which he keeps for his own and children's amusement, has nothing that pays a tax. Groom, vehicle, and horses, he does not require any more than I should do except for the purposes of my profession. In addition to this, he has his time at his own disposal, which he uses for the benefit of his family, and the saving of expenses. Thus, I notice the fine crops of early peas and potatoes (of which he is kind enough to send us a dish now and then) raised by his own labour, or rather by way of amusement; and I am persuaded that he grows vegetables of all kinds for the supply of his family, to say nothing of the pigs and poultry which he breeds and rears for profit and use. He has other advantages over me in this complete leisure which he enjoys: he is tutor to his sons, and teaches his daughters music; whilst I, as I sometimes say, am half ruined by school-bills. Then, the care he can take of his health is much to be envied; whilst I, drudge that I am, must toil on, ill or well. I will make this very plain to you. Some four years ago, as I was hastening to a labour, about three o'clock of a winter's morning, along one of our interminable lanes, blinded by the drifting rain, my horse (like myself, half asleep I suspect) slipped into a marl pit (so common on the road sides in this quarter) throwing me into the water. On reaching my patient, duty demanded I should attend to her rather than my own comfort; the consequence was a rheumatic fever, which confined me five weeks to bed, kept me as many more weeks an invalid, and has left, I fear, some affection about the heart. At any rate, I doubt whether, after this, an assurance office would readily accept my life, or indeed, accept of one in three of the lives of our village surgeons. Even now I am a martyr to chronic rheumatism in damp weather, and can hardly dress myself without help; and, added to this, is a touch of the asthma, owing to which I find my night journeys trying to flesh and blood. Very different is it with Mr. Stockton. A couple of years ago, having caught cold in a shower, as he was teaching his daughter to fly a kite, he had rheumatism of the left knee, and since then slight stiffness in the joint; but the care he takes of his health (and can afford to take) is not to be exceeded, and the knee is made a plea for frequent visits to the Buxton baths, from whence he returns, he says, improved—quite a new man.

"Well! I cannot but hope that the Chancellor of the Exchequer will even yet consider the case of us surgeons, and lessen our burdens, or, at all events, treat us equitably. I have heard that financiers assert that an income, say of £500, from one source is just as good as £500 from any other source.—£500 from a profession such as mine, depending solely on the continuance of my health, just as good as my neighbour Stockton's from funded property, which is an income *for him and his family after him*, independent of all contingencies. Now, there is some truth, no doubt, in the assertion: £500 income once in the purse of the owner is as good to the pick-pocket, be it obtained from a profession or from property: the money he finds as good in the one case as it would be in the other; and the Chancellor of the Exchequer appears to be of the same opinion, for he deals alike with the two kinds of income. But the owner of the income *knows better than this*; he is of a different opinion. When I have got my £500 I know it is *all* that I possess, and that I must pay out of it my heavy assessed taxes and for my life assurance, and also put apart a tenth as a provision against unforeseen emergencies if I and mine are to keep clear of the parish. When Mr. Stockton, however, has got his £500 dividends, he knows that this is not *all* that he has, that it is only a thirty-fifth part of his property—in a word, that he has £17,000 in addition. Surely, a child could see through so flimsy a fallacy as this.

"With my wife and seven children, and another in prospect, and no provision but the before mentioned life assurance (if this indeed should not have to be dropped in the long-run from ill-health and consequent inability to pay the premium), I am sometimes almost tempted to emigrate. For, in her fretful moments, my wife says that she anticipates she will yet be obliged, in the end, to keep a boarding-house like the widow of my late friend Mr. B., surgeon; or, like her cousin in Salford, the widow of another surgeon, to hire herself out as a monthly nurse. But these, I tell her, are only 'fears of the brave' unworthy of her fine courage. In the meantime I wait to see what the Chancellor is willing to do for the profession. I am no member of your 'Manchester school' as it is called, but a

loyal subject, willing to pay all just and equal taxes for the support of the Government; and it is under this feeling that I have written what I now have. I fear, dear sir, you will think my case very prolix, not to say tiresome; if so, I cannot help it, it has been drawn up in the best manner I could. In mitigation of any censure you may be inclined to pass on me for this, I will repeat to you the homely negro adage I once heard from a friend many years in the West Indies. The negro, apt to be prosey, will say to any one who attempts to cut short his story, 'Massa, if you won't take time to kill a fly you can't see his guts'. So with this for your edification, I am, etc.,
"J. FAGG.

"P.S. I have said that I pay my assessed taxes out of the income returned, but I quite *understate* my case; because I have, in addition, to pay out of it, the wages of my groom, and the keep of my horses: I am not permitted to deduct these expenses. If I would make oath that I never use horses and gig excepting in professional visits, then the deduction would be allowed. But no surgeon (no country surgeon at any rate) whose life is spent, almost literally, on horseback or in his conveyance, can swear this: he cannot, in the nature of things, do so without perjury. For it will inevitably happen that, in his rounds, he calls at the house of a friend; that his wife has to be taken to and brought home from an evening party in the gig, or that an ailing child, perhaps, is sent for an airing in it, as was the case occasionally of late with one of my children recovering from whooping cough. To saddle the surgeon with income tax on the before mentioned expenditure for groom, gig, and horses, because of such trifling incidental services to his family, is to oppress the *weak*, whilst the *strong* are altogether passed over. Thus Mr. T., a very opulent silk-manufacturer, not far from this, dines daily with his sons and his partners in the counting-house (*quasi* a dwelling-house) at the mill, and yet he has not, for this, been charged with the house tax. And his porters carry his portmanteau to and from the railway station and do many like services for him and his sons, but who ever heard of the *tax on servants* being charged on these? Or, of their wages not being allowed to be deducted from the sum returned by Mr. T. as his income? J. F."

METROPOLITAN COUNTIES BRANCH.

LETTER FROM DR. T. O. WARD, TO THE EDITOR.

SIR,—Having received a notice from Dr. Semple that he intends to bring forward the subject of Medical Reform at the ensuing general meeting of this Branch, on the 10th of May; and also one from yourself, respecting the Vaccination Bill, it appears to me to be desirable that the utmost publicity should be given in the pages of the Journal to these notices, in order that every member of the Branch who is interested in them (and who is not?) may come to the meeting fully prepared for their discussion.

I am anxious to state that no circulars are to be sent to members, the advertisement which appeared in the Journal of April 8th and 15th, being deemed by the Council sufficient notice of the meeting.

I am, etc.

T. OGIER WARD, *Hon. Sec.*

Kensington, May 3rd, 1853.

EXTRA-URBEM LICENTIATES OF THE COLLEGE OF PHYSICIANS, AND THE PROPOSED CHARTER.

LETTER FROM HENRY JOHNSON, M.D., TO THE EDITOR.

SIR,—The readers of our ASSOCIATION JOURNAL, who are also extra-urbem licentiates of the College of Physicians, will have seen, by the draft of the new charter printed in your pages, how it is proposed to deal with that large and respectable body of British physicians. After being examined, and approved of, and declared fit to practise by the College, we are yet to come with certificate in hand, and are to be treated in all respects the same as those who have been practising all their lives in contempt of the charter, and as if we had never been in any way connected with the College.

I hope you will permit me through your pages to invite all members of the *Provincial Medical and Surgical Association*, who are also extra-urbem licentiates, and who have not already joined the ranks of the "associated extra-urbem licentiates", to lose no time in doing so, by sending in their names to the Secretary, Dr. T. Laycock, York.

I am, etc.,

HENRY JOHNSON, M.D.
One of the Committee.

Shrewsbury, April 29th, 1853.

MR. SYME'S OPERATION FOR STRICTURE.

LETTER FROM JAMES MILLER, ESQ., F.R.S.E., TO THE EDITOR.

SIR,—In your report of the discussion at the Royal Medical and Chirurgical Society, on the 26th inst., in the last number of the *ASSOCIATION JOURNAL*, the following passage occurs:—

Mr. Syme stated: "As to the case operated upon by himself in Edinburgh, and published by Professor Miller as an escape from extreme danger, he believed that the nervous symptoms described in his paper had imposed upon Mr. Miller; who, so far as he knew, had had no further experience of the practice than this single instance which he had witnessed as the family attendant. He did not believe that there had been the slightest ground for serious apprehensions in this case; and as the patient, after being for a year under this treatment by Mr. Liston without relief, had been restored to perfect health by the operation, he thought that, instead of being quoted as an objection to its practice, it should rather be regarded as a very favourable example of success."

In reference to this passage, permit me to observe:—

1. I am well satisfied that I was not "imposed upon" by "the nervous symptoms". They ("a curious train, consisting of rigors, bilious vomiting, suppression of urine, and delirium") certainly did occur; and that they did not cause unnecessary or unfounded alarm, was amply shown by their having been followed by perineal abscess which required incision, by pelvic abscess which was opened and discharged very copiously from the rectum, and by a painful as well as protracted and critical recovery.

2. I was not a mere "witness" "as the family attendant". The patient had been under the late Mr. Liston, and afterwards under my care. Extreme irritability of the parts prevented all systematic attempts at cure. At my request, he came to Edinburgh, with a view to consider the propriety of his submitting to the treatment by incision, then coming into use. On his arrival, Mr. Syme was, at my suggestion, called into consultation along with me; and, the operation having been determined on, it fell to be performed by Mr. Syme, as the senior surgeon, and the author of the mode of treatment. The patient was attended by me throughout his entire illness.

3. My personal experience of this operation is limited, simply because I have not found occasion, in all the cases of stricture recently under my care, to adopt any other treatment than that by the bougie. In certain extreme cases, I should not hesitate to resort to the use of the knife; but such cases have not occurred to me.

4. I am sorry to say that the case in question cannot be "regarded as a very favourable example of success". The urethra has now contracted to a considerably smaller calibre than that which was gained by the operation; the bougie is not passed without difficulty and suffering; and it will require much care to prevent decided relapse of the disease.

I am, etc.

JAS. MILLER.

Edinburgh, May 3rd, 1853.

P.S. I should not have found it necessary to intrude thus upon your columns, had the President's caution been duly observed. "He had not judged it proper to allow the usual practice to be departed from, by giving names publicly in the Society. Surgeons referred to by name in that way, in their absence, might with justice complain. It would be unusual and improper."—J. M.

NEWS AND TOPICS OF THE DAY.

MEDICAL ATTENDANCE AND CHARGES FOR MEDICINE.—CIRCULAR OF THE MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE Sub-Committee of the Medico-Ethical Association, appointed to ascertain the opinion of the profession in Manchester, on the expediency of discontinuing to make specific charge for medicine, have much pleasure in presenting the following analysis of the replies received to their former circular:

FAVOURABLE

UNFAVOURABLE.

72

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The result of the inquiry gives every encouragement to pursue the matter further, in the confident hope of a considerable reform being effected in the present mode of charging for professional services.

The precise terms of the proposed change have, in a few instances, not been fully understood. The Committee, therefore, beg to repeat, that the object in contemplation is to establish the practice of charging for professional attendance only, the practitioner supplying medicine or not, as may be expedient. Among the large majority who are favourable to the plan, some have expressed an opinion that it would be difficult to carry out with the labouring class. Others have suggested a difficulty in the case where the practitioner having ceased to attend, a repetition of medicine is requested, which would involve a positive loss, particularly if the medicine were unusually expensive.

The Committee acknowledge the difficulty of accomplishing so great a change, without incurring numerous objections on the part of those who may still be prejudiced in favour of the questionable system of remunerating their medical attendant according to the quantity of medicine supplied.

A well directed effort, however, cannot fail of success with the intelligent part of the community, and here is the key to the whole question. Experience teaches that there exists a strong desire to escape from the abuse of medicine being made the means of a pecuniary gain. To this fact may be, in some degree, attributed the success of those practitioners who only prescribe, as well as the mysterious popularity enjoyed by those who eschew the use of medicine altogether.

The Committee desire it may be understood that they do not propose to endanger the plan by injudiciously attempting to carry it out in every instance; and they would repeat that the recommendation is limited by the term, "as far as practicable".

The Committee confidently appeal to the experience of those practitioners who, having tried the system with all classes, declare that the difficulties for the most part are imaginary, and that they vanish at once under the light of explanation.

After the most careful consideration of the whole question, the Committee beg to submit the following proposition, which they consider is well calculated to place the system of medical charges in a position more consonant with the claims of a scientific profession.

"That medical bills be made out as heretofore, merely giving the total amount, and specifying or not, as may be expedient, the charge made for each visit."

The practice of lumping together a long attendance in one amount affords no clue to the principle on which the particular items are calculated; and which, not unfrequently, is regarded as a questionable form of rendering an account.

The proposal to state the amount of the fee, comprehends the twofold advantage of declaring the terms of attendance, and satisfying the patient that he is not taxed with an unnecessary quantity of medicine. On the other hand, if the terms of attendance be not specified on the face of the bill, the Committee are of opinion that it will be incumbent on the part of the practitioner to embrace every opportunity of explaining the principles on which his medical charges are made. In either case the result would be the same, the more intelligent members of the community readily complying with the change, and being impressed with the integrity of the principle, will be found influencing and converting others to appreciate a plan that ultimately must obtain the approbation of all classes.

RICHARD ALLEN, *Chairman*.

[This circular bears date 29th March 1853.]

ACCOUCHEUR TO THE EMPRESS OF FRANCE. M. Paul Dubois has received this appointment. His father, M. Antoine Dubois, attended Marie Louise at the birth of the King of Rome.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

*BAYES, William, M.D., elected Physician to the Brighton Dispensary, in the room of Dr. Ormerod, resigned.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

CUNIER, M. Florent, editor of the *Annales d'Oculistique*, at Brussels, at a comparatively early age, recently.

MILLER, James, M.D., Assistant Physician to the London Hospital, at his residence, 40, Welbeck Street, after a short illness, aged 34. Dr. Miller was a young physician of much promise; and the author of a valuable work on the *Pathology of the Kidney in Scarlatina*.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XIX.

LONDON: FRIDAY EVENING, MAY 13, 1853.

NEW SERIES.

ANOMALOUS POSITION OF THE MEDICAL STAFF OF THE NORFOLK AND NORWICH HOSPITAL.

WE have on various occasions, in the course of our remarks upon hospital abuses, referred to the obsequious urgency and undignified diplomacy with which honorary hospital appointments are constantly being canvassed for in many metropolitan and provincial hospitals—learned and highly educated medical men being compelled either to renounce their chance of obtaining such posts, or to beg them cap in hand from a heterogeneous constituency of hundreds of “governors”, the overwhelming majority of whom are unable to form any estimate of the comparative qualifications of the candidates. The disastrous effects upon the medical profession of these hospital elections are becoming more and more apparent every day. Strategy is required to secure the votes of Lord Flummery (who pays his medical bill with patronage only, and who sends his sick servants to the hospital), of Dr. Rubric the rector, the Rev. Edward Whine the dissenting minister, Sneeze the perfumer, Sneak the tailor, Squills the druggist, and other electors of all sorts and conditions. The practice of this strategy must to a greater or less extent destroy the candidate’s feeling of self-respect, and lower at the same time his professional status in public estimation. Unfortunately, it is not only the hospital candidates themselves who suffer from this reckless pursuit of unpaid labour: the whole profession is depreciated in public estimation by the scenes enacted; and in extreme cases, such as that unfolded in the report of the Norwich Hospital meeting (to be found at p. 426), it is snubbed and sneered at, to the great extent possible within the conventional boundaries of gentlemanly language.

The Rev. J. Holmes said:—

“This was the relative position of the Board of Management, and their Medical Staff: the board as the controlling power, and the medical officers as a highly respectable body of men, but nevertheless persons who must, like other men, be controlled and supervised. He was confident that, if ever the medical staff should succeed in obtaining a dominant position in that board, the institution would certainly be ruined.”

Mr. Utten Browne was still bolder in giving utterance to his sentiments. He seemed to think that medical men, when under an accusation before the Board of the Norwich Hospital, had no claim to those ordinary rights of British subjects, which are shared alike in courts of law, by the peer and the peasant. A secret tribunal, on the model of the Spanish Inquisition, is his *beau idéal*. When the accused is a medical man, he would prevent sifting of evidence, or any pleading on his behalf. Here are the words of this man, as reported in the *Norwich Mercury*, and echoed in a leading article of that newspaper:—

“Let them only conceive the state of things which would arise if this proposition were carried. Suppose a question came before the board affecting in any way the conduct of a member of the medical staff. The medical members of

the board could muster in force; and though he was very far indeed from imputing to any one of those gentlemen a desire to take any particular course in order to shield any of their number, yet they knew that the *esprit de corps* was particularly strong among these gentlemen . . . and they would raise a discussion upon the point; and, though it was perfectly true that they would not have the right of voting, yet they would have the right of speaking . . . and it was very likely that they would be successful in inducing the board either to pass over the complaint altogether, or to say, without assigning any reason, that they were satisfied with the conduct of the officer who had been implicated.”

Such are Mr. Utten Browne’s ideas of the proper constitution and course of proceedings of a tribunal, for deciding “a question in any way affecting the conduct of a member of the medical staff”. It is not exactly “Jedburgh justice”;* for at Jedburgh they did try a man, only they unfortunately deferred the trial till after he was hanged. Mr. Utten Browne’s plan has no exact parallel, so far as we know, except in the rules of the “Holy Office”. The inquisition admitted that it was difficult, from its method of proceeding, to prevent many innocent persons from perishing with the guilty; but the *Directorium Inquisitorium* of the Dominican Nicholas Eymeric of Gerona supplies, in the following passage, abundant consolation for all mistakes so committed. “Let no person”, it says, “venture to affirm that he is unjustly condemned; or venture to complain of the censures of the church. But if he be unjustly condemned, let him console himself with the reflection that he has suffered for righteousness’ sake.” Even this comfort will not be left to the Norwich Hospital medical staff, should the present law remain unrepealed. If thwarted, censured, or unjustly condemned by their “supervisors”, they will only be able to console themselves with the reflection that they are suffering the penalties of a system, which they never ought to have allowed to come into existence.

Had Dr. Copeman not withdrawn his motion in favour of Mr. Johnson’s amendment, a much greater degree of importance would attach to the adjourned discussion than can now be the case. When a man takes the field as the champion of a principle, it is more useful to the cause of truth for him to be beaten, than for him to avoid defeat by making a compromise. Dr. Copeman had a good cause; and he supported it in a straightforward and convincing address. He might possibly, upon a division, have been in a minority of votes; but so just and necessary a reform as that which he advocated can never be long prevented, if perseveringly demanded in as moderate and as conciliatory a tone as that which was adopted in the written application and in the speeches of the hospital staff. The majority of the governors, if rightly dealt with, must ultimately discover that the medical staff of an hospital, if it perform its duty to the institution, is its great financial pillar, as well as its ministering arm. They must also sooner or later agree with Dr. Ranking in thinking that the medical officers “should not be placed in the same position as the porter or

* Scottish, “Jethart justice”.

nurse of the establishment, to be sent for by the board when wanted"; and they will not then unite with the *Norwich Mercury* in insulting medical gentlemen by comparing their position with that of menials.

Lest any one should suppose that we are unfairly censuring the newspaper organ of the anti-medical governors, we reprint a passage from the leader to which we have already referred:—

"The *real cause* of the proposition, however, jumped out in the very few words which fell from Dr. Ranking—that the medical men did not like to be placed upon a level with the nurses or the porter, to be sent for when wanted. That this is 'the rub', was evident, and we confess we heard it with regret, for it argues a false feeling, which is not generally the companion of strong intellects and high minds."

Alas! alas! to how low an ebb in social estimation has the hospital system of England brought our profession! It has tarnished the native lustre of medical philanthropy, and changed the voice of public thanksgiving into that of scornful ingratitude:—and who can

"Cover the monstrous bulk of this ingratitude
With any size of words?"

THE CRIMINAL PRODUCTION OF ABORTION BY PERSONS CALLING THEMSELVES SUR- GEONS SHOWS THAT A MEDICAL REFORM ACT IS REQUIRED AS A MEASURE OF PUBLIC SAFETY.

A most disgraceful instance of the criminal production of abortion, in which the characters of a clergyman of pious repute and of two persons calling themselves surgeons are involved, has been several times within the last fortnight brought before the Hon. G. C. Norton, at the Lambeth Police-office, and will soon be tried before the Criminal Court. A Mr. James Thompson Currie, a practitioner in London, has (according to the evidence published in the newspapers) for some time past been acting as the accomplice of a man named Cunningham, *alias* Smith, who was in the habit of seeing pregnant females at Currie's surgery, for the purpose, as it is presumed, of causing them to abort by the employment of mechanical means. The case which led to the discovery of the criminality of Cunningham, and to the implication of Currie subsequently, took place at the house of a Mrs. Halcomb, at 4, Stockwell Road, Clapham Road. A young woman, named Eliza Mardon, took rooms under the guidance of her seducer, the Rev. Mr. Gordon, at Mrs. Halcomb's house, and received medical visits from Cunningham, who informed Mrs. Halcomb that the young lady was suffering from a polypus of the womb, which it would be necessary to remove. On one occasion when Cunningham was alone with the lady, her cries were so loud that Mrs. Halcomb made an excuse to enter the bedroom, where she saw sufficient to lead her to opine that a foetus and not a polypus was being evolved from the womb. Cunningham was seen by her to remove something from the bed, and to take it away with him.

After a time Mr. Darnton Greenwood, of Clapham, was called in. He formed a decided opinion that the patient had recently passed through the process of labour, and gave such information to the authorities as led to the arrest of the two above-named prisoners.

On examining the medical directories, we find no men-

tion of the name of the prisoner Cunningham; but Currie is described in the *British Medical Directory* as L.F.P. and S. Glas., 1839. We should be sincerely glad if time might show that neither of them belonged, by qualification, to the medical profession. Nothing can point out more strongly, than the occurrence of such cases, the duty we owe to ourselves and to society, of applying with renewed zeal for such a measure of medical reform as would draw a line between qualified and unqualified practitioners.

Criminal abortion is, we fear, a much more common crime than many of the good and the just amongst us may suppose; and we therefore deeply deplore that the medical colleges cannot rid the profession of miscreants, who are found out in the commission of this sinful and horrible practice. The conduct of Mr. Greenwood, in the present case, seems to us to have been careful, just, and well deserving the earnest approbation of the profession and of society; but no one can save the medical profession from sharing in the disgrace of such discoveries, till there is a legal register of qualified practitioners, and a medical council, with power to erase from it the names of delinquents. We would earnestly say to our colleagues, that an opportunity at present exists, such as never before existed, for obtaining a useful measure of medical reform; and that, with such scandals as that to which we have now called attention damaging our social reputation, it becomes a duty to meet each other in the spirit of the most liberal concession as regards our class interests, and to rally round Sir Charles Hastings and his colleagues in the Medical Reform Committee of the Provincial Medical and Surgical Association, in obtaining at least an instalment of reform during the present session of parliament. Nothing will tend more to the accomplishment of this object, than our pouring petitions in profusion upon the table of the House of Commons. By signing such a form of petition as that which we published last week, no one will compromise his individual opinions upon matters of detail; and those who have strong views upon any matters of special difficulty, can easily make them known through the medical journals, or through the medical committees which are now being formed throughout the kingdom. At the present crisis, we require on the one hand full and free discussion, and on the other a brotherly and patriotic spirit of mutual concession. The conciliatory spirit in which the discussion of the Reform question was conducted at the meeting of the Metropolitan Counties Branch on Tuesday, is an omen of good. A full report will be found in another part of this number.

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GENTLEMEN WISHING TO JOIN THE ASSOCIATION, OR TO APPLY TO THE GENERAL SECRETARY, TO THE EDITOR OF THE JOURNAL, OR TO THE EDITOR OF THE JOURNAL.

ORIGINAL COMMUNICATIONS.

TRAUMATIC LESION OF THE EYE.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the
Central London Ophthalmic Hospital, Assistant
Surgeon to St. Mary's Hospital, etc.

CASE. SUMMARY:—PENETRATION OF THE LEFT EYEBALL BY A PARTICLE OF IRON: PROLAPSE OF THE IRIS, AND CLOSURE OF THE PUPIL, WITH ALMOST CONSTANT PAIN IN THE ORGAN FOR SEVERAL WEEKS: SYMPATHETIC INTOLERANCE TO LIGHT, AND CONSIDERABLE DIMINUTION OF THE POWER OF VISION IN THE OTHER EYE: REMOVAL OF CORNEA AND GREATER PART OF IRIS FROM THE WOUNDED EYE: ESCAPE OF SEVERAL MINUTE PIECES OF OXIDISED IRON: CESSATION OF THE LONG-CONTINUED PAIN: COMPLETE RESTORATION OF THE FUNCTION OF THE RIGHT EYE. REMARKS.

A **HALE** powerful man, forty years of age, whilst pursuing his avocation of boiler-making, on the 20th of January, 1853, was wounded in the cornea of the left eye by a piece of the metal which he was chiseling. The iris prolapsed, and the pupil was destroyed. There was not any evidence that the splinter of iron had entered the eye; indeed, appearances were rather against such an occurrence. A few days subsequently, there was an accession of pain, which was ever present during waking hours. Mr. Ernest Elliott, the surgeon of the government establishment at Plymouth to which he belonged, resorted to such measures as were adapted to subdue it; but, finding them ineffectual, and discovering that the other eye evinced symptoms of sympathetic disease, he sent the man to London for my advice. I saw him on the 16th of March, admitted him into the Central London Ophthalmic Hospital, and made the following note of his case:—"The left eyeball is much inflamed, and apparently disorganised, inasmuch as it is enlarged; and the cornea, which has been divided, is opaque, and bulges. There is not any perception of light. There is pain, sufficiently intense to disturb sleep. The journey has rendered this symptom more severe. In the right eye, there is slight pain, with preternatural vascularity of the conjunctiva; considerable intolerance of light, so much that a sheet of white paper cannot be looked at without uneasiness. Vision is not sufficiently perfect to enable him to read the type called *English*. There is much general prostration. The tongue is foul. He has no appetite."

From some experience in parallel instances, I had not any doubt that the piece of iron, which had impinged on the eye, had passed to its interior, and was yet incarcerated; and, on the conviction of the correctness of such diagnosis, I excised the front of the eyeball to allow of its escape. The greater part of the iris was also excised—a result that was inevitable, at the same time desirable, from the close apposition of this membrane with the cornea, the result of the prolapse. A large amount of what appeared to be aqueous humour escaped. A little of the vitreous humour was lost. The crystalline lens was absent. The eyelids were closed, and retained shut by a strip of plaster; and the patient sent to bed.

On the morning of the second day after the operation, he removed from the corner of the eye with his finger two pieces of iron-rust, about the size of pins' heads. A day later, a third bit was cast out.

On the 23rd, my note runs:—"His relief is very decided. There is only occasional pain in the eye; and, from his description of it, it is rather darting than dull. It is probably due to the operation. The surface of the vitreous humour is covered over by a greyish-white pulp-like deposit. The conjunctiva is yet very vascular, and bathed with purulent secretion. The other eye is fast recovering itself, is no longer red, and can bear bright light much better. He can

actually read the *Times* newspaper." Soon after this, he left for home; and when I heard from him, on the 8th of April, he stated that all pain had ceased, and that the right eye was daily improving.

REMARKS. While certain affections of the eye are for the most part consigned to those who practise for ophthalmic affections on a large scale; and while some may without detriment have their treatment delayed for awhile, there are several which, from their emergency, require prompt attention, and, which all surgical practitioners should be prepared to undertake. Now, mechanical lesions constitute one class of those which call for general attention. It is a class of much importance, and susceptible of much practical comment; but I must restrict myself to that division of it under which my case falls (foreign bodies within the eyeball), and at the same time maintain a strict reference to the individual example before me.

The first practical lesson here taught is the impossibility of our being able to determine, from the mere appearance of a wound, or, in the first instance, from the sensations that succeed to it, whether a body has or has not passed into the eyeball. Prolapse of the iris does not afford any indication either way; and it frequently happens that, with the presence of a body, there is not immediately any pain. Perhaps, while the vitreous humour is the resting place, sensitiveness is not manifested; but then even one or the other of the chambers of the eye may not directly resent its lodgment there; yet, on the other hand, there may be pain, immediate, intense, and enduring even for weeks, as the effect of a wound alone. Therefore, in traumatic injury, when we cannot see any foreign substance, after attempting to replace the iris, should there be a probability of the attempt being successful, and adopting such measures as are likely to ward off inflammation, we must patiently abide the result. Even with strong suspicion or positive assurance of a body having entered, should it be out of sight (supposing vision not lost), it would be certain destruction to the eye, and therefore malpractice, to seek guideless for it; and it must be borne in mind, that its presence is not necessarily fatal, as some substances may dissolve, and any may become encysted. But should vision be assuredly destroyed, and the cornea or the sclerotica be extensively wounded, the sooner, by the excision of a part of the eyeball, an exit is afforded for its escape, the better. In any case, after inflammation has set in, attended with much pain, and the means to subdue them have failed, and the eye is evidently disorganised, we ought, I think, to act as if sure of there being a foreign body present; and excision should be practised, as a means of averting suffering, and securing the other eye from a sympathetic attack. Certainly it should be executed directly that sympathetic inflammation sets in. In my patient, the sympathetic attack was unusually early.

From these principles of practice not being generally recognised, many eyes are annually sacrificed. On the value of their observance rest the chief merits of this report. For the valuable facts on which they are founded, we are indebted to Mr. Barton (see report by Mr. Crompton, *London Medical Gazette*, vol. xxi); and the reiteration of them here cannot be superfluous. In seven cases, a fragment of copper cap was driven into the eye; and, from the symptoms, it was not possible to determine whether the cap had entered or not. The eyes not wounded became affected; loss of vision was threatened. Mr. Barton, suspecting the nature of the cases, excised the cornea, and applied poultices, in the hope that the fragments of copper would escape, and the cause of irritation, with its threatenings on the other eye, would be removed. In all of the number, the copper passed out, and was found either in the coagulum of the wound or in the poultice; and the effect on the other eye was magical.

Now, concerning the manner of operating, I do not consider it immaterial. I suspect that, to be certain of the result we seek, the iris, i. e., the greater part of it, should be removed, together with the cornea, or else it may be an obstacle to the body coming away. Where it is prolapsed

(and it has been so in all the cases with which I have been concerned), a large portion of it must necessarily be removed. The details of my operation may be thus expressed. After an assistant has retracted the eyelids, I transfix the cornea with a curved cataract needle, and with a cataract knife cut away the required portion.

69, Brook Street, Hanover Square, London, April 1863.

FAILURE OF VACCINE.

By J. A. HINGESTON, Esq.

THE frequent failure of vaccination is now so generally admitted, that statistical proofs are not requisite in order to establish its truth. People look upon it as an equal chance, whether those who have been vaccinated shall be able to resist an attack of the small-pox or not, should they be exposed to it; while some go so far as to surmise, hastily and rashly enough, that vaccination is all but useless. A few vote for a return to the old variolous inoculation; and a few, still more inconsiderate, boldly declare themselves in favour of the small-pox itself, as the only and the surest guarantee of their safety. There is, of course, a great deal of exaggeration and misrepresentation in expressions of this sort; and much more is affirmed against the non-protective agency of vaccine lymph, than, as is usual, a dispassionate inquiry into all the circumstances of the case will justify or imply. The broad and undisputed fact of the actual diminution of small-pox since vaccination has been introduced and practised, is alone sufficient to contradict these wild notions, and to refute the vulgar prejudices aloft upon the subject. For, even during an occasional outbreak, the disease is nothing now to what it used to be formerly, when the old inoculation, which is itself not free from risk, was the only obstacle opposed to its incessant and alarming encroachments. At that time, it was a real plague of terrible malignity, whereas it is now a comparatively mild and transient epidemic. This well-known fact is a satisfactory answer in favour of the protective influence of vaccination, which, if not universally, is at least extensively serviceable and effectual.

To medical men, the occasional failure of vaccine lymph presents itself in a very different light from that in which it is viewed by the public at large; and with vaccinators in particular it is a topic of the deepest interest, which they endeavour to explore to the best of their abilities, and in every possible direction. The various points of inquiry offered to their notice, may be reduced to the few following items.

I. A chief cause is the capital oversight on the part of the vaccinator himself, in transferring lymph from an imperfect pock. There is no doubt that this oversight or carelessness is a copious source of the quantity of bad lymph in circulation, as well as of the ultimate failure of vaccination as a protective agent. For it is a maxim in vaccinating, never to transfer lymph from a pock in the slightest degree abnormal, nor from a normal pock in a constitution evidently disordered or unsound; because, if it be so transferred, the inevitable result will be abnormal pocks and inefficient lymph. It is impossible to restore contaminated lymph to its primitive purity; no subsequent care in its propagation can ever recover its lost or defective virtue. Having once become devious or degenerate, it continues to descend both degenerate and devious, until its power becomes extinct, and it fails to propagate itself, even in a degenerate form. This glaring fact is so unquestionable, that it is necessary to bring it forward, and place it first and foremost among the causes of the failure of the vaccine lymph.

II. Another main cause of failure is, we must candidly own, carelessness in the act of vaccinating. Not only is the good quality of the lymph used not strictly inquired into at the outset, but, what is more unpardonable, the mode of operating is not exactly performed. There is a

right and a wrong way of vaccinating, just as there is a right and a wrong way of amputating, bleeding, or tying an artery. Every surgeon knows the value of performing an operation rightly, and the evil consequences to be apprehended from operating wrongly. It is the same with vaccination, which, in its vital results, takes rank among the capital operations of surgery, and requires, for its proper performance, an intelligence as clear and a hand as dexterous as ever fell to the lot of the best of surgeons. By neglecting, or by not being aware of, the precise way of operating, it happens that so many vaccinations turn out, either eventually or immediately, inefficient. The puncture is made too wide or too deep, or irregular; each of which faults materially affects the shape and character of the vesicle; or else, if it have been properly performed, and the lymph effectually inserted, it is not punctually watched from day to day throughout its progress. Success demands constant vigilance. In performing the operation, the cuticle alone must be raised, and the cutis beneath exposed, but not wounded, or wounded as little as possible. The cutting, or rather the scratching, of the cuticle, should be done lightly and delicately, with the least possible irregularity, and over the smallest extent of surface consistent with the application or insertion of the lymph. Its course must be watched and noted on the third, eighth, and fourteenth days in particular; and no case can be pronounced safe, unless every step in its progress have shown itself to be regular, critical, and complete.

It is very necessary to point out these causes of failure; first of all, because they are frequent, and seem, in a great measure, to have lost of late years something of their due weight and importance in the estimation of medical men.

From the medical pupil never having been hitherto distinctly educated on the subject of vaccination, he is naturally liable to fall into mistakes through inexperience, which can only be overlooked out of tenderness to his unavoidable ignorance, in consequence of his never having been taught, *ex officio*, how to proceed with scientific precision. But, upon public grounds, inexperience is inexcusable, and cannot be too severely censured and condemned.

III. Owing to a want of attention to the proper time for taking it, the lymph is transferred too soon or too late, and the obvious consequence is, that unripe or effete lymph is procured and propagated. Of course such lymph is weak, or altogether inefficient. It ought never to be taken away earlier than the eighth, and sometimes not before the ninth day. At too early a day, it is ichor rather than lymph. Again, it may be taken away too late; that is to say, after the ninth day, when it is becoming purulent, and the vesicle is turning into a pustule. The exact time is eight times twenty-four hours, dating from the hour of the day of vaccinating. The lymph will remain genuine till the ninth day is over, and sometimes even till the tenth; for occasionally the whole course of the pock is stage by stage a day after its time: thus, the inflamed point of the third day is delayed till the fourth, and the inflamed halo of the ninth does not reach its climax till the tenth, and so on. This delay in the progress of the symptoms is regarded as a favourable prognosis; and certainly, in cases disposed to reject the specific action of the virus, the inflammation and vesicle, besides their being abnormal, arise and disappear much too quickly. Lymph taken after the tenth day is universally reprobated; and none but such as are miserably ignorant or indifferent would ever think of transferring it at this late epoch.

IV. It is advisable never to transfer lymph that has become purulent. A prudent vaccinator never does. That that *pus per se* invalidates the lymph any more than blood does; for it may appear on the ninth day mixed with the genuine lymph: nor would its accidental presence weaken or destroy its efficiency; but it indicates more inflammation than is necessary for the production of the vesicle, and it moreover signifies the co-existence of an inflammation different in kind from that which produces the genuine lymph. After the tenth day, the lymph is

mixed up with the contents of the vesicle, which is thenceforth rapidly declining, and ceasing to be prolific. A blow or injury of the vesicle will hurry on the appearance of the tenth day, and consequently render the lymph unfit for transfer. Sometimes the first stages of the pock are suppressed, and then it breaks forth all of a sudden into its normal appearance of the eighth day; but such a pock is invalid.

v. Many parents, especially in the upper classes of society, object to lymph being taken away from their child's arm, lest, as they fancy, it should weaken its ultimate effect. A prejudice of this kind would extinguish vaccination altogether. Nevertheless, there are not wanting acute observers who consider that, if all the vesicles be exhausted of their lymph, the prognosis is thereby rendered unfavourable, and, moreover, that such exhaustion causes local irritation and disturbance. Indeed, it is affirmed that convulsions and death have ensued from such a proceeding. Be this as it may, it is certain that every one concurs in the propriety of leaving one vesicle intact, for the express purpose of judging of the normal progress of the pock from first to last; and no one would, we should suppose, be so imprudent as to irritate the exposed surface with the lancet or an ivory point, merely for the sake of draining it of every drop of its lymph. Yet it may be well to bear in mind, that one of the causes of the failure of vaccination as a protective agent, is imputed to thus draining the exposed vesicle—an error which, if it be one, it is easy enough to avoid.

vi. Lymph should never be taken from any but a primary pock. The pock resulting from a revaccination is not to be relied on. If there is any reason to doubt the vesicle being a primary one, it ought to be rejected.

vii. The actual or suspected presence of scrofula, syphilis, porrigo, etc., is quite sufficient to condemn the subject of it as a legitimate source of fresh lymph. A vesicle on such a subject, however perfect, should be allowed to die out by itself. Indeed, any eruption of the skin is a barrier against vaccination, except under the imminent risk of catching the small-pox; but as to transferring matter from such a constitution, it is out of the question.

viii. The sudden accession of constitutional disturbance during the pock, or the increase and extension of the inflammation around it, should render the validity of the operation more than doubtful. A second vaccination should be attempted within six months from the first, and the sensitive feelings of mothers opposed to such a proceeding should be steadily overruled. Many a vaccinator, not satisfied with a first pock, would wish to repeat it until he felt confident in the normal character of the last produced. But he is seldom permitted to adopt this wise precaution; and this may be numbered among the causes of failure in vaccinating. The forms of society tie our hands, and force us to comply with its own conventions.

ix. The number of vesicles is said to modify the result of vaccination. Some maintain that one alone is sufficient, while others declare that several are requisite, to insure efficiency. There is no proof to support either the one or the other of these two assertions. Pathologically speaking, it would seem, *a priori*, that the existence of a single good pock manifests the saturation of the system with the virus as entirely as any multitude of them would do. But as a matter of fact, there is nothing to help us in arriving at a decisive conclusion respecting it.

x. The most popular notion concerning the failure of vaccine, is that derived from its supposed contamination by passing through so many successive generations of mankind. This is the most popular belief, and the one which appeals most readily to the greater number of minds. Nevertheless, of all the different reasons alleged for accounting for the acknowledged fact of deteriorated lymph, this would seem to be the most untenable. It is an hypothesis built up in the face of facts that directly contravene it. For genuine lymph, dating from the time of its first introduction, continues to produce a genuine vesicle from a genuine vaccination performed on a subject in a genuine

state of health, as exactly now as it at first produced it under the hands of Jenner himself. Lymph, fresh from the cow, is certainly more energetic than such as has been long ago in use; but the pock that it produces is identical, and its immediate and ultimate effects upon the constitution are the same. This hypothesis, likewise, fails in explaining the failures that happened even in persons vaccinated by Jenner. We must look for the cause of deteriorated lymph in other sources than this.

xi. Dry lymph is said to be another cause of failure, and the use of liquid lymph is enjoined. No doubt, liquid lymph, and vaccination from arm to arm, is always preferable, but it cannot always be brought about. Besides, there is no solid ground for supposing that the virus, when dry, upon points, between glasses, or in a crust, is not equally as active as when it is still moist and quite new. Every vaccinator is aware of this. Lymph may be taken to India and brought back again, and still prove energetic and effective.

After all that has been said, the most apparent cause of failure is that of vaccinating with lymph taken from an irregularly formed vesicle, or from an unsound constitution, or at a wrong date of the pock. Independent of all other causes, this inadvertence or carelessness cannot be overlooked.

The signs of an obnoxious or doubtful vesicle ought to be closely studied. They are both constitutional and local. The health may be cachectic, the child suffering from debility, or some congenital infirmity or malformation. In these instances the pock is worthless. Regular vesicles may coexist with an irregular one, which alone is sufficient to invalidate the integrity of all the rest—unless its irregularity can be accounted for by something purely accidental.

The following eight points should be impressed on the memory:—1. Irregularity of form throughout all the stages of the pock. 2. The vesicle not being round. 3. The colour of the inflammation not being fresh and rosy, and that of the vesicle not of a pearly whiteness. 4. Its fluid contents being straw-coloured, instead of colourless and transparent; or else being purulent on the eighth day instead of the tenth. 5. The areola, or surrounding inflammation, not being defined and circular, but, on the contrary, irregular, confused, and, as it were, blended with the vesicle, whereas it ought to be distinct from it. 6. The crust forming prematurely, looking pale or yellowish-brown, and being friable and gritty, instead of dark, round, and compact. 7. The vesicle forming on the fifth day, and rising up of a conical shape, or festering like a small pustule. 8. The areola becoming efflorescent, or scurfy, or shooting out into a figure like the margins of a map. All such cases should be rejected without hesitation, and a second vaccination should be earnestly advised. It is by vaccinating from vesicles, more or less imperfect according to this description, that so many failures are recorded.

Laxity of practice in this respect is owing to vaccination not being hitherto included within the pale of legalized medicine. Any one may vaccinate as he pleases. There is no recognized authority to guide or check him in his pursuit, and no one is responsible for the lymph he uses, nor for what he thinks proper to circulate. Vaccination has slipped out of the guardianship of Jenner's learned successors, and has been allowed to pass into the custody of a so-called inferior grade of the medical profession.

Few know the criterion of a perfect vaccine vesicle—"The pearl in the rose,"—as Jenner admirably defined it. The practised eye alone can descry it. Too often it is looked upon but in a loose way: a pock, more or less perfect, runs through its course in fourteen days; and this is reckoned a sufficient evidence of its authenticity. Far from it: much more accuracy than this is called for, before a certificate of its completeness can be justly drawn up and signed. It must have been minutely correct in each step of its progress, not only apparently correct upon the whole; it requires a studious attention, the most refined in the practice of medicine; and the superficial haste with which vaccination is sometimes conducted and dismissed, is enough to rouse

the shade of its great discoverer from his resting place among the dead.

The manner, likewise, in which the lymph is preserved on points or glasses, is not more praiseworthy. It is carried about in the waistcoat pocket, or laid aside in a warm room, or left in a damp corner, where it spoils or turns putrid. And who can expect that, after being treated in this way, the lymph should take effect, or that, if effective at first, it should prove eventually genuine? It is folly to suppose it.

My much honoured father, who was a careful vaccinator of the old school, "remote from consequence, and unknown to fame", vaccinated from crusts that had been allowed to form and dry up unmolested. He was very particular in his selection of these crusts; for, after rejecting a great many, he would retain but a few for his private practice. He kept them enclosed in a covered box, in a dry place, in the dark, for he had a notion that light and air were prejudicial to them. They were round, blackish crusts, indented in the centre, and greyish on the inside. When he intended to vaccinate from them, he mixed up a drop of distilled water, or water that had been boiled, with the point of his lancet, in the hollow of the inside of the crust until he had stirred it up into a thickish fluid. With the lancet, thus armed, he vaccinated confidently. He used to say that, though it was matter apparently taken on the fourteenth day instead of the eighth, yet the crust comprised the virtue of the entire pock, and that the centre of the crust contained the lymph of the eighth day, undisturbed, and in its utmost vigour. This was the reason why he preferred the crust to matter drawn from the vesicle. Jenner preferred catching the lymph as it oozed out of a vesicle perfectly ripe; and Dr. Walker used to remove the epidermis altogether, and take the matter upon glasses from the exposed base of the ulcer, without any ulterior damage that I can remember; for Dr. W. was an excellent vaccinator, and most punctilious in all his observances.

There are certain signs of a genuine vaccination which are pathognomic. The microscope reveals a small vesicle within forty-eight hours after the insertion of the lymph, while the unaided eye can as yet discern nothing but a tiny scar with a faint blush. By passing the finger gently over it, a small elevated point is perceptible. On the fourth day, the redness, which is more decided, ought to have a dark central point in it, over which forms a small vesicle of a dull white colour. As the surrounding inflammation extends, it should be circular, or only slightly oval, in correspondence with the long axis of the puncture. Its margin must be well defined, and the inflammation itself full, red, and shining. The vesicle ought to be quite round, with rounded edges, and a central depression, as if the finger had pressed it down; but it becomes more elevated on the eighth or ninth day—the centre rises up and the circumference sinks.

The constitutional symptoms ought to be trifling. Adults complain of headache and lassitude, and the pulse becomes quick. A gland may become tender in the axilla. In adults, too, the vesicles are thinner and more easily torn, and the lymph is more yellowish, and the areola broader, than in children. The tendency to lichen, however, is not so great.

The areola should develop into a halo of erythematous character. It should itch, and the adjacent skin should sympathize beyond its margin. Its diameter is one or two inches. A number of little vesicles, filled with an amber coloured serum, sometimes arise upon it. The areola is the discriminative sign of a laudable vaccination. On the eleventh day it declines, its colour fades, and, as it passes away, it leaves behind it one or two concentric rings of a blueish light grey colour. It is almost gone on the thirteenth day; the vesicle hardens, and a circular dark brown crust remains. Beneath this crust, the fluid dries up, beginning at its centre. At the end of twenty-one days, the crust falls off, leaving the skin beneath clean and entire, but at first reddish, the site of the pock being marked with a scar, which eventually becomes flat, shining, and colourless. Its shape is zig-zag, and its area exhibits a number of depressed points corresponding with the cells of which the vesicle had

been composed. For the vesicle, resulting from each puncture, is made up of little cells intercommunicating with each other, and secreting a perfectly transparent colourless lymph, which on the seventh, eighth, and ninth days is at its full maturity, and ripe for transfer. After this crisis, the lymph becomes thicker, less transparent, at last purulent, and unfit for transfer.

These signs are as important as those which indicate a dislocated joint, or a strangulated hernia; and they are as indispensable to the correct diagnosis of its nature as they are to the scientific application of the rules for treating it.

There are, however, some deviations incidental to an efficient vaccination, which do not invalidate its protective quality. The local inflammation may transgress its limits, extending upwards and downwards, from the wrist to the shoulder and thorax. It may become erysipelatous, and an open ulcer may form in the place of the usually fair and placid vesicle; a papular eruption may break out and spread over the extremities and trunk. Such things may happen without damage to the specific action of the virus; and, it has been affirmed, that an eruption of this sort is a favourable sign, by showing the system to be thoroughly imbued with the lymph. It may be so, and the vaccination may be complete; but it weakens our confidence in its results, and certainly the lymph is not the most approved of, if transferred.

In the foregoing short remarks, I have confined myself exclusively to the consideration of the means proper for the transfer of genuine lymph. I have likewise attempted to point out a few of the characters of genuine lymph itself, without which, success is impracticable. There are many other circumstances connected with vaccination, which may be reserved for a future occasion. The main object in view is that of directing attention to an accurate knowledge of the true vesicle (so little appreciated), without which all hopes of keeping up a constant supply of good lymph are delusive and pernicious. The stock from which we derive it may be the most authentic in the world; but only let it fall into the hands of a careless practitioner, and it will be sure to disappoint our reasonable expectations in the second or third removes, and will not fail sooner or later to cease altogether in taking effect, or else go doggedly on in engendering any thing but an approved and perfect pock. Hence it arises, that so many false or imperfect pocks are observed, that the protective power of the lymph is weakened or lost, and that vaccination itself has fallen into so much disrepute and neglect.

Brighton, May 1853.]

AUSCULTATION, WITH REFERENCE TO THE SIMPLIFICATION OF TERMS.

By A. WHYTE BARCLAY, M.D., Medical Registrar to St. George's Hospital.

I TURNED with anticipated pleasure to a paper by Dr. Theophilus Thompson in the *Journal* issued on the 29th of April, the object of which seemed to be to simplify and correct the arrangement and nomenclature of the stethoscopic signs of disease in the lungs. With most of the observations there made, I most fully agree; and I am glad to find one of the physicians of the Hospital for Consumption deprecating that over-refinement, and those excessively minute distinctions, which they must be so constantly tempted to draw in confining their attention so exclusively to one disease; distinctions which few have an opportunity ever afforded them of learning with any degree of accuracy, and which, when learnt, have not a tithe of the value of information obtained with so much more ease and so much greater certainty from the patient's own lips, in the history of the incursion of the malady and the general state of his health.

I find Dr. Thompson set out with the assertion that doubtless much confusion has arisen from the use of inaccurate terms; and he announces that, though what

make any violent changes in nomenclature, he would feel no hesitation in displacing terms that are obviously inaccurate. I was therefore rather surprised to find, as I proceeded, the more inaccurate term "rhonchus" universally substituted for the more allowable one of "râle", which has at least the merit of reminding us of our obligation to that great master-mind who traced out the path in which he now finds so many followers, and which has also the reasonable defence which Laennec himself set up for it when he adopted it,—that it was a generalisation of a well-known and popular phrase, the "death-rattle", as applied to sounds generated by the meeting of air and fluid in the air-passages. Still greater was my astonishment, as I proceeded, to find a justification attempted to be set up for the word rhonchus, ending, too, with a couple of lines from the Greek! I much doubt if there be any analogy between the loud-booming roar of the ocean, as it dashes in its majesty against some headland cliff, and the tiny rattles heard in the minute bronchial tubes. It is evident that Dr. Thompson had in his mind the beautiful description of the aged priest of Apollo, as he wandered weeping along the shore, and heard the splashing of the waters as they broke in foam over the pebbly beach; but how different the language!

A document such as this, coming from one of the physicians of the Hospital for Consumption, issues, as it were, *cum privilegio*, or at least with some degree of authority; and, therefore, I trust my friend Dr. Thompson will forgive me, if I quarrel with his affixing the sterling stamp to baser metal. The pages of Dr. Walsh's most able and comprehensive treatise are crowded with terms infinitely more objectionable; but their very number and variety, their utter defiance of all euphony and philology, will alone prevent their ever coming into general use.

The term crepitation, as happily devised by the author of auscultation, need not be superseded, as it cannot probably be improved upon; but the definition given in the paper we are considering, "numerous, minute, similar, rapid puffs", conveys to my mind no idea of its character. A puff (*vide* Johnson) is a small blast of air; and the term might be not inappropriately applied to the blowing or whiffing breath-sound which often accompanies crepitation, but has no analogy with the minute crackling which constitutes the sound itself. The term "râle sous-crepitant" is in perfect analogy, according to the theory then entertained of the formation of both sounds, with the classical and legitimate employment of the prefix "sub": thus "subraucus" is somewhat hoarse, and subcrepitant would mean somewhat crepitant, and was applied to a mucous rattle which approached to the character of crepitation. I am not sure that Laennec employed the word "sous-muqueux"; but if he did, it stood in the same relation to the "râle muqueux", just as "sub-humidus" is somewhat moist. The "râle crepitant" stood at one end of the scale, the "râle muqueux" at the other, of a series of sounds, which were all supposed to be produced in the same way, and the varieties were described as "crepitant", "sous-crepitant", "sous-muqueux", "muqueux". All this is objectionable, because conveying a theory, which, as Dr. Thompson has shown, our present views lead us to believe to be untrue.

I remember when at school being sorely puzzled by the phrase "simplex munditiis"; its meaning, however, has not been forgotten, and it is much to be wished that physicians, who by their position and their eminence give the tone to our medical nomenclature, would bear it in mind. In the application of auscultation to diseases of the lungs, we have no need to travel beyond our own language; and for some time I have been in the habit of employing terms the most simple, in attempting to convey to the junior students at St. George's Hospital ideas of what they hear in listening to the chest. The word "sound" in its various combinations easily supersedes the more perplexing terms of rhonchus and râle, and the more ugly names of rattle or noise. We have then, the breath-sound, and the voice-sound, the natural, the diminished or the weak breath-sound; or we have it exaggerated, loud or harsh. Then again we have the inspiratory sound and the expiratory sound in all their various

relations: and these may be qualified as shortened, prolonged, blowing, whiffing, loud, very loud and blowing, metallic. Such terms avoid all exposition of a theory, such as are more generally conveyed in the use of bronchial, cavernous, or amphoric, of which the last is the least objectionable. Exactly the same forms of expression may be applied to the voice-sound: it may be weak, exaggerated, or loud; it may have a metallic or an amphoric tone; it may be ringing, squeaking, or quavering. I am afraid we shall not get rid of the term *ægophony*; and yet constant errors in diagnosis are due to its employment.

Coming now to those cases in which the terms rhonchus and râle are used, it appears to me that we cannot improve upon crepitation, expressing thereby that sound which most nearly resembles rubbing the hair between the finger and thumb near to the ear; and if people choose, it may be called fine or coarse, although I have often observed in the same case, that what one man calls fine, another calls coarse. Then, abolishing the terms subcrepitant, submucous, and mucous, we simply substitute the terms fine and coarse moist sounds, which naturally merge into rattling, bubbling, or gurgling moist sounds. Clicks, moist clicks, or clicking sounds, express another variety, where the intervals are more or less prolonged between each individual explosion, which together make up the sum of the moist sound. Crackling and crumpling sounds are also each of them sufficiently expressive. Sonorous sounds are either grave or shrill, and individual observers may indulge their fancy in calling them whistling, cooing, snoring, and the like. Nor is there any difficulty in describing the combination of crepitation and moist sounds, which has given rise to the unintelligible phraseology referred to by Dr. Thompson, of mucocrepitant rhonchus. So also we may have clicks and moist sounds together, or sonorous and moist sounds together.

If Dr. Thompson will allow me to suggest these emendations, I trust he will also allow me to add my small meed of commendation to the attempt he has made to simplify this mode of diagnosis.

Bruton Street, Berkeley Square, May 3rd, 1853.

PERISCOPIC REVIEW.

MIDWIFERY AND DISEASES OF WOMEN.

NEW OPERATION FOR THE CURE OF PROLAPSUS UTERI.

M. DESGRANGES, senior surgeon of the Hôtel-Dieu at Lyons, has published an account of a new operation for the cure of prolapsus uteri in the *Gazette Médicale de Paris* for January 29th, and February 12th and 26th.

He defines a radical cure in such cases to consist in replacing the uterus in the pelvis, maintaining it there without the aid of apparatus, and in doing nothing which may compromise life, or even the functions of the organ; in attempting nothing which, if it fail, would render the disorder more severe than before. These indications he believes he has fulfilled, after three years of observation and experiment.

The author first briefly reviews the various operations which have been proposed for the treatment of prolapsus uteri.

NARROWING OF THE VAGINA. Cauterization. In 1823, M. R. Gérardin proposed to form contractile cicatrices, and thus to narrow the vagina, and increase the resistance of its walls. He went still further, and advised the complete obliteration of the canal. In 1833, Professor Laugier employed cauterisation with acid nitrate of mercury. In 1835, M. Velpeau applied the actual cautery. The objections to cauterisation are, the difficulty, especially with the actual cautery, of limiting the extent of the part acted on; and the danger of injuring neighbouring organs, which renders it necessary to cauterise superficially, and hence often insufficiently. Success, however, may be expected from cauterisation in a few cases; but it requires to be carried further than prudence allows.

Excision. Drs. Heming and Marshall Hall propose the removal of an elliptical piece from the anterior wall of the va-

gina; the edges being immediately united by suture. Mr. Ireland recommends the removal of a quadrilateral flap on each side. M. Velpeau prefers removing pieces both before and behind, so as to treat the rectocele and cystocele, which he observes to habitually accompany prolapsus uteri. In the few cases in which excision has been practised, the prolapsus has returned in a few months. The tediousness and difficulty of this operation, its liability to injure the bladder or rectum, and the chance of purulent infection, are objections to its performance.

Suture. M. Bellini, an Italian surgeon, proposes to include a fold of the vagina in a suture, so as to produce sloughing. But the fold may be too deep; hemorrhage may be produced; or the long presence of the sloughs may irritate the organs, and expose the patient to the risk of purulent infection.

NARROWING OF THE VULVA. Dieffenbach excised a series of longitudinal folds round the orifice of the vagina. But this only converts complete into partial prolapsus; and this would be a great point gained, if the patients were freed from the pain produced by displaced uterus at the same time as from the projecting tumour. The merit of the operation is, however, doubtful. M. Malgaigne believed that the excision of the anterior or the posterior semicircumference of the vagina would be of more advantage than other methods; but the only case on which he operated in this way was unsuccessful.

Fricke of Hamburg proposed to unite the walls of the vulva. He pared the internal faces of the labia majora, and united them by suture, as in perineorraphy. Care must be taken to have an aperture behind for the passage of fluids, and one in front for the performance of the generative functions. The uterus is thus sustained by an artificial floor; but this is too low, and the radical cure is only the substitution of one grave infirmity for another.

All these modes of operation M. Desgranges believes incapable of fulfilling the object intended, while several of them are likely to produce danger. The opinion of M. Moreau, that pregnancy is a remedy for prolapsus, he answers by the statement that he has always seen it augmented after labour in persons in whom it previously existed.

The instruments used by M. Desgranges are small self-closing curved forceps, furnished at the end with projecting teeth; a holder resembling a pair of lithotomy forceps, but having the end of one branch channeled, for the purpose of applying the small curved forceps; a trivalve speculum; a lithotomy gorget; a pessary to distend the vagina; and a double T bandage.

OPERATION. The patient, having been prepared by rest, bathing, gentle purgatives, and an enema, is placed on her back, with her thighs widely separated. The trivalve speculum is then introduced, with the handle turned towards the pubis, and the valves are separated to a circumference of about six inches. The vagina usually projects between the blades; but sometimes, when the tissue is less lax, it remains stretched. The cervix uteri must be carefully looked for, as it may lie between the valves of the speculum, like the portions of the vaginal wall.

Through the speculum, the vaginal forceps, with strings passed through their handles, are introduced by means of the holder; and, by strongly pressing on the handles of the latter, the blades of the forceps are separated. They are then placed on the projecting membrane of the vagina; and, by relaxing the hold of the handles, they are made to take firm hold of the tissues. Each projection between the blades of the speculum, or, as is sometimes found, each flat portion between them, may receive two or three of these forceps, so that from six to nine altogether are applied. The speculum being withdrawn, the pessary is introduced, and is firmly fixed by means of some turns of a double T bandage, of which the vertical bands meet the transverse one at the level of the hypogastrium: each of the vertical bands turns over the upper part of the thigh, to rest on the great trochanter. The string which attaches the pessary to the bandages ought to be rather behind than in front, as the passage of urine may otherwise be impeded or prevented by the pressure of the urethra against the pubis. The strings attached to the forceps are collected, tied together, and fastened to the bandage. The patient is then put to bed, and perfect rest is enjoined. The forceps generally fall off from the fifth to the tenth day, sooner or later, according to the size of the fold of membrane which they have seized.

This operation is repeated on other parts of the vagina, the speculum being employed until the walls no longer project between its valves, or its being opened causes pain or hemorrhage. The gorget or finger must then serve as a conductor. The gorget is passed in on the finger to the part intended to be operated on, and is turned with its convexity towards the vaginal wall. The vaginal forceps, fixed in the

holder, are then introduced along the groove in the gorget. When they have arrived at the end, the conductor is withdrawn, and the forceps are made to seize the membrane. When the finger is used, the forceps are introduced along it, taking care that the finger be not wounded. On arriving at the destined spot, the blades are separated, and pressed against the vaginal wall.

The instrument is most easily applied on the posterior wall of the vagina; with more difficulty on the lateral walls; but, in regard of importance, the lateral walls have the preference. M. Desgranges has never made more than ten applications of the instrument. He says, that the surgeon must be guided by circumstances in judging of the proper number of applications, but that it is better to make too many than not enough.

The pain, he says, is not great, unless the cervix uteri be seized: pain then is severe, radiating to the loins and abdomen. The free extremities of the forceps may cause excoriations, unless the tissues be protected by diachylon plaster.

Results of the Operation. The febrile reaction is slight, and of short duration; and requires no treatment beyond low diet.

When the forceps have fallen off, a small suppurating wound is left. By digital examination, small hemispherical projections are felt, varying from the size of a pea to that of half a nut.

The vagina gradually loses its calibre and its mobility. At a later period, it becomes covered with nodular bands; the narrowing goes on until the finger can scarcely be introduced without a disagreeable sensation. In process of time, the nodosities become smaller, and even disappear; the vagina regains its suppleness, and, with the exception of its calibre, it returns far towards the normal state. The cervix is in the axis of the vagina; and the contraction affords no impediment to coitus or to delivery, as has been proved in one case.

PROLAPSUS OF THE UTERUS AND VAGINA DURING PREGNANCY AND LABOUR.

The *Dublin Quarterly Journal of Medical Science* for May 1853, contains a paper on the above subject by Mr. J. H. Houghton, of which the following is an abstract.

CASE. Mrs. S., aged about 26, had been much neglected in her first confinement, and had since suffered from prolapsus uteri. About November 1850, she had retroversion of the uterus, followed by a miscarriage at the fourth month: since which time the uterus had descended daily, and had prolapsed every day during her present pregnancy, even to the day of her delivery. At times she had had considerable discharge from it; and she was aware of ulceration existing round the os. She had not had any medical advice for the prolapsus.

She was taken in labour with her second child, on November 13th, 1851, at 4 P.M. The pains continued feeble and infrequent till 2 P.M. the next day; and Mr. Houghton saw her at about 4. The head presented naturally; the os uteri was dilated to about the size of a crown-piece; the passages were moist; the membranes had been ruptured twenty-four hours previously. On examination, the os uteri was found close to the outlet; the walls of the uterus, from the margin of the os to that part of the uterus against which the head of the child pressed, formed a cone three inches long, the apex downwards. The lips of the os were very thick, rigid, and unyielding; and indeed the whole of the cone presented the same character. The pains were regular and tolerably strong. As the labour proceeded, the whole mass, uterus and head, came down together, dragging with it the anterior wall of the vagina, and at length obliterating the anterior *cul-de-sac* of the vagina; the tumour thus formed dilated the vulva. The descent continuing, and the os uteri scarcely dilating at all, the uterus came so low down that the anterior lip of the os uteri was pushed outside the vulva, and the anterior half of the os uteri and the posterior half of the vaginal orifice formed an elliptical opening, through which the child's head could be readily felt, and, if necessary, could have been seen. Still the os uteri continued firm and unyielding; and eventually the whole of the os, with an extraordinary *caput succedaneum*, protruded from the vagina.

Tartar emetic was given, and nausea kept up for about three hours. After this, two scruples of laudanum were administered.

At 8 P.M., the os uteri was rather larger than a crown-piece; the *caput succedaneum* protruded; the bones of the head pressed on the margins of the os, which were thick, hard, and very unyielding. The pains were strong. The anterior *cul-de-sac* of the vagina was obliterated with each pain, with a disposition of the whole os uteri to pass externally. For some time after the laudanum was given, the pains became more moderate, but they never ceased, and at 10 P.M. returned strongly. The os was now more disposed to dilate, though still very firm and rigid.

Mr. Houghton determined to wait for dilatation, and in the mean time to prevent total inversion of the vagina. To effect this, he proceeded in the following manner. Having replaced the uterus and vagina as well as he could, he watched carefully for each pain; and when it was about to commence, he passed the fingers of his right hand into the anterior *cul-de-sac* of the vagina, and the thumb of the same hand into the posterior *cul-de-sac*. The fingers and thumb thus embraced the os and the child's head; and while the latter was allowed to press on and dilate the former, he supported the whole mass in position, or nearly so. For some time the dilatation continued very slowly, and he could feel, from time to time, that abrasion of the anterior and posterior lips of the os had taken place. The os now very tightly embraced the head, the posterior lip being softish, the anterior very hard and thick. At about half-past 11 p.m., during a very strong pain, Mr. Houghton felt something suddenly give way, and the child was almost immediately born alive; laceration of the posterior lip of the os uteri having taken place to the extent of about an inch. No flooding followed. The uterus and vagina were prolapsed when the placenta was expelled. The uterus was easily returned; the patient was much exhausted; a stimulant and a dose of opium were given, and she was allowed to rest.

The patient went on favourably; but remained subject to prolapsus, which returned every time she sat up.

Prolapsus of the uterus during pregnancy and labour is a rare disease. Mr. Houghton collects six cases from a paper published by Dr. Merriman in the *Medical Times*, six related by Dr. D. D. Davis, in his *Principles and Practice of Obstetric Medicine*, and two cases recorded by Dr. Ashwell, one of which is from Capuron.

From a review of these fourteen cases, Mr. Houghton finds:

That two cases were primiparae; four multiparae; while in eight the number of pregnancies was not named. That in two cases the head presented; in twelve the presentation was not named. That in four cases there was great rigidity of the os; in ten, the state of the os was not mentioned. That in thirteen the prolapsus was complete; in one, this was not mentioned. That in one case venesection, tartar emetic, and opium, remedies calculated to remove rigidity, were used with benefit; in four, counter-pressure was used; in four, dilatation; in four, the mode of proceeding is not clearly related; in two, incisions were practised; in one, turning. In twelve cases the patients recovered (probably with prolapsus uteri remaining); in one, death occurred; in one, recovery without prolapsus. Rupture of the cervix uteri took place in one case.

The accounts of treatment of the disease are very meagre. Counter-pressure, dilatation, and incision, were the means most practised.

Counter-pressure seems applicable in all cases of prolapsus during labour; for on seeing the uterus and vagina protruded, and reflecting how the uterus is naturally suspended in the pelvis, it follows that by supporting the vagina with the tips of the fingers, and thus maintaining its *cul-de-sac*, a point is afforded from which the child or the membranes may press on and dilate the os.

Mechanical dilatation is objected to by Mr. Houghton, on the grounds that by its performance a risk is incurred of stimulating the reflex function of the uterus, and hence producing violent uterine action, and laceration of the cervix or body of the uterus.

Incision of the cervix is recommended by Mr. Houghton to be employed, after counter-pressure has been continued some time, and rigidity continues in spite of the ordinary means of overcoming it.

STOMATITIS MATERNA: ITS CAUSES, VARIETIES, AND TREATMENT.

In the Periscopic Review of our number for March 11th, p. 218, we brought together the substance of several very interesting papers on the symptoms, anatomical lesions, and treatment of stomatitis materna; and, in consequence of our remarks, Dr. Cullen published, at p. 333 of our number for April 16, a case of the disease in question which occurred in his practice. We now return to the subject for the purpose of introducing to the notice of our readers a paper "On Stomatitis Materna," by W. H. BYFORD, M.D., Professor of Medicine in Evansville Medical College, U.S., which appears in the April number of the *American Journal of the Medical Sciences*.

Dr. Byford regards the inflammation of the mouth as a symptom of a general disorder of the whole system, depending most

probably on an abnormal condition of the blood. On this point he remarks:—

"Could we see all the vital and chemical changes produced in the blood—for changes there must be—by the efforts of the mother's system to sustain the child *in utero*, and the necessary mutation after the process of gestation is completed, compared with its condition in health and during lactation, we might receive some light upon the subject. I apprehend that we should be taught that the character, in some respects, of change in the blood itself, would be continuously the same from the commencement of gestation to the termination of lactation; and that the effect upon the mother's energies would correspond with the quantity of the peculiar change growing out of the increasing wants of the being dependent upon her for support. And as anæmia is one of the results of protracted lactation, this tendency may begin with the commencement of pregnancy. Patients not very competent to the task of childbearing and its consequences, however, often become enfeebled and thin in gestation, and continue to become more so until they succumb, or are relieved from the discharge of these duties. The same nourishing principle called for to sustain the child *in utero*, is still demanded to nourish it at the breast; and it may be a secretion in the first place, similar in character (possibly identical) to what it is in the last. This demand increases as the child grows in size and vigour, and must consist of the proximate elements of nutrition so nearly vitalized as to require none in the first instance, and, in the second, but feeble powers of digestion to render them subservient to their appropriate uses. If the pathological condition of the system is that of anæmia resulting from pregnancy and lactation, there must be some peculiarity about it, judging from its effects, differing from anæmia arising from other causes. And this may be the peculiarity, viz., a greater paucity comparatively, perhaps, than in any other case of anæmia of the material elements expended in the process of nutrition. And this may be the case without any of the ordinary signs of anæmia. From what has been said above, it may be inferred that pregnancy, as well as lactation, is regarded by me as one of the causes of stomatitis materna."

Dr. Byford considers extreme youth, the scrofulous diathesis, and debility, as predisposing conditions; and he also attributes great importance to extrinsic causes, namely, epidemic and endemic influences. The remarks upon this branch of the subject are of peculiar interest as general pathological observations, as they show the fundamental error which special pathologists commit when they labour to establish the characteristic distinctions of fevers, without at the same time pointing out what is equally important, their essential identity, and the meteorological and other causes which induce in them a change of features. This line of thought we hope to pursue on future occasions. In the mean time, the reader is requested to mark the general application of the following extract, as well as its bearing upon stomatitis materna:—

"By the epidemic influence, I mean the extensive change which has taken place in the general cast of the diseases of the West, especially along the course of the large rivers, from the ordinary endemic bilious fevers, and other miasmatic diseases, to the typhoid or continuous type, attended for the most part with affections of the mucous membranes, particularly of the alimentary canal. This typhoid diathesis is so remarkably developed in many parts of this extensive tract of country, that it has usurped the place of the former diseases, or moulded them into a different type. The western physician of many years' experience can remember that in many extensive sections of country nothing was known from observation, until within a few years past, of the typhoid or continued fever. Taking these things into consideration, I think it may be inferred that a widespread epidemic influence has been for some time exerting its force upon the inhabitants of this portion of the country, producing a condition of the system in which there is a strong proclivity to disease of the mucous surface; and operating upon the maternal system, its effects are the tendency to this disease, just as in particular seasons, and under certain circumstances, there is a tendency to puerperal fever."

VARIETIES. Dr. Byford describes three varieties of the disease; and the following is a summary of his descriptions.

First variety. It is characterized by an erythematous inflammation, which may be either confined to one spot, or more or less diffused over the mucous surface of the mouth and fauces. This may pass away in a few hours, but it more generally continues for some days, after which it generally subsides, leaving the patient apparently quite well, with the exception of a little debility. Sometimes there is only a remission, and not a com-

plete relief from the soreness and distress. After an uncertain interval, a similar train of symptoms occur.

Second variety. It seems to engraft itself upon and to alternate with the first variety. A crop of vesicles is scattered over a part or the whole of the inflamed surface. The vesicles are sometimes transparent, and easily overlooked; sometimes aphthous, and quite obvious. The paroxysm is more severe, and more protracted. The respite from suffering is commonly shorter, and less complete.

Third variety. The whole force of the paroxysm is concentrated upon a small part of the surface; always, in Dr. Byford's experience, upon the tongue. Either upon its side or inferior surface, he has seen it begin by a fissure, gradually leaving an ulcer, from a hardened tubercle, from the bursting of a vesicle, or simply from an inflamed point. A rapid ulceration deeply notches the tongue: suddenly the ulceration ceases, and the cavity granulates; but the tongue is left distorted. Fresh paroxysms occur, as in the former varieties. Notwithstanding the severity of the ulceration, the constitutional symptoms are milder in the third than in the first and second varieties.

In our former notice, we mentioned that authors described the extension of the inflammation from the buccal mucous membrane to the bowels, as giving rise to diarrhoea, and we quoted a case reported by Dr. Hubbard, in which the following sentence occurs: "She complained of heat in the stomach, and colicky pains. The fecal discharges were solid, but more or less coated by a jelly-like substance, and that often spotted with dots of blood." We find in Dr. Byford's paper more precise statements as to the migrations of the inflammation from the mouth. He says:—

"The two first varieties are migratory, travelling from the mouth along the surface of the mucous membrane to all the neighbouring cavities, down through the pharynx and oesophagus to the stomach; and thence through the whole extent of the alimentary canal, frequently finding permanent lodgment in some section of this extensive tube, and destroying the patient by originating chronic gastritis, duodenitis, ileitis, etc., or passing through the larynx, trachea, and into the bronchia. And if it does not, by establishing inflammation in some portion of these tubes, exhaust the patient, it may awaken into existence the more fatal affections of the substance of the lungs. It has also followed the nasal passages into the different cavities of the skull, or maxillary antrum, and there induced permanent inflammation. At other times it travels through the Eustachian tube to the tympanum, and thence to the mastoid cells. And I have seen one case where permanent deafness of one ear, and exfoliation of bone from the mastoid process, occurred. The most common course for it to take is into the alimentary canal and lungs. It is very prone to fasten fatal disease upon the lungs, when it is allowed to run on for any considerable length of time."

TREATMENT. Ferruginous tonics, nutritious diet, and cod-liver oil, are the best remedies in the opinion of Dr. Byford. Change of residence, and weaning (in common with most authors), he considers more conducive to recovery than any medicines. With regard to weaning, he says: "In some cases weaning will not in itself cure, although this is the general rule."

TRANSVERSE PRESENTATION: DELIVERY BY EVISCERATION AND DECAPITATION OF THE FÆTUS.

Blundell [ed. 1840. p. 153], speaking of Embryotomy, says:—"We may attempt the abstraction of the child in two ways: by decapitation, or by disruption of the different cavities. For opening the cavities, the best instrument, I suppose, is a long and large perforator. It is to be introduced at the thorax in the arm presentation, which is the most common;—the viscera being afterwards removed at the opening, so as to make room for the introduction of the hand, and the seizure of the feet. But although a fetus may be removed in this manner, I suspect that extraction by decapitation, when this can be accomplished, is decidedly to be preferred—a practice first recommended by Horne, and recorded, I think, by Heister. For this purpose I should prefer (to a semilunar knife with cutting edge) a blunt hook of soft iron (not of steel) mounted on a stem, firm yet flexible, so that in operating, the curve might be accommodated to the situation of parts. This hook is to be fixed over the neck; and then by drawing resolutely but rationally, the head is to be torn from the body. The body of the fetus is then to be abstracted by the arm; and the head afterwards removed separately from the uterus."

The points of importance connected with decapitation are the

difficulty of removing the separated head; and the danger of injuring the mother by using a cutting instrument of improper construction. In the following case the scalpel was probably employed from necessity, and not from choice. We quote from the "Proceedings of the Records of the Boston Society for Medical Improvement" as reported at p. 372 of the *Amer. Jour. of the Med. Sciences* for April 1853.

"CASE REPORTED BY DR. GRAY. A patient, somewhat over thirty years of age, was taken in labour of her first child in the early part of November 1852. At the end of thirty-six hours, the left hand and arm were found protruding externally, and the head which was in the hollow of the sacrum was forcibly pressed against the sternum. Under these circumstances, turning being out of the question, evisceration was at once resorted to. The presenting arm, nearly filling the vulva, was removed at the shoulder; a cord wound round the finger, and thus passed completely over the neck, served to bring the child sufficiently low to render evisceration of the thorax comparatively easy. This operation being finished together with the removal of several bones, the child, even though propelled by violent pains, made but little progress; and after assiduous efforts for a period of two hours, decapitation was decided on. The neck being drawn fully into view by the cord, was readily divided by a scalpel. The body by means of the remaining hand was easily withdrawn, and the head as readily followed from the vagina—the operator's fingers being introduced without difficulty to bring it away. The head was of the usual size, and the child was a large one."

"Dr. STORER thought this a remarkably favourable result. He alluded to the great difficulty uniformly experienced in removing the separated head. He knew of but two cases, besides the one reported by Dr. Gray, having occurred in Boston: one was attended by Dr. Channing, and for a long time efforts at removing the head were unsuccessful. Dr. C. removed it on the succeeding day. In his own recently reported case, Dr. Storer had stated that he used great exertions for half an hour after the attending physicians were exhausted, and only continued his efforts from a desire to free them from any odium likely to follow were the head left in the uterus. He had then succeeded."

THE DISASTROUS RESULTS OF IGNORANT AND VIOLENT INTERFERENCE WITH THE PROCESS OF PARTURITION.

In this country, we have still to deplore an unnecessary mortality among puerperal women, from the violent interference of ignorant midwives and untaught practitioners, during natural as well as during preternatural labour. This subject has been forcibly brought before the readers of the *ASSOCIATION JOURNAL* by Dr. MURPHY, in his Lettsomian Lectures, published in the numbers for March 25th, April 8th and 15th. The following account, by Dr. W. S. KING, of the native midwifery of Monterey, in California, presents a more appalling picture, and on a larger scale, of meddlesome midwifery, and its direful consequences, than anything which we can recollect having read of in any other work. We quote from a paper on the "Medical Topography, Climate, and Diseases of Monterey, California," in the *American Journal of the Med. Sciences* for April, p. 301:—

"The diseases peculiar to females are far more common in Monterey than any other class of disorders. Of these, the most usual are leucorrhœa, prolapsus uteri, and deranged menstruation. Those affections are more numerous in proportion to the population in Monterey than in any community I have ever known."

"The two first mentioned are, I believe, owing to the mode of treating parturient women practised by the natives of this place. It is the custom in Monterey, when labour begins, to place the woman on a chair in the middle of the room; a rope is fastened to the rafters above her head, which she is directed to pull. Round her abdomen a broad towel or rebosa is passed, the ends crossed behind, and intrusted to assistants, who are instructed to tighten it when the abdominal tumour descends during the pain, and *belay there* (as it were) until the arrival of the next, when it is *hauled taut* again, so as to hold on each time to the progress made, and not permit the usual ascent of the tumour after the subsidence of the pain. With the same view, a strong man is frequently seated behind the woman, who, with his hands placed on her abdomen, makes strong pressure downwards at each pain, with the idea of assisting, by mechanical force, the contractions of the uterus. All this time, the midwife (generally some old woman) is seated in front with one, and, if possible, both hands in the vagina, making all the

traction in her power. When the woman and assistants are somewhat fatigued, she is placed upon her knees on the floor, but without relaxing any of the means and appliances which would cause them to lose the advantage already gained.

"These measures often prove fatal to both mother and child; usually, on the termination of the labour, the female is completely exhausted. From the injury done to the soft parts by the long and rough handling, ulceration and inflammation often ensue; thus laying the foundation of uterine and vaginal diseases, with displacement of the uterus.

"Immediately after the delivery, and when the poor woman is nearly worn out, and in a more or less excited state, and the nervous system in an exceedingly susceptible condition, and disposed to receive strong impressions from slight causes, it is the universal custom for all acquaintances, however slight, to visit, with one accord, the new mother; so that her room will resemble an evening party, being filled with numerous guests, who do not hesitate to sit for hours, in loud conversation, and regale themselves in smoking paper cigarettes. When we consider how much lying-in women often suffer from not being kept in a tranquil and quiet state after confinement, and how important to her well-doing is rest and exclusion of company, we may readily conceive the unfortunate result of an opposite course, and understand why more untoward circumstances happen with such women here than ordinarily.

"Within the last four years, the influence of the intelligent physician, and a few American families, have made some improvement in these matters; but, as this part of the profession is still in the hands of the Californian midwife, much ignorance and superstition still exist throughout the country, to an extent that could scarcely be credited in other portions of the United States."

ASSOCIATION INTELLIGENCE.

MR. SYME AND THE CENTRAL COUNCIL.

At a meeting of the Central Council, held at Worcester, on the 30th April, was read the following letter from Mr. Syme, of Edinburgh:—

"Edinburgh, April 22nd, 1853.

"SIR,—I beg to direct your attention to the 158th page of the 19th volume of the Transactions of the Association just published. As it is impossible for me to remain connected with a body which could tolerate such a statement, or sanction its publication, I must desire my name to be withdrawn from the list of associates.

I am, etc.,

"JAMES SYME."

To the President.

It was then resolved—

"That this Council receive with regret the resignation of Mr. Syme; but at the same time they beg to impress upon him that the passage complained of in the address was read at the anniversary meeting by Mr. Hester; and that, therefore, this Council have had no choice but to carry out the instructions of their superior body, viz., the members assembled in general meeting."

JAMES P. SHEPPARD,
Secretary to the Association.

April 30th, 1853.

ANNUAL MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The members and friends of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION are informed that the Twenty-first Anniversary Meeting of the Association will be held at SWANSEA, on WEDNESDAY, the 10th, and THURSDAY, the 11th of August next.

Full particulars will be forwarded to the Editor for publication in an early number of the Journal.

JAMES P. SHEPPARD,
Secretary to the Association.

May 7th, 1853.

METROPOLITAN COUNTIES BRANCH.

A meeting of this Branch was held on Tuesday, the 10th instant, at 4 P.M., at 37, Great Queen Street, Lincoln's Inn Fields. It was summoned by the Council, to consider Dr. Cormack's proposal to hold Quarterly Meetings of the Branch, and also for the consideration of general business.

MEETINGS OF THE BRANCH: ALTERATION OF RULE XI.

Dr. CORMACK proposed a resolution providing for three general meetings during the year, in addition to the annual general meeting.

Mr. RICHARDSON seconded the resolution.

Mr. BOWLING doubted very much the judiciousness of Dr. Cormack's proposal. Medical men left home with difficulty; and he did not think that good meetings could be obtained, if they were held so frequently. He urged Dr. Cormack to reconsider his proposal. When there was business to be transacted, the Council could at any time call a meeting. Would Dr. Cormack be satisfied with two meetings?

Mr. COLLYNS, from his experience in the South Western Branch, to which he formerly belonged, was convinced that it would be difficult to get a good quarterly attendance.

Dr. G. WEBSTER said, that these were stirring times, and that the profession expected the members of this Branch, who could assemble so much more easily than those living scattered at great distances in the country, to meet for the discussion of the questions of the day. There was no other society in London where the economics of the profession could be debated. He would support Dr. Cormack's motion.

The PRESIDENT thought that, without business, quarterly meetings would involve needless expense. Unless notices were sent, members forgot that there was to be a meeting; and notices involved a large postage expenditure. He had only accidentally remembered to-day's meeting from seeing an allusion to it in the Journal of last week.

Mr. CHARLES hoped that Dr. Cormack would neither withdraw nor modify his proposal. There were several most important questions of professional polity upon which the Branch ought to deliberate, not once only, but frequently. "Advice gratis" and "hospital abuses," which had been so well handled in the Journal, ought to engage the attention of an early meeting of this Branch.

After some conversation, the motion was ultimately passed in the following modified form:—

"That the following do stand in place of Rule XI.

"That the annual general meeting be held on any Tuesday in June or July, and at any time or place which the Council may appoint, provided that not less than twenty-one days' intimation of the day, hour, and place of meeting, be given in the Journal; and that, in addition to the annual general meeting, two other general meetings be held annually in London, viz., on the second Tuesday in February, and the second Tuesday in May."

The object of appointing these meetings on the particular days specified was, that they would best afford the members an opportunity of considering with advantage any measures affecting the medical profession which might be before Parliament. By the days of meeting being fixed, members would be able to remember them, and make their arrangements accordingly.

MEDICAL REFORM.

Dr. SEMPLE thought it very necessary that members of the Association should take part in matters of importance connected with the profession. At the present moment, two measures were under consideration by the ministry, both of which affected very materially the interests of all practitioners of medicine and surgery. The first was the proposed new Charter of the Royal College of Physicians; and the second was the Medical Reform Bill proposed by the Association. With respect to the first measure, it was one of internal reform; and as such, the Association had probably little concern in its enactments; but it was nevertheless quite evident that, if it passed into a law, it would affect not only the members of the College of Physicians, but, in connexion with any coming measure of general medical reform, likewise all the practitioners of medicine throughout England and Wales. It was therefore necessary that a Committee should be appointed to examine how far the new Charter of the College would influence the great mass of the profession.

But the Association is more particularly interested in the Bill of Medical Reform brought forward by itself. Admitting as he (Dr. Semple) did the necessity for some measure of medical reform at the present crisis, he thought that there might be some parts of the bill liable to objection; and, at any rate, that its provisions should be open to discussion. A draft bill was drawn up last year; and it was generally understood that some modifications had lately been introduced; but the nature of these modifications has not yet transpired. It was also necessary that public meetings should be held, and that the views of the members of the Association, and of the profession gene-

rally, should be clearly understood. It was quite possible that some such meetings had taken place; but he (Dr. S.) had not heard of them, with the exception of one of the South Western Branch, an account of which was printed in the ASSOCIATION JOURNAL and *Medical Times* of last week. That Branch had expressed some strong objections to the Bill. Believing that something must be done, but that at the same time we should guard against hasty and rash legislation, he thought that the appointment of a Committee, to watch the progress of the reform question in general, would be the means of putting the Association in possession of every important step which might be taken by the government, or by the Houses of Parliament; and also of inviting an expression of opinion, both individually and collectively, on the part of the members of the Association, as well as of other members of the medical profession. He moved the following resolution:—

“That a committee be appointed to watch the progress of the Medical Reform question in the Houses of Parliament; to communicate with the Reform Committee of the Parent Association, and with other Medical Reform Committees; and to report its proceedings to this Branch.”

Dr. GEORGE WEBSTER seconded the motion. He thought that the more the Bill was discussed the better. He concurred in the suggestion of communicating with other Committees; and he thought that the Committee of the South Western Branch ought to be invited to meet the Committee of this Branch, or to correspond with it. From some experience in the subject of medical reform, he was convinced that, without full, cordial, and frank discussion, the opinions of the medical profession could never be brought into sufficient harmony to enable any bill to meet with general support. He, therefore, speaking as a member of the Medical Reform Committee of the Parent Association, would say—let every part of the bill be discussed here and throughout the kingdom; and if it contain any parts which are objectionable, let them by all means be altered. He would, however, remind the meeting that the subject is involved in immense difficulties. It is not as if they were legislating for the profession *de novo*: they were obliged to purchase the support of powerful interests by making concessions; and he felt assured that any one who had had any experience of the difficult negotiations which a settlement of this question involved, would pause before they blamed the Committee for in one or two points sanctioning what was not intrinsically best.

Dr. CORMACK proposed that Mr. G. Hastings, though not a member of the Association, being the Secretary of the General Reform Committee, be requested to take part in the discussion.

This proposition having been put by the President, was carried unanimously.

Dr. O'CONNOR thought that it would greatly facilitate the discussion, were Mr. Hastings at once to state to the meeting the present position of the Bill. He would ask, Is it likely to be introduced into the House of Lords, as intimated in the Journal for last week?

Some conversation ensued between Dr. O'Connor, Mr. Bowling, the President, and others; in the course of which it was stated, that many members of the Association were embarrassed from not having had it in their power to peruse the bill in its altered form.

Dr. DAVIES (of Hertford) would like to see the amended Bill printed in the Journal.

Mr. HASTINGS, having been called upon by the Chairman, then rose, and gave a history of the present position of the reform question, and of what had been done since the Oxford meeting.

He would reply to two statements made by Dr. Semple. In the first place, Dr. S. had stated that meetings of the Branches had not been held. Now, every one of the branches had met, and discussed the bill, and all except one had reported in its favour. The subject had also been brought forward at the last general meeting of the Association at Oxford. So that, so far from the bill not having been discussed, it had been extensively discussed. Secondly, Dr. Semple had said that very little had been done by the Committee since the draft bill was published in November 1852. This was a mistake. The Committee had exerted themselves in various ways—by correspondence with various bodies, and by deputations to the Scottish Colleges; in fact, they had done everything which they could with the view of rendering the bill acceptable to the corporate bodies, and to the mass of the profession. He did not, therefore, think that the Committee could be reproached with having been idle.

With regard to the present state of the bill, it had been found impossible for the Committee so to alter it as to meet the wants of all concerned within any reasonable time; and, under these

circumstances, it had been thought best to give it into the hands of Lord Palmerston in its existing condition, as it was published in the *Provincial Medical and Surgical Journal* for 10th November, reporting to him such alterations as might be from time to time suggested by the colleges and the profession. Lord Palmerston had expressed himself impressed with the importance of the subject; but he had since stated to Mr. Hastings that he had not time, being much occupied with Irish and other important parliamentary business, to give proper attention to it. He (Lord Palmerston) was willing that a deputation should wait upon Lord Aberdeen, and ask him to introduce the bill into the House of Lords, which was less occupied than the House of Commons. If introduced there, the bill would be discussed, and sent down to the Commons in a state which would probably give them very little trouble. He (Mr. Hastings) had written to Lord Aberdeen, requesting him to fix a day for receiving a deputation; and his lordship had fixed Thursday, May 12th, at two P.M., for that purpose. He would advise petitions of the form published at p. 390 of the Journal for last week, as an effectual means of bringing the subject of medical reform before the notice of the House of Lords. It would show to them that the subject was attracting the notice of the profession in general.

He agreed with the remarks of Dr. Webster, that the Association was in a different position from having to legislate *de novo*. Varying interests, and corporate bodies tenacious of their rights, had to be legislated for. It was evident that the Committee could not have everything as they liked; and the question was, whether the profession would accept a compromise. A bill opposed by all the corporate bodies could certainly not pass. But the present bill was supported by the College of Physicians; and this Mr. Hastings stated, notwithstanding assertions made to the contrary, on the faith of a letter which he had received from Dr. F. Hawkins, the Registrar of the College. The College of Surgeons had not acted so cordially: it evidently did not wish for any reform measure; but he did not think that parliament could throw over a bill which, though it did not meet all the views of the Council of the College of Surgeons, still proposed nothing injurious to it, and was acceptable to the mass of the profession.

It had been stated that the bill did not provide for the general practitioner. It did all that can be fairly asked for. When the bill became law, every one, even though only possessing the license of the Society of Apothecaries, would be entitled to be registered as a surgeon. Again, in future, every person admitted under the new act would be a member either of the College of Surgeons or the College of Physicians; and this would do away with any third grade—which, he believed, had been desired by the Association. The bill abolished a third grade, merely retaining the distinction between physicians and surgeons. With regard to education also: all members of the profession will have to enter through the same portal. Here again the system of equality is recognised; and the *status* of the general practitioner is raised.

In the formation of the Council, he allowed that there were points to which objections might be raised, and in which improvements might be introduced. It had been objected, that the Council was to be formed of the Regius Professors of Medicine in the Universities of Oxford and Cambridge, a member designated by the Senate of the University of London, the Presidents of the Royal Colleges of Surgeons and of Physicians in England, five physicians to be chosen by the College of Physicians, five surgeons to be chosen by the College of Surgeons, and of six other members, who may or may not be general practitioners. It would not be possible to place more members of this class on the Council; and he thought that the plan which had been proposed, of electing members of the Council by the whole profession, could not be adopted. It might work well for a year or two, but would ultimately lead to cliquism and other evil consequences. The committee thought that, as a compromise between the two systems, the Secretary of State should nominate the Council.

A great difficulty in all attempts at medical legislation had hitherto been the presence of clashing interests. Until the present occasion, he believed that England and Scotland had differed on the subject of medical reform. The Scottish bodies now propose to have, instead of a separate Council for each division of the kingdom, a single Council for all; and that their examiners should be chosen from the Colleges of Physicians and of Surgeons in Edinburgh, and the Faculty of Physicians and Surgeons in Glasgow; and that practitioners should be registered on passing the examination of the Board thus appointed.

The Colleges of Physicians and of Surgeons in Edinburgh had deputed their Presidents to attend the deputation which waited upon Lord Palmerston, and to express their concurrence in the bill. The Faculty of Physicians and Surgeons in Glasgow at first opposed the bill; but that opposition had now ceased. In Ireland there had been no objections raised: he did not therefore expect much opposition from that quarter.

In order that the bill should pass, an united effort on the part of the profession was necessary, and he hoped that the recommendation to petition, contained in the Journal of last week, would be extensively acted upon.

In reply to an observation from Mr. BOWLING,

Mr. HASTINGS said that the College of Surgeons had objected to the measure because the examiners to be appointed by the Bill would examine in surgery. They wished that all candidates should present themselves both before the College of Physicians and the College of Surgeons. He had, however, heard that the College of Surgeons would not object to a Board appointed jointly by the two Colleges.

Mr. BOWLING said that Mr. Hastings had not referred to the Society of Apothecaries; and he was anxious to know if the Committee had had any communications with them. It was of no small importance to know the sentiments of so influential a body.

Mr. HASTINGS said that he had sent different communications to the Society of Apothecaries; but he had not received from them in reply any expression of opinion as to the bill.

Dr. HALLEY said that the Society of Apothecaries had always expressed a willingness to give up their rights whenever they should be called upon to do so.

Mr. BOWLING said—yes, but only upon certain conditions; and they would never do so voluntarily, unless some machinery were provided that would equally, or to a greater extent, maintain the high standard of education of the general practitioners. He wished to ask Mr. Hastings whether the six practitioners on the Council were to be general practitioners?

Mr. HASTINGS said that the term employed was, "medical practitioners".

Dr. WEBSTER said, this was a point upon which there had been a good deal of discussion; and he thought it had been understood that the six practitioners were to be general practitioners. He would like to see a Council elected by the profession at large; but if that could not be obtained, he would much prefer that the Council was nominated by the government than by the medical corporations.

Mr. BOWLING said that there were various points of difficulty, and one of them was the registration as surgeons of persons who were only Licentiates of the Apothecaries' Society.

Dr. O'CONNOR was convinced that the examination at Apothecaries' Hall was more conducive to public safety than that at the Royal College of Surgeons. The examination of the College was no test of fitness for the discharge of any duty connected with the profession. A slight examination in surgery and anatomy was no protection to the public. The object of the College of Surgeons appeared to be to form two distinct classes; the one a superior grade, the consulting surgeons; the other an inferior grade, men to make and find work for the superior. Mr. South had told a candidate, that in a case of hernia it would be his duty, not to operate himself, but to send for a hospital surgeon.

Mr. RICHARDSON said that if the Branches had discussed the medical reform question, he had seen no reports of the proceedings. No such reports had appeared in the ASSOCIATION JOURNAL, or in the other medical periodicals.

Dr. WEBSTER. You will find reports of many discussions in the Journal of last year.

Mr. RICHARDSON said that might be quite true; but since these discussions had taken place a new bill had been brought forward; and, excepting the discussion reported in the Journal of last week of the proceedings at the meeting of the South Western branch, he had not seen a report of any Branch meeting at which the bill now in the hands of Lord Palmerston had been considered. He much feared that the promoters of this bill were too impatiently bent on pushing it through parliament; for he knew that in many parts of the country the principles of the bill were not comprehended; nor was there an adequate sense entertained of the numerous changes which would be effected on medical practice, should it become law. He thought that the best thing that could happen to the profession, would be a refusal on the part of Lord Aberdeen to proceed with the measure during the present session of parliament. So far as he understood the bill, its tendency would not be to elevate, but to degrade the general practitioners.

Dr. CORMACK wished to recal the meeting to the nature of the proposition which was before it, and which probably they were all disposed to sanction. The topics upon which Mr. Richardson had entered would, as a matter of course, receive ample consideration from any committee which might be this day appointed; and might afterwards be fully discussed at a general meeting, when a report of the Committee was given in. He therefore thought that, unless some objections could be urged to Dr. Semple's motion, much valuable time might be saved by passing it at once. He could not at all agree with what had fallen from his friend Mr. Richardson, as to the question not having been fully discussed by the Association. Since ever he (Dr. C.) had been a member, it was one of the topics which had most frequently met his eye in the Journal of the Association. It had been debated in all the Branches, and at various annual meetings. At the Oxford meeting, the bill had been very minutely considered; and the result of an animated discussion had been the unanimous conviction that it was the duty of all classes of medical reformers to merge their individual differences. It was upon this basis that the present Medical Reform Committee was selected: it was a committee which fairly represented all—even extreme—opinions; and for that very reason the results of its deliberations were peculiarly entitled to respect. He fully admitted, with previous speakers, that it would only be just and right that the profession should elect its own Council; but his conviction was, that any attempt, in the first instance, to insist upon this legitimate claim, would produce no other practical effect than complete obstruction to medical reform. The Colleges would not concede this point; and the Colleges were too strong to allow any measure to pass in opposition to their combined exertions. The Colleges were, however, every day becoming more liberal. The question then was, not what was theoretically best as regarded the composition of the proposed Council, but whether a compromise might not be accepted. He thought that the nomination of the Council by the government was a very fair compromise; and that it was a method which even had some advantages. However, as he had already said, the question before the meeting was the appointment of a Committee; and he would therefore suggest that the further discussion of the merits of the bill should be delayed till the report of that Committee was before them. In the meantime, it should be well understood that the General Reform Committee had been engaged in arrangements of the greatest difficulty and delicacy, and that many of them were sacrificing their own peculiar interests to secure the co-operation of the profession, in behalf of the best measure which could in the circumstances be obtained. The Committee represented all opinions; and upon that ground it commanded confidence. The exertions of its members deserved the gratitude of the profession.

Dr. SEMPLE's motion was put and carried.

Dr. SEMPLE then moved, that the following gentlemen be appointed members of the Committee, with powers to increase their number to twenty-five:—

The PRESIDENT.	R. P. COTTON, M.D., Clarges Street, Piccadilly.
The SECRETARY.	JOHN DAVIES, M.D., Hertford.
HENRY ANCELL, Esq., 3, Norfolk Crescent.	PATRICK FRASER, M.D., Guildford Street.
J. RISSDON BENNETT, M.D., 15, Finsbury Square.	ALEX. HENRY, M.D., Alfred Street, Bedford Square.
T. SNOW BECK, M.D., Langham Place.	C. F. J. LORD, Esq., Hampstead.
JOHN BOWLING, Esq., Hammer-smith.	WM. O'CONNOR, M.D., George Street, Portman Square.
CHARLES T. CARTER, Esq., Hadley.	B. W. RICHARDSON, Esq., Mortlake.
T. CHARLES, Esq., Holborn.	C. SHILLITO, Esq., Putney.
WM. COLLYNS, Esq., Harlow, Essex.	F. SIBSON, M.D., Brook Street, Hanover Square.*
J. R. CORMACK, M.D., Putney.	

Dr. FRASER seconded the motion; and in doing so proposed that Dr. Semple's name should be added to the list; and that he should be Chairman of the Committee.

Dr. O'CONNOR moved:—

"That the Committee now appointed be empowered to call a general meeting of the members of the Branch, when they think it expedient, to report the result of their labours."

Mr. CHARLES seconded the motion.

The PRESIDENT had some doubts as to such a motion being in order: but after some discussion, it was put, and unanimously carried.

* When the Committee is completed, we will publish the additional names.

COMPULSORY VACCINATION BILL.

Dr. CORMACK said that the lateness of the hour would oblige him to omit much of what he had intended to state on the subject of the Vaccination Bill: but he thought that he could in a brief space of time say more than enough to justify the meeting in adopting the resolutions which he was about to propose. It was known to all present that Lord Lyttelton had introduced a compulsory vaccination bill into the House of Lords; and that it had actually passed the House of Lords, and was now before the House of Commons. He was willing to give the fullest possible credit to the philanthropy and patriotism of Lord Lyttelton, Lord Shaftesbury, and Lord Ellenborough, the noblemen who had most identified themselves with the measure; but patriotism and philanthropy were practically useless, unless they were supported by knowledge; and unfortunately, as regarded the vaccination bill, this was not the case. The promoters of the bill had become strongly impressed with the necessity of legislating for the repression of small-pox and the extension of vaccination; and they had startled the medical profession, from one end of the kingdom to another, by launching the present sweeping measure without affording to the profession any opportunity of expressing its opinion upon the complicated questions, political and medical, which were inseparably connected with it. If the medical profession had been consulted, it would most certainly have declared that, whether the principle of compulsion be politically sound or unsound, practicable or impracticable, there was another principle of far greater moment—an essential principle—which had been entirely overlooked. There was no provision in the bill to ensure efficient vaccination: and that was the first point to which legislation undoubtedly ought to be directed. A scheme must be devised for the abundant supply of good lymph: and for the conscientious and intelligent performance of the duty of vaccination. If time permitted, much more might be said upon this point: but he would just remark, that efficient vaccination could never be provided for except by obtaining the cordial support of the profession; whereas the effect of Lord Lyttelton's coercive measure was to irritate the profession.

If the measure was objectionable in principle, it was not less faulty in its details; which were, in some particulars, absolutely ridiculous. For example, in clause 1, we read as follows: "And such guardians and overseers shall require such medical officer and practitioners in all practicable cases to perform such vaccination in the presence of the parent or other person by whom any child may be brought to such place for such purpose *from the arm of a healthy child there present*; and where any such medical officer or practitioner shall not so perform vaccination as herein-before directed, he shall forthwith report the same, together with the reason thereof, to such guardians or overseers, who shall thereupon, if they shall not be satisfied with the reason so assigned, proceed, subject to the approval of the Poor Law Board, to take such measures as to them may seem fit for vacating the contract entered into with such medical officer or practitioner for the purpose of vaccination, or for enforcing the payment of any penalty provided for such case in such contract." No one who knew anything about vaccination could read the clause without smiling. A general system of vaccination can only be carried out by the use of dry lymph; and then, who are to be the umpires in disputed cases as to the healthy arm? The poor law guardians, forsooth, the cardinal point of whose sanitary creed is cheapness.

We might naturally suppose, that the House of Lords, in their liberal allotment of work and penalties to the medical profession, would at least not have excluded the idea of remuneration; but there is a special clause, (clause v,) which provides that there is to be no remuneration legally due for the highly responsible and very troublesome duties imposed by the act—duties which unquestionably require skill, patience, and integrity; qualities which ought to have some money-value in the eyes of the British Parliament; and which must in the end be so acknowledged, if the profession prove true to itself.

Clause VIII refers to the imposition of fines upon the parents and guardians of the unvaccinated: but what would be the result of enforcing fines upon poor people, who are generally the parties who show backwardness in having their children vaccinated? Why, if their goods were distrained, and they were cast into prison, the only result would be, that they would be converted into paupers; and there would be no economy in making such persons stipendiaries of the state.

Dr. CORMACK then moved the following resolutions:—

1. That the bill now before the House of Commons ought to be opposed by the public and the medical profession, upon the

grounds of its making no provision for efficient vaccination, and being crude and unworkable in its machinery.

2. That the following petition be sent for signature to the various towns within the bounds of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association.

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The petition of the undersigned legally qualified medical practitioners resident in _____ and its vicinity, humbly sheweth,—

That your petitioners have learned that a Bill has been introduced into your honourable House for the extension of vaccination, by making it compulsory.

That your petitioners humbly beg leave to represent to your honourable House that a measure of so much importance to the community, so difficult of execution, and so intimately connected with medical science and medical interests, requires and deserves the most careful and enlightened consideration.

That the success of any measure of that nature must mainly depend upon the cordial concurrence, and the zealous co-operation of the medical profession.

Your petitioners, therefore, humbly but earnestly hope that neither the bill in question, nor any other of a like tendency, may receive the sanction of your honourable House, until the medical profession shall have had ample opportunity for considering its provisions, and expressing its feelings and opinions thereon.

That your petitioners beg leave most respectfully to urge on your honourable House the expediency of arresting further legislation on this subject, until a full and complete inquiry shall have been made into the causes which have led to the failure of the present Vaccination Extension Act, and into the best means of extending vaccination to the public, with a due regard to its efficiency, and to the just rights, feelings, and interests of the medical profession.

And your petitioners, as in duty bound, will ever pray, etc.

3. That a deputation from this Branch be appointed to wait upon the Secretary of State for the Home Department, to request him to refuse his support to any vaccination measure, till the medical profession has been consulted regarding its provisions, and till more information has been laid before the country upon the subject.

It was, he (Dr. C.) thought, peculiarly the duty of the profession to come forward at this juncture to stop the progress of this objectionable bill. It was, above all, incumbent on members of the Medical and Surgical Association to take every means in their power to prevent discredit being cast on the discovery of the immortal Jenner, and dishonour and injustice being done to the medical profession. The report of the Vaccination Committee of the Association was, up to this hour, the most valuable document which had yet appeared upon the vaccination question; and the body under whose auspices such a paper had been published, was well entitled to tell its sentiments to the government, the parliament, and the public.

There were also other bodies who could supply much useful information on the subject of vaccination, such as the Epidemiological Society, and other societies. The College of Physicians of Edinburgh had published a statement relating to the deficiency of medical practitioners in the Highlands and Islands. From this interesting document, (ordered to be printed by the College on the 3rd August 1852,) it appears that there is no machinery for vaccination which can be called into operation in the Highlands and Islands of Scotland, unless government came forward with a grant. Dr. Cormack then read the following passages, from the statement of the College of Physicians of Edinburgh, to which he had referred:—

"According to the population returns of 1841, the number of persons who never receive, and cannot, without great expense, at any time receive the benefit of medical aid, amounts to about 34,300; while those who receive it occasionally are in number about 90,000, making a total of 124,300 persons inadequately supplied. Doubtless, the numbers of these are almost daily becoming less by emigration; but it may be presumed that about 116,000 people, scattered over wide and rugged districts, are, at this moment, most imperfectly provided for in sickness.

"This destitution is at once a consequence and a proof of the miserably depressed social state of the Highlands. With the economics of that state, a College of Physicians has not a direct concern; but, whether the physical well-being of the people at large be considered, or the interests of the pro-

professional brethren who share the privations of the poor Highlanders, and help them to the best of their ability, it is conceived that the simple facts now brought out afford a sufficient apology for the College having made this attempt to bring the subject under the consideration of the public.

"The past history and present circumstances of Highland destitution forbid the hope that any such improvement in the social state of the people will be brought about within the present generation, as will enable them to provide medical aid for themselves; and, therefore, if relief is to be given at all, it must be from without.

"The scourge of small-pox may be kept in check by an increase of vaccinators in the Highlands, as it appears that many of the inhabitants are not protected by vaccination, so that, when they come into the Lowlands, they are peculiarly liable to suffer from small-pox: which fact is so well known to them that it not unfrequently prevents the poor from leaving home to seek for employment."

Dr. CORMACK concluded by urging his resolutions upon the meeting, upon the grounds that the profession had not been consulted, and that elements for enlightened legislation did not yet exist.

Dr. SEMPLE seconded the motion; which was unanimously carried.

Dr. CORMACK then proposed that the deputation to Lord Palmerston should consist of the President, Dr. Fraser, and Dr. Semple.

The PRESIDENT expressed his inability to form part of the deputation; and at his suggestion, his name was withdrawn, and that of Dr. Cormack substituted.

Dr. O'CONNOR seconded the motion in its amended form; and it was carried unanimously.

SCOTTISH UNIVERSITIES TEST BILL.

Dr. CORMACK thought that the Scottish Universities Test Bill, which had been brought into the House of Commons by the Lord Advocate (Moncrieff), was well entitled to the support of the medical profession; inasmuch as it would enable laymen to occupy the lay chairs of the Scottish Universities without subscribing allegiance to the doctrines and discipline of the established Church of Scotland. It was no argument in favour of these tests, that they were often subscribed by episcopalians and other dissenters in Scotland; and he thought that the medical profession were much indebted to the Lord Advocate for bringing in a measure which would open up the Scottish universities to members of the Church of England and of other churches, who are too conscientious to subscribe a creed which they did not believe. He therefore moved the adoption of the following petition:—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The humble petition of the undersigned members of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association,

SHKWEETH—

That your petitioners observe with much satisfaction the introduction of a bill into your Honourable House, "To regulate the admission of professors to the lay chairs in the Universities of Scotland".

Your petitioners earnestly pray your Honourable House to pass the same into a law.

And your petitioners will ever pray, etc.

Dr. HALLEY expressed concurrence in what had fallen from Dr. Cormack, and seconded his motion.

Dr. O'CONNOR said that every right feeling man must feel grateful to see a measure brought into Parliament, which would do away with great temptations to religious hypocrisy.

The PRESIDENT expressed his approval of the Lord Advocate's measure.

The motion was put and carried.

The meeting then separated, after passing by acclamation a vote of thanks to Dr. Forbes for his conduct in the chair.

EDITOR'S LETTER BOX.

THE JENNER MONUMENT.

LETTER FROM RICHARD TURNER, Esq., TO THE EDITOR.

SIR,—I fully concur in your remarks in the Journal of to-day respecting the Jenner Testimonial. We have heard too little of it; for a matter brought before us only once or twice, and at long intervals, is almost sure to be forgotten in the midst of our pressing professional and domestic duties.

The appeal of the committee should indeed come home with peculiar force to members of the medical profession; for, although the general public are the greater gainers, we can sympathise more fully with our departed brother (if, indeed, he should not be called a father in physic) the never-to-be-forgotten Jenner. But I do not remember seeing an appeal.

I suppose the statue is already almost paid for by the subscriptions, and this may be a very good and proper way of testifying the respect of the wide wide world for this good man; but I must acknowledge that if, while marking our sense of his value, we could carry forward his philanthropy by devoting a fund to some equally perpetual and more really useful purpose, I should with much more pleasure contribute, and expect others to do so likewise. I am not prepared to suggest any particular way of carrying out such an idea, but shall be glad by this letter to call the special attention of our Associates to the subject, and so to support your remarks at the latter part of the second paragraph of the leading article alluded to. I would propose the appropriating a small portion of vaccination fees to this object, and perhaps soliciting another small sum from the parents of the child vaccinated. This itself would, in the aggregate, furnish a goodly sum; and those who can afford it—and who cannot in some small measure?—might add to it at their pleasure.

Might not this fund be applied to establish an institution for the gratuitous vaccination of the poor, and the ready furnishing of lymph to medical practitioners by letter or application, the appointed vaccinator going, from time to time, to the original source for a new supply? I am, etc.,

RICHARD TURNER.

Tunbridge Wells, May 6th, 1853.

MR. FAGG'S REMARKS ON THE INCOME TAX.

LETTER FROM R. U. WEST, Esq., TO THE EDITOR.

SIR,—Your correspondent Mr. Fagg (a capital name, by the bye, for a country doctor) has put the case of the *working* income tax payers most admirably; but he has omitted one point, which his statement makes perfectly obvious. If his wealthy neighbour, Mr. Stockton, "grows vegetables of all kinds for the use of his family"—"fine crops of early peas and potatoes raised by his own labour"—"to say nothing of the pigs and poultry he breeds and rears for profit and use"; if, too, "he is tutor to his sons, and teaches his daughters music"—ought he not to pay income tax on more than the £510 he derives from the funds? Poor Richard says, "a penny saved is a penny got", and so it is. If Mr. Stockton saves by teaching his children, and by growing and raising his own vegetables, pigs, and poultry, he has more left to spend on other things. He has clearly *earned* the amount thus saved, and ought to pay the tax for it. I am, etc.

R. U. WEST.

Alford, Lincolnshire, May 7th, 1853.

CAUSTIC POTASH IN MALIGNANT DISEASE OF THE UTERUS.

LETTER FROM C. HOLMAN, M.D., TO THE EDITOR.

SIR,—In your number for May 6th, Dr. Oke makes such a sweeping condemnation of all patients affected with malignant uterine disease, that I must beg to be allowed to draw attention to the subject.

During my pupillage at Guy's, I saw several cases of hard cancer of the cervix, as well as one of fungous disease, successfully treated by the application of caustic potash. I have notes of the case of one patient in particular, the subject of carcinoma of the cervix, whom I saw some considerable time subsequent to the operation; she not only appeared well, but no trace of malignant disease or tendency to its return could be discovered in her.

The method of operating I have usually seen adopted, has been to include the part to be destroyed within the field of the speculum; to defend the healthy tissues by cotton-wool saturated with dilute acetic acid; and, after having thoroughly destroyed the diseased portion, to mop the part freely with the dilute acid. In some instances it may be advisable not to destroy the whole of the diseased portion at one sitting.

If taken in time, when the cervix is only affected, before the vagina, the body of the uterus, the inguinal or lumbar glands, have become the subject of the disease, I think it will be found that destruction of the diseased portion by potassa fusa or solid chloride of zinc, can be depended upon, as much as any of the operations for the removal of malignant disease from the other parts of the body.

I am, etc.,

C. HOLMAN, M.D.

Reigate, May 1853.

NEWS AND TOPICS OF THE DAY.

BILL [AS AMENDED ON RE-COMMITMENT] INTITULED "AN ACT FURTHER TO EXTEND AND MAKE COMPULSORY THE PRACTICE OF VACCINATION".

ARRANGEMENT OF CLAUSES.

Parishes or unions to be divided into districts for the purpose of vaccination, and places appointed for the performance of vaccination, sect. 1.

Children born after 1st August 1853, to be vaccinated within three or four months after birth, 2.

Certificate of successful vaccination to be delivered by medical officer, 3.

If the child be not in a fit state for vaccination, the medical officer to deliver a certificate to that effect, to be in force for two months, and to be renewed until vaccination be successfully performed, 4.

No fee to medical practitioner for duties under the act, 5.

Child's incapacity to receive the vaccine disease to be certified, 6.

A register of cases of successful vaccination to be kept, of which searches and extracts may be made, 7.

Notice to be given of the requirement of vaccination.

Penalty on parent or guardian failing to cause vaccination to be performed, 8.

Fee to registrar, 9.

Registrar-General to provide books and forms for carrying out the provisions of this act, 10.

Recovery of penalties, 11.

WHEREAS an act was passed in the fourth year of the reign of Her present Majesty, intituled "An Act to extend the Practice of Vaccination": And whereas an Act was passed in the fifth year of the same reign, intituled "An Act to amend an Act to extend the Practice of Vaccination": And whereas it is expedient that the practice of vaccination should be still further extended: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. Within six weeks after the passing of this act, the guardians of every parish or union, and the overseers of every parish in which relief to the poor shall not be administered by guardians, in England and Wales, shall, subject to the approval of the Poor Law Board, divide such parish or union, if need be, into convenient districts, for the purpose of affording increased facilities for the vaccination of the poor; and shall appoint a convenient place in each such district, which shall in all practicable cases be not more than one mile from the furthest limit thereof, for the performance of such vaccination, and shall take the most effectual means for giving from time to time to all persons resident within such district due notice of the days and hours at which the medical officer or practitioner contracted with for such purpose will attend at such place to vaccinate all persons not already successfully vaccinated who may then appear there, and also of the days and hours at which such medical officer or practitioner will attend at such place to inspect the progress of such vaccination in the persons so vaccinated; and such guardians and overseers shall require such medical officer and practitioners in all practicable cases to perform such vaccination in the presence of the parent or other person by whom any

child may be brought to such place for such purpose from the arm of a healthy child there present; and where any such medical officer or practitioner shall not so perform vaccination as herein-before directed, he shall forthwith report the same, together with the reason thereof, to such guardians or overseers, who shall thereupon, if they shall not be satisfied with the reason so assigned, proceed, subject to the approval of the Poor Law Board, to take such measures as to them may seem fit for vacating the contract entered into with such medical officer or practitioner for the purpose of vaccination, or for enforcing the payment of any penalty provided for such case in such contract.

11. The father or mother of every child born in England or Wales after the first day of August in the year of our Lord one thousand eight hundred and fifty-three shall, within three calendar months after the birth of the said child, or in the event of the death, illness, absence, or inability of the father and mother, then the person who shall have the care, nurture, or custody of the said child, shall, within four calendar months after the birth of such child, take or cause to be taken the said child to the medical officer or practitioner appointed in the union or parish in which the said child is resident according to the provisions of the first-recited act, or to some other duly qualified medical practitioner, for the purpose of being vaccinated, and the said medical officer or practitioner so appointed, or such other duly qualified practitioner, shall and he is hereby required thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child.

III. Upon and immediately after the successful vaccination of any child, the medical officer or practitioner who shall have performed the operation shall deliver to the father or mother of the said child, or to the person who shall have the care, nurture, or custody of the said child, a certificate under his hand, according to the form of schedule hereinafter inserted, marked (A.), that the said child has been successfully vaccinated, and shall also transmit a duplicate of the said certificate to the registrar of births and deaths of the sub-district in which the operation was performed; and such certificate shall, without further proof, be admissible as evidence of the successful vaccination of such child in any information or complaint which shall be brought against the father or mother of the said child, or against the person who shall have had the care, nurture, or custody of such child as aforesaid, for non-compliance with the provisions of this act.

IV. If such medical officer or practitioner be of opinion that any child which shall be brought to him for vaccination is not at the time when so brought for the purpose aforesaid in a fit and proper state to be successfully vaccinated, he shall postpone the vaccination until such time as he thinks the operation may be safely and successfully performed, and he shall, in the event of such postponement, thereupon and immediately deliver, without fee or reward, to the father or mother of such child, or the person having the care, nurture, or custody of the said child, a certificate under his hand according to the form of schedule hereinafter inserted, marked (B.), that the child is in an unfit state for successful vaccination, and such certificate shall remain in force for two calendar months from its delivery as aforesaid; and the father or mother of the said child, or the person having the care, nurture, or custody of the said child, shall, within two months next after the delivery of the said certificate as aforesaid, and if the said child be not vaccinated at or by the termination of such period of two months then during each succeeding period of two calendar months until such child has been successfully vaccinated, take or cause to be taken to the said medical officer or practitioner such child to be vaccinated by him; and if the said medical officer or practitioner deem the said child to be then in a fit and proper state for successful vaccination, he shall forthwith vaccinate it accordingly, and shall deliver to the father or mother of such child, or person having the care, nurture, or custody of such child, a certificate under his hand according to the form of schedule hereinafter inserted, marked (A.), that such child has been successfully vaccinated; but if the said medical officer or practitioner be of opinion that the child is still in an unfit state for successful vaccination, then he shall again deliver to the father or mother of such child, or person having the care, nurture, or custody of the said child, a certificate under his hand, according to the said form of schedule (B.), that the child is still in an unfit state for successful vaccination; and the said medical officer or practitioner, so long as such child remains in an unfit state for vaccination, and unvaccinated, shall at the expiration of every succeeding period of two calendar months deliver, if required, to the said father or mother of such child, or person having the

care, nurture, or custody of such child, a fresh certificate under his hand according to the said form of schedule; and the production of such certificate shall be a sufficient defence against any complaint which shall be brought against the said father or mother, or person having the care, nurture, or custody of such child, for noncompliance with the provisions of this act.

v. No medical officer or practitioner appointed as aforesaid shall be entitled to any fee or remuneration for the duties imposed upon him by this act other than is provided for by the said first-recited act.

vi. In the event of any medical practitioner acting under the provisions of this act being of opinion that any child that has been taken to him for the purpose of being vaccinated as hereinbefore provided is insusceptible of the vaccine disease, he shall deliver to the father or mother, or person having the care, nurture, or custody of such child, a certificate under his hand according to the form of schedule hereinafter inserted marked (D.); and the production of such certificate shall be a sufficient defence against any complaint which may be brought against the said father, mother, or person having the care, nurture, or custody of such child for noncompliance with the provisions of this act.

vii. The registrar of births and deaths in every subdistrict in which the operation has been performed shall keep a register of the persons of whose successful vaccination a certificate shall have been transmitted to him as above provided by the said medical officer or practitioner, and shall at all reasonable times allow searches to be made of any such register book in his keeping, and shall give a copy, certified under his hand, of any entry or entries in the same, on payment of the fee hereinafter mentioned; (that is to say,) for every search extending over a period of not more than six months, one shilling, and one shilling and sixpence for every additional year, and the sum of sixpence for every single certificate.

viii. The registrar of births and deaths in every subdistrict shall, on or within seven days after the registration of the birth of any child not already vaccinated within the said subdistrict, give notice in writing in manner hereinafter directed, and according to the form of schedule hereinafter inserted, marked (c.), to the father or mother of such child, or in the event of the death, illness, absence, or inability from sickness or otherwise of the father and mother, then to the person upon whom the care, nurture, or custody of such child shall have devolved, that it is the duty of such father or mother, or person having the care, nurture, or custody of such child as aforesaid, to take care that the said child shall be vaccinated in the manner directed by this act; and the registrar shall deliver such notice at the time of or within seven days after the registration of such birth to the father or mother of such child, or to such other person as aforesaid upon whom the care, nurture, or custody of such child shall have devolved, and shall together therewith deliver to such person a notice of the days, hours, and places within the district of such registrar at which the medical officer or practitioner as hereinbefore provided will attend for the purpose of vaccination; and if after such notice the father or mother of the said child, or the person so having as aforesaid the care, nurture, or custody of the said child, shall not accordingly cause such child to be vaccinated, then such father or mother, or person having the care, nurture, or custody of such child as aforesaid, so offending, shall forfeit a sum not exceeding one pound upon the first complaint, to be afterwards increased at the discretion of the justices imposing the penalty as hereinafter provided, in case of repeated complaints for non-compliance with the provisions of this act in respect of the said child; provided that the whole amount of such penalty shall not exceed five pounds.

ix. A fee of threepence shall be paid to such registrar for each child vaccinated in respect of which he shall have performed the duties required in this act; and he shall keep a book, to be provided as hereinafter directed, containing a minute of his having duly given such notice as hereinbefore directed; and the said fee shall be payable in the same manner as the fee now payable to such registrar for registering the birth of such child as aforesaid is paid.

x. The registrar general for England and Wales shall, and he is empowered and directed, within two months after the passing of this act, to frame and provide such books, forms, and regulations as he may deem requisite for carrying into full effect the provisions of this act, and shall transmit the same to the superintendent registrars of each district in England and Wales, who shall deliver to the medical officers so appointed as aforesaid, and other duly qualified medical practitioners in the said district, such of the said books, forms, and regulations, as they

may require for the performance of the duties imposed upon them by this act; and the expenses to be incurred by the Registrar-General under the provisions of this act, shall be defrayed in the same manner as the expenses under the act of the sixth and seventh years of William the Fourth, chapter eighty-five.

xi. All penalties by this act imposed, shall be recovered before any two justices of the peace for the county, city, or place where the offence shall have happened, upon the information or complaint of any person; and if on the conviction of the offender such penalties, with the costs of conviction, shall not forthwith be paid, the same shall be levied by distress and sale of the goods and chattels of the offender, by warrant under the hand and seal of such justices.

Schedules referred to by this Act.

SCHEDULE (A).

I, the undersigned, hereby certify, that _____, the child of _____, aged _____, of the parish of _____, in the county of _____, has been successfully vaccinated by me.
Dated this _____ day of _____, 185 .

(Signed) A.B.,

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (B).

I, the undersigned, hereby certify that I am of opinion that _____, the child of _____, of the parish of _____, in the county of _____, aged _____, is not now in a fit and proper state to be successfully vaccinated, and I do hereby postpone the vaccination until the _____ day of _____.
Dated this _____ day of _____, 185 .

(Signed) A.B.,

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (C).

I, the undersigned, hereby give you notice, and require you to have C.D. vaccinated within three (or four, as the case may be, according to the Second Section of this Act) months after the birth, pursuant to the Provisions and Directions of the Act of the 16 Victoria, cap. _____. As witness my hand this day of _____, 185 .

J.B.,

Registrar of Births and Deaths for the _____ sub-district (as the case may be).

SCHEDULE (D).

I, the undersigned, hereby certify that I am of opinion that _____, the child of _____, of the parish of _____, in the county of _____, is insusceptible of the vaccine disease.
Dated this _____ day of _____, 185 .

(Signed) A.B.,

Surgeon of the Union or Parish of _____ (or other Medical Practitioner, as the case may be).

NORFOLK AND NORWICH HOSPITAL.

The Anniversary Meeting of the Governors of the Norfolk and Norwich Hospital was held on Saturday, April 9th, at the hospital, Sir THOMAS B. B. BEEVOR, Bart., in the Chair. The attendance of governors was numerous.

QUARTERLY REPORT.

"The Board of Management beg to present to the governors their quarterly report. The internal condition of the hospital, and the conduct of the officers and servants, continue to give satisfaction. The usual quarterly inspection of the building and premises has been made by a committee of the board, and every part appears to be in good and efficient repair. The following donations have been received by the treasurer, and are thankfully acknowledged: Charles Lombe, Esq., £100; Lord Henniker, fully acknowledged: Charles Lombe, Esq., £22:9:0. £10; Col. Oakes, £10; Grand Jury of Lent Assizes, £22:9:0. A legacy of £19 has been bequeathed to the hospital by Mrs. Archer, late of Coltishall. The poor boxes have been opened, and the sum of 5s. found therein, which has been paid over to the treasurer."

Mr. E. HOWES, Chairman of the Board of Management, moved the adoption of the report. Mr. MARSHAM seconded the motion, which was carried *nem. con.*

ANNUAL REPORT.*

"The Board of Management present to the governors their

* We have omitted a few sentences of no general interest.

Fifth Annual Report, together with the financial statement for the year 1852.

"The attendance of the members of the board of management during the year has averaged something over eleven weekly; the plan of house visiting still continues to be most useful, and the reports of the visitors on the internal state of the house most satisfactory.

"In addition to the usual statement of the number of patients discharged during the past year, the medical staff have prepared a statistical table of diseases and results during the year 1852, which will be regularly continued.

"A microscope has been obtained for the hospital, for which £35 was contributed from the hospital funds, and £32, the rest of its cost, by anonymous donors.

"The receipts during the year 1852 amounted to £4338:5:0, which included the following items:—Balance in the hands of the treasurer at the end of the year 1851, £1064:16:2; annual subscriptions, £1600; benefactions, £117; dividends on stock, £647:17:5; and legacies, £769:10:0. The disbursements amounted to £3301:11:2, including the following items:—Expenses of housekeeping, £1656:8:10; salaries and wages, £594:16:0; expenses of dispensing, £259:8:5; repairs, £186:19:9; linen and furniture, £76:4:4; incidental expenses, £127:13:10; and purchase of £406:12:2, 3 per cent. consols, £400; leaving a balance of £1036:14:7.

"1275 patients (including 596 in-patients and 679 out) had been admitted during the year by recommendations, and 443 (including 149 in, and 294 out) as casualties; 477 patients remained on the books at the end of the last year, which made a total of 2195 persons who had received relief from the hospital from December 31, 1851, to December 31, 1852. Of these, 711 had been cured, 294 had been relieved, 28 had been discharged as not likely to receive any benefit, and only 8 as incurable. The daily average number of patients in the house had been 112, and the average number of days each in-patient had remained on the books was 48½ days. 680 patients at present remained on the books, of whom 97 were in-patients, and 583 out-patients. 77,519 patients (including 43,967 in, and 33,552 out) had been relieved by the hospital since the opening in the year 1772."

The report was adopted unanimously, on the motion of the Rev. E. POSTLE, seconded by Mr. W. C. HOTSON.

EXCLUSION OF THE MEDICAL STAFF FROM THE MEETINGS OF THE BOARD OF MANAGEMENT.

The CHAIRMAN read the following communication from the medical officers.

"TO THE GOVERNORS OF THE NORFOLK AND NORWICH HOSPITAL.

"We, the undersigned, medical and surgical officers of the hospital, solicit the attention of the governors to our position with respect to the board of management. According to the hospital rules, as altered in 1848, the honorary medical officers are precluded from taking any part in the proceedings of the board of management; and we believe such exclusion to be injurious to the interests of the institution, by preventing that free and beneficial cooperation between the managing bodies of the hospital, which existed without interruption for more than seventy years.

"W. H. RANKING, M.D. "ARCHIBALD DALRYMPLE, Surgeon.
"E. COPEMAN, M.D. "W. P. NICHOLS, Surgeon.

"B. H. NORGATE, Surgeon. "G. W. W. FIRTH, Assist. Surgeon.

Norfolk and Norwich Hospital, March, 31st, 1853."

Dr. COPEMAN believed that it was very desirable that the medical officers should be allowed to take part in the conversations and discussions at the board, and had no doubt that their presence would often facilitate business and obviate unfavourable impressions. In proof of a similar feeling having been entertained by the board, he would read the following resolutions, passed on the 16th of August, 1851: "Resolved, that the chairman be requested to invite the medical staff more frequently to avail themselves of their privileges as governors of attending the weekly meeting of the board." The chairman on that occasion addressed a very courteous letter to the medical staff; and he (Dr. Copeman) alluded to the circumstance to show that something was then felt to be wanting at the board which could be supplied only by the attendance of the medical officers. They would ask, perhaps, why, after such an invitation, did not the medical officers attend? The answer sent by the medical staff would partly explain the reason, and at the same time would show that the medical officers were anxious to cooperate with the board for the benefit of the institution.

"The undersigned medical and surgical officers of the Norfolk and Norwich Hospital have the honour to thank the chairman

of the Board of Management for the courtesy of his letter of the 16th inst. They beg leave to state in reply, that they have hitherto felt themselves precluded by rule 15, from any useful attendance upon the meetings of the board over which he presides, since they would have been subject to the same consequences of its infringement as those which occurred to their late eminent colleague, Mr. Crosse; and they hesitate still to avail themselves of their privilege while that rule remains unmodified. They beg to assure the gentlemen of the board that they entirely appreciate the motives which dictated their nomination on this subject, and that they anxiously desire increased opportunities of cooperation with the board of management, sincerely believing that the interests and harmony of the hospital will be thereby much promoted.

(Signed) "R. HULL, W. H. RANKING, E. COPEMAN,
"B. H. NORGATE, G. W. W. FIRTH."

The allusion to the late Mr. Crosse referred to a transaction which took place at the board on March 10th, 1849. There was some demur about a bill for instruments; Mr. Crosse, who was concerned in the matter, offered an explanation, but was refused a hearing; and although he was the only person who could explain the matter, he was compelled to make his communication through a member of the board. On a more recent occasion, a member of the board objected to hear a communication from one of the medical officers, on the ground that he had no right to volunteer a statement, or take part in the proceedings. He (Dr. Copeman) did not bring these cases forward with a view of casting any reflection upon those who objected; on the contrary, he thought that they acted entirely in accordance with the rules of the hospital; but he mentioned them to convince the meeting that the medical officers had grounds for declining the invitation of the board, and that by their legal exclusion they were placed in a false position—a position uncomfortable to themselves, and injurious, he did not hesitate to say, to the institution itself. The medical staff had hoped that the board of management, after receiving their answer, would have carried on the work they had begun, and taken steps to remove the difficulty which prevented the medical officers from accepting the invitation of the board; but no further notice of the matter had been taken by them, and the obstruction remained. This was the first year that they had had a published tabular statement of diseases, accidents, and operations, or that scientific record of such matters had been kept in the hospital. As a medical man, he (Dr. Copeman) was aware of the deficiency, and had proposed that such documents should be established. He was at that time a member of the board, with perfect liberty to make any proposition he pleased. Now, however, that he was one of the medical staff, and in a better position to understand matters connected with the hospital, he found himself trammelled by an exclusive law, and deprived of the right to enter into any discussion at the board.

He would now direct their attention to the practice pursued in other hospitals in such matters. He would begin with the sole precedent for the rule observed in this establishment:—In the Nottingham Hospital the medical officers were not members of the board, *ex officio* or otherwise; at Bath, the senior physician and surgeon were elected members, the other members of the staff having the privilege of attending the meetings, but having no votes; at Liverpool, there was a separate medical board; at Birmingham, there were six honorary medical officers, two of whom were appointed to the board of management by the Queen's College, and there was no law to prevent the whole of them being on the committee of council; at Gloucester, they were eligible for election, and were allowed to attend and give their opinion, but not to vote unless elected; at Bristol, Berkshire, Stafford, Salop, and Canterbury, there was no law to prevent their being elected; at Leeds and Bedford, the honorary medical officers had the same privileges as other governors; at Chester, Derby, Worcester, Oxford, Manchester, Newcastle, Lincoln, Sussex, Bury, Ipswich, Northampton, Cambridge, Hull, and Sheffield, the medical officers were members *ex officio*; at the York and Colchester hospitals, it was not stated whether they were eligible or not. Thus, then, in other provincial hospitals the medical officers were, in a great majority, *ex officio* members of the board of management; in most others they were eligible for election; and in scarcely any were they excluded altogether. (Hear, hear.)

He would now refer to the practice of their own hospital from its commencement to the year 1848. For a period of more than seventy years the medical officers were more or less concerned in the business of almost every board, and formed part of almost every committee. No alteration of importance, no transaction of

consequence took place without the assistance of one or more of the medical officers; and, lest it should be said that this mutual co-operation was found objectionable, he would quote a resolution, passed unanimously at a general board of 104 guardians, which proved it to have been highly beneficial: "October 10th, 1827. Moved by Rev. J. D. Borton, and unanimously carried, That the thanks of the board be given to the medical officers for their constant and unvarying attention to the interests of the Norfolk and Norwich Hospital; for their readiness to communicate information upon all subjects laid before them, involving either the management or the credit of this highly valuable institution." On the ground, therefore, of the desire expressed by the board that the medical officers should be more frequently present at their meetings; the willingness of the medical staff to assist in the proceedings of the board; of the very general practice of other provincial hospitals; and of their own for more than seventy years; on these grounds, and for the sake of the advantages which he conscientiously believed would result from its adoption, he begged to move the following resolution:

"That the following addition be made to rule 15: Except the honorary medical and surgical officers, who shall be honorary members of the board of management, with liberty to take part in the proceedings, but not to vote upon any question before the board."

Mr. WEBSTER thought that it was not dignified for the profession to which he belonged, to depart from the practice pursued in all unions, where it was an established rule that no interested parties should have any power in the management of the institution with which they were officially connected. It might be said that, though they might be allowed to take part in the proceedings of the board, yet that they could not vote; but he knew that it was easy for them to whisper, and he had been there frequently enough to see that there were on that board friends of the medical officers, or otherwise he could not conceive how certain matters had occurred there with regard to himself. He had found some relative or friend of one of the staff make observations at that board which were as uncalled for as they were uncourteous. Having been in the profession some thirty-seven years, he might perhaps have been competent to have formed an opinion on many matters relating to the hospital; and he declared that he had never entered it except with the spirit and intention of being useful. He admitted that if the medical officers were allowed to take part in the proceedings, they might be able to explain a great many matters to the board; but at the same time they would also be able to make explanations as to other matters, when parties who were implicated would not have the opportunity of removing impressions which had been created. He was decidedly opposed to the medical gentlemen taking any part in the proceedings of the board, except when solicited; and as they could, by the present regulations, always be present, he confessed he did not see the drift of this motion, unless there were something attached to it which did not appear in the naked proposition.

The Rev. E. POSTLE said that, with reference to the resolution of the board in 1851, inviting the medical men to exercise oftener their privilege of attending the meetings, Mr. Howes, who was then the chairman, would probably explain whether these gentlemen were invited merely to show themselves at the board, without taking any part in its proceedings.

Mr. E. HOWES said that the communication alluded to was addressed to the medical staff with the view, principally, that by attending at the board they should be a little more conversant with the reasons on which the board acted on several occasions, and also in order that the board might put to them inquiries which might be much better answered *vis à voce* than by letter.

The Rev. E. POSTLE said that he thought, then, that the medical officers had quite sufficient privilege already.

The Rev. J. HOLMES had the greatest respect for the medical staff of that establishment, and he thought that few men deserved greater regard for their professional ability and their private character. He could not help thinking, however, that there was a place for the persons who had to manage, and there was another place for the persons who were to be supervised; and he thought, also, that there was a marked distinction between medical officers of that establishment, and medical gentlemen in their private character. When they accepted office in the institution, they rendered themselves liable to the same control, supervision, and fault-finding, as any other officers in the establishment. The intention of the rules laid down for the well-working of the establishment was to provide a controlling power. The great controlling power was the meeting now assembled; subordinate to it was that of the board of management. Having sat on that board for four years, he could

say that its members felt it their duty to supervise everything connected with the establishment, and, where fault was to be found, to find it, it mattered not how high might be the character or position of the person. He (Mr. Holmes) did not pretend to say that the board of management should say, "You shall do this or that"; or, "You shall not do this"; but he insisted that it was their duty, if they anticipated anything improper, to say, "If you do so and so, we shall interfere; we shall represent your conduct to the governors, and obtain your dismissal". Now, he put it on this broad ground, whether it was right that the medical officers, whose conduct, he unhesitatingly affirmed, might be called in question before that board, should be allowed to sit there, and have their conduct canvassed, and take part in the discussion on it. The laws of the hospital at present gave them power to attend. The present motion only asked for power to take part in the debates; yet, hereafter, they would ask also for the power of voting. He thought that the medical officers were trying to place themselves in a very improper position, as, if they were granted the privilege which they sought to obtain, they would be frequently obliged to hear very unpleasant remarks, or else to "cut" the room. This was no hypothetical case. One of the medical officers very lately, by a visitation of Providence, completely lost his memory, but, not being aware of his infirmity, continued to prescribe for the patients, and if they had not had a careful and skilful house-surgeon, serious consequences might have resulted. The board determined accordingly to make a representation to this gentleman, and request him to resign, which, after a great deal of reluctance, he consented to do. The governors would understand, therefore, that there were cases in which the board felt they were justified in interfering with their medical officers; and it was not merely a mental infirmity that might give rise to a similar circumstance hereafter; but there were many circumstances, which the meeting might easily comprehend, which might compel the board to act in the same manner again. This, then, was the relative position of the board of management, and their medical staff—the board as the controlling power, and the medical officers as a highly respectable body of men, but, nevertheless, persons who must, like other men, be controlled and supervised. He was confident that, if ever the medical staff should succeed in obtaining a dominant position in that board, the institution would certainly be ruined—not that the medical gentlemen were not highly honourable, but because it was, as he believed, essential for the well-being of the hospital that its affairs should be managed by an independent body. He had observed in the long experience he had had at the board, that there was too much of an *esprit du corps* among medical men, which rendered them unfit to be either the prevailing or dominant influence there. There was quite enough of the medical element in the board.

Mr. D. DALRYMPLE said that Mr. Holmes had given several unanswerable reasons why medical men should be entitled to take part in the proceedings at medical boards. If the medical staff were allowed to be present at the board, what practical benefit was there in restricting them from taking part in the proceedings? The board had always, in revising the two-monthly list, to ascertain from the medical officers the state of health of certain patients, the benefit they had derived, and the period it was anticipated they would have to remain in the hospital, and this would be much better ascertained were the medical officers present at the board, than by the present stereotype communications. Mr. Holmes had not shown one reason why the power of the governing body of the hospital would not be exercised with as much efficiency if every one of the medical staff had the privilege of sitting at the board, and taking part in the proceedings; nor did he think that any one could be prevented, by the presence of the staff, from animadverting on the conduct of that body, since nothing, he thought, would be more likely to lead to a proper investigation of any complaint than the presence of the parties implicated. As belonging to that profession, he (Mr. Dalrymple) believed that they should like everything to be open, and that the proposition made by Dr. Copeman would promote a better feeling, and a closer intercourse between the medical staff and the board of management. Those who opposed the measure should show good cause why a rule which had worked well for so lengthened a period, should ever have been altered so as to exclude the medical officers from taking part in the proceedings of the board. As to the equality in position of the medical staff and the governors, both could attend the meetings of the board of management, and watch their proceedings, but the governor could be elected on the board to which the medical officer was not eligible. He was not, therefore, on the same footing with other governors. They thus de-

prive themselves of the assistance of those very persons who, by their daily and hourly intercourse with the patients of this hospital, and the management of it, were best calculated to bring the knowledge which was most wanted. When they reviewed the list of the members of the board of management, and observed that the greater part of them were entirely unacquainted with the routine business of the establishment, or with those little *minutiae* the attention to which was of such importance in that institution, they would readily appreciate the advantage of having at least a portion of the medical staff to assist in the administration of affairs. They were bound to place in their proper position a body of gentlemen who devoted to the benefit of the hospital their time, their services, and their money; for it was, he assured them, no small diminution from their professional incomes.

The Rev. Mr. HOLMES said that the medical officers acquired position and character from their connexion with the hospital.

Mr. TUCK felt most strongly that the proposition of Dr. Copeman would confer great benefit upon the institution.

Mr. UTEN BROWNE had not heard, either from the gentleman who moved the resolution, or from those who supported it, a single good reason in its favour. The governors of this hospital, until the alteration took place by which the board of management was elected, were all competent to take part in the administration of the affairs of the hospital. The medical men, as governors, under the old constitution, exercised the same right; but by the alteration in the constitution, the governors had been deprived of that right. They might, it was true, enter that room, and observe the proceedings of the board of management, but if they ventured to make any observation, they should—no doubt with great politeness—be told, like the medical men, to “hold their tongues”. Now, he did not think that that of which no governor complained, should be complained of by the medical men. It might be said that the governor was eligible, but that the medical man was not. The medical men, however, enjoyed, in common with the other governors, the right of electing the board; and it was quite clear, therefore, that the medical staff had it in their power, by making legitimate use of that power, to elect a board of management, of whom the majority should be composed of persons whom they considered to be best calculated to promote the interests of the institution.

Let them only conceive the state of things which would arise if this proposition were carried. Suppose a question came before the board affecting in any way the conduct of a member of the medical staff. The medical members of the board could muster in force, and though he was very far indeed from imputing to any one of those gentlemen a desire to take any particular course in order to shield any of their number, yet they knew that the *esprit de corps* was particularly strong among these gentlemen, and that they always took a favourable view of any matter which affected themselves, or those with whom they were in the habit of intercourse, and with whom, as in this case, they had a bond of brotherhood; and, therefore, he thought that the medical staff would come to the board impressed—and honestly impressed—with the conviction that whatever might be said, the person who said it was wrong; that whatever charge might be made, it was utterly unfounded, and they would raise a discussion upon the point, and though it was perfectly true that they would not have the right of voting, yet they would have the right of speaking, and they would speak at a considerable length too—(laughter)—and it was very likely that they would, by the influence, and the proper influence, which they possessed, be successful in inducing the board either to pass over the complaint altogether, or to say, without assigning any reason, that they were satisfied with the conduct of the officer who had been implicated. Now, that was the state of things which he thought would be very likely to exist if these gentlemen became *ex officio* members of the board of management.

Dr. RANKING did not rise to speak in support of Dr. Copeman's motion, because he thought it more in accordance with the position of the medical staff that their case should be taken up by others than themselves; but he wished, in reply to Mr. Browne's statement that he could not conceive any case in which benefit could arise to the hospital from the presence of the medical officers at the board of management, to assure them that such cases did frequently occur, and that a vast number of questions of a purely medical and surgical nature, which could only be answered by medical men, were frequently required to be published by the board. That he considered a sufficient ground and necessity for the presence of the medical staff. And he certainly thought that the medical man should not be placed in the same position as the porter or nurse of the establishment, to be sent for by the board when wanted.

The Hon. and Rev. Lord BAYNING made the suggestion with an earnest desire of promoting the best feelings between the medical gentlemen and the board, whether one physician and one surgeon should have seats at the board. To a proposition of that sort, he should lend a ready consideration; but his objections to the whole medical staff taking part in the proceedings of the board were not removed.

Mr. J. G. JOHNSON said, that having been formerly one of the medical officers for nearly twenty years, he might be allowed to make a few remarks, without laying himself open to the imputation of having any personal interest in the question under discussion. It had been very properly put by those opposed to Dr. Copeman's proposition; first, whether any inconvenience had been felt, and secondly, what would be the inconveniences felt by the proposed change, and which of the two inconveniences would be greater. Now, with respect to the inconvenience which had been experienced under the present system, two instances were alleged in which medical officers had been impeded in taking what he considered to be a proper part at a meeting of the board of management, and he was quite sure that no gentleman belonging to his profession, would ever, after such treatment give the board an opportunity of occasioning a third instance. The present system was a general inconvenience; and the rule which prevented the medical staff from attending at the board in the position which they had a right to occupy, should, therefore, be altered. He did not hesitate to say that his principal reason for retiring from that board, was because he saw steps taken with relation to the conduct of some of his medical brethren, and without their knowledge, which, had he been at the time on the staff, would have been exceedingly disagreeable and repugnant to his feelings. According to the present rules, a medical officer had no opportunity of making any explanation on matters which none but medical men could understand, unless he attended before the board, at the summons of their chairman, like the porter, or the nurse of the establishment, and his explanation might, even then, be objected to by any members of the board. Now, that did happen to one of the most talented officers of the institution, Mr. Crosse, and had also happened since in the case of Mr. Firth, and he must tell them that such treatment was most repugnant to the feelings of the medical gentlemen connected with the hospital. He concurred with the suggestion made by Lord Bayning, but would propose that instead of a physician and a surgeon being elected for a certain period, the medical and surgical officers of the week preceding should be *ex officio* members of the board of management. Mr. Browne had observed that when the constitution of the institution was altered, the governors were excluded from the board. The conduct of the governors, however, did not come under the consideration of the board of management, whereas the conduct of the medical and surgical officers must and should and always would continue to be brought under their notice. To take a very ordinary instance—a complaint was made by a patient, and the patient and nurse were called and made their statements to the board, but there was no medical officer there to hear it, and consequently no explanation. An impression, very often unfavourable and unjust to the officer, was thus formed by the board, which the slightest explanation would have removed. Mischief of an extensive character arose in this manner, and would always continue to arise until some alteration was made in the rule. He would move, therefore, “That the medical and the surgical officer of the preceding week, or the assistant surgeon if they be absent, be *ex officio* members of the board of management.”

Lord BAYNING seconded the amendment.

The Rev. Mr. HOLMES considered the amendment so important, and so entirely different from the motion of which Dr. Copeman had given notice, that it was impossible for them to make up their minds upon it suddenly. He hoped, therefore, that the discussion would be adjourned.

Mr. TUCK apprehended that they had not the power to entertain the amendment, because the 10th rule provided—“That no motion, which has for its object the repeal or alteration of any existing law, or making any new law, shall be entertained, unless notice shall have been given at the previous quarterly board.” The motion of which Dr. Copeman had given notice referred to rule 15, while Mr. Johnson's amendment related to rule 14.

The Rev. A. W. KEPPEL moved, and Mr. D. DALRYMPLE seconded, the adjournment of the discussion.

Dr. COPEMAN having withdrawn his motion in favour of Mr. Johnson's amendment, the discussion was adjourned to the next quarterly board.

[Abridged from the *Norwich Mercury*.]

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EDITED BY JOHN ROSE CORMACK, M.D.

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NEW SERIES.

HOSPITAL ABUSES, ADVICE GRATIS, AND MEDICAL BENEVOLENCE.

LETTERS have, for months past, poured in upon us in rich abundance, denouncing the mischievous tendencies, and deploping the evil consequences, of our hospital system, and of the equally injurious and meaner system of giving "advice gratis" of a morning, as a bait for popularity and practice. There is a profusion of compliments bestowed upon our humble efforts to awaken the profession to emancipate itself from the evils which these systems inflict upon it; but very few indeed of our applauding allies allow us to authenticate their disclosures with their names. This timidity on the part of hospital reformers, we cannot help thinking, is culpable, and scarcely to have been looked for in those honourable men by whom it is manifested. It is impossible, however, not to feel some degree of sympathy with many excellent colleagues, who, in the present state of professional and public apathy, shrink from hazarding their all in a warfare which they know cannot be conducted successfully by small parties of skirmishers, and which demands, as the only hope of victory, a numerous, resolute, and well-disciplined army. It is a pity, however, that those who, in private letters and conversations, admit, with us, that a tide of social and professional degeneration is, under the guise of charity, flowing over the kingdom with rapid though stealthy wave, should feel so much hesitation or so little power to stem the current; and that they should think they have contended manfully for the cause, by addressing to us "private" communications, or, in some quiet coterie, applauding the boldness and the honesty of those who do not shrink from bearing the burden of the opening battle between real and spurious medical philanthropy. These reflections arose as we perused a letter marked "private", which we received a few days ago, and from which, as it is a fair sample of many which have been addressed to us, we quote a paragraph, omitting names and allusions which might lead to the identification of the writer.

"Do show up the public abuses and medical intrigues which are now going on at Blaque Hospital. If you will promise not to name me as your informant, I will give you the very fullest particulars of the mischief which that institution works upon us under the names of charity and benevolence. I will give you some pretty little histories. The whole system ought to be exposed,—root and branch it is corrupt; and most of the medical men in the town and neighbourhood are of opinion that, under the present management, the hospital is a great public evil, as it diverts practice from many deserving general practitioners who are struggling to support their families, and generates a devil-me-care spirit of improvidence among the artisans and petty tradesmen. The hospital and the lying-in society, I am certain, check every prompting to lay aside, from the weekly earnings, a reserve fund for sickness; and the money which would go to the doctor, were there no indiscriminate hospital aid in this place, goes to the publican and the betting-office. The most disgusting part of the affair is this, that our gentry and hospital-staff are not satisfied with demoralizing the people, and defrauding the medical profession, but they

must have their names boastfully published in reports and newspapers as charitable donors! Now some of these persons subscribe to the hospital chiefly that they may send their sick servants to it, and thus avoid a medical man's account for attendance on them. As I am not attached to the hospital, I am obliged, every morning, to give 'advice gratis' to all who come in shabby attire, or in the dress of working-men. If I did not do this, the parties would go to the hospital, and Dr. —, in place of me, would have his skill and kindness advertised."

While we feel discouraged by the evidence which such letters afford of the timidity and thralldom engendered by the present hospital system, we are not inclined to despair. Reforms, which no man is strong enough to achieve single-handed, may be accomplished by a league. If every town had its hospital-reform committee, and if there were a central conference formed of delegates from these committees, the nature and extent of these universally-deplored abuses could be ascertained, and placed in an authentic shape before the public; and hospitals might even, in our day, become sources of good, and not of evil. We have here broached the idea of a Hospital Reform Society, because we have been assured by many that such an institution only requires to be founded, to be sure of great support. Undoubtedly, if such a society could be established, and conducted on the broadest principles of charity, conciliation, and justice, its efforts would not long be without their reward.

The letter of "Observator", at p. 447, is calculated to carry conviction to the minds of many, but especially to those unlucky though often accomplished men, who, year after year, are stranded in their pursuit of the emoluments of metropolitan practice, after having spent health, mental serenity, and fortune, in a vain and desperate struggle of many years duration. In London, the amount of fees which are unjustly filched from the profession by the hospital system, is enormous. A rich farmer from Somersetshire, some years ago, entered a London hospital for the purpose of having a necessary operation performed. On his return to the country, he boasted of having had "the best advice" for nothing; and, by his suggestion, several rural friends, able to pay for advice, became both out-patients and in-patients of the same institution. A few years before the death of the late Sir Astley Cooper, a general practitioner (our informant) made an arrangement with that eminent surgeon to operate upon a patient who had stone in the bladder. The stipulated fee was eighty guineas. When Sir Astley entered the room, an immediate look of recognition passed between him and the patient, who, it turned out, had long been in the habit of attending as an out-patient at Guy's. This person lived comfortably, and left to his heirs upwards of £40,000. Nothing could be easier than to multiply anecdotes of this kind; but as no one denies that hospitals are often made the means of depriving the profession of its legitimate rewards, and of ministering to the mean avarice of many, we are unwilling to occupy more space by giving additional illustrations. We cannot, however, leave this topic without laying before our readers an

advertisement which, a few days ago, we cut from the *Times* newspaper,—as we think it ought emphatically to proclaim the necessity of no time being lost in reforming hospital abuses, and placing “advice gratis” within the confines of benevolence. The following is an exact reprint of the advertisement to which we have referred :—

“UNIVERSITY COLLEGE HOSPITAL.—A patient, who has been cured by surgical treatment, at University College Hospital, offers £50 towards a sum of £60,000, for the purpose of endowing that hospital with eighty more surgical beds, in perpetuity; and proposes, as essential conditions with the same, that such beds shall be free to deserving patients, and that the medical officers of the hospital shall subject themselves to re-election every five years for the future. If the proposal is approved, he will subscribe the first £50 of each £10,000.”

The rapid multiplication of hospitals for the treatment of special diseases, to which Mr. Arrowsmith alludes at the close of his letter (p. 447), is too extensive a subject for us to enter upon at present. We must, however, commend his letter to the favourable attention of our readers. Mr. Smith's communication, at p. 446, has also within it the germs of useful suggestions; and his long and disinterested labours in the cause of medical philanthropy, as opposed to indiscriminate medical relief, commend his views to the respectful consideration of his brethren. Our duty is to lay such documents before the members of the profession, and to urge them to unite, for the purpose of devising and carrying out the necessary reforms. There may be a practical difficulty in carrying out any universally applicable scheme of amendment; but there are several objects which a united profession might accomplish, and which, if accomplished, could not fail to be productive of great and immediate benefits. We may mention three important objects, which are undoubtedly attainable by means of cooperation and energy on the part of medical practitioners :—

FIRST: An active share being taken in the management of medical charities, by the whole body of the medical practitioners residing within the towns or districts within which these charities are situated.

SECOND: The fearless exposure of those persons who subscribe to hospitals and dispensaries as a cheap means of procuring medicine and medical attendance for their servants.

THIRD: The enlightenment of the sincerely Christian and charitable public in methods of giving their bounty with discrimination; and the impressing upon them the necessity of making their gifts conditional upon a machinery being provided by hospital committees, such as is adequate to ensure the judicious application of the money with which they are entrusted.

If the first object be well carried out, the other two are likely also to be secured. In support of this view, we may mention that, through the influence of the medical element in the executive board of St. Mary's Hospital, an efficient system of registration of the out-patients has been prominently brought forward in the report for the year 1852, which is now before us. The fulfilment of such a measure must prove a corner-stone of hospital reform. Careful registration would make it impossible for sixty cases to be entered and prescribed for in an hour, as is actually stated of some hospitals, in the reports of which the number of cases prescribed for is the leading argument in favour of public liberality. Medicine would thus be relieved from the dis-

credit which it now endures, through much of the advice given at our hospitals being worse than useless, from the reckless haste with which it is administered.

THE PROSPECTS OF MEDICAL REFORM.

It is with sincere pleasure that we announce that in all parts of the kingdom an active movement has commenced in favour of the Medical Reform Bill of the Association. Petitions have already been sent up from many towns, and many more, we understand, are in course of signature. At a meeting of medical practitioners held in London, on Wednesday last, a Committee was formed, “for the purpose of obtaining an act of Parliament during the present session of Parliament, for the better regulation of the medical profession”. Dr. LANKESTER is chairman, and Dr. D. JONES and Mr. W. M. POWELL secretaries, of this Committee. At the meeting referred to, the principles of the Medical Bill of the Association were fully considered and unanimously approved. As this Committee has power to add to its members, and proposes to meet weekly for the furtherance of its objects, we earnestly recommend to all legally qualified medical practitioners to co-operate with Dr. Lankester and his colleagues. We anticipate that an immense impetus will be given to the medical reform question by this combination of metropolitan reformers, which is admirably organized, and full of zeal. Our advertising columns contain the official announcement of the formation of this Committee. Next week we hope to be able to communicate additional particulars.

We are glad to find, amongst other indications of the state of feeling on this subject, that the *Daily News* is again devoting its columns to the advocacy of the immediate settlement of the great question of medical reform. We have often lamented the popular apathy on this subject, which, combined with the differences of medical men, has so long delayed any just or comprehensive settlement of this question. In an article commenting on the deputation, which on Thursday, the 12th inst., waited on Lord ABERDEEN, the *Daily News* thus speaks of medical reform as a question not simply affecting medical men, but as one of general state policy.

“We have never agreed with the successive governments of this country who have thought that nothing should be done to reform the laws of the medical profession till its members are all agreed that those laws shall be. If we had waited for all the landlords to agree about the corn-laws, when should we have got free trade? Medical law is not a question of the internal organization of the profession, but a question involving the relation of a body of men to the State. The less the law interferes with the professional organization of the medical body, the better will it be both for the profession and the State. What is now wanted is rather that the State should relax the chains of law with which it has tied down so many medical institutions, than that it should construct new special laws. In short, what is wanted, is an introduction of the free trade principle into physic. Let all medical men be properly educated and properly examined, but, having once gained a legal diploma, let them practise what branch of their profession they please, in whatever part of the kingdom they like. Previous Governments have asked for an impossible unanimity amongst medical men before any step was taken. This was absurd; but just now the nearest attainable approach to that unanimity is presented by the medical profession.”

We cordially congratulate the Association and the friends of medical reform generally, upon having the enthusiastic support of so influential an organ of public opinion as the *Daily News*.

ORIGINAL COMMUNICATIONS.

A CASE OF INTESTINAL OBSTRUCTION
ARISING FROM INTERNAL STRANGULATION:
WITH A TABLE OF CASES.

By JOSEPH HINTON, M.R.C.S.L.

(Read before the Bath and Bristol Branch of the Provincial Medical and Surgical Association, March 24, 1853.)

THE increasing importance of that class of diseases commonly styled Intestinal Obstruction, and the large mortality which still attends these disorders, must be my excuse for occupying the time of this branch of the Association by the brief detail of a solitary case. Still, as isolated cases may yet contain some facts leading to the more successful treatment of the disease, I would direct attention to the case itself, and to the remarks appended to it.

CASE. About six months previous to the fatal attack, W. P., aged 16, a collier, suffered from an attack of constipation, attended by serious symptoms of inflammatory action in the caecal region. These symptoms were relieved by leeches, calomel and opium, etc., the opium being exhibited freely.

On the night of Monday, October 1st, 1852, having had a slight motion during the evening, he went to bed in perfect health, but was roused during the night by a sudden attack of severe pain in the bowels, and almost immediately he vomited. He took some brandy, without relief; and early in the morning his mother came to my surgery, requesting some aperient medicine, which my assistant gave her. Recollecting his old attack, I called; and finding that the aperient had not acted, but that the vomiting had rather increased, I ordered it to be immediately discontinued. The boy's appearance was anxious; his tongue was coated, and already becoming dry; and his pulse was quick. The abdomen was tense, and slightly tender in the caecal region, which appeared, if anything, more prominent than on the opposite side; there was no dullness on percussion, but rather resonance. Mustard poultice, followed by poppy fomentation, was applied to the abdomen. And

Rx.—Pulveris ipecac. compositi gr. x.
Hydrargyri chloridi gr. ij.

Ft. pulvis omni hora sumendus.

Sumat olei ricini 3 iij mane.

I will not detail the progress of the case. Suffice it to say, that under the plan mentioned, he improved in every respect. The vomiting abated and disappeared; the tongue became moist; but although the oil was not rejected, it did not act. On the following day, I ordered him three grains of solid opium; and, about three hours afterwards, an injection of castor-oil, with eight or ten drops of croton oil, was given. This speedily returned, bringing with it a very large, bulky, feculent motion, giving great relief, which lasted throughout the day. Small doses of opium were continued.

During the following day, October 20th, partial motions, less copious, and one containing blood (as reported), followed the use of injections; but towards evening, pain returned slightly, and although he did not vomit, his countenance was more anxious, and his tongue drier. From this time he gradually became worse. Opium was given freely whenever he was in pain, and relieved him for a time. Purgatives were omitted, and the vomiting did not return. Croton oil, tartar emetic, and other injections were employed without avail. The abdomen was more tense; and the quantity of urine passed was scanty. On the fifth day of the attack, seeing that he did not improve, I began seriously to think of an operation, and expressed my opinion plainly to the parents, who consented to let me perform any operation I chose. The next morning, therefore, I sent for my friend Mr. Scott, of Newport, determining that, if his view of the case in any way coincided with my own, I would hesitate no longer. I found my patient considerably worse

on that morning; much weaker; delirious at times; and before Mr. Scott arrived, death terminated my hopes.

EXAMINATION OF THE BODY. On the day after death, I opened the abdomen, as I had intended doing during life, by an incision about nine inches in length, from above the umbilicus to the pubes. The distended intestines immediately filled up the opening; and among the convolutions I noticed one considerably darker than the rest. Having, however, determined to search for the healthy contracted intestine below the obstruction, I turned the convolutions on one side, and soon found the colon contracted, and white. I endeavoured to trace it backwards, but the distended small intestine interfered. Returning, therefore, to the dark convolution, I found that it was a portion of small intestine, about eight or ten inches in length; and on turning it aside from the others, the disease was easily exposed. A thin band of membrane ran from the termination of the appendix, and appeared attached to the caecum. On gently touching it with a bistoury, it was divided, and the intestine released, and the strangulated bowel was directly filled with the gaseous contents of the intestine above.

REMARKS. *Diagnosis.* Without discovering the character of the obstruction, our diagnosis is incomplete. I am not going to enlarge upon this most important topic, but shall merely notice those symptoms which appear to direct us towards a class remediable, with very rare exceptions, by operative interference alone. For practical purposes, internal strangulation, intussusception, and twist or malpositions of the intestines, resemble each other in symptoms, especially in the character of the attack. In all it is *par excellence* sudden. Health and disease closely approach each other: the past has been health, its future a state of extreme suffering. Thus many cases resemble strangulated hernia; and, in fact, the diseases are often the same. Not only is there a change perceptible to the patient, but vomiting, as in the case related, may occur at the very moment of seizure, showing that some of the actual consequences of the disease supervene immediately: and vomiting generally is an early symptom. From my own limited experience, added to the examination of reported cases, I am compelled to think that the period when vomiting presents itself in the course of the attack, depends not, as some have supposed, upon the height of the obstruction in the alimentary canal, but upon the character of the obstruction itself; that when the disease consists in one of the three alterations just mentioned, there it is pre-eminently the *early* symptom, and *vice versa*. The reason is perhaps uncertain; but may it not be accounted for by supposing that, in these alterations, the vermicular action is arrested at once; and that, this returning upon itself, vomiting ensues? As ileus, the disease most likely to be confounded with these, is, if I may be allowed the term, a constitutional disorder, the symptoms altogether, and vomiting especially, are less sudden. In the table will be found a few cases where vomiting appeared early; but they do not belong to this class. Such are cases 118 and 136; but the previous history shows that the cause of its early appearance was rather connected with disordered stomach than obstruction of the bowels. A few other instances of sudden attack will be found in the table, but generally with some distinguishing feature denoting their character.

The history is an important help in diagnosis. Here inflammatory action had existed previously at the same spot; and it is very probable that membranous bands were then formed. The urine was scanty. By some this is supposed to denote the height of obstruction in the canal; but even allowing this, it does not inform us of the situation where the obstruction exists, and hence is of little value. The previous history, the prominence, and the pain, all pointed to the caecal region. The latter symptom, however, cannot be relied on. In strangulated hernia, for example, how frequently is the pain referred rather to some point in the abdomen than to the hernial protrusion. In some cases, as No. 15 in the table, the pain has even existed on the opposite side to the seat of obstruction; and in opera-

ting, it is now generally considered that the pain should not lead us to prefer one part of the abdomen to another.

The sex of the patient has been considered to have some weight in the diagnosis of membranous bands; it being thought that the female sex are more exposed to their formation, from the mobility of the contents of the abdomen. Of forty-two cases mentioned in the table, thirty were males, only twelve females.

There is another important point in the case, which certainly misled me in the prognosis for some hours: I mean the copious action of the bowels, which followed the administration of the croton-oil injection. I am well aware that, in intestinal obstruction, the bowels are frequently relieved, the inferior portion alone evacuating its contents; but the relief, if any, is transient. It will be found by reference to the table, that where mention is made of the bowels, it is rather the exception than the rule that they should remain unacted on; but that relief does not attend their action. Here, however, relief was most marked. It was far from transient, lasting over twenty-four hours; and the motion was so copious, that it led me to hope that the obstruction was removed. Further, several less copious motions followed. The *post mortem* examination proved how fallacious had been the hope. From this, may we not deduce the general rule, that, when the relief following an evacuation in intestinal obstruction is not permanent, the disease is probably still unremoved; and that our treatment has been hitherto unsuccessful?

Treatment. Purgatives were omitted, experience daily proving this the more rational plan. Opium was freely given, and from it alone did the patient experience much relief. The vomiting diminished after the omission of purgatives; nor does it generally appear to be urgent where these are avoided. When it is so, total cessation from swallowing anything in bulk, so that the stomach may not be excited to action; the free exhibition of opium; ice, on which two or three drops of dilute hydrocyanic acid may be placed, with an occasional mustard poultice to the epigastric region,—appear to be the plans which meet with the greatest success. All kinds of aperients must especially be omitted, and all attempts at moving the bowels be confined to the lower portion of the canal. On the various remedies which have been adopted, and which from time to time have been successfully (?) employed at this portion of the tube, I will not enlarge. All the different remedies, from tobacco to simple warm water, have had their advocates. Of the depressing class, tartar emetic is the safest and most easily managed, having all the advantages without the deadly effects of tobacco. The gradual injection of large quantities of warm water has often relieved the patient; but still, in the successful cases, it is not always easy to determine the character of the obstruction. Nor should this portion of the tube be forgotten as a receptacle for nutriment, in the shape of strong beef-tea injections; sufficient opium being added to prevent their return. They may be given at regular intervals of a few hours, according to circumstances.

If we can be in some measure certain as to the diagnosis of these cases, the proposed operation appears to offer the sole rational grounds of success; and in this case I regret that it was delayed so long. As the *post mortem* examination proved, the diagnosis was correct; the case was comparatively easy. In performing the *post mortem* examination, I acted as if operating. The contracted intestine, though easy to discover, was difficult to trace backwards. Here, however, it would not have been necessary; for the strangulated intestine, being large, was easily brought into view, and its dark colour distinguished it at sight. In less favourable cases, the only guide to be depended upon is the collapsed intestine, which must be carefully and patiently traced until the obstruction is reached.

The following table contains a brief outline of the histories of 137 cases, collected from various sources. In all, either the disease was discovered by *post mortem* examination, or was otherwise evident. The exceptions to this are

the case of Mr. J. Soden's, No. 60, which, as he was present, I thought he might explain his own impression; and No. 61, a case of my own, in which I state my own impression. I may also state that many cases are not mentioned, which are elsewhere reported, merely because the character of the symptoms is so indistinctly portrayed in the author's remarks. The cases are arranged for convenience in three classes:—1. Cases in which the obstruction arose from causes exterior to the intestine; 2. Cases where the intestine itself formed the obstruction; 3. Cases in which obstruction was produced by faeces or foreign bodies within the intestine.

These cases may also be divided into those in which the symptoms appeared suddenly, and those in which the disease came on gradually. Of the sudden cases, no less a number than sixty-nine were cases of intussusception, internal strangulation by peritoneal bands or adhesions, or malposition; and many of the remainder have the sudden attack explained by the remarks appended. Of the gradual cases, nine belong to the class mentioned, but many are scarcely cases of obstruction.

Abstract of the Table.

	Internal strangulation.	Ileus.	Intussusception.	Enteritis, etc.	Stricture.	Scirrhus.	Foreign bodies.	Total.
Sudden	49	4	20	2	2	3	4	86
Gradual	7	5	4	2	22	7	6	51
Total	56	9	24	4	24	10	10	137

Of the cases of ileus, three, Nos. 57, 58, and 59, reported by Dr. Abercrombie, have an indistinct history of the attack; and it appears to me that he has described their condition when he was called in to see them, not the history of the attack. No. 54 had nothing to distinguish it. Of the four cases of foreign bodies, one, No. 133, was attended by jaundice; the others, Nos. 134 and 135, were accompanied by paroxysmal pains, as in the passage of biliary calculi. No. 136 might probably have been diagnosed by attention to the history. Of the cases of scirrhus, etc., No. 118 owed its sudden nature to food swallowed unmasticated; in No. 123, the disease could be felt; No. 99 had hernia also; while Nos. 117 and 122 were not to be distinguished.

Of the gradual cases, those of invagination were remarkably chronic; while of the five cases of strangulation, No. 114 had stricture of the rectum also, possibly the cause of death, while some of the others might also be distinguished.

In concluding these hasty remarks, I would ask, Is not the treatment of hernia most applicable to these cases? Release the intestine, and you destroy the disease. True it is, we may not destroy its consequences; but do not these frequently, if not constantly, arise from the delay? Such is the conclusion at which I have arrived; and, were I in the position of the patient, I would say, "Defer not that operation; call it not a *last resource*; for it is not so much its intrinsic danger as its tardy adoption that renders it worthy of this name." There is no longer that intense objection to opening the abdominal cavity which formerly existed. Women recover from operations for ovarian disease, and after the Caesarean section, in which an important viscus is also wounded: why should they not also recover from operation for intestinal obstruction? Nor has success been altogether denied to those who have thought it expedient to give the patient the benefit of this *ancient remedy*. Case No. 19 is a case in point; a case in which the operator considered it less injurious to puncture the intestine in three different places, than to confine the contents

[Continued at page 433.]

Table of Cases of Intestinal Obstruction, shewing the Character of the Symptoms and the Nature of the Obstruction.

A. OBSTRUCTION FROM CAUSES EXTERNAL TO THE INTESTINE.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
1	F. 50	Gradual: attack sudden.				D.	Obturator hernia.	4 wks.	Mr. Stanley, Lancet, May 1851.	History indistinct. While coughing, felt sudden descent of hernia in left groin. Operation without relief.
2	F. 55	Sudden.				R.	Obturator hernia.		Mr. Obrè, Med. Chir. Soc., June 24, 1851.	Oper. in femoral region: reduction of strang. bowel.
3	F. 49	Sudden.	Yes.	No.		R.	Obturator hernia.	4 days.	Mr. B. Cooper, Med. Times, Jan. 29, 1853.	Explor. oper. in femor. reg.; accidental reduct. during. exam. Died subsequently of bronchitis. Health ailing since fall; but attack sudden.
4	M. 74	Gradual: attack sudden.			Fall.	D.	Diaphragmatic hernia.	9 days.	Mr. Erichsen, Lancet, Feb. 9, 1850.	Health ailing since fall; but attack sudden.
5	M. 14	Sudden.			Wnd.	D.	Diaphragmatic hernia.	2 days.	Med. Times, Feb. 5, 1853.	Usual remedies.
6	M. 27	Sudden.	No.			D.	Mesocolic hernia: jejunum and ileum between layers of left mesocolon: ileum constricted 2 inches above ileo-caecal valve, by sharp edge of mesocolon.	41 hours.	Dr. Peacock, London Journ. of Med., Oct. 1849.	Usual remedies to procure action of bowels and relieve vomiting. The hernia evidently of long standing.
7	F. 24	Sudden.	No.			D.	Mesocolic hernia: mesocolon falling over and strangulating jejunum.	2 days.	Mr. Charlton, Med. Gaz., Sept. 12, 1851.	Aperient enemata. Had several attacks.
8	M. 25	Sudden.	No.		Fall.	D.	Strang. of jejunum in slit of mesentery.	2 days?	Mr. Bailey, Prov. Med. and Surg. Journ., April 14, 1852.	Bleeding, opium, etc.
9	M. 15	Sudden.				D.	Strang. of ileum through rents in mesentery.	10 days.	Dr. Biaggini, Lancet, June 5, 1847.	
10	M. 21	Sudden.	No.			D.	Strang. of ileum by mesentery and bands.	9 days.	Mr. Robinson, London Journ. of Med., July 1851.	Calomel and opium, etc.
11	M. 22	Sudden.	Yes.	No.	Indigestion	D.	Omentum partly strang. ileum.	6 days.	Mr. B. Phillips, M. Gaz. Aug. 8, 1851.	Bleeding, leeches, cal., and opium.
12	M. 32	Sudden.	Yes.	No.		D.	Ileum twisted and strang. by omentum: hernia also.	4 days.	Mr. Paget, Med. Times, Sept. 18, 1852.	Explor. oper. in inguinal region without relief.
13	M. 58	Sudden.	No.			D.	Growth of omentum round knuckle of ileum.	3 days.	Mr. Robinson, London Journ. of Med., July 1851.	Aperients: enemata.
14	M. 50	Sudden.	Yes.	No.	Blow.	D.	Partial hernia: one side of intestine undiscovered.	30 hours.	Mr. Hey, Med. Gaz., Oct. 28, 1849.	Bleeding, leeches, etc.
15	M. 46	Sudden.	Yes.		Strain.	D.	Intestine strang. by appendix. Pain on left side.	7 days.	Mr. Gay, Ibid., Aug. 29, 1851.	Castor oil enema: calomel: explor. oper. in median line, div. of band, and release of intest.: d. in 22 hrs.
16	F. 37	Sudden.	Yes.			D.	Intestine strang. by appendix.	5 days.	Dr. Abercrombie, Dis. of Stomach, etc.	Usual remedies.
17	M. 31	Sudden.	No.			D.	Intestine strang. by appendix.	4 days.	Mr. Hancock and Mr. Willing, London Journ. of Med., March 1851.	Cal. and opium. Oper. was proposed, but refused.
18	F. 24	Sudden.	Yes.	No.		D.	Diverticulum of ileum twisted round intestine, and attached in right iliac fossa.		M. Bouvier, Gaz. Méd. de Paris, April 12, 1851.	Old adhesions: acute peritonitis after delivery: death.
19	M. 24	Sudden.	No.			R.	Portion of ileum strang. by small intest.		M. Reali, Révue Méd.-Chir., Janvier 1851; Prov. M. and S. Journ. June 11, 1851.	Oper. in med. line: div. of stricture with success.
20	M. 31	Sudden.	Yes.	No.		D.	Portion of ileum strang.	5 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
21	M. 31	Sudden.	No.			D.	Portion of ileum strang. Diseased mass also existed in abdomen.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
22	M. 78	Sudden.	No.			D.	Hernia strang. high up. Blighted testis.	4 days.	Dr. Turley, Prov. Med. and Surg. Journ., April 15, 1851.	Opium. Refused explor. oper.
23	M. 30	Very sudden.	No.		Supper.	D.	Internal strangulation by band.	14 days.	Dr. Oke, <i>Ibid.</i> , July 7, 1852.	Opium: beef-tea injections: bleeding, etc.
24	F. 50	Sudden.				D.	Intern. strang.: umbilical hernia.	24 hours.	Mr. Paget, Med. Times, July 31, 1852.	Explor. oper. at umbilicus without relief.
25	M. 16	Sudden.	Yes.	No.		D.	Intern. strang. by band at cæcum.	6 days.	Mr. Hinton, Present paper.	Cal. and opium: aper. injections.
26	M. 11	Sudden.				D.	Internal strangulation.	14 days.	Dr. Druitt, Med. Chir. Soc.	Oper. in med. line: bowels gave way during manipulation. D. in 24 hours.
27	F. 19	Sudden.	Yes.	No.		D.	Internal strang.: band fr. mesent. to fundus uteri.	20 days.	Mr. Fergusson.	Oper. in median line: relief of strict.: but death in 17 hours.
28	M. 20	Sudden.				D.	Internal strang. of ileum, by small intest. and membranous band.	13 days.	Dr. Bird, Mr. Hilton, Med.-Chir. Trans., vol. xxx.	Oper. in median line: d. in 10 hours. Attack very distinctly marked; but sympt. not urgent, vom. appearing on 5th day.
29	M. 60	Sudden.				D.	Constricted condition of cæcum: fresh morbid matter had formed tough band strangulating intestine.	20 hours.	Mr. Brown, Association Medical Journal, Feb. 11, 1853.	Usual remedies.
30	F.	Gradual.				D.	Strangulation of ileum by old bands.	10 days.	Mr. Brown, <i>Ibid.</i>	Usual remedies. Patient had for some time complained of pain across umbilicus; also in cæcal region, where circumscribed hardness could be felt: frequent constipation.
31	M. 35	Sudden.	No.			D.	Internal strangulation.	7 days.	Mr. Curling, Lancet, July 20, 1850.	Explor. oper. in groin without relief.
32	M. 21	Sudden.				D.	Internal strangulation; also hernia.		Mr. Solly, <i>Ibid.</i> , July 13, 1850.	Explor. oper. in groin; disease not discovered.
33	F. 50	Sudden.	Yes.	No.	Over-reach.	D.	Apparent hernia. To internal ring portion of ileum was attached firmly, and opened during operation. A band stretched from omentum to right groin, immediately under which was the small coil of intestine connected with internal ring.	17 days.	Mr. B. Phillips, Med. Gaz., August 8, 1851.	Explor. oper. in inguinal region: escape of purulent matter, followed by relief. Three days before death, symptoms returned and ended fatally.
34	M.	Sudden.				D.	Intern. strang. of ileum by band.	24 hours.	Mr. Callaway, Lancet, vol. for 1830, p. 743.	Bleeding, calomel, etc.
35	M. 63	Sudden.	No.			D.	Intern. strang. of ileum; also old hernia.	3 days.	Dr. Crisp, <i>Ibid.</i> , May 20, 1847.	Usual remedies.
36	F. 24	Sudden.				D.	Strang. of ileum by band, from appendix to another portion of ileum.	3 days.	Mr. Marshall, Lancet, Jan. 9, 1847.	Bleeding, calomel, opium, etc.
37	M. 16	Gradual.	No.			D.	Intern. strang. by band of three feet of intestine.	15 days.	Dr. Beilby, Edin. Med. and Surg. Journ., 1835.	Mercury. Attack came on after diarrhoea for one day. Large amount of intestine strangulated may account for gradual character.
38	M. 12	Sudden.			Strain in wrestling.	D.	Band from umbilicus strang. intestines.	7 days.	Dr. Berncastle, Lancet, Feb. 15, 1845.	Various remedies: injections, etc.: frictions with croton oil.
39	F. 20	Sudden.	No.			D.	Ileum strang. by band from colon to spine. Peritonitic effusion; intest. very vascular.	19 days.	Mr. C. R. Thompson, Med. Gaz., July 12, 1851.	Bleeding: purgatives, injections. Exciting cause of attack was wet feet and suppressed catamenia.
40	F. 23	Sudden.	No.			D.	Two feet of ileum strang. by band from mesentery to another portion of ileum. Bowels agglutinated by recent lymph.	4 days.	Mr. C. R. Thompson, <i>Ibid.</i>	Injections: wine: beef-tea, brandy.
41	M. 40	Sudden.	Yes.	No.		D.	Strang. of lower part of ileum by bands.	6 days.	Mr. Robinson, London Journ. of Med., July 1851.	Purgatives: enemata: opiate, etc.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
42	M. 34	Sudden.	No.		Strain.	D.	Ileum bound down to iliac fossa by bands.	8 days.	Mr. Robinson, London Journ. of Med., July 1851.	Bleeding: leeches: calomel, etc.
43	M. 17	Sudden.	No.		Several attacks.	D.	Ileum bending down and attached to pelvis.	5 days.	Dr. Abercrombie, Diseases of Stomach, etc.	Bleeding: blisters, etc. Each separate attack sudden.
44	F. 14	Sudden.				D.	Lower portion of ileum involved in old disease, and completely confined by false membrane.	3 days.	Dr. Abercrombie, <i>Ibid.</i>	Usual remedies. Had never complained before the sudden attack.
45	F. 61	Sudden.	Altern. with diarrhoea.			D.	Cæcal ulcers and fistulæ; colon and ileum firmly agglutinated.	3 mths.	Dr. Jenks, Association Journal, Feb. 11, 1853.	Camphor relieved extreme flatulence: diarrhoea uncontrollable.
46	F. 32	Gradual: rather sudden.				D.	Bowels agglut. together.	10 days.	Mr. Erichsen, Lancet, Feb. 9, 1850.	Bleeding: leeches: injections.
47	M. 28	Sudden.				D.	Old disease of bowels. Intest. matted together strang. loop of ileum.	4 days.	Dr. McCarogher, Med. Gaz., Aug. 24, 1849.	Injections, etc.
48	F. 14	Gradual.	Diarrhoea.	No.		D.	Intest. matted together.	5 mths.	Mr. I. B. Brown, Lancet, July 13, 1850.	Hyd. c. cretâ, Dover's powder, etc. Solid tumours in abdomen had been mistaken for ovarian tumour; but disappeared on discharge of feces.
49	M. 4	Sudden.	No.			D.	Intern. strang. by another portion of intestine.	2 days.	Mr. Simon, Prov. Med. and Surg. Journ., Oct. 13, 1852.	Aperients, etc.
50	F. 60	Very gradual.				D.	Diseased mass round rectum causing stricture; intestine itself apparently healthy.	Several weeks.	Dr. Abercrombie, Diseases of Stomach, etc.	Usual remedies.
51	M.	Gradual.				D.	Tuberc. dis. of mesent. glands. Calculi making exit through abdom. parietes.	Months.	Dr. Oke, Prov. Med. and Surg. Jour., July 7, 1852.	The case resembled more strict. rect.
52	F. 65	Gradual.				D.	Diseased uterus.	Years.	Mr. Gay, Lancet, June 7, 1851.	Amussat's operation.

B. OBSTRUCTION PRODUCED BY THE INTESTINE ITSELF.

53	M. 50	Gradual.	Yes.	No.		D.	Ileus: dilated and contracted portions.	2 weeks.	Mr. B. Phillips, Med. Gaz., Aug. 8, 1851.	Calomel, colocynth, etc. Explor. oper. in umbilical region without relief.
54	M. 5	Sudden.				D.	Ileus: three contracted portions: undigested food.	3 days.	Dr. Cholmley, Guy's Hosp. Rep., and Prov. Med. & Surg. Journ., April 16, 1851.	Aperients: cal.: leeches: bleeding. Twisted about in bed as from colic.
55	M. 40	Gradual.	Yes.	No.		D.	Ileus: small intestines uniformly distended.	10 days.	Dr. Abercrombie, Diseases of Stomach, etc.	Usual remedies.
56	F. 20	Gradual.	No.		Cold.	D.	Ileus: small intestines distended.	10 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, warm bath, etc.
57	F. 70	Sudden?	No.			D.	Ileus: small intestines distended.	2 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, warm bath, etc. Though attack was apparently sudden, bowels had been confined some days.
58	M. 19	Sudden?				D.	Ileus: colon gangrenous.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
59	M. 19	Sudden?	Yes.	No.		D.	Ileus: small intestines gangrenous.	10 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding. Characters of this and of preceding case very indistinct: merely "was affected thus, and had been ill so many days."
60	M. 60	Sudden.	Yes.	No.	Crush.	R.	Ileus?	14 days.	Mr. Soden, Prov. Med. and Surg. Journ., March 17, 1852.	Expectant treatment: opium: ice: nutritive enemata.
61	M. 45	Gradual.	Yes.	Yes.		R.	Ileus.	4 days.	Mr. Hinton.	Bleeding: leeches: inject. of tart. em., cal., and op.
62	F. 60	Sudden.	No.			D.	Intussuscept. of ileum into colon.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
63	M. 60	Sudden.	No.			D.	Intussusceptio.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.

No.	Sex and Age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
64	M. 2½	Sudden.	Yes, blood.	No.		D.	Intussusceptio: the intussuscepted portion protruding at stool. It commenced from the middle of arch of colon.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
65	6 mts.	Sudden.	Yes, blood.	No.		D.	Intussusception of cæcum into colon.	4 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
66	M. 37	Sudden.			Dose of rhubarb.	D.	Intussusception.	8 days.	Mr. R. Jones, Lancet, Dec. 20, 1851.	The attack apparently induced by action of rhubarb.
67	6 mts.	Sudden.	Blood.			D.	Intussusception: ileum into cæcum.	4 days.	Mr. Clark, Lancet, Aug. 25, 1850.	Pulv. Doveri.
68	8 mts.	Sudden.				D.	Intussusception: the intest. protruding at anus.		Dr. Steele, Lancet, June 23, 1849.	
69	4 mts.	Sudden.				D.	Intussusception of colon into rectum.	2 days.	Dr. Steele, Lancet, June 23, 1849.	Castor oil, etc.
70	M. 4ms.	Sudden.				D.	Intussusception of colon into rectum.	2 days.	Mr. Nind, Lancet, June 23, 1849.	Castor oil, etc.
71	Inf. 4ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Dr. Alex. Monro, Med. Gaz., March 2, 1833.	Injection of castor oil.
72	M. 28	Gradual.	Diarrhœa.			D.	Intussuscept. of ileum and cæcum into sigmoid flexure.	Weeks.	Mr. B. Phillips, Med. Gaz., March 2, 1833.	Peculiarly chronic case: no obstruction.
73	Inf. 5ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Mr. Blizard, Med.-Chir. Trans. 1815.	
74	M. 9ms.	Sudden.	Blood.			D.	Intussuscept. of ileum and cæcum into colon.	3 days.	Mr. Cunningham, Med. Gaz., Sept. 15, 1838.	Leeches: enemata.
75	M.	Sudden.	Yes.	Yes.	Supper.	R.	Intussusception: 23 in. passed at stool.	15 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
76	M. 23	Sudden.	Yes.	Yes.		R.	Intussusception: intestine discharged.	18 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
77	M. 45	Sudden.	Yes.	Yes.	Strain.	R.	Intussusception: 18 in. passed.	14 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
78	M. 37	Sudden.	Yes.	Yes.		R.	Intussusception: 18 in. passed.	20 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
79	M. 40	Sudden.	Yes.	Yes.		R.	Intussusception: intestine passed 10 inches.	14 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Mercury.
80	F. 40	Gradual.	Yes.	Yes.		R.	Intussusception: intestine passed.		Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
81	F. 56	Sudden.	Yes.	Yes.		R.	Intussusception: 40 in. passed.	7 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
82	M. 6	Gradual.	Yes.	Yes.		R.	Intussusception: intestine passed at stool.	5 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
83	F. 30	Sudden.	Yes.	No.		D.	Intussusception: 2 ell in length passed away.	8 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Remedies not mentioned.
84	F. 48	Gradual ill health, attack sudden.	Yes.	No.		D.	Intussusception: 10 in. passed.	30 days.	Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Bowels had always been costive: seizure quite sudden: they had not been acted on for five days previously.
85	F. 31	Gradual.	Yes.	Yes.		R.	Intussusception: 10 in. passed.		Dr. Thomson, Edin. Med. and Surg. Journ., 1835.	Bowels had been unacted on for eight days.
86	M. 24	Sudden.	Yes.	No.	Several attacks.	D.	Twist of colon: cæcum turn. upwards, & attached to colon by old adhesions.	3 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies: opiates, etc. Vomiting not mentioned.
87	M.	Sudden.				D.	Twist of colon.	36 hours.	Dr. Ayre, Med. Gaz., Oct. 29, 1841.	Usual remedies.
88	M. 52	Very sudden.				D.	Twist of sigmoid flexure.	7 days.	Mr. Erichsen, Lancet, Jan. 26, 1850.	Operat. in median line: twist replac.: feces passed into it: bow. twice mov.: patient d. of exhaust. 11 hrs. aft. op.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
89	F. 50	Gradual.				D.	Twist of sigmoid flexure.	4 weeks.	Dr. Roupell, Lancet, Aug. 9, 1851.	History indistinct: says she had been ill three days.
90	M. 20	Sudden.	Yes.	No.		D.	Inflammation of ileum.	6 days.	Dr. Abercrombie, Dis. of Stomach.	Usual remed. Had felt uneasiness for many days. Pain intense, as of peritonitis.
91	F. 3	Gradual.	Yes.	No.		D.	Upper part of small intestine gangrenous.	6 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
92	M. 10	Sudden.	Yes.	No.		D.	Upper part of small intestine much distended, pushing down lower into cavity of pelvis.	2 days.	Dr. Abercrombie, Dis. of Stomach.	Bleeding, etc.
93	F. 22	Gradual.	Yes.	No.		R.	Inflammation of cæcum? Distinct tumour of some thickness in that part, continuing after relief of pain.	4 days.	Mr. Hinton.	Cal. and op. each gr. ij, ev. hour: leeches: frict. of ung. hyd.: inject. of tartar emet.: castor oil, etc. Grt. tenesmus foll.: relieved by opium in rectum: at least 5 ss of op. taken by mouth.
94	M. 40	Gradual.	Alter. consti. & diarr.	No.		D.	Stricture near middle of ileum from centre of periton. coat.	14 days.	Mr. Robinson, Lond. Journ. of Med., July 1851.	Bleeding: leeches: injections: croton oil, etc.
95	M. 24	Gradual.	Yes.	No.		D.	Stricture of arch of colon.	1 year.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
96	M. 47	Gradual.				R.	Stricture of colon.	Weeks.	Mr. Clement, Med. Times, March 6, 1852.	Operation in ascending colon.
97	M. 40	Gradual.	Yes, occas. diarr.			D.	Stricture of colon.	Weeks.	Mr. Hinton.	Diarrhoea at times with difficult control: attacks simulated dis. of stomach.
98	M. 23	Gradual.				R.	Stricture of colon. Died subsequently.	Months.	Mr. Evans, Med.-Chir. Trans. vol. xxviii, p. 25.	Operation in ascending colon.
99	M. 55	Rather sudden.				D.	Stricture of colon at lower part: hernia also.	10 days.	Mr. Luke, Lancet, March 30, 1850.	Explor. oper. in groin. No relief.
100	F. 42	Gradual.				R.	Stricture of colon, prob. beyond transverse portion.	Weeks.	Mr. Hilton, Guy's Hosp. Rep., vol. viii, pt. i, p. 186.	Opium and enemata: afterwards oper. in ascending colon.
101	F. 80	Gradual.				D.	Stricture above sigmoid flexure.	Weeks.	Dr. Murer, Med. Gaz., Jan. 21, 1841.	Inject. of croton oil, etc.
102	M. 50	Gradual.				D.	Stricture of colon. Old hernia came down on fifth day: retd. with diff.: red. en masse suspected. Gt. hypertrophy of musc. coat.	13 days.	Mr. Luke, Lancet, March 30, 1850.	Explor. oper.: enemata, etc. Duration short, yet symptoms came on gradually from weariness. Hypertroph. musc. coat would probly. explain absence of constipation.
103	F. 56	Gradual.				D.	Stricture of colon.	20 days.	Mr. Avery, Med. Gaz., May 18, 1849.	Explor. oper. in groin: extended to umbilicus: art. anus formed. Death in eight hours.
104	M. 65	Gradual.	Yes.	Yes.	Dinner.	R.	Strict. of colon? Ileus?	4 days.	Mr. Hinton.	Opii gr. ij, cal. gr. i, 2ndis horis. Oleaginous and croton oil injections, both ineffectual. Inject. of tartar emet. appeared to have effect. At least gr. xx of opium were taken.
105	M. 70	Very gradual.				D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
106	M. 80	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies.
107	F. 88	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies. Alternately diarrhoea.
108	F. 44	Gradual.	Yes.	No.		D.	Stricture of sigmoid flexure.	Several weeks.	Dr. Abercrombie, Dis. of Stomach.	Usual remedies. Alternately diarrhoea. At one period, had no evacuation for 13 weeks.
109	F. 40	Gradual.				D.	Stricture of sigmoid flexure.	6 weeks.	Mr. Lawrence, Lancet, Aug. 9, 1851.	
110	M. 56	Gradual.				R.	Stricture of sigmoid flexure.	Months.	Mr. Field, Lancet, Jan. 19, 1850.	Operation in descending colon.
111	F. 21	Gradual.				R.	Stricture of sigmoid flexure.	Months.	Mr. Clarkson, Ibid.	Operation in descending colon.

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
112	F. 50	Gradual.				D.	Stricture of sigmoid flexure.	8 weeks.	Dr. Roupell, <i>Lancet</i> , Aug. 9, 1851.	Amussat's operation performed after death.
113	M. 38	Gradual.				R.	Stricture of rectum: prob. near sigmoid flexure.	Months.	Mr. Curling, <i>Med. Times</i> , Dec. 18, 1852.	Oper. in left loin. Died 5 months afterwards.
114	F. mid. age.	Gradual.				D.	Stricture of rectum: strang. of ileum & cæcum.	Weeks.	Dr. R. Bennett, <i>Med. Times</i> , Dec. 18, 1852.	Imperfect report: said to be gradual constip.: stricture prob. cause of death. Usual remedies.
115	F. 44	Gradual.				D.	Stricture of rectum.		Mr. B. W. Brown, <i>Associat. Journ.</i> , Feb. 11, 1853.	
116	M. 50	Gradual.				R.	Stricture of rectum.	Months.	Mr. Pennell, <i>Lancet</i> , May 25, 1850.	Operation in descending colon.
117	M. 36	Sudden?			Mowing.	D.	Stricture of rectum, as if tied with string: ulcer at stricture.	10 days.	Mr. Crompton, <i>Med. Gaz.</i> , July 20, 1840.	Explor. oper. in descending colon: relief: patient sank. He fancied he had strained himself in mowing: soon aft. had bloody motion.
118	M. 65	Sudden.	No.		Supper.	D.	Scirrhus of ileum.	6 days.	Mr. Hinton.	Bleeding: leeches: injections, etc. Extreme suddenness, caused by indigestion: vom. portions of unchewed meat, $\frac{1}{4}$ inch in diameter, and 1 in. long. I heard afterward that he previously had slight attacks. Purgatives, enemata, etc.
119	F. 51	Gradual.				D.	Scirrhus of ileum at lower part.	Months.	Dr. Crisp, <i>Lancet</i> , May 29, 1847.	
120	M. 70	Gradual.				D.	Scirrhus of colon.	Months.	Dr. Oke, <i>Prov. Med. & Sur. Jour.</i> , July 7, 1852.	
121	M. 60	Gradual.	Yes.	No.		R.	Disease about sigmoid flexure.	14 days.	Mr. Luke, <i>Med. Gaz.</i> , July 11, 1851.	Aperients: explor. oper. of Littré.
122	F. 35	Sudden.				D.	Scirrhus of sigmoid flexure.	20 days.	Dr. Oke, <i>Prov. Med. & Sur. Jour.</i> , July 7, 1852.	Puncturing colon with trocar.
123	F. 55	Sudden.				D.	Two attacks: death in second. Scirrhus of rectum: felt by finger.	8 mths.	<i>Ibid.</i>	Diluent injections.
124	M. 44	Gradual.				R.	Dis. of rectum: nearly complete obstruction.	Weeks.	Mr. C. Hawkins, <i>Med. Times</i> , March 20, 1852.	Operation in descending colon.
125	M. 33	Gradual.				R.	Scirrhus of rectum.	Weeks.	Mr. Adams, <i>Ib.</i> , March 6, 1852.	Operation in descending colon.
126	M. 48	Gradual.				D.	Scirrhus of rectum.	3 mths.	Mr. Clement, <i>Ibid.</i>	Operation in descending colon.
127	F. 62	Gradual.				D.	Disease of rectum.	Weeks.	Mr. Baker, <i>Ibid.</i>	Operation in descending colon.

C. OBSTRUCTION FROM FOREIGN BODIES WITHIN THE INTESTINES.

128	F. 40	Gradual.	Yes.			R.	Impacted feces.	Months.	Mr. Erichsen, <i>Lancet</i> , Feb. 9, 1850.	Leeches; injections; and removing feces.
129	F. 30	Gradual.	Yes.	Yes.		R.	Fæcal accumulations.	3 days.	Mr. Hinton.	Calomel and strong aperients. She habitually took calomel and colocynth every other night, never otherwise having a motion; this time they failed. Case peculiar, from severe crampy pains from shoulders to elbows and from hips to knees; which ceased as soon as bowels were relieved.
130	F. 25	Gradual.	Yes.	Yes.	Pregnancy?	R.	Fæcal accumulation.	7 days.	Mr. Hinton.	Oleaginous enemata; opium freely; miscarried at fourth day.
131	F.	Gradual.	No.				Concretions in rectum.		Dr. A. Knox, <i>London Journal of Med.</i> , Sept. 1850.	Purgatives; injections; removal of concretions.
132	M. 40	Sudden.			Several attacks.	D.	Large gall-stone.	5 days.	Dr. Abercrombie, <i>Diseases of Stomach</i> , etc.	Use of rectum; dice and...

No.	Sex and age.	Character of symptoms.	Action of bowels.	With or without relief.	Cause.	Result.	Nature of disease.	Duration.	Authority.	Treatment: and remarks.
133	F. 50	Sudden.				D.	Biliary calculi in lower part of ileum.		Dr. Oke, Prov. Med. and Surg. Journal, July 7, 1852.	Injections, etc. Two attacks, in second of which pain shifted to another position after action of bowels, also pain at onset was <i>paroxysmal</i> , like passage of gall-stone.
134	F. 50	Sudden.				D.	Biliary calculus.		Dr. Oke, <i>Ibid.</i>	Mercury. This, from the <i>p. mort.</i> exam., was cause of death by inducing gangrene. Pain spasmodic.
135	F. 23	Sudden.				D.	Mass of cherry-stones at pyloric end of stomach.	12 hours.	Mr. B. W. Brown, Association Med. Journal, Feb. 11, 1853.	The cherries were eaten the evening previous; the attack occurring in the night.
136	F. 10	Gradual.			Bean.	D.	Horse-bean in appendix had set up peritonitis.	3 days.	Mr. B. W. Brown, <i>Ibid.</i>	Usual remedies.
137	M. 11	Gradual.			Swallowing bullet.	R.		4 days.	Dr. Cumming, Prov. Med. and Surg. Journal, May 28, 1851.	Injections of castor-oil; leeches, etc. Bullet was never found.

[Continued from page 432.]

lation and exposure necessary for the reduction of the strangulation; and I confess I am in some measure disposed to accord with the opinion. Nor was this the only point opposed to the recovery; the three punctures were subsequently found to be continuous, and required the uninterrupted suture; yet, although the operation was followed by erysipelatous inflammation, the recovery was perfect.

In the *Medical Gazette* for March 2nd, 1833, Mr. B. Phillips, speaking on this very subject, says that he has collected three hundred and thirty-two cases of gastrotomy; only forty-four were fatal. In intestinal obstruction of all kinds, curable and incurable, the mortality is far above this. I cannot but think that the cause of death after gastrotomy, when applied for the relief of intestinal obstruction, depends on the delay. That is indeed dangerous; but with an earlier adoption of the operation, and with proper precautions as to the temperature of the room, which should be raised nearly to blood-heat, I feel convinced that different results will ultimately attend the surgeon's efforts; and that success will crown his attempts at the restoration of life.

I would here tender my sincere thanks to my friend Mr. Colthurst, the honorary secretary of the Bristol Branch, for his kindness in looking out several works for me, by which I was enabled in a short space of time to add several cases to the table, which were beyond my limited means of reference; also, to Dr. Alexander Henry, who most kindly drew my attention to several other cases, and who also arranged the table in its present advantageous form for reference.

Blaina Iron Works, Monmouthshire, March 1853.

CASE OF ACUTE INTESTINAL TUBERCULOSIS.

By WILLIAM HENRY ASHLEY, M.D., Surgeon to the Kensington Dispensary.

CASE. Miss B., aged 14, of a weak and delicate constitution, not having yet menstruated, had been from an early age subject to those symptoms which mark a high degree of tuberculous dyscrasia. Her stature was exceedingly dwarfish, and the general conformation of the frame so diminutive, that she might have been considered rather of the age of ten than fourteen years. The circulation was languid; the extremities had a shrivelled appearance, and were generally cold; and the pallid surface of the body in-

dicated an impoverished condition of the blood. On many occasions she had been under medical treatment, on account of general debility and ulceration of the feet, when she had taken with much benefit the mineral acids and cod-liver oil. Several members of her family were afflicted with scrofulous cachexia; but she appeared to have been the greatest sufferer, and to have inherited the disease in a remarkable manner. The friends of the young lady attributed her illness to exposure to the night air.

January 25th, 1853. The face was pale, with oedema of the eyelids and cheeks; the expression was anxious; there was considerable emaciation; the respiration was natural; she had slight cough, with scanty viscid expectoration; there was no pain on deep inspiration. The percussion sound was clear, and there was sonorous breathing in the upper lobes of the lungs. The physical signs indicated but very partial disease of the pulmonary tissue. The pulse was small, and 120 in the minute. The cardiac sounds were normal. She had occasional febrile exacerbations, but no rigors; the epigastrium and abdomen were free from any tenderness or pain; the action of the bowels was regular, without diarrhoea; the tongue was moist and somewhat furred; the skin very dry and unperspiring; the feet and ankles were oedematous; the urine was scanty, pale, and highly albuminous; the specific gravity was not ascertained, in consequence of its paucity and involuntary flow with the motions. She had some pain over the lumbar region. I prescribed as follows:—

R. Liquoris ammoniæ citratis ʒij.
Tincturæ scillæ ʒj.
Tincturæ digitalis 3 ss.
Spiritus ætheris nitrici ʒij.
Acidi hydrocyanici diluti ʒxx.
Syrupi aurantii ʒss.
Misturæ camphoræ ʒiiss.

Misce. Sumantur cochlearia duo quartâ quaque horâ.

R. Hydrargyri cum cretâ gr. iss.
Extracti hyoscyami gr. ij.
Scillæ pulveris gr. ss.

Misce. Fiant pillulæ duæ mane nocteque sumendæ.

Hot mustard hip-baths were directed to be used, and an embrocation, as a counter-irritant, to be applied over the region of the kidneys.

February 1st. There had been some amendment since the last date. The hydropic affection had in a measure subsided, more particularly in the face; there was scarcely any cough; and she expressed herself generally relieved. The pills were directed to be omitted in the morning, and the mixture to be continued.

February 6th. Since the last date, the oedema had not decreased; and the countenance had assumed a more anxious

expression. The urine was still serous and scanty; and there was anorexia.

The symptoms continued the same, with more or less variation, until February 15th, when, for the first time, she complained of tenderness over the bowels, and pain on pressure. The medicine also occasioned distress, and was constantly rejected. Profuse diarrhoea now supervened, the evacuations consisting of coagulated blood, with reddish brown matter. There had also been much vomiting of coffee-grounds-like fluid, accompanied by hiccough.

It now became evident that glandular ulceration of the bowels was the main cause of these alarming symptoms. To alleviate her sufferings, and moderate these discharges, opium and chalk mixture were prescribed.

The patient expired on February 17th, apparently from exhausting hæmorrhage. No cerebral disturbance had taken place, and the intellect remained unimpaired to the last.

EXAMINATION OF THE BODY, twenty-seven hours after death. *External Appearance.* The body was in the last stage of marasmus. There was no cadaveric rigidity, but oedema of the feet and ankles. The vascular system and the viscera were in a state of exsanguinity.

Chest. On the superior and posterior portion of the apex of each lung, interstitial tuberculous granulations were found, very limited in number and extent. Some purulent solution had taken place; and the right lung contained a small tuberculous cavity of very recent formation. The anterior surface of the superior lobes was emphysematous. The cause of the clear percussion sound during life was thus explained. There was no oedema, but some old cellular adhesions existed between the costal and diaphragmatic pleuræ.

The heart was small, empty, pallid, and devoid of fat.

Abdomen. Near the cardiac end of the great curvature of the stomach was a patch of congestion. The lining membrane was pale, and the viscus was distended with sanguineous coffee-coloured fluid.

The liver had undergone no degeneration of its tissue into fat. It was perfectly healthy, and had contracted old adhesions to the diaphragm.

The kidneys were free from disease, but anæmic.

The mesenteric glands were natural.

The ileum assumed an unusual appearance, occasioned by a firm coagulum completely impacted in the intestine, and distending its coat to the utmost limit. When removed, the coagulum presented a perfect cast of the bowel; and on a transverse section being made, a colourless fibrinous mass was found entirely enveloped in the coagulated blood. It would be interesting to determine how this nucleated portion became denuded of its colouring matter. The mucous membrane throughout the small intestines was in parts congested; the greater portion, however, would have appeared pallid, had it not been much stained by the blood-globules arrested in the exudative process. The various outlets of hæmorrhagic exhalation were plainly indicated. The texture of the membrane was generally soft, and, in the vicinity of the glands, much thickened. The glandulæ solitariae and agminatæ were in a state of ulceration, with deposit of tubercular matter; but the lining membrane had not become involved in the destructive process.

REMARKS. The acute dropsy at the onset of the illness rendered the case complicated, and the disease less amenable to treatment. Drastic or hydragogue purgatives were inadmissible, as were also the more irritating diuretics. The most important indications were to restore the balance of the circulation, and to promote interstitial absorption. There was no evidence of intestinal ulcerations until three days before death; tenderness or pain over the abdomen having been entirely absent, and the alvine evacuations regular and healthy, without any tendency to diarrhoea.

Scrofulous disease of the glands as it existed in this case, is rarely met with, excepting as a secondary and dependent

affection, or sequence on long protracted or severe pulmonary tuberculosis. Here the disease of the lungs was of short duration, and very circumscribed; and the constitutional disturbance arising from the same was unimportant.

Although the kidneys presented no appearance of congestion, inflammation, or structural change, yet the pain at the commencement of the illness might have been occasioned by some local hyperæmia of those excretories.

The immediate cause of death was the hæmorrhage. The quantity of blood lost from the system could not be well ascertained. Besides that which was vomited, and voided by stool, the stomach was found distended with sanguineous fluid, apparently conveyed into that viscus by antiperistaltic action. The intestines also contained effused blood in a large quantity, of unusual solidity, as before related.

Although the glandular apparatus was extensively ulcerated, there was no sloughing or perforation of the coats of the bowel. The hæmorrhagic discharge appeared to arise from the diminished density and depraved condition of the circulating fluid, superadded to a lax state of the contractile vascular fibre and textures. The same causes may have operated, towards the termination of the illness, in producing the large amount of albumen excreted by the kidneys, and in occasioning the infiltration and accumulation of serum in the areolar tissue of the face and lower extremities.

8, Boyne Terrace, Kensington Park, May 6th, 1853.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, APRIL 16TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

TREATMENT OF CERTAIN FORMS OF ULCER. BY JOHN GAY, ESQ.

The object which Mr. GAY had in view was to propose a method of treatment for those cases in which, after an ulcer had proceeded favourably up to a certain point, the healing process became arrested, and the ulcer refused to cicatrize. He attributed this retardation to the tension of the surrounding skin, by the contraction of the cicatrix, so that it could no longer yield; and in some cases to the formation of adhesions between the cicatrix and the subjacent parts. To remedy the first of these impediments to recovery, he had made an incision just on the outside of the cicatrix. This had been followed by healing of the ulcer; and it was observed, that as the ulcer healed towards the centre, the side of the newly-made wound nearest the cicatrix was drawn inwards. In cases where adhesions had been contracted with the subjacent parts, while a part at least of the surrounding skin remained loose, he had partially dissected off the adherent portion of the cicatrix by subcutaneous incision, and shifted it over the ulcer. This plan had also been followed by success.

SATURDAY, APRIL 23RD, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

ALKALINE TREATMENT OF LOW INFLAMMATION. BY JOHN MARSHALL, ESQ.

Mr. MARSHALL was desirous of directing attention to the efficacy of alkaline treatment in low forms of inflammation, especially in the furunculoid epidemic at present prevailing. In the case of a man who, some days after amputation of a finger on account of serious injury, had been attacked with symptoms of pyæmia, he had administered a scruple of bicarbonate of potash, with three or four grains of sesquicarbonate of ammonia, every three hours. Under this treatment, with good diet, the man recovered. Mr. Marshall had employed the same plan successfully in several other cases of low inflammation.

He had observed in persons who died of pyæmia, that the pus and purulent fluids found in the body were acid, and contained vibrios. In less marked cases, there was also a tendency to acidity and to the formation of vibrios. This is similar to

what takes place in sour milk; and Mr. Marshall suggested that vibrios have perhaps the same relation to lactic acid as the *penicillium glaucum* has to the vinegar fermentation.

He had found in cases of whitlow, that when he had an opportunity of examining the pus at an early period, it contained either partially or fully developed vibrios almost immediately after removal from the body.

ANEURISM OF THE SUPRA-ORBITAL ARTERY CURED BY INJECTION OF A STRONG SOLUTION OF THE PERCHLORIDE OF IRON. BY JOHN GAY, ESQ.

MR. GAY read a case which had been communicated to him from Paris, in which the treatment of aneurism recommended by M. Pravaz had been successfully employed. It consists in producing coagulation of the blood within the aneurism, by the injection of a small quantity of a solution of perchloride of iron.

CRANIOTOMY IN DEFORMED PELVIS. BY ROBERT GREENHALGH, ESQ.

MR. GREENHALGH related the following case.

The subject was a milliner, aged 28, four feet in height, with considerable curvature inwards of the thigh bones. The catamenia appeared at the age of 17, and had been irregular, scanty, and painful. She had had occasional leucorrhœa. She married at the age of 21, and became pregnant. Mr. Greenhalgh was called to her in her first labour, about three years ago. He found that labour had continued for some time, and that the pains were feeble, with symptoms of prostration. The sacrum and coccyx projected forwards, and the rami of the ischium and os pubis approached each other. Having revived the patient with brandy and laudanum, he performed craniotomy, and removed the child with some difficulty. He prescribed Dover's powder and salines, with beef-tea and stimulants, if necessary. The patient recovered.

Mr. Greenhalgh strongly advised separation from her husband. In January of this year, however, she again applied to him, being five months advanced in pregnancy. She would not consent to the performance of any operation which would not give the child a chance of living. Notwithstanding the endeavours of Mr. Greenhalgh and Dr. Locock (who was consulted) to dissuade her from her purpose, she persisted in desiring the performance of the Cæsarean section. Under these circumstances, and especially under the encouragement afforded in a letter from Dr. Simpson, of Edinburgh, Mr. Greenhalgh determined to perform the operation.

On March 19th, however, at seven and a half months, labour set in. This was encouraged, under the idea that delivery might possibly be effected by the efforts of nature. This, as well as attempts to turn and to apply the forceps, having failed, and the constitutional symptoms becoming severe, craniotomy was performed, sixty-three hours after the commencement of labour. The child was a female, and weighed four and a half pounds. The distance from zygoma to zygoma was two and a quarter inches. Opium and calomel were given. The patient had a severe febrile attack, but ultimately recovered.

Dr. WINN said that, in comparing the British with the continental statistics of the Cæsarean section, we must remember that on the continent medical men are compelled to perform the operation.

Dr. CRISP observed that in America, where there is no compulsion, the Cæsarean operation has been successful.

Dr. MURPHY said, that the question of the relative merits of craniotomy and the Cæsarean section could be placed in an intelligible form, only by considering the exact circumstances under which the practitioner is placed. If we took statistics alone as a guide, we should err; and we should especially come to an unfair conclusion if we confined our attention to British statistics. In this country, surgical midwifery has made slow progress. In cases where the Cæsarean operation has been performed in Great Britain, the patient has been let alone from day to day; and at last the operation has been performed to remove the child from a dying woman. On the continent it is different, both from compulsion and from a better system of surgery. The statistics of all the cases of Cæsarean section taken together, show 158 recoveries out of 409. We must not, however, argue too much from these, because we have to consider special cases; as, for instance, one which lately occurred to Dr. Oldham at Guy's Hospital, in which he was unable to perform craniotomy, and was hence compelled to have recourse to the Cæsarean operation.

He held it as a moral principle that the life of the child was too valuable to be destroyed by craniotomy. The life of the mother is no doubt more valuable than that of the child; but if the chances of recovery to the mother, in craniotomy, are so

uncertain as to amount to only one in three, while those afforded by the Cæsarean section are at least as good, we are not justified in destroying a living child. He had carefully considered the question of retardation of the union of parts after the Cæsarean operation, by the reduction and disintegration going on in the uterus; and still believed that the operation might be performed with greater success than has hitherto attended it. Mr. Greenhalgh had been perfectly justified, both morally and professionally, in determining to perform the Cæsarean section in the case which he had related. Dr. Waller had recently performed the Cæsarean section on a woman, in whom delivery was impeded by the presence of a large tumour. A similar case had occurred in the Dublin Lying-in Hospital some years ago, under Dr. Shekelton, who was desirous of performing the Cæsarean operation. His opinion was overruled; craniotomy was performed with great difficulty; and the woman died. Dr. Waller, on the other hand, had succeeded in saving the life of the child.

MR. I. B. BROWN said, that in determining on the relative merits of craniotomy and the Cæsarean section, it was important to consider whether the child were dead or living. He believed that in many cases of narrow pelvis, delivery could be effected by turning, as recommended by Dr. Simpson. He had often seen death follow craniotomy; and this fatal result probably arose from delay. The same observation applied to abdominal surgery in general: operations had been often delayed too long. For instance, operations for hernia at one period were almost invariably fatal, because not performed early, and because the bowels were not kept quiet; while, in the present day, early operation and the use of opium are generally attended with success. The reason why the Cæsarean operation was not performed, as had been intended, in Mr. Greenhalgh's case, was that it was considered possible that the cranial bones of the fœtus at seven and a half months might have become sufficiently overlapped to be squeezed through the pelvis.

MR. J. F. CLARKE held that the previous speakers had attached too little importance to the induction of premature labour.

Dr. GRIFFITHS said that premature labour ought to be insisted on whenever possible; and if not, the forceps should be tried; and in this way the life of the mother might in many cases be saved. At the same time, the use of the forceps should not be pushed too far. The statistics of craniotomy were of little value, because the operation was so frequently successful, that the cases were often not thought worth publishing; hence we had a majority of unsuccessful cases on record. As regarded the operations themselves, there was much less danger in craniotomy than in the Cæsarean section. The former operation was probably frequently fatal from the employment of unnecessary force.

SATURDAY, APRIL 30TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

INTUSSUSCEPTION IN A CHILD TWO YEARS OLD. BY C. COGSWELL, M.D.

The subject of the case was suddenly attacked with vomiting and other urgent symptoms, and died in forty-eight hours. At the distance of four inches from the caput cœcum coli, the small intestine began to have a red appearance. The ileum was invaginated into the colon, and apparently strangulated by the ileo-cæcal valve.

SUDDEN DEATH DURING UTERO-GESTATION. BY EDWARD SMITH, M.D.

CASE. A lady, aged 20, near the end of her second pregnancy, while lying in bed dressed, suddenly cried out, and died suddenly, after a few minutes. Dr. Smith was called, but found her dead.

EXAMINATION OF THE BODY, forty hours after death. The under part of the body was much congested, and had some petechial spots. The blood was universally black and fluid, except in the pulmonary vein, which contained a cylindrical coagulum, composed of two layers of fibrin, the outer one of which was free from red corpuscles. The heart was flaccid; its tissue was undergoing granular degeneration, especially on the right side. The right auricle and ventricle contained dark fluid blood. The left cavities were empty. The aorta at its bifurcation was very small; the external iliac artery was no larger than a swan's quill: there was no blood in the arteries. The veins were much distended: the ovarian veins were twelve in length, by three-quarters of an inch in breadth; they curved along the iliac fossæ. The stomach and intestine were much distended. The diaphragm was pushed up to between the

fourth and fifth ribs. The lungs were much collapsed; there were numerous bubbles of extravasated air beneath the pleura: there was much discolouration posteriorly. The left pleural cavity contained three ounces of sanious fluid, without coagula. The brain and sinuses were turgid: there was no effusion at the base of the brain, nor congestion of the choroid plexuses. The child was small.

Dr. Smith would attribute death in this case to suffocation, connected with atony of the system. The venous congestion was probably connected with diminished exercise, and the horizontal position in which she commonly indulged. Taking all circumstances into consideration, he would be inclined to regard the plug formed in the pulmonary vein as having been instrumental in producing death. Had the enlarged size of the veins any connexion with the smallness of the arteries?

STRICTURE OF THE URETHRA. BY JOHN CHIPPENDALE, ESQ.

The object which Mr. CHIPPENDALE had in view was to direct attention to spasmodic stricture. This might be produced by an unusual degree of acridity in the urine, arising from dyspepsia, or from causes impeding elimination by other emunctories. Spasmodic stricture under these circumstances is of constant occurrence: the urine at first flows freely; soon the stream becomes smaller, and at last ceases abruptly. This form of stricture may also be produced by mechanical causes, as unskilful introduction of instruments. This is less likely to happen from the introduction of a large than of a small instrument.

Mr. Chippendale did not believe that the urine was expelled by the action of the bladder, but that this was effected by the abdominal muscles and the diaphragm. He believed the office of the muscular structure in the bladder to be merely to adapt the organ to its contents.

The treatment consists in removing the exciting causes, in giving opium and antispasmodics. Injection of warm water into the urethra often relieves the spasm.

SATURDAY, MAY 7TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

PURULENT INFECTION AFTER OPERATIONS ON THE GENITO-URINARY ORGANS. BY HENRY BULLOCK, ESQ.

Mr. BULLOCK divided his paper into the following heads:—
I. Secondary affections after diseases of and operations on the genito-urinary organs, not followed by a fatal result; II. Secondary affections followed by a fatal result; III. Summary of the pathology and treatment of these affections.

I. Secondary affections may follow (a) diseases of, (b) operations on the genito-urinary organs.

(a) Gonorrhoeal rheumatism is an example of this class: and Mr. Bullock related a case in illustration. He observed, that the inflammation of the joints could not have been a mere coincidence of the gonorrhoeal disease; nor was gonorrhoeal rheumatism a result of the absorption of pus. He explained it by supposing that there is an interference with the changes by which pus is formed on the mucous membrane of the urethra; that the fibrin intended for this purpose undergoes a retrograde metamorphosis, and is carried into the blood, from which, an attempt being made to eliminate it, rheumatic symptoms are set up.

(b) The non-fatal secondary affections following operations are chorea, affections of the cartilage of joints, syncope, and rigors. A case of stricture was referred to, in which the passage of the urethra was followed by rigors, succeeded by ulceration of the cartilage of the shoulder, and by pneumonia. In another instance, a woman was operated on for the removal of some necrosed portions of a tibia. Two days after the operation, phagedenic ulceration of the wound came on, and was attended by chorea. This continued for a month; and, as it subsided, the wound became more healthy. A man, aged 42, was suffering from stricture and irritable bladder. A small catheter was first passed, then Holt's dilator, which was enlarged up to No. 4. When No. 4 was passed, the patient had some shivering and giddiness, felt ill, and passed blood with his urine. At the end of a week, a No. 4 tube was passed without difficulty, though attended with pain. The patient was attacked with rigors, and had an irregular painful swelling on the back of the right hand. Leeches were applied, and calomel and opium given. This swelling proceeded some distance up the arm; and after some time subsided, but again returned. It ultimately disappeared, and an ordinary sized bougie could be passed into the urethra.

The first and last of these were regarded by Mr. Bullock as

cases of local inflammation following the introduction of an instrument into the bladder. The chorea was connected with phagedenic ulceration of the wound in the leg: here probably the amount of morbid matter absorbed was too small to produce any severe local effects on other parts of the body.

II. The fatal secondary affections following diseases of and operations on the genito-urinary organs are puerperal fever, purulent deposits, peritonitis, pericarditis, pleuritis, etc. In all these cases, the progress is rapid, and the termination fatal. Mr. Bullock related some cases, of which the following are summaries. Death occurred in all.

1. M., aged 69; lithotripsy; purulent deposits in knee-joints.

2. M., aged 38; lithotomy; secondary hæmorrhage; purulent effusion in right shoulder, and abscess extending from the seat of operation to the rectum.

3. M.; perineal section for traumatic stricture; pericarditis and pleurisy with effusion, minute purulent deposits under capsules of kidneys, and purulent effusion a round wound.

4. F., aged 42; operation for ruptured perinæum; rigors and sloughing of wound, with tenderness of abdomen; pus in Fallopian tubes; incipient peritonitis and pleuritis, and small deposits under the pulmonic pleura.

5. M., aged 16; run over by a cart: retention of urine; fistula in perinæo, and false passage; catheter introduced with much difficulty; chorea; death. Abscess by side of rectum communicating with urethra and bladder; also by side of pelvis; pubic bones had been fractured.

Similar results also follow injuries of and operations on other parts, as in the following cases.

6. F., aged 12; injury to leg from fall; pericarditis and pleuritis; and pus beneath periosteum of tibia and fibula.

7. F., aged 46; wound in hand with rusty nail; opening of abscess; purulent deposits in right knee, and in right wrist and shoulder joint, with ulceration of cartilage; also pus in left knee.

The points worthy of notice in these cases, as appeared in their detailed history, were the variety of situations in which the purulent deposits occurred; the comparatively small amount of pain in the part secondarily affected; and their universally fatal termination in spite of treatment.

III. Phlebitis has been generally assumed to be the primary cause of secondary purulent affections; an opinion which was first opposed by Mr. Henry Lee. In the cases related, the veins were sometimes thickened in the neighbourhood of the original seat of injury; but there was no disease in those at a distance. Considering the cases of undoubted purulent infection, in which no phlebitis can be detected, we must look further for the cause. The inflammation of the veins, when present, may be only a portion of the general inflammation. Mr. Bullock believed that purulent infection was a poison-disease. This view he believed to be supported by the circumstances attending puerperal fever, which are similar to those of other epidemic diseases. He believed that the fibrin which should form pus in the seat of injury or operation, undergoes a retrograde metamorphosis, and is again carried into the circulation; and that in the attempt to eliminate it, secondary purulent deposits are formed.

The treatment must be directed to interrupt and destroy the morbid development; and when pus is formed, it must be evacuated as soon as possible.

DR. DRUITT said that Mr. Bullock's paper pointed out in a measure the degree to which we may arrive in the doctrine of unity of disease. Inflammation is almost always traceable to the presence of a poison in the blood. The most simple form arises from the ingestion of non-convertible or badly convertible aliments; such as substances producing urtiaria. Examples are also afforded in the determination of blood to the fauces, produced by iodide of potassium; in the exanthematous affections produced by copaiba or cubeba in large doses; and by specific morbid poisons, such as the exanthemata. Another set of poisons is produced in the blood by perversion of the reparative processes. Mr. Bullock's cases had proved that the blood-plasma may undergo a retrograde metamorphosis, so as to render it a poison, giving rise to morbid phenomena. Within the last twelve months there has been a remarkable pyrogenic constitution, as shown in the prevalent furuncular affection.

The treatment in these cases should consist of, 1. Elimination: 2. Opium, to quiet the nervous system: 3. Such means as may render the blood less susceptible of the retrograde metamorphosis. With regard to the latter indication, the means for fulfilling it is a desideratum. Dr. Drutt had been in the habit of giving, in cases of labour, sulphate of zinc three or four days after parturition; he had also given with benefit sulphate of iron and quinine in cases of suspected puerperal fever. Pelas has been successfully treated in Edinburgh.

chloride of iron. Dr. Druitt had not had an opportunity of trying this remedy; but he would suggest its employment in cases of the kind under consideration.

Dr. CRISP suggested a trial of the alkaline treatment, as recommended by Mr. Marshall in the treatment of the prevailing funicular affections.

Mr. DENDY did not think that the presence of a poison in the blood will explain all the phenomena which occur in the secondary affections: a predisposing cause is afforded by systemic debility. Early treatment is important.

Dr. DANIELL said that the cases related conveyed the important lesson—that, before operating, surgeons should inquire into the state of health of the patient, the epidemic constitution, and other circumstances.

Mr. HENRY LEE believed that *real* purulent infection—from the absorption of pus into the circulation—is a very rare occurrence. There is a development of cells and white fluid, but not of pus, in the blood; and he believed also that in the early stages the deposits in the various organs, as in the kidneys in one of Mr. Bullock's cases, are not pus, but fibrin. He did not think the purulent diathesis really is more common, but that more attention has lately been directed to it. It is important in the treatment that all the injured veins should be closed: he had found in most cases of secondary purulent affection that some vein remained open. He suggested a trial of the perchloride of iron for the purpose of producing coagulation, as described by M. Pravaz.

Mr. HAYNES WALTON said that secondary deposits in the brain were unfrequent; but he had met with a case in which a patient suffering from abscess of the eye had died suddenly, without pain, or other symptom of cerebral disease. A large deposit of pus was found in the left anterior lobe of the brain. No direct communication could be traced between this and the abscess in the orbit.

Mr. BULLOCK said that opium had been given in large doses in one of the cases related, but without any effect; and also chloride of lime, but perhaps at too late a period. He had endeavoured throughout to show that pus does not circulate in the veins as such: he had not detected pus-globules in the blood in any of his cases. In cases of abscess in the brain following disease of the ear, it is often very difficult to trace the connexion between the affected organs.

SATURDAY, MAY 14, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

THE GALVANIC CAUTERY IN THE TREATMENT OF UTERINE DISEASE. BY ROBERT ELLIS, ESQ.

The earliest application of galvanism for the purpose of cauterising was made by Mr. Marshall. Mr. ELLIS's investigations had led him to a more extensive application of the remedy; and he had sought to provide for the collection and concentration of heat over a considerable surface. With this view, he used a tube of porcelain—which he had found to be the best substance for the purpose—round which was twisted about a foot of platinum wire. The porcelain is placed at one end of a silver catheter, and is connected with the conductors of a Grove's battery by means of a copper wire passing through the catheter. This instrument he believed to possess an advantage over the actual cautery in cases where it was indicated, in being always ready for use, and far less formidable in appearance.

In the application, the patient should lie on her left side. A cylindrical glass speculum is introduced, and the diseased part made to protrude through it. The mucus on the surface of the part must be removed, in order to avoid loss of heat. The platinum wire having been in a few seconds heated to a white heat, the porcelain becomes hot; and the whole is applied to the diseased part. If any portion has escaped, the cautery must be again applied. It is important that the platinum wire be raised to a white heat; otherwise it is liable to produce pain, and slight hæmorrhage from a portion of the tissue adhering and being torn away. The length of time for which it is applied should be in proportion to the extent and depth of tissue which the surgeon thinks it desirable to destroy. The pain is generally less than that produced by the application of caustic.

The after-treatment consists of absolute rest, saline draughts with hyoscyamus, and opiates if required. Warm soothing injections are also useful; and it is important that these be effectually applied. After two or three days, the patient may rise; but should still rest as much as possible. The eschar generally comes away from the eighth to the tenth day.

The cases in which this treatment is applicable are those of long standing ulceration with induration, prolapsus uteri, and in the prolapsus of the vagina and bladder described by Dr.

Golding Bird and Mr. I. B. Brown. Mr. Ellis had used it in twenty cases, without any untoward results.

Dr. MURPHY said, that Mr. Marshall and Mr. Ellis had done great service by enabling the cautery to be used in a form divested of terror to the patient. The terrible appearance of the actual cautery had given rise to the adoption of chemical means; but these had the inconvenience of spreading beyond the part intended to be acted on; whereas the power of limiting the action was an advantage possessed by the actual cautery. The employment of a porcelain cylinder for increasing the heated surface was an improvement due to Mr. Ellis.

Mr. DENDY suggested that Drs. Routh and Crisp, who had witnessed the employment of the actual cautery in cases of uterine disease by M. Jobert de Lamballe, should give an account of the cases in which he used it.

Dr. ROUTH said, that M. Jobert applied the cautery in nearly all those cases in which caustic was used by Dr. Henry Bennett: viz., in hypertrophy of the cervix, in induration with so-called ulceration, and in cancer.

Mr. RICHARDSON had been informed that Dr. Simpson of Edinburgh had used potassium as a cauterizing agent.

Mr. STREETER inquired why, if cancer of the uterus is treated with at least apparent success by cauterisation, the same remedy could not be applied to cancer in other parts of the body. He believed that many cases of uterine disease had been brought into a hard, suspicious-looking state, by the use of irritant injections; whereas warm baths, hyoscyamus, and constitutional treatment, might have cured them.

BIRMINGHAM PATHOLOGICAL SOCIETY.

THURSDAY, APRIL 14TH, 1853.

Dr. FLETCHER in the Chair.

PHLEBITIS FOLLOWING AMPUTATION. BY O. PEMBERTON, ESQ.

Mr. OLIVER PEMBERTON exhibited a specimen, showing the effects of suppurative phlebitis in the right common iliac, external iliac, and femoral veins, occurring after amputation of the thigh. The case was that of a healthy girl, aged 17, received into the General Hospital with a severe machinery accident, causing great contusion of the chest and compound fracture of the thigh, with laceration of the soft parts, and considerable hæmorrhage. The patient went on well (with the exception of slight pleuritis, which easily yielded to treatment), till the fourteenth day after the thigh had been removed; phlebitis then set in, and she died four days afterwards. The *post mortem* examination showed fracture of the cartilages of four ribs on the injured side, with inflammation and exudation of lymph on the pulmonary pleura in the corresponding situation, but without laceration of that membrane. The right lung was the seat of tubercular deposit and general consolidation, and the left healthy, with the exception of a circumscribed fibrinous deposit of old date. On tracing the large veins from the thigh upwards, they were found to be the seat of suppurative inflammation, extending to within a short distance of the vena cava, further progress being prevented by a large fibrinous clot, three quarters of an inch in length, plugging the entire calibre of the common iliac vein. Imperfect attempts at plugging were observable lower down.

A discussion then followed, chiefly having reference to the large average mortality following amputation after accidents in hospital practice, as compared with private, and especially country practice. The general opinion was, that the cause of this mortality is to be sought in the placing of a number of patients together, and their exposure to erysipelas and other miasmata, influences inseparable from hospital practice.

FIBRO-CYSTIC DISEASE OF BREAST. BY O. PEMBERTON, ESQ.

Mr. PEMBERTON exhibited a tumour of the right breast, removed by Mr. Amphlett in the General Hospital. The patient was a young married woman, aged 23, and had been a mother. She was tolerably healthy, and did not present in herself or her family any indications of the cancerous diathesis. The disease had recently progressed rapidly, the tumour having grown in a period of fourteen months from the size of a marble to that of a child's head, but having been stationary for six months of that time. It was quite painless till within a few days of its removal, and then became the seat of acute lancinating pain. It was soft in parts, and firm in others.

A section of the tumour presented large and small cavities in different parts, the chief bulk being made up to solid and dense fibrous and cellular deposit. Both the firm and soft portions exhibited under the microscope oval and fusiform cells con-

taining two or more nuclei, fibres, and free nuclei, such as are commonly seen in canceroid growths undergoing rapid development. The fibrous tissue of the gland appeared to have become occupied by, and continuous with, the diseased growth which pervaded the whole structure. The left breast was wasted and flaccid. The axillary glands were unaffected. The wound healed rapidly and well.

The question of the cancerous nature of the disease was debated, and it was considered that canceroid growths not essentially malignant may come, during a period of rapid development, to present appearances and structures closely identical with those which are characteristic of cancer.

FIBRINOUS DEGENERATION OF PLACENTA. BY J. BASSETT, ESQ.

Mr. BASSETT exhibited a placenta which was the seat of disease. There was nothing in the history of the case to throw light upon its pathology; the pregnancy was the first, and continued to the full time; the child had been dead for several days before birth, and the placenta was firmly adherent to the uterus. On its fetal surface there was an elevated hard ring extending around the insertion of the umbilical cord, at a distance of an inch and a half. This consisted of fibrinous matter, which extended into and throughout the whole structure, and which was in various stages of disintegration. The true placental structure was almost entirely absent, and was replaced by a reddish homogeneous substance, of the consistency of liver, permeated by obliterated vessels and tough bands. From the after history of the case, it was rendered probable that the condition of the placenta was the result of disease commencing in the lining membrane of the uterus, and of which the death of the child was the consequence.

ASSOCIATION INTELLIGENCE.

THE MEDICAL REFORM BILL:—DEPUTATION TO LORD ABERDEEN.

ON Thursday, May 12th, a deputation from the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION waited on Lord Aberdeen, at his official residence in Downing Street, in order to draw his attention to the measure of medical reform prepared by a committee of that body.

The deputation consisted of Sir Charles Hastings, M.D., D.C.L.; Dr. Robertson, M.D., of Northampton; Dr. Webster, of Dulwich; Mr. Nunneley, F.R.C.S., of Leeds; Mr. Noble, F.R.C.S., of Manchester; Mr. Bottomley, F.R.C.S., of Croydon; Mr. Walsh, F.R.C.S., of Worcester; Mr. Southam, M.R.C.S., of Manchester; Mr. Cartwright, M.R.C.S., of Oswestry; Mr. Bree, M.R.C.S., of Stowmarket; Mr. Stedman, M.R.C.S., of Guildford; and Mr. Hastings, barrister, Secretary to the Committee. The deputation was introduced by Earl Beauchamp, and was accompanied by Mr. Ricardo, M.P., Mr. Cowan, M.P., Dr. Barnes, Dr. Cormack, Mr. Wakley, and Mr. J. F. Clarke.

LORD ABERDEEN having expressed his desire to hear the views of the gentlemen present explained,

Sir CHARLES HASTINGS read the following statement:—

"My Lord,—We appear before you as the representatives of the Provincial Medical and Surgical Association, a society consisting of nearly 2,000 members, and instituted for the advancement of medical science. The members are chiefly physicians and surgeons residing in the provinces and in Scotland. The society has been more than twenty years in existence, and has regularly published transactions, and has maintained a journal for the dissemination of its views.

"We have had forced on our attention the incongruous and confused state of the profession, which presents a great obstacle to the advancement of medical science.

"There are no fewer than nineteen different sources from which licenses to practise can be derived, and hence arises an utter want of uniformity in professional qualification.

"This evil the Society have steadily endeavoured to remedy, and they have for twenty years been engaged in the endeavour to improve the organisation of the profession.

"They early established certain principles which should guide them in their attempts; these were

"Uniformity of qualification; equal right to practise throughout Her Majesty's dominions; and the establishment of the representative system in the formation of the governing bodies. These views have been repeatedly brought forward in petitions to Parliament, in memorials to government, and in public discussions.

"Sir G. Grey encouraged us with the hope that if any measure should be brought forward in which there was a concurrence of sentiment, government might be induced to lend assistance.

"This induced the Association, with the assistance of a barrister, Mr. Hastings, to frame a bill embodying the principles which they have so long advocated.

"This bill has received an unparalleled amount of support from the profession, both in England and Scotland, and we are able to speak of it as one which embodies, on the whole, the views of the Association, and of the profession at large. At the same time, we shall be ready to concur in any alterations that the government may think fit to introduce into it, provided they are in harmony with the principles of the bill. With this view, we requested the honour of an interview with Lord Palmerston, and on that occasion the Committee of the Association, accompanied by the Presidents of the Colleges of Physicians and Surgeons of Edinburgh, and by more than fifty members of the House of Commons, presented the bill to his lordship. Since that date, we have received a letter from the Home Office, stating his lordship's hope that a measure of medical reform may be introduced into parliament this session, and we believe that his lordship approves of the object of the present deputation.

"The bill contemplates the appointment of a Council to regulate the education of the profession, a Board of Examiners before whom every candidate for practice will have to appear, and a system of registration which will embrace all qualified practitioners.

"We now, therefore, my lord, come to submit the bill to your lordship, as the first minister of the Crown, as one eminently calculated to promote the welfare of the profession, and of the public at large. We earnestly request your lordship to enable it to pass into law during this session of parliament, in order to stop the agitation which will otherwise assuredly continue.

"We implore your lordship to put an end to the evils which must result, as every reflecting mind can perceive, from the present order of things, and to place the medical profession in a position, not only worthy of its own character, but one calculated to enable it to confer the greatest possible amount of benefit to the community at large.

"We have, in conclusion, to request your lordship that before the government introduce a measure of medical reform into parliament, they will previously allow the Committee, through their Secretary, Mr. Hastings, an opportunity to consider the bill."

Mr. WAKLEY wished to impress on Lord Aberdeen that the present moment was most favourable for the object which the deputation had in view, and that if the Government would now take up the measure, its success was certain. He had been labouring for thirty years in the cause of medical reform, and he had never seen anything approaching the present unanimity. There might be a difficulty in passing the Bill through the House of Commons at this moment, burdened as it was with business; but he trusted that Lord Aberdeen would introduce it into the House of Lords, it being a question eminently fitted for their consideration.

Mr. COWAN, M.P. for Edinburgh, expressed the strong feeling which his constituents entertained in regard to medical reform, and the warm support which they gave to the Bill of the Association.

Mr. NUNNELEY said that the medical profession were especially anxious for a system of registration which might distinguish qualified practitioners from such men as those who had been recently figuring in police reports, and who cast a slur on a profession to which they did not really belong.

LORD ABERDEEN said that he fully appreciated the importance of the Association and the objects which they had at present in view. He should be most happy to afford them every facility in his power, and, unless some unforeseen obstacles should arise, he hoped to be able to carry out their wishes.

The deputation, after thanking his lordship, then withdrew.

YORKSHIRE BRANCH.

The annual meeting of the Yorkshire Branch of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION was held at the Museum of the Yorkshire Philosophical Society, York, on Thursday, May 12th. RICHARD HEY, Esq., the President, occupied the Chair. There were also present: Edward Allen, Esq. (York); James Allen, Esq. (York); William Bannister, Esq. (Knottingley); Charles Chadwick, M.D. (Leeds); Thomas Cornhill, Esq. (Leeds); B. Dodsworth, Esq. (York); William Farnham, Esq. (Leeds); Thomas Hornby, Esq., (Harley Moor);

band, Esq., (York); Henry Jackson, Esq. (Sheffield); W. Matterson, Esq. (York); Thomas Simpson, M.D. (York); D. H. Tuke, Esq. (York); J. Watmough, M.D. (Pocklington); Caleb Williams, Esq. (York).

After some prefatory remarks by the President, W. Matterson, Esq., the Secretary read the Report of the Council.

REPORT OF THE COUNCIL.

In presenting their Annual Report, your Council have to bring before you several matters bearing more or less intimately on the interests of the profession.

The first subject, which is of paramount importance to this Association, is the long protracted question of Medical Reform. The amended draft of a bill was at the annual meeting of this Association at Oxford consigned to a Committee appointed to watch over its interests, and to make such alterations in its details as should be deemed necessary. An amended bill was published in the *Provincial Medical and Surgical Journal* of November 10th, 1852, containing some important alterations; the chief of which were, the insertion of an interpretation clause, and the introduction of a clause providing for the publication of an annual statement of accounts. An alteration has been made in the fifteenth clause, in favour of the pupils of registered practitioners, and dispensing with the provident fund.

The Committee had conferences with the different Colleges in London and Edinburgh. The Edinburgh Colleges agreed to the bill under certain very reasonable conditions. The London College of Physicians approved of it; and the Committee have reason to believe that an alteration in the bill, which would not affect its principles, nor impair its efficiency, would remove any objections which the College of Surgeons of England may have entertained. The Committee then determined, as the principles of the bill met with no opposition, and as the objections referred to matters of detail, in order to obtain an earlier solution of these difficulties, to submit it at once to Lord Palmerston. Accordingly, on the 18th of March, the Committee, accompanied by a deputation from the Scottish Colleges, by a number of medical men from all parts of the kingdom, and by several members of Parliament, waited upon Lord Palmerston, who received them with great courtesy, and held out hopes that he would bring it forward as a government measure; but his lordship, it appears, has hitherto found his hands so fully occupied, that he has not had time to take up the bill; neither is it probable, if introduced late in session, that it would pass into law. Mr. G. W. Hastings has therefore thought it best to make an effort to introduce the bill into the House of Lords; and arrangements are now being made for a deputation to wait on Lord Aberdeen on an early day.

At our last meeting, notice was taken of a new charter sought to be obtained by the College of Physicians. At Oxford, the contemplated changes met with considerable opposition; and it was determined to appoint a Committee to confer with the College of Physicians, and watch over the interests of those concerned in it. That Committee has been actively engaged; but the result has not been such as to prove satisfactory. On the 6th of April, a deputation of the Fellows of the Royal College waited on Lord Palmerston, to urge him to take such immediate steps as were necessary towards obtaining a new Charter. In reply, his lordship stated that he would give the subject his earliest attention. Dr. Todd, one of the deputation, reminded his lordship that he had been waited upon by a deputation from our Parent Association, which he said represented very accurately the feelings of the profession, and stated that the bill which the association advocated was in entire harmony with the Charter of the College.

The subject of the Income Tax, which has for some time past occupied the attention of Association, has, through late political events, rendered active exertion necessary. The different Branches have held various meetings, to which the profession generally were invited. Several petitions have been presented to the Houses of Lords and Commons against the unjust principle of taxing alike fixed and precarious incomes. At a meeting of the York members of the Council of the Branch, it was thought necessary to call a general meeting, and it was suggested that the chief towns of the Branch should petition the House of Commons against the proposed measure.

Dr. Chadwick, our worthy President, at once attended to the suggestion, and obtained the signatures of sixty of the profession in Leeds to a petition, which was presented to the House by the sitting members. The Secretary here obtained the signatures of nearly all the medical men of this city to a petition, which was presented by the city members. Though parliament has not yielded to our wishes, still this Branch has the satisfac-

tion of knowing that it has used all legitimate means to obtain a modification of this taxation, which presses so heavily on the hard-earned income of the medical man.

A Vaccination Extension Bill has been introduced into the House of Lords by Lord Lyttelton, the object of which is to eradicate small-pox by compulsory vaccination. Whilst the Council strongly feel the importance of the general diffusion of the practice of vaccination, they would contend, on so important a subject, for mature deliberation, and a more just appreciation of the services of the medical man. The Council recommend the meeting to adopt a petition to the House of Lords, through their President, against the proposed measure.

It is with unfeigned regret that the Council record the death of their old associate, and long-tried friend, Dr. Goldie. About three years since, declining health compelled him to withdraw from the Association, as well as to retire from the practice of the profession; and although he left this city, and went to reside in the neighbourhood of Sheffield, there lives in the memory of his colleagues a lively sense of his gentlemanly deportment, his unsullied integrity, and the industry and zeal with which he entered upon every undertaking which had for its object the advancement of science, the harmony and welfare of the profession, or the general improvement of the moral and social condition of his fellow-men. Those who had the privilege of his friendship, can also bear testimony to his private worth, to the kindly feelings of his nature, and the real benevolence of his heart; and they will long cherish the recollection of their friend and fellow-labourer, with feelings of sincere respect and affectionate regard.

In conclusion, your Council would wish to impress on the members of the Branch the firm maintenance of those principles for which it has hitherto contended, and to remember, that in unity of action lies our strength, and that our aim should be to adapt the profession to the progress of the times, and to elevate its status and moral standard.

RESOLUTIONS IN REFERENCE TO THE REPORT.

The following resolutions were unanimously adopted:—

It was moved by Mr. HORNBY, and seconded by Mr. HUSBAND, that the report of the Council be received and adopted.

It was moved by Dr. CHADWICK, and seconded by Dr. STEPHENSON, that a Petition in favour of the Medical Reform Bill be presented to the Houses of Lords and Commons.

It was moved by Mr. W. HEY, and seconded by Mr. JACKSON, that a Petition against the Vaccination Extension Act be presented to Parliament.

ELECTION OF OFFICERS.

It was proposed by Dr. WATMOUGH, and seconded by Mr. BYWATER, that the Meeting of the Branch for 1854, be held at Sheffield, that Mr. W. Jackson be the President Elect. W. Matterson, Esq., was re-elected Secretary.

Dr. WATMOUGH moved, and Mr. HORNBY seconded, that the following gentlemen be appointed the Council for 1853-4.

James Allen, Esq.; H. S. Belcombe, M.D.; B. Dodsworth, Esq.; R. Hey, Esq.; W. D. Husband, Esq.; W. Matterson, Esq.; T. Simpson, M.D.; Caleb Williams, Esq.—(York); C. Chadwick, M.D.; J. P. Garlick, Esq.; W. Hey, Esq.; T. P. Teale, Esq.; T. Nunneley, Esq.; S. Smith, Esq.—(Leeds); F. Branson, M.D.; M. M. de Bartolomé, M.D.; H. Jackson, Esq.; W. Jackson, Esq.; G. Reedal, Esq. (Sheffield); J. Ness, Esq. (Helmsley); T. Sandwith, M.D. (Beverley); H. Y. Whythead, M.D. (Craike).

It was moved by Mr. W. HEY, and seconded by Mr. WILLIAMS, that a vote of thanks be given to Dr. Chadwick, for his able services as President during the past year.

COMMUNICATIONS READ.

The following communications were then made:—

The PRESIDENT related a case of idiopathic gangrene.

Mr. H. JACKSON exhibited a large calculus weighing about 3 oz., which had been taken out of the bladder of a boy after death. He also read a case of traumatic tetanus successfully treated by chloroform and cannabis indica.

Mr. W. HEY, related a case of delirium tremens successfully treated by chloroform and morphia.

Dr. WATMOUGH exhibited a large polypus uteri which had been removed by ligature.

Mr. MATTERSON related a case of polypus uteri removed by excision.

Thanks to the President, for his conduct in the chair, were proposed and carried unanimously.

The members then adjourned to the Black Swan, where an excellent dinner was provided, and a pleasant evening spent under the presidency of Mr. Hey.

EDITOR'S LETTER BOX.

NEW IDEAS ON MEDICAL BENEVOLENCE, AND THE USE AND ABUSE OF MEDICAL CHARITIES.

LETTER FROM H. L. SMITH, Esq., TO THE EDITOR.

SIR,—As there is a hopeful, though perhaps not very near, prospect of medical men obtaining seats in parliament, it may not be amiss for us to habitually submit our thoughts to the test of the premises and clauses of acts of parliament. I therefore humbly submit to my honourable representatives, *in posse*, some of the improvements in the profession and to society, which may be brought about through their exertion. It may, at first sight, appear that the specimen acts now suggested, are not such as strictly belong to the medical profession; but it will soon be found that there is no question of sound social progress with which the medical profession are not, by reason and experience, better acquainted than any other class of the community; and also, that by reason of use of their faculties, they are better fitted than others to investigate causes of disorder in the body politic, and to suggest appropriate remedies.

First preamble. Whereas it appears that the ignorance and cupidity of working men induce them to take their children from the national and other schools, at the earliest possible age at which they can earn anything, and to employ them in keeping off crows, running errands, sweeping shops, etc., whereby their learning is interrupted; and whereby they are prevented from receiving the full benefit of that education which the liberality of individuals or of the nation has provided for them; and they forget, by such early removal, all they have previously learned.

Second preamble. Whereas it appears that much of the misery of mankind arises from their following employments, pursuits, trades, and professions, for which they are not physically, morally, or intellectually qualified, whereby boys are obliged to abandon the trade or employment to which they have been trained, to the great unhappiness of their friends and hindrance to themselves, etc.

Third preamble. And whereas it appears that many schoolmasters, and many medical men, having rendered most important services to the community and to the state, by the zeal, intelligence, and self-denial, which they have exercised for many years on its behalf, have been left to the care of union workhouses, or the worse and more cruel neglect of those whom they have educated or cured, etc.

Fourth preamble. And whereas there is much suffering, beggary, and pauperism, created and made by ostentatious charity in the form of lying-in hospitals, dispensaries, and other contrivances for creating a name amongst the fashionable, ignorant, and wealthy, by which the provident habits and prospective feelings of the industrious and working people are damaged and destroyed, etc.

The correctness of these preambles will be confirmed by the experience of every medical man; and if he wishes to read up for them, or cram any honourable member for a speech, he will find the material in the reports of the Committee on Education at Whitehall, or in the waiting-room of any great dispensary, where he will find shoe-makers, tailors, weavers, paint-makers, lucifer-match makers, etc., all giving evidence of this truth. He will also find them corroborated in the reports of charitable associations for schoolmasters and medical men; and for the last by inquiry into the effect of misguided charity, and the report of the commissioners on the charities of the kingdom. All of these would form the substance of the supporting speech, with special and individual examples in abundance.

Now for the clauses of an act of parliament to remedy the foregoing evils.

I. It is therefore enacted, that every working-man's child, who stays at school till he is fifteen years of age, and, by his industry and diligence, has obtained certain testimonials (to be hereafter fixed upon), shall have, say, ten pounds given to him; one-half to be applied towards his indentures, and one-half to be given him on his attaining the age of twenty-one, provided he has presented himself once a quarter to the inspector, and shows that he has properly maintained his scholastic knowledge and moral character.

II. That no boy shall be bound apprentice to any trade without a certificate from a medical man, and another from a schoolmaster, showing that he is a fit and proper person, by

his organization and capability, by his faculties and powers, for such employment; and that ten shillings shall be advanced for these certificates, two shillings to be given to each respectively, and the remaining six to be paid to a fund for the maintenance in old age of all medical men and schoolmasters; such as the proposed Benevolent College of Mr. Probert, a similar one to which is, I believe, under consideration for decayed schoolmasters.

III. That every honorary dispensary, or lying-in charity, shall forfeit £10 10s. for the aforesaid purposes, for every case, in which it can be proved that they have granted assistance to persons who could have paid for themselves; the circumstances of which shall be tried before a county court. As this, however, would happily soon extinguish and dry up their resources, and as the sum required would appear to be considerable, the duty on indentures should be continued, or if repealed, re-established, and applied to that purpose; the probability is that it would materially increase the number of apprentices, and that the fund so raised would be fully equal to the demand made upon it.

Let me now state, Mr. Editor, a very few of the advantages to society which would result from these few simple clauses:—

1. The parents would strive to keep their children at school, when they saw before them the prospect of an advanced step in life from education; which they do not at present.

2. The children would be able to reap the full benefit of all that the schools could teach them: we should become an educated people.

3. They would be brought quarterly, again and again, before the inspector or clergyman; and a more permanent attachment and connexion would be created between the laity and the schools, between church or chapel, than now exists.

4. They would feel during their adult age that they were yearly becoming responsible members of Christ's body, a knowing, loving, united temple, building for His coming glory.

5. We should have boys more suitably qualified and trained for their future respective employments, than they are now, from their earliest days.

6. The churl need not fear but that the crows will be kept off: and the shop swept: his allies and slaves will still remain in the children of the drunken, idle, and vicious, till they are all swept with one besom into one pit.

7. We should have the special detriments of particular trades, brought before the public by the medical man; and their reports, backed by an honest press and the dread of public indignation, would be attended to by the mammon worshippers and money-grubbers.

8. There would soon be a remedy found also for the glaring evils of particular trades, when chemical and medical science was once fairly directed to the subject.

9. Boys would qualify themselves, when at school, for their future pursuits; and not enter on them hap-hazard, as they do now.

10. A stimulus would be found to the formation of funds in aid of the proposed retreats for school masters, and medical men. (See prospectus of Mr. Probert's Medical College).

11. The disgraceful obloquy of many of our millionaires, who have been educated at the national expense, would be removed; for it would give them an opportunity of gratefully repairing the neglect of their first friend, the national-school master. Witness, A., of Blanque, who is said to be worth £40,000 per annum: he has forgotten B., who first polished the rough granite of which he is made. Also witness B., the mayor of Blanque, who employs three hundred men, besides women and children: his mother never paid the doctor (now old and worn out) for bringing B. into this devil's millennium.

12. Beggar making bastard charities, such as lying-in-hospitals, and honorary dispensaries, would be shown up as body and soul destroying inventions, to the horror of the jug and bottle department of gin palaces.

13. And thus would arise love for what is good, union to each other, and a perpetual and eternal connexion between the boy and the man—the school and the church—the laity and the clergy—the man here and the man hereafter—the church militant and the church triumphant.

I am, etc.,

H. L. Smith.

Southam, May 5th, 1853.

HOSPITAL ABUSES.

LETTER FROM J. Y. ARROWSMITH, ESQ., TO THE EDITOR.

SIR,—I have been so much pleased with your articles on the growing abuses of hospitals and dispensaries, that I am induced to offer a few words, *for your private ear only*, as to the difficulties to be encountered in carrying your valuable suggestions into effect. It is certain that in this town the present system of indiscriminate medical and surgical relief is productive of three great evils:—1st, that of injuring the juniors of the profession; 2nd, that of inflicting enormous trouble and engrossment of time on the medical officers of the infirmary and dispensary; and last, not least, that of inducing, in a great portion of the lower classes, “improvidence” and “extravagance”, and of “destroying in the bud the growth of” those feelings of independence and self-reliance, without which respectability and general well-being cannot exist. To redress the grievances of this system, I know that the medical officers of the different charities *here* do all they possibly can, and would willingly associate themselves with all their professional brethren in any practical or practicable measures that could be suggested to that end; but I fear that any appeal to the “discerning public”—that is, the whole body of subscribers, directors, governors, and trustees,—would be responded to by the imputation of interested and unworthy motives on the part of “the sufferers from the present system”. Each subscriber, if his individual opinion were asked, would readily assent to the *principle* of “vigilant supervision” and sharp discrimination between proper and improper objects of charity; but he is apt to make so many exceptions in *practice*, that his *principle* becomes in a great degree inoperative. I cannot exclude the “known subscriber” or the “clergyman” from this category. A clerical friend of mine, the other day, was on the point of withdrawing his subscription to the infirmary, because the physician of the week refused to admit a patient for whom he was interested, as “not duly qualified”. I remonstrated with him, pointed out the absurdity, to say the least of it, of what he was going to do, and he forbore. This is an example of what frequently occurs. People who fancy their name and supposed influence set at naught by the rejection of their recommendations, revenge themselves by withdrawing their subscriptions! A lady in this town, on being asked to subscribe to the dispensary, consented, on condition that her servants might be attended from that establishment. This condition was very properly refused, and the lady kept her money in her pocket. One of the rules of our lying-in charity provides that no woman whose husband earns more than ten shillings a week, unless she has a very large family, shall be allowed to avail herself of it. A lady recommended a woman whose husband was getting eighteen shillings a week, with only one child; and on the observance of the rule being insisted upon, threatened to withdraw her subscription.

I mention these things, by way of showing the difficulty of impressing upon the charity-bitten public the necessity of being more guarded and discriminative in the gratification of their humane feelings.

The plan adopted by the Destitute Sick Society of Edinburgh is no doubt admirable, and might be applied to our largest towns; but I do not at present think it could be worked out *here*. If hospital managers, persisting, in spite of all remonstrances, in the present indiscriminate system of relief, were to be called upon for remuneration by their medical officers, those managers would instantly say—“We accept your resignations, gentlemen, which we consider you have virtually tendered; we can pick our men out of a score of competitors to succeed you, who are willing to afford us their *gratuitous* services.”

“The eager canvassing for honorary medical appointments” does indeed “tend to lower the proper value of our services to the public”; still the canvassing *will go on*, and the profession, as the late Lord Castlereagh might have said, *will persist* in “turning their backs upon themselves”. But once in office, there is anything but “cringing” displayed by medical officers to directors. For instance, there is often a “little war” about wine, and diet, and expenses general and particular, out of which the medical officers always *have* and *will* come victorious, or they would resign in a body, to the great scandal of the directors, as they very well know; therefore they succumb, being aware that the same thing would happen with any other medical officers whom they might appoint. To be *in* office and *out* of office are very different things.

To illustrate the number of those who resort to hospitals and dispensaries, in proportion to the population of the places in which they are situated, you take Bath as an example. “There

is the Bath United Hospital, and there are seven other general and special dispensaries in Bath, enumerated in the medical directories. Bath only affords a specimen of that which is going on in every town and city.” This brings me to the worst thing I have to say to you. Charity, so-called, in its various phases, is the order of the day: each charity has had its generator—its Lady Bountifuls, and its champions; and none more than the medical charities. And who have been, ninety-nine times in a hundred, the generators of medical charities? A number of individuals of our own profession, who, for their self-glorification and ultimate pecuniary advantage, have so practised on the humanity and credulity of the public, as to induce it to subscribe to all sorts of specialities, with which, of course, their own names are identified. These gentlemen have initiated the creation of a philanthropic “Frankenstein”, that runs riot with a rage they may not now be able, even if willing, to control; and though they may exist in ignoble safety from the ravages of the monster they have helped to animate, the large body of their brethren are likely to be crushed and destroyed by it.

I am, etc., J. Y. ARROWSMITH.

Shrewsbury, April 1853.

[This excellent letter, originally intended for the editor's private use, is printed with the author's permission. EDITOR.]

HOSPITAL ABUSES AND HOME ADVICE GRATIS.

LETTER TO THE EDITOR.

SIR,—There is another form of gratuitous medical assistance besides those commented on, whether by yourself or your correspondents, to which I desire to call your attention. It is this:—Many physicians and surgeons are in the habit of sitting at home for a certain time of a morning, and prescribing, without fee or reward, for all and sundry who apply to them for advice. Now, the majority of the persons who take advantage of this, as I believe, not only needless, but very pernicious liberality, are much beyond the condition of poverty or necessity, and have no title in the world to any such consideration as is shown them. They are mostly in such a position, that had they not the opportunity of going to consult these over-liberal gentlemen, they would very certainly be the patients of one or other of the respectable general practitioners in their several neighbourhoods. Now, if these gratuitous advisers are so favoured by fortune as to be spared the necessity of living by their profession, how can they reconcile it with their sense of propriety, when they find themselves interfering with their brother's chance of existence, who has no such advantages as they? Charity is a good thing, when well directed; when ill-applied, as it most certainly is in the case adduced, it is at once an evil and a great injustice. Even hospitals and dispensaries for the relief of the necessitous suffering under disease, are mainly to be abetted and upheld as schools. In any other light, they are not more defensible than is the practice of the gratuitous private advice against which I inveigh, and against which I desire to secure your voice and assistance. Save as schools for the training of young men in a knowledge of disease, hospitals and dispensaries are not more defensible than would be establishments, at the public charge, in all our towns and villages for the supply of food and raiment, without fee or reward, to all and sundry who might wish to be fed, and have their nakedness covered, without an effort on their part. And this leads me to the grand fact which I think none of your correspondents have even hinted at, viz., that as every one in this great country who is truly in want, has a legal right to relief as a pauper; so, by the law of the land, he is also entitled to medical assistance, free of charge, if he be indeed sick and penniless: or wherefore have we boards of guardians and parochial and union surgeons?

I am, etc., OBSERVATOR.

May 9th.

THE UNCERTAINTIES OF AURAL SURGERY.

LETTER TO THE EDITOR.

SIR,—It appears to me that the uncertainty which exists in some branches of medicine forms one of the strongholds of quackery. Thus, hysteria, in all its various and tiresome forms; thus, imaginary ailments of every kind, constitute the bulk of cases submitted to the homœopathic, or hydropathic, or galvanic systems. The incurableness of them is a part of the disease; and, till the will of the patient be exerted, there is no hope of doing any good. A violent revulsion from, perhaps, too much medicine to sweet little globules, or from a languid couch, port wine, and a close room, to the bracing hills and cold-

water-down-the-back system, is calculated to excite, perhaps to correct, the morbid moral feelings; and accordingly we hear of remarkable cures occasionally. We scientific people know better, and denounce it as quackery. But, I must say, from my own experience, that I can excuse anybody for going to various quacks, when "the faculty" have failed to give relief. The desire for cure is so strong in the human breast, that, if I did not believe the "wise woman of Wing" to be a sorceress, I could imagine myself becoming her patient; and, by the bye, the sequel will show, I think, that she might possibly know as much about my ears as "the faculty".

But, to spare your columns, I shall proceed at once to state my case. It is soon told. I am a physician, between thirty and forty, temperate, with no family or other taint, in robust health, ride a good deal, and work hard. Ten years ago, after a journey outside a coach, in fine weather, I suddenly found myself deaf in the right ear, as if I had a cold; but it continued month after month. There never has been any pain; the Eustachian tube is clear, and the secretion natural. The right ear has never varied much; I cannot hear a watch, unless it touch the skin. The left ear for a long time continued quite perfect, but, for the last twelve months, I fear it too is beginning to fail me. Auscultation has been my delight; and the natural nervousness arising from the constant dread of deafness has, I have no doubt, acted injuriously on me. As I once said to an aurist, I would give £500, aye, £1,000, for a cure.

In 1845, I saw my first adviser, whom I shall call Mr. I, a metropolitan. I conceived a great dislike to him, from his persisting in speaking to me, and patting me on the cheek, as if I had been an old dowager. His opinion was, that it depended on disease of the nerve. His treatment was sarsaparilla, and a journey to town once a week, to have some medicated air pumped in from a machine of his, which looks very frightful when its nozzle is half way up the Eustachian tube. This part of the treatment it was impossible for me to follow out.

I next consulted a country aurist, Mr. II, a very well-informed, acute practitioner. His opinion was, that it was nervous, or rather I should call it nervic. He ordered me thirty blisters in succession, iodine and sarsaparilla, and a pill with colchicum, mercury, and hyoscymus, night and morning. The blisters took me a long time to get through with; and at length the nervous irritability produced was such that my courage failed at No. 29, and I went and saw Mr. II again, not the least improved. He reiterated his opinion, that it was disease of the nerve, as distributed on the internal ear, or perhaps dislocation of one of the small bones (!); and gave me the comforting assurance, that the other ear would follow, and that I should be quite deaf in five or six years.

For several years after this, I consulted no one; but by and by I again sought the metropolis, as a patient; this time seeing Mr. III. He looked at the external meatus, and quickly said, "Ah, I have 127 dissections of similar cases in that drawer." "By George, I don't mean you to dissect mine", was my reply; and he proceeded to inform me that my deafness depended on contraction of the osseous meatus, and thickening of the tympanum. He advised me to become a teetotaler, to apply concentrated tincture of iodine behind the ear and over the mastoid process, and to take the everlasting iodine and sarsaparilla internally. I tried the total abstinence for six weeks, with the most unpleasant results, dyspepsia, want of sleep, etc.; and the treatment, like everything else, failed to give any relief. Would you believe it? I saw my case actually reported, with a drawing illustrative of osseous contraction of the meatus; while other aurists assured me (of course I cannot see down my own ears) that nothing of the kind was there!

I next saw Mr. IV, who did not take long about his diagnosis. "Ah, all mucous membrane." I have so often quizzed patients of my own who have complained of suffering from "mucous membrane", or whose friends were ill of "mucous membrane", that it was a kind of retribution to be told I had it myself. Well, he told me I must take iodine and sarsaparilla again—oh, how I hate the taste of it—a dose of aloes twice a week, and sleep with my mouth shut! He accused me of sleeping with it open; and I have since discovered that I am an inveterate snorer. (N.B. I am a bachelor.) This treatment disordered my bowels, and by and by produced a most annoying irritation of the throat and fauces. I left it off, began it again, and all with no benefit.

I was induced to consult No. V by a memorandum I had made years before in my scrap-book. "Mr. So-and-so cures deafness by music. Pleasant." Well, he said music wouldn't do me any good, that my deafness was all a bad habit; he rubbed a little tincture (it felt like tincture of nettle-stings) on the ear,

and then insisted I was "better already"! I got some more of this said tincture, and tried it, but with no good effect; and the pain from its reaching the eye accidentally is diabolical.

Lastly, I consulted Mr. VI. I told him I had seen five aurists, and had got five different diagnoses, and five different plans of treatment; but he did not wish to hear them till he had made his examination; and he actually got a sixth diagnosis for me—"a granular condition of the meatus, and probably of the Eustachian tube". He desired me to take Plummer's pill and colchicum, to gargle my throat with an astringent, and to leave off smoking. I had told all of them that I did indulge in the weed, but he was the first who said it was noxious. I did leave it off for a month, but afterwards was obliged to resume it in moderation, as I found I could not work without it. I swallowed an immense number of those said pills—nine dozen, one every night; and here I am, not one bit better than I was: indeed, I begin to fancy that the prospect held out by Mr. II is beginning to creep over me, and the left ear to give way as well.

I do not wish to seek for prescriptions in the Journal; but if any member can help me by any suggestions, either in its pages, or privately, addressed "A. B. Surditas, M.D., office of the Association Journal, 37, Great Queen Street, Lincoln's Inn Fields", I shall direct them to be called for.

The aurists I have consulted are all "all, honourable men", some of them highly scientific, and others highly successful; but hardly two of them have agreed. This, I again assert, is the ultimate cause of quackery. Where would I not go—what would I not do—to be cured, or even to know the real state of matters? I hope none of the gentlemen whom I have consulted, if this meet their eye, can feel offended if they recognise themselves and me. They have all received me most kindly, and seemed most anxious to do me good. It is not the aural surgeons, but aural surgery, that I find fault with. I venture to say there is not another organ, the diseases or derangements of which could have such a varied nomenclature, or so many contradictory diagnoses, as the ear.

I am, etc.,

A. B. SURDITAS, M.D.

May 9th, 1853.

[The writer of this letter is an accomplished member of the Association, who has communicated his name to us in confidence. EDITOR.]

NEWS AND TOPICS OF THE DAY.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BARBER, J., Esq., elected Surgeon to the Infirmary, Sheffield.
KENNEDY, Henry, M.D., appointed Physician Extraordinary to Sir Patrick Dun's Hospital, Dublin.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

FLETCHER, William, Esq., formerly Surgeon to the Gloucester County Hospital, at Wellington Parade, Gloucester, of apoplexy, on May 11.
*GOLDIE, George, M.D. (late of York), at Sheffield, on May 2, aged 69. Dr. Goldie was a permanent Vice-President of the Provincial Medical and Surgical Association.
KING, Charles, Esq., Assistant-Surgeon H.E.I.C. at Rangoon, of abscess of the liver, lately.
PULLING, Frederick L., M.D., late of Queenhithe, at Reigate, lately.
*SCOTT, John, M.D., Physician to the Queen for Scotland, at 4, Rutland Street, Edinburgh, on May 3.
WEBB, John, Esq., Surgeon, at Stratford-upon-Avon, on April 23, aged 60.
YOUNG, William Baker, Esq., Assistant Surgeon to the 73rd Regiment, at 1, South Place, Camberwell Grove, on May 8, aged 36.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

KIRKBRIDE, Thomas S., M.D. REPORT OF THE PENNSYLVANIA HOSPITAL FOR THE INSANE for the year 1852. pp. 44. Philadelphia: 1853.
THE SOPHISTRY OF EMPIRICISM. pp. 84. London: 1853.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXI.

LONDON: FRIDAY EVENING, MAY 27, 1853.

NEW SERIES.

THE PROGRESS OF MEDICAL REFORM.

THE London Medical Reform Committee, the formation of which we announced in our last publication, has already placed itself in communication with Government. It has likewise resolved to appeal to the friends of medical reform, for pecuniary support. As the contributions are expected to be very numerous, the Committee do not solicit large donations.

We subjoin a copy of the memorial of the Committee. It has been sent to Lord Aberdeen, as well as to Lord Palmerston.

To the RIGHT HONOURABLE VISCOUNT PALMERSTON,
Her Majesty's Secretary of State.

MY LORD,—On behalf of a Committee appointed at a meeting of medical men, held in London on the 18th of May, 1853, to promote the passing into law of the proposed Bill for the better regulation of the Medical Profession, prepared by the Provincial Medical and Surgical Association, and presented by that body to your Lordship, we beg to submit the following statement to your notice:—

The present condition of the Medical Profession imperatively demands the immediate interference of the Legislature. And for these, amongst other reasons:

- I. The utter want of uniformity which at present exists in Professional Qualification, there being no less than *nineteen* different sources from which Licenses to Practise can be obtained.
- II. The hardship by which highly educated men are restricted in their Practice to one particular portion of the kingdom; a Practitioner who is legally qualified in England being unqualified in Scotland or Ireland, and *vice versa*.
- III. The want of a system of Registration by which men who have been properly educated, and who possess a Legal Qualification, may be distinguished from ignorant and dishonest pretenders.

We would point out to your Lordship that these evils affect the Public no less than the Profession, because they may at times deprive the sick and suffering of the best medical assistance, and because they continually place them at the mercy of uneducated and unscrupulous men. An example of the pernicious consequences that flow from the present defects in the law, is afforded by a recent case in a public Court of the Metropolis, where two individuals have been charged with the offence of criminally procuring abortion. These persons are described as medical men, and appear to have been practising as such; though there is no ground for believing that they have any legal pretensions to the title.

We are convinced that the proposed Bill prepared by the Provincial Medical and Surgical Association is a wise and salutary measure, and one well calculated to remedy the evils of which we complain. We think this, because it provides for one common examination, through which every candidate for practice must pass; because it gives to every one thus examined an equal right to practise throughout the United Kingdom; and because it establishes an efficient registration.

We know that it is supported by a very large majority of the medical profession throughout the kingdom. We know

that many petitions have already been presented, and that many more will shortly be forwarded, to Parliament in its behalf.

We have reason to believe that a considerable number of the members of the House of Commons have expressed their determination to support the measure, should it be introduced into Parliament.

We therefore consider that the present moment is eminently favourable for the settlement of a question which is of great importance to the medical profession, and to the whole community, which has been long agitated, and which will assuredly not be suffered to rest till it has been brought to a satisfactory solution.

We therefore earnestly entreat your Lordship at once to take up the question, and to pass into law the Bill now in your hands, during the present Session.

In conclusion, we may state that we are entirely unconnected with the Provincial Medical and Surgical Association, and are only desirous of the enactment of the measure above-mentioned, because we believe it to be one that will prove beneficial to the public and equitable for the whole profession.

We have the honour to remain,

Your Lordship's obedient servants,

(Signed) EDWIN LANKESTER, M.D., *Chairman.*

J. DALSTON JONES, M.D. } *Secretaries.*
W. M. POWELL.

We observe that petitions have already been presented to Parliament in favour of medical reform from the following places.

PLACES.	No.	PLACES.	No.
Edinburgh Col. of Phys.	1	Newport (Isle of Wight)	1
Edinburgh Col. of Surg.	1	Alford (Lincolnshire)	1
Worcester	1	Shrewsbury	1
Evesham	1	Doncaster	1
Guildford	1	Sheffield	1
Hull	3	Bath	1
Leeds	1	Stowmarket	1
Durham	1		
Dewsbury	1		18

While the general body of the profession are thus engaged in petitioning parliament in favour of medical reform, some of the corporations, we hear, are preparing to defend their special interests by counsel, at the bar of the Houses of Parliament. We sincerely trust that Government will grapple with, and decide those questions of competing privilege, provided no compromise between the conflicting parties can be arranged. The united voice of the profession is in favour of the immediate passing of an Act of Parliament, securing—*first*, uniformity of professional qualifications; *second*, reciprocity of privileges in the three kingdoms for qualified practitioners; and *third*, the registration of legal practitioners, so that the public may be able to distinguish them from unqualified pretenders.

All other questions of medical reform are of less urgency and more difficult; but these are so paramount and so obviously calculated to promote the honour of the profession and the safety of the public, that they must not be sacrificed at the shrine of class and corporation jealousy.

PRE-RAFFAELITISM AND MEDICAL ART.

A FEW years ago, three or four young artists, of determined character, saw, or thought they saw, that the true road to real eminence in their art lay in the conscientious study of nature. They believed that, if an artist wished to represent a tree, he must diligently set to work by copying that tree, and not by merely copying his own impression of a tree remembered in his studio, or, worse still, imitated from another master. They therefore refused to draw a line, or to use a brush, except in the presence of the object to be painted. Their canvas was secured in a box under lock and key, which was carried to the spot where the tree stood, and only used there. These "Pre-Raphaelite brethren" had to bear much adverse criticism; but the crowds now at the Royal Academy, standing before the paintings of Millais, Hunt, and C. Collins, are some evidence that these young painters were not mistaken in their principles, and that their conscientious diligence has had its reward.

There is a parallel between this and our own art at this time. There are indications that the same spirit is at work in both. A society has been formed, called the "London Medical Society of Observation", which will receive no case "unless it shall have been noted in writing at the moment of observation". To facilitate their labours, this society has published an excellent little book, with the title, "*What to observe at the Bedside, and after Death, in Medical Cases*", which has been prepared with infinite diligence, painstaking labour, and deep acquaintance with the subject, so as to be a valuable instructor to those who are commencing their profession, and an useful refresher to all in the investigation of obscure cases.* Their rule, to admit no cases not noted down at the moment, is an excellent one; and we may much doubt whether any real addition can be made to our knowledge of facts, unless such strict attention to truthful detail is scrupulously adhered to. Very few, it is true, are able to make original observations; so that the power of seeing a new fact looks like intuition, though, after all, it is probably the reward of persevering attention. The majority of us are compelled to be content with seeing what has been discovered for us. We go to Laennec, to Louis, to Bright, to Brodie; and when they have taught us what is to be expected, we can determine whether it is so in the actual case before us. But for those who would advance our knowledge, who hope to be discoverers themselves, there is no short road, nothing available but the most painstaking and laborious attention: and all such should follow this good rule of noting at the time.

The *soubriquet* given to these artists may also teach us something. They are called "Pre-Raphaelites", from their belief that painters of faces are too apt to copy not nature, but Raphael's idealisms; and that there was more truth in art before this great man's time, as artists then went to Nature herself. Some affectation has been grafted on this; but the lesson to be drawn is, that those who write on medical matters must go to Nature, and not to books. We are deluged with second-hand descriptions of well-known diseases, or at least of well-known descriptions of diseases. What we want is, that men who write should observe Nature with their own eyes, and describe it; and not write from their memory of books, like the painters from their remembrance of Raphael. How common is the remark, that when we consult a book for a difficult case, it throws no light on it; and this is not certainly from the want of books; they

are as abundant almost as disease. But men go on, often unconsciously, copying the old masters, and thus accumulate words without real matter. True reputation in medical science is only possible in these days to well-directed labour in observing and reflecting on disease; and we trust this new school of medical observation will turn out true discoverers; men not merely content with the reputation of successful practice, but whose fame rests on a deeper basis—their original insight into the laws of health, and disease, and cure.

HER MAJESTY'S ACCOUCHEMENT: CHLOROFORM.

ON the 15th of April, we announced to the profession that chloroform had, on the 7th of that month, been administered to the Queen, under the sanction of Her Majesty's Physician in ordinary, Sir James Clark, Her Majesty's First Physician Accoucheur, Dr. Locock, and Her Majesty's other Physician Accoucheur, Dr. Ferguson.

On the 14th of May, that is, after one month's silence, the *Lancet* said—

"Intense astonishment has been excited throughout the profession by the rumour that Her Majesty during her last labour was placed under the influence of chloroform, an agent which has unquestionably caused instantaneous death in a considerable number of cases. * * * Probably some officious meddlers about the Court so far overruled Her Majesty's responsible advisers, as to lead to the pretence of administering chloroform; but we believe the obstetric physicians to whose ability the safety of our illustrious Queen is confided do not sanction the use of chloroform in natural labour."

As the article in the *Lancet* is calculated to throw discredit upon our statement, we think it right to repeat it, along with an assurance of its accuracy. The expressions which we used were as follows:—

"We understand that chloroform was administered by Dr. Snow during the latter part of the labour, with very satisfactory effect; and that the Queen expressed herself as grateful for the discovery of this means of alleviating and preventing pain."

The *Medical Times* of May 21st, in reply to the *Lancet* of the 14th, repeats and enlarges our statement in the following words:—

"Dr. Snow administered chloroform to the Queen, in the presence of Sir James Clark, for the last hour of parturition. A handkerchief, on which a small quantity of chloroform had been dropped, was held to the face. Her Majesty was never completely insensible; but she expressed herself as satisfied with the anodyne effects produced. Should further information be required, we are confident that Dr. Snow will, with his usual courtesy, afford it to all such as consider themselves entitled to ask it."

We did not venture to make our original announcement upon mere rumour; and we now, upon the best authority, inform our readers, that our statement, and that of the *Medical Times*, are correct. We therefore repeat, that the recent accouchement of Her Majesty was an "event of medical importance", and "calculated to remove much of the lingering professional and popular prejudice against the use of anæsthesia in midwifery". We would remind the *Lancet* that anæsthesia may be induced without loss of consciousness. To those accoucheurs who are in the habit of using chloroform in labour, we would refer, for final decision, the question of its being a safe or a dangerous practice. From a careful perusal of most of that which has been written on the subject, as well as from some personal experience of the practice, we may in the meantime state, as our own humble opinion, that the cautious inhalation of the vapour of chloroform during labour is entirely free from danger, and calculated to afford merciful relief from pain, in one of the most agonizing trials of humanity.

* Vide ASSOCIATION MEDICAL JOURNAL for January 14th, p. 89.

ORIGINAL COMMUNICATIONS.

ILLUSTRATIONS OF TUBERCLE.

By EDWARD HENRY SIEVEKING, M.D., Fellow of the Royal College of Physicians, Assistant Physician to St. Mary's Hospital, etc.

(Read before the Harveian Society of London, April 7th, 1853.)*

THE term tubercle is synonymous, as we all know, with nodule, and does not in itself imply any peculiar constituents. Usage has, however, limited the application of the denomination to a certain form of deposit, which we meet with but too frequently in the cadaveric inspections which we are allowed to make, and which, at all ages of life, is a source of danger to the individual, and of serious consideration to the medical practitioner. There is no necessity for urging the importance of the subject; but it is sometimes useful to bring a familiar fact before our eyes in a form in which we are not in the habit of seeing it. Thus, we find, with regard to the frequency of tubercular disease, by striking an average of ten weeks taken at random in the Registrar-General's Report for 1851, that it ranks second in mortality of all the causes which the returns specify. Zymotic diseases stand first; tubercular maladies follow in their wake; diseases of the lungs and of the brain respectively occupy the third and fourth position. The exact numbers for the ten weeks are as follows:—

Mortality from zymotic diseases,	19,914
" " tubercular diseases,	18,395
" " cerebral diseases,	12,068
" " pulmonary diseases,	15,475

But we all know that individuals are frequently carried off by diseases to which a name is applied that does not indicate any tubercular affection; while the scalpel exhibits to us lesions sufficiently indicative of tubercle having been sown, or of such a taint having existed in the circulating fluid as to produce that peculiar debilitating effect which renders treatment ineffectual, which, under more favourable circumstances, might have saved the patient. So far, then, from diminishing the Registrar-General's ratio, or rather the ratio indicated by his figures, we would enforce the earnest lesson they teach still further, by pointing to the numerous cases included under other headings, which, though not bearing the stamp of tubercle so prominently, yet do present it, and therefore deserve to be classed with the second department.

That constitutional tendency which leads to the deposit of tubercle, and is to be found wherever the necessary stimuli of life, and, above all, pure atmospheric air, are deficient, predisposes to other diseases as well; it assists the approaches of the enemy, and actually places the fortress in his power before a formal assault is made. Though we no longer believe in the elements of Thales, we may, without a great stretch of the laws of the natural sciences, admit that air is the chief element of health or disease, according as it is supplied to the lungs in its unadulterated condition of four-fifths nitrogen and one-fifth oxygen, or as it carries diffused through it carbonic acid gas, carbonated hydrogen, sulphuretted hydrogen, the effluvia of cesspools and drains, the poison of influenza or cholera, the emanations of the variolous or typhous patient. As long as it was supposed possible that the royal hand could charm away by its mere touch the accumulated effects of long neglect of Divine laws, and crowds of scrofulous subjects thronged the path of royalty in order to be saved from their loathsome disease, neither could the patient be relieved, nor the dignity of the healing art be vindicated. But, though the darkness that spread over the human mind has been somewhat lightened, and though we may have penetrated be-

yond the first barriers of knowledge, so as to obtain a glimmer of the goal for which we have to struggle, we are yet far from having reduced the various forms of diseased action to such definite laws that we may arrange them as a science, and rest contented with the contemplation of the edifice which our predecessors and our contemporaries have erected. There is much which we may yet learn from the fathers of medicine, in regard to the patient and careful analysis of disease; but we possess this undoubted advantage over them, that, in the means of analysis, in the aid afforded by chemistry and the microscope, we may approach nearer to the elements of vital action, whether in its normal or in its perverted state, than they were able to do. Still, even here we must not blind ourselves to the fact, that we have scarcely reached beyond the elements, not of diseased action, but of the products of diseased action; and not even have we succeeded in displaying the primary effects of morbid action, but all we can assert as having been achieved is the investigation of its secondary products. Hewson and Gulliver, Christison, Bright, Andral, Frerichs, Garrod, and many others whose names are familiar to you by their researches into the constitution of the blood in disease, have earnestly laboured to grasp their primary effects. Their light shines on our path, and will illumine the tottering steps of future inquirers; but beyond a faint indication of what is to be done, we can scarcely admit a great approach to what lies before us; and we are perhaps constrained to admit that we shall not understand the relation of secondary effects until we have a greater insight into the first changes constituting disease. Yet we have no alternative but to proceed rigidly in our analytical inquiry, holding strictly to the legitimate mode of research, and eschewing all hypothesis for which we have not the guarantee of scientific induction.

The questions which suggest themselves for solution, in regard to any morbid growth, apply equally to the subject of tubercle. They affect the origin, the mode and situation, and the ultimate constituents and character, of the deposit. Each of these involves subjects for further consideration, not the least of which is the medical treatment. It is, however, manifest, that, until we have a definite understanding of the points first alluded to, our therapeutic proceedings will be conducted in the dark. They may be occasionally successful, but they will be altogether empirical; and we shall derive little intellectual profit or gratification from our profession. A knowledge of the precise locality in which tubercle is deposited will necessarily aid us in determining whether and how we can attack it locally; a correct appreciation of its ultimate elements will enable us to choose the remedies which may affect the product, or diminish the constitutional tendency in the most secure and legitimate manner. If our studies show us that in many instances the product of the tubercular cachexia is beyond the reach of curative agents, we may at least hope to discover the laws regulating its introduction into the system, an acquaintance with which will enable us to avoid those causes which induce the constitutional taint.

Allow me, then, briefly to advert to the origin of tubercle. We possess sufficient evidence to show that it is derived from the blood; that it transudes from the capillary vessels of the part in which we find it; and that, after having been deposited, it is liable to undergo certain further changes. On a close examination of incipient tubercular deposit, we may always note that there is congestion in the tissues immediately surrounding it. In the pia mater of the Sylvian fissure, we see an increased redness, in which a few vessels are more prominent than usual; in the pulmonary parenchyma we may, especially by the use of the microscope, discover the engorgement of the interlobular capillaries investing the air vesicle into which the tubercle is being secreted; in the mucous membrane of the intestines, we see the exquisite arborescent arrangement of the congested vessels, tending from the mesenteric attachment to the point where we observe the deposit shining through the mucous surface from the submucous tissue, in which it has collected. The first elimination of the morbid

* The paper was accompanied by a large number of illustrative drawings, of which we are necessarily precluded from giving the readers of the ASSOCIATION JOURNAL more than seem essential to explain the author's meaning.

product acts like a magnetic point of attraction, and generally serves as a centre round which the deposit progressively enlarges by eccentric deposition. The amount of vascular action accompanying the elimination varies in different individuals; in some, there is scarcely a perceptible increase in the sanguineous current; in others, we cannot deny the presence of acute inflammation, shown both by the congested state of the blood-vessels, and by the presence of plastic exudation and exudation corpuscles. In ordinary inflammatory conditions, we may actually observe the part taken by the capillary vessels in the process of transudation. We see the inflammatory product immediately after its passage through the vascular membrane, coating the vessels; and, if my limited observations justify the statement, we may see the same matter within the vessels, adhering to the coats, previous to its discharge. Whether it be so or not, whether we may be enabled to observe the transition of the contents of the vessels into the surrounding parts or not, it is evident that we ought not to be satisfied with ascertaining the fact of the exudation as the primary change: we are driven to take one step more, before we gain the fountain-head of the malady; we therefore look to the constitution of the blood itself in tubercular disease, in order to ascertain whether any deficiency in the normal components, any variation in their relative amount, any new products, are to be met with, which may explain the source of the extravascular deposit. All observers, who have brought either the microscope or chemical analysis to bear on this subject, are agreed that there is an alteration in the blood, indicating a want of vigour and tone. There is a general increase in the fluid parts, the water and albuminous constituents; while the solids are diminished, the fibrine and the red corpuscles are reduced in quantity, and both exhibit what has been termed a diminished vitality; the fibrine possesses less plasticity; the blood corpuscles are feebly formed, their outline less defined, their colour faint, and the colouring matter easily yielded up to the surrounding fluid. The actual relation of the white cell to the red corpuscle in various diseases has not as yet been satisfactorily demonstrated; but we are inclined to view an excessive development of the former as indicative of debility, and an aplastic, if not cacoplasic, condition of the blood: we certainly have noted an increase in their number in persons affected with tubercle. Many of the peculiarities in the blood of tuberculous individuals are also met with in the blood of individuals labouring under other diseases. We are not, therefore, justified in laying down any absolute indications which are conclusive evidence of the tubercular infection; and if we are unable to define the specific constitution of the blood that accompanies tuberculosis, it follows, *a fortiori*, that we are not possessed of the means of predicating a mere tendency to tubercular deposit from the constitution of the blood. This, however, is the point at which we must hope to arrive, if, as we believe, one of the primary elements of the malady is traceable to the blood, and the seeds of the disease are sown, and must therefore be destroyed here, unless they be anticipated before their introduction into the body. On this point, Mr. Ancell, in his laborious work on "Tuberculosis", judiciously remarks:—"The predisposition differs from the general disease only in degree, and the condition of the blood in the predisposition is the same, differing only in degree"; and so undoubtedly it is, but we yet want that positive and conclusive sign by which the predisposition may be recognized by analysis of the blood. It is manifest that, with regard to tuberculosis as well as other diseases, such an indication would be of extreme value; for, as the diagnosis of morbid processes in the thorax has improved, our treatment of these diseases has commensurately acquired greater simplicity and greater certainty. In the same way, it is tolerably certain that, if we discovered the means of recognizing the seeds of a malady before they had taken firm hold upon the system, we should be enabled to eradicate them, or to counteract their influence more effectively than we now can.

It is not my object at present to examine all the dietetic and regiminal circumstances which are daily forced upon

our notice in connexion with tubercular disease; but I must advert to one point bearing upon the question of its origin, before proceeding to the second division of the subject. It refers to the organ by which the malady is introduced into the system. Are we to lay the chief fault to the perspiratory apparatus of the surface, to the organ of oxygenation and purification, or to the digestive and blood-making apparatus? I need not point out to you how each of these affect the constitution of the blood by overcharging it, positively or negatively; that is, by conveying into it material in excess, or by allowing material to accumulate which ought to be eliminated from the system. Formerly, the *corpus delicti* was invariably the stomach; now, popular prejudice is directed chiefly against the lungs: and, though I am not desirous to deprive the former of its just claims to power and influence, I confess myself to be one of those who attribute in the production of the tubercular disease a greater share to the organs of oxygenation than to those of sanguification. Baudelocque, who has written some of the wisest remarks on the relation between the respiratory function and tuberculosis that I have met with, affords some very striking illustrations of this position. He states as the result of his examinations and experience, that a truly scrofulous disease is invariably caused by vitiated air, and that it is not always necessary that there should have been a prolonged stay in such an atmosphere. Often a few hours each day may suffice, and it is thus that patients may live in the most healthy country, pass the greater part of the day in the open air and yet become scrofulous, because they sleep in a confined place where the atmosphere has not been renewed. M. Baudelocque illustrates these observations by numerous well chosen instances; he refers, among others to the shepherds of his country, who may become scrofulous although they lead an open air life; but although, as he says, the disease with them is attributed to exposure to storms, to atmospheric vicissitudes, and to humidity, attention has not been paid to the circumstance that they pass the night in a confined hut, which they transport from place to place, and which protects them from the rain; this hut has only a small door which is closed when they enter, and also remains closed during the day; six or eight hours passed daily in vitiated air, which is never renewed, is the true cause of their malady. I have spoken of the bad habit of sleeping with the head under the clothes, and the insalubrity of schoolrooms, in which a number of children are assembled together. The repetition of these circumstances is often a sufficient cause of scrofula, though they may last but for a few hours a day. Human beings and animals are equally affected by vitiated air: close rooms, as Dr. Arnott has pithily remarked, act like extinguishers to the vital flame; and the extinction literally takes place at the point at which the fuel accumulates for want of being burnt off. If space and time allowed, I would multiply the evidence that has been adduced in support of the particular view which I have dilated upon; but this is beyond the limits of this paper, and moreover, there is now scarcely a necessity for enforcing what, I believe, is the prevailing opinion among medical men. To sum up, while we would not deny which defective supply of food and raiment influences the production of tubercular disease, no cause so certainly predisposes to and generates it as defective aeration. The exact part taken by the *light* in this matter cannot be appreciated. Its direct influence upon the health of everything living is proved irrefragably; but whether its absence can alone induce morbid states of a definite character, remains yet to be proved.

As the tubercular deposit is derived from the blood, it is not surprising that all the organs of the body are more or less liable to become the seat of the morbid product. Some tissues present a greater proclivity to the elimination than others; and some, as the fibrous and tegumentary tissues, appear to enjoy almost an immunity from tubercle. At the two ends of the scale, we may place the mucous membranes and the fibrous tissues: the former are the true soil for the tree of death; the latter are rarely, if ever, affected. There can be little doubt that this depends in a measure upon

certain physical laws, influencing the current in the vascular system, and determining the greater or less facility of transudation, in the first instance. I should venture to suggest, that we may lay it down as a law regulating the deposit of tubercle, that it is effected at that point of an organ or of a tissue where the smallest amount of pressure is exerted upon the capillary system. This does not exclude the operation of other laws, which determine the attraction to any one organ. It does not offer any reason why in one case we find tubercle in the spleen, in another in the mesenteric or bronchial glands, in a third exclusively in the pulmonary tissues; but it seems to embrace the various circumstances modifying the exact site of the deposit in these different parts of the system. The *vis a tergo* varies but little in the different parts of the capillary system; but the relation to surrounding tissues differs very much. Thus, while the force with which the blood is driven into the nutrient artery of the sternum, and into the interlobular plexuses of the lungs, is identical, the pressure which the respective capillary systems meet with in a case of congestion, which implies a tendency to exudation, is necessarily greater in the bone than in the soft parenchymatous structure. No organ is more frequently the seat of tubercular deposit than the lungs, and in none do we find the capillary ramifications of the vessels with so little covering. They almost lie naked on the surface. Beyond the basement membrane forming the air vesicles, and possibly a delicate epithelial layer, there is nothing between the capillary network and the atmosphere. We need not therefore wonder that the ultimate vesicle in which the bronchule terminates is, above all other points, that of tubercular election. The receptacle is ready; the product being in the blood, a slight increase of pressure will overbalance the natural and healthy equilibrium between the external and the internal fluids, and the discharge takes place. If our view is correct, nothing but a previous change in the ultimate vesicles or bronchules could give rise to a deposit of tubercular matter in the intervesicular tissue, in the parenchyma of the lung itself, as contradistinguished from the respiratory cavities. We can suppose that obliteration of a portion of the breathing apparatus might leave the intervesicular texture less resistant than the air vesicles; and in that case we should expect to find an interstitial deposit. Whether this does actually occur I am not prepared to say. I have not seen any appearances that would justify the assumption of a primary interstitial deposit, but I have seen a distinct deposit of tubercular matter within the air-vesicles, and I have traced its primary deposit, in the semi-liquid form, in the solitary vesicle, to the deposit in numerous adjoining vessels, causing destruction of their breathing power and obliteration of the bronchule terminating in them. There is some difficulty connected with these investigations, which I may point out to those members who are not in the constant habit of employing the microscope. The air-bubbles issuing from the pulmonary tissues that have not been entirely obliterated, are very liable to obscure the field of vision, and to prevent our observations; while, when the entire obliteration by which all air is expelled has taken place, the parts are rendered so opaque, that it is next to impossible to obtain sufficiently delicate sections to show the specimens clearly. It is only by frequent examinations, and by carefully watching our opportunities, that we can succeed in obtaining well defined specimens. I may take this opportunity of remarking, that in the drawings I have added nothing from my imagination. They are as accurate representations of nature as my abilities allowed me to give; but as they were all taken with the object before me, whether viewed with the naked eye or with the microscope, I pledge myself for their truthfulness, so far as I can answer for my eye and my hand.

Before proceeding, I may be allowed to advert to the drawings, so far as they illustrate the remarks which I have hitherto ventured to offer to you. The most marked evidence of the congestion surrounding recent tubercular deposit is given in drawing 15c (Fig. 1). The blood being more persistent in the vessels than in a healthy lung, I

succeeded in obtaining distinct views of the loops encircling, as you will perceive, the ultimate air-vesicles. I next refer you to figure No. 91a (Fig. 2), to show how the

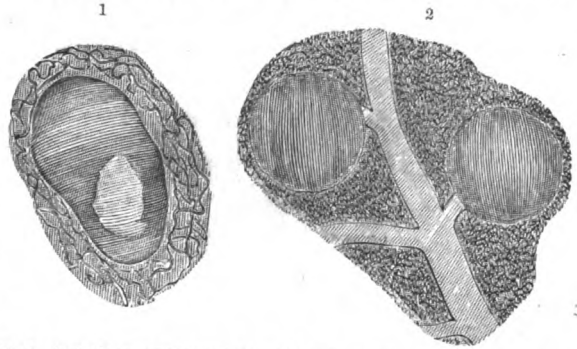


Fig. 1. A single milary tubercle, semiopaque, surrounded by highly injected blood-vessels. Mag. 20 diameters.
Fig. 2. Semiopaque milary tubercle, deposited throughout both lungs of a child, aged 5 years, a patient of Dr. Markham's. The tubercular matter distends the ultimate air-vesicle, the basement membrane of which is clearly defined. The ultimate bronchule is perfectly free and patulous. The tubercular matter fills the vesicle as a bullet fills its mould. Mag. 40 diameters.

effusion of tubercular matter takes place into the ultimate air-vesicle, causing it in the first instance to assume a globular form, and entirely impeding any interchange between

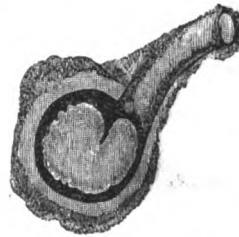


Fig. 3. Recent milary tubercle, also showing the deposit within the ultimate air-vesicle and the bronchule leading to it, the latter as yet patulous. The tubercular matter is surrounded by a dark ring of exudation corpuscles. From a man aged 60, a patient of Dr. T. K. Chambers, who had been ill six weeks. Mag. 40 diameters.

but that its presence is now considered certain proof of an

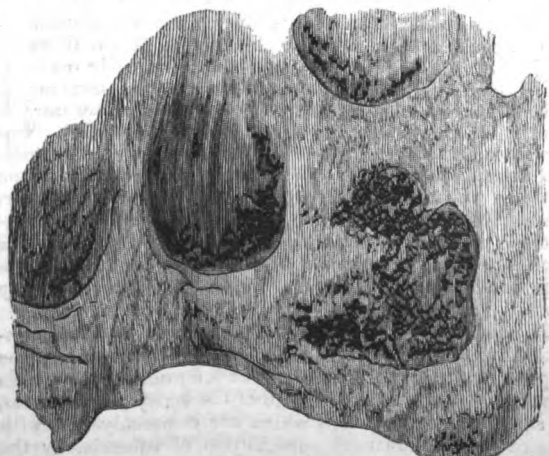


Fig. 4. Grey milary tubercle, to show the limitation of the deposit within the air-vesicles and the exudation surrounding the former. From a patient of Dr. Sieveking, a man aged 27. There was extensive tubercular deposit and intense congestion surrounding it, in both lungs; this has not been represented in the cut.

inflammatory process. I may remark parenthetically, that while we rarely, if ever, meet with an inflammatory condition of the lungs and brain, in which this microscopic sign is absent, it much more rarely occurs in other organs and tissues, as in the kidneys or liver, in the pericardium or abdominal mucous or serous coats. Drawing No. 25 (Fig. 5) affords

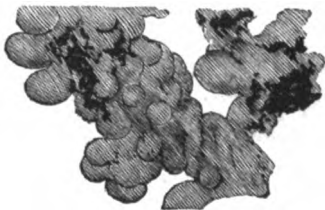


Fig. 5 shows the more advanced stage of tubercular deposit. The air-vesicles are closely aggregated together, but the pressure is not yet sufficient to destroy their general circular form. Some melanotic matter is seen scattered upon them. Taken from a female patient of Dr. Weber's. Mag. 60 diam.

another instance, on a larger scale, of the deposit of tubercle within the respiratory cavities. Here, too, the deposit scarcely having consolidated, the pressure has not affected these vesicles universally in such a manner as to cause the circular outline to be destroyed. Of this effect of increased pressure, No. 32 (Fig. 6) affords demonstrative proof. Here you



Fig. 6. Crude yellow tubercle; the circular form of the vesicles is destroyed by the mutual pressure exerted in consequence of the advance of the deposit; the bronchule leading to the cluster is obliterated, and converted into a mere ligamentous band. Mag. 60 diam. The specimen is taken from a patient of Dr. Markham's.

observe the vesicles presenting a honeycombed appearance, with an almost uniformly hexagonal outline, in perfect accordance with the physical laws which you are familiar with. The bronchule, you perceive, leading to this obliterated portion of lung-tissue, is in each instance equally rendered impervious, and the tubule that ought to be patulous, to permit the passage of the vivifying stimulus of air, is choked up, fine-drawn, converted into a blind alley. Observe, too, in this case, the utter obliteration of the interstitial tissue, which, in No. 91 (Figs. 2, 3), is seen to intervene between the vesicles containing the tubercular matter. These illustrations offer nothing new, and nothing unexpected; and yet we seem to feel a surprise that a disease should produce so palpable and mechanical a change in the most vital organs, and that our means to arrest and destroy it should amount as yet to so very little.

The law to which we have adverted as, in our opinion, regulating the deposit of tubercle, viz., that the tendency to the deposit in any organ is inversely as the pressure the vessels sustain, or that it is in the ratio of the laxity of the tissues, is supported by the views which are commonly held with regard to the chemical constitution of tubercle, by the form and mode of deposit in the various organs of the body, and it also assists us in explaining why certain parts of different organs possess so marked a liability to become the seat of tubercular exudation. This feature constitutes an essential difference between tubercle as a mere effusion of

a certain constituent of the blood, and those other new formations in which we cannot but see a tendency to independent development or organisation. The most familiar instance of pathological processes with which I would compare it, are the serous effusions that take place into the peritoneal cavity, from obstruction to the vena cava or portal system, inducing congestion and consequent liquid discharge at the most yielding points. If we adopt the view suggested, it appears to me to offer an explanation of the circumstance that the apices of both lungs are the chief seats of tubercle, while it tends to show the importance of encouraging the use of all the physical means at our command to promote a free and active circulation of the entire vascular current, and to obviate and anticipate anything approaching to local congestion in the organs and parts of organs which we know to be most liable, at different periods of life, and under different circumstances, to become affected with the disease in question. The manner in which I would apply the law to the explanation of the predominant proclivity of the pulmonary apices, is simply this: the upper portions of both lungs are surrounded by more unyielding parietes than the inferior; they have less room for expansion; consequently, if there is any increase in the vascular current supplying these parts, the difference between the pressure of the parietes and of the atmosphere within the vesicles will increase unduly, and effusion will take place into the latter. In acute tuberculosis, we do not observe this peculiar election, because the process is of a more active character; the strain upon the capillaries of the entire organ is greater than they can bear, and we consequently find the deposit takes place with much uniformity throughout the lung. In the chronic forms in which tubercular deposit generally occurs, the balance of the forces in the different parts of the vascular system is in a measure preserved, and only the very weak points are assailed. We do not at all deny that other forces come into play, and that there are elective affinities between different tissues and morbid products with which we are not even acquainted as yet; but it appears that the circumstance alluded to is one of considerable importance in its bearings upon tubercle, both in the lungs and in the brain and abdominal tissues. To take a single instance from the latter: in scrofulous deposit in the kidneys, where does the tubercular matter invariably present itself? In the loose textures of the cortical substance. The dense tubular tissue, with its stronger basement membrane and firmer epithelial coat, wards off the encroachment; but the feebler texture of the convoluted tubes is unable to repel the enemy.

Allow me now finally to examine shortly the ultimate constituents of tubercular deposit, to see partly whether it exhibits characters by which we may surely recognise it, and partly whether it offers, as far as our present knowledge goes, such features as to destroy all fair ground for hope that we may succeed in curing or eradicating it from the system. Perhaps I ought to have apologised to you for the method which I have pursued in the consideration of the subject; but I have followed the same mode of explaining to you my views, as I have followed in arriving at them myself. The ruder and more general characters of disease, and their relation to physiological states, are those which first attract our attention; from their examination we proceed to the contemplation of the more recondite phenomena of disease; and thus, by truthful observation and rigid inductive analysis, may hope to arrive at the real laws which govern the most wonderful fabric of the human body.

The simplest definition of tubercle appears to me to be, according to the present state of knowledge, the following: *Tubercle is an exudation from the blood of a protein compound, incapable of organisation, but undergoing certain physical changes independent of vital influences.* Tubercle is, in fact, effete matter which the powers of the system are unable to use as building material to repair the natural waste; and it is deposited in this or that organ of the body according as it is invited by the greater or less liability of the part. Tubercle is not a plastic material; it does not grow; it is not the manifestation of a departed vitality.

ating power, superadded, as it were, upon the normal energies of the system, or taking their place, such as we find to be the character of malignant disease; nor, on the other hand, is it identical with the effusions of blood-constituents which result from an exaltation of the normal energies, and continue in possession of their vitality, by which they are susceptible of organisation. This we do not see in tubercular deposit, which must be viewed as bearing to the diathesis giving rise to it, very nearly the same relation as, to use the strongest comparison that suggests itself to us, calculus in the bladder bears to the calculous diathesis to which it is due. There is, unfortunately, no such emunctory for the effete protein compounds, as there is for the excess of saline constituents of the blood; or tubercle might accumulate as the latter do, at a given point, and the product be removed by operative proceedings, or by chemical solution. The lungs and the skin have this duty to perform; but I need not stop to point out to you why we have not yet succeeded in destroying the tubercular product in the former, and removing it from them, by direct applications. I do not myself despair of a remedy being discovered which, in a gaseous form, may be conveyed to the deposit in the lungs, and, by dissolving it, enable the patient to expectorate it; but this would only affect a single organ. The cachexia leading to the local product will ever remain the real malady to deal with, so that we may anticipate its local effects.

The changes which take place in the deposit itself, and which have been the source of much discussion, and of some very wild speculations, are, as I have already observed, closely allied to what we see taking place out of the human body in inorganic substances. They seem to follow the laws regulating crystallization and chemical decomposition rather than those of vital action.

The earliest form in which tubercle presents itself to the eye is that of a faintly granular blastema, in which we are only just able to trace a tendency to aggregation into circular forms. An instance of this is given in the microscopic view of the miliary tubercle represented in drawing No. 91a, which was taken from a case of acute tuberculosis occurring in a patient of Dr. Markham's, secondary to rheumatic disease of the heart, and central softening of the brain. Here, as elsewhere, while the process of deposition continued, the vicinity of the tubercular matter was surrounded by exudation corpuscles, with or without an enveloping wall. The next form which we find tubercle presenting is that of more definite corpuscles; they offer an oval form, with a more or less sharp outline, and a granular surface. These corpuscles are surrounded by the granular blastema before mentioned, which now becomes more definitely marked, and by and bye appears to eliminate oil-globules in a greater or less quantity. The tubercular corpuscle does not present a nucleus as its normal constituent; it is, in fact, regarded by some, among whom I may be allowed to mention your excellent secretary Dr. H. Jones, as itself a nucleus. We occasionally find cells with nuclei in tubercular matter, as you will observe in several of the drawings which I send round, but I am inclined to think that they are generally, if not always, derived from the normal tissues of the organs in which the deposit has taken place. In many cases the corpuscles offer no distinct cell-wall, but appear merely to be an aggregation of the granular blastema; and at all times the envelope presents but a faint outline, compared to the sharp and well-marked margin which we discover in the cancer or epithelium cell. In examining tubercle taken from different organs, we must never forget that an admixture of the cells and corpuscles belonging to the healthy tissues may take place, which, at first sight, gives an appearance to the microscopic field different from that described. Another source of difficulty, also, consists in the admixture of the products of secondary inflammation, which is often excited by the tubercle acting as a foreign body. In the former case, our knowledge of the healthy tissues must guide us; in the latter, we must carefully discriminate blood-corpuscles, pus, or debris of the tissues, from the tubercular deposit. In the instance of tuberculated kidney which I submit, you will see that

renal cells are mixed up with the true tubercular matter; in the glands the normal corpuscles often closely resemble the tubercular, and some care is necessary to distinguish the two. The characters which I have laid down will generally suffice to determine the question; and we may also bear in mind, that while in normal components there is generally more definiteness of outline and uniformity of shape and size, the elements of morbid products are characterised by an absence of that typical regularity. The dimension of the tubercular corpuscle generally fluctuates from one to three five-thousandths of an inch.

A term has of late been brought into vogue by the authority of great names, to which, before concluding this brief sketch, it is necessary that I should allude, as the subject to which it refers is closely associated with tubercular disease. I refer to *fibrinous deposits*. Many of the cases which are thus denominated present no differences perceptible, either to the naked eye or under the microscope, by which we can distinguish the product from tubercle; and in such it is scarcely in accordance with sound induction to assume a different disease, until we are able to demonstrate a distinct primary lesion in the blood. It is not my intention to enter fully into this very important question at present, because I should fear to exceed the limits of your patience; but I wish to point out that, while there is a wide distinction between the two forms of disease in their well marked characters, they occasionally merge into one another, and are associated together. In drawing 104, I have represented the most marked instance of a combination of tubercle and fibrine which I have met with. You perceive that the characters of each are maintained as shown in the microscopic view; while, at the same time, the naked eye appearance of the morbid product corresponds with those of ordinary tubercle. When we remember the close approach between the elementary composition of fibrine and albumen, it is only surprising that the morbid products which are formed from them should present on the whole the broad distinctions that we recognize. Here, as elsewhere, we must look further back than to the mere local deposit: the primary cause resides in the perverted impulse given to the system; that impulse itself we shall never be able to seize with physical means, but we may hope to obtain an insight, a sensual appreciation of its manifestations at an earlier period than has yet been vouchsafed to us. When we do this, we may hope to be more successful in applying our curative agents; till then we shall see but as through a glass darkly, and our steps will be, like those of the infant learning to walk, insecure and infirm.

I cannot take my leave of you without apologising for attempting to touch upon a subject of such vast importance as that of tubercle in so cursory a manner. No one is more conscious than I am myself of the very imperfect manner in which the little that has been said has been brought before you. And though I may have failed to suggest anything which your own observations and researches have not already made out, I may succeed in eliciting the observations of other inquirers into this field of pathology, which will deserve the attention of the learned members of this Society.

May 1853.

ON REVACCINATION.

By J. A. HINGESTON, Esq.

Of those who have been once properly vaccinated, an indeterminate number become again susceptible of vaccination at a subsequent but indeterminate period of their lives. It is said that this susceptibility never occurs within six months after an effective primary vaccination; and this interval of protection has been extended to seven or even ten years; but there are no proofs to warrant our implicit confidence in this assertion. The scar of a genuine vesicle is no evidence of insusceptibility; for those without a scar will remain insusceptible both of the small-pox and revaccination all their days; while others, with a scar of

normal character, will take the small-pox or revaccination, notwithstanding this apparent testimony in their favour, and contrary to our most sanguine expectations of their security. Some vaccinators say, that about half the number of those vaccinated are susceptible of a revaccination; but this computation, though it may depend on statistical calculations, gives no assurance of its positive accuracy; for, out of this susceptible half, there may be justly reckoned a great many who have been imperfectly vaccinated at the beginning, and therefore have never been thoroughly protected at any moment from the first.

The question has arisen, Whether the protective agency of vaccination does not wear out with age? Perhaps this is the most popular notion entertained upon the subject; but it is, nevertheless, an entirely gratuitous one. There is nothing to prove that this is the case. It has been proposed to repeat vaccination every seven years in each individual; but this, like the foregoing opinion, is taken for granted, and nothing actually certain is ever pretended to be advanced in support of it. To adopt such a measure from some vague sense of precaution, is as unphilosophic as it is likely to prove illusive.

If one half of the vaccinated are safe, as some suppose, what signs are there to indicate the particular kind of constitution comprehended within this fortunate moiety? It is evident they exhibit no premonitory signs by which we may recognize them. It is mere guess work. If, as it is generally admitted, a primary genuine vaccination do occasionally prove unprotective, what reason have we for concluding that a secondary genuine vaccination should prove more protective than the first? There is neither reason nor evidence to enable us to form any satisfactory judgment respecting it. And, even supposing the patient to be unprotected by the first, we have no test to assure us that he will not be liable to take the small-pox, in spite of his remaining insusceptible to the virus of a secondary vaccination. The value of a negative proof is very precarious.

The varieties and degrees of susceptibilities and insusceptibilities constitute a problem which no one has hitherto attempted to solve. Our information respecting vaccination in general is scanty enough, and practical writers have not thought it worth their while to bestow more than some passing thoughts upon it. The result has been, that theories have been broached, and allowed to pass current without challenge, inquiry, or remark; opinions have been mistaken for facts; and, excepting on a few rare points (such as the variolation of the cow), vaccination is now almost just where it was upon its first discovery.

A foreign writer, of the name of Wendt, recounts, that out of 275 revaccinated in the Danish army, more than half succeeded. But vaccination has succeeded, it is declared, in persons already deeply pitted with the small-pox, to the amount of one half, which is about the same proportion. Jenner himself at last perceived and owned, that the susceptibility to cow-pox is renewed in some constitutions—an admission which only shows that vaccination, like everything else on the earth, is neither universal nor infallible. Our just confidence in a remedy is weakened by overrating its value. Of the deaths from small-pox in some of the largest cities and towns of Great Britain, four-fifths occur in the first five years of life. If this account be authentic, then these children were either not vaccinated at all, or else, if vaccinated, they took the small-pox at the precise age when vaccination ought to be the most protective.

The question of revaccination is embarrassed on all sides. In times of danger from infection of the small-pox, it is unquestionably proper. For the most part, a genuine scar is the sign and seal of protection; and most vaccinators will feel confident that, in such a case, revaccination will in all probability produce nothing more than a spurious pock, running its course in five days; or that, if small-pox supervene, it will be only a mild form of it, terminating favourably in a week, and seldom proceeding so far as the fourteenth day. Should the attack, however, turn out a severe one, the medical man will be inclined to suspect the normal character of the primary vaccination; for he has a firm conviction,

or consciousness, derived from his own experience, that a genuine vaccination, carefully watched and approved of throughout all its stages, never deceives him. It is, in his estimation, proof impregnable against the small-pox infection, and of strength sufficient to resist the specific virus of revaccination. We may appeal to those who have been attentive observers of what has transpired within their own sphere of practice, and ask them whether this declaration does not express the unshaken conclusion of their minds? Testimony of this sort is of no trifling weight, and supercedes the nicest arguments which can be opposed to it. In a court of law, it would be decisive. Many a doubtful point, however, would be cleared up and settled by the returns of extensive statistical reports on vaccination, such as those of the Registrar-General's respecting births, deaths, etc.; and an arrangement of this kind might be provided for in a new Vaccination Act.

The proper age for vaccinating has been determined by necessity rather than by choice. The usual time is about the third month, nor does there seem to be any good reason against it. At this period, the pock usually succeeds very well, without interfering with dentition, weaning, or the change of dress, which is generally made lighter, towards the eighth or ninth month. Indeed, there is no time when the nursing and warmth are more carefully attended to than at this period, nor when the infant is more susceptible and less irritable than then. About this time, also, healthy children are plump, and they sleep a good deal, both of which are favourable conditions for vaccinating. The spring and autumn are the best seasons for obtaining fully developed vesicles. The winter checks the action of the skin, and the summer overheats and exhausts the surface. The one hurries on, while the other delays the progress of the pock. It is best to postpone the vaccination altogether in very cold weather, and to wait for a more congenial temperature.

Dentition by no means hinders the virus from taking effect; and every vaccinator is aware of vesicles being produced as perfect, and as much approved of, at this time as at any other; only the liability to secondary eruptions is greater, and the constitutional powers are engaged in the formation of the teeth, which is an important process, making a great call upon the strength, disturbing the regularity of the nervous centres, and occupying the chief activity of the system almost exclusively in its own operations. On this account, it has been recommended to postpone vaccinating until after the formation of the first teeth, or at least until after the expiration of the first twelve months. Except in some particular cases, there does not seem to be any good ground for giving way entirely to such a scruple.

No one would ever think of vaccinating during the existence of feverishness, sleeplessness, diarrhoea, catarrh, etc., in children; nor in adults during menstruation, an attack of indigestion, jaundice, excessive fatigue, care, grief, or any other accidental circumstance interfering with the general health.

The fourth month used to be the age at which the old inoculation was practised, and the child's health was prepared for its reception. Under the most favourable conditions, it was not free from risk; for sometimes the small-pox eruption came out over the whole body, and occasionally children died in consequence of it. During the incubation of the small-pox, that is to say, between the moment of infection and the appearance of the eruption, vaccination may be attempted. Its success will depend on its being performed nearer the moment of infection than that of the eruption. Some say that, if vaccination be effected within six days from that of the infection, the vesicle will arise, and anticipate or intercept the appearance of the small-pox. Others affirm that, even though vaccination should be attempted as early as the moment of infection itself, yet it will not do more than modify the character of the small-pox; while others, again, declare that, if vaccination take place consentaneously with the small-pox eruption, then the small-pox eruption will proceed *pari passu* with the vaccine vesicle. Nay, it is even asserted, that a confluent small-pox

will proceed along with a genuine vaccine vesicle. It is evident that these are abstruse points, almost beyond the reach of a private individual's experience. Nothing but extensive reports, spread over the space of several successive years, could furnish us with anything like positive data for working by. In the case of imminent exposure to infection, we are forced to vaccinate without delay, and trust to chance for its succeeding.

It is stated that, when a child has been vaccinated and inoculated at the same time, and almost on the same part, so as to allow of the vesicles uniting, the virus taken from this compound pock will produce either cow-pox or small-pox, no one can foretell which; and that inoculation with vaccine and variolous virus mixed will give rise either to the one or the other of the two diseases indiscriminately. These curiosities in pathology scarcely bear upon practice; perhaps they may be adduced in proof of the identity of the two affections; but their importance does not extend much beyond the limits of their own intrinsic value. Like many other phenomena, they begin and end in themselves, because we are ignorant of their exact relations.

As the greater number of children who die from small-pox, die between their birth and the second month of their existence, it is advisable to vaccinate the poor as early as possible. Their means do not enable them to isolate themselves, and live apart from the sources of contagion and infection, like the rich. Moreover, they are disposed to be negligent in this as in all other matters; and it is difficult to make them see the importance of being vaccinated at all, or, if vaccinated, of bringing their children to be inspected on the proper days throughout the progress of the pock. The consequence is, that, when seized with the small-pox in after life, they are said to have been vaccinated in their infancy; whereas the vaccinator had never been allowed to watch the vesicle, and therefore could never vouch for its protective quality. When I resided in London, I vaccinated many poor children; but, owing to the necessities or ignorance of this class of people, the vaccinations were desultory, and a great number departed or disappeared, without rendering any account of themselves. In instances like these, the appearance of small-pox after vaccination cannot be surprising. The fault does not rest with the medical practitioner, for he cannot control the caprices of the public. The wealthier classes contract small-pox through the indiscretion of their domestics, who visit infected places, and bring it back with them.

A child, on the eve of sickening for measles, etc., may happen to be vaccinated, and in this case the vaccination may not appear, but lie dormant until after the measles have passed away, and then come forth, and pass through its stages with apparent regularity. Every vaccinator is, I believe, aware of a genuine vaccination being delayed for two, more, or several days; and in some seasons the best virus fails in taking effect, no one knows why. The insusceptibility to vaccine is more frequently to be imputed to defective lymph, than to any constitutional peculiarity in the patient. Good lymph seldom fails in taking effect.

Hooping cough was at one time supposed to be cured by vaccination, but subsequent experience has not confirmed this theory. Some have considered that vaccination has cured eruptive diseases, while others affirm that it has produced or aggravated them. These notions most likely turn upon the old difficulty of distinguishing between the sequence and the consequence of events.

The secondary lichen after vaccination is urged as a strong reason against its practice. The virus is supposed to have conveyed something prejudicial into the blood, and thereby provoked scrofula, etc. But it is not easy to determine what is the immediate and exciting cause of scrofula, which may be attributed to many other causes besides vaccination. Anything may awaken it from its latent state, and render it active for a shorter or longer period, if not for the remainder of life. Be this as it may, the constitutional ailments which are said to follow upon vaccination, may be avoided by the use of purgatives (hydr. c. creta) proportioned to the patient's age and strength. All erup-

tive diseases require this treatment at their close, and the vaccine pock among the rest. In scarlet fever, the train of awkward symptoms which manifest themselves in the throat and kidneys may be removed by purgatives, exhibited for the space of three or four weeks during convalescence. It is the same with measles, in which the lippitudo and diarrhoea that threaten to supervene may be averted by the same means. It is especially the case with small-pox, which requires repeated laxatives on its cessation. Variolous inoculation, and its congener vaccination, call for the same treatment. The cachexy following eruptive diseases, fevers, inflammations, etc., may be traced up to the neglect of this wholesome practice; and the eruptions spoken of as occurring after vaccination may be ascribed to the same omission.

Lichen is apparently an inflammation of the nervous structure of the skin—a true hyperæsthesia, and the eruption is but an accident; for in many cases of prurigo there is no eruption at all. In plethoric subjects, salines, laxatives, and antimonials, together with the use of warm bathing, are the proper remedies; but in cold constitutions, and debilitated persons, the opposite treatment is called for, and stimulating the skin is the best practice. It is analogous to that asthenic conjunctivitis which is curable by stimulating lotions (argenti nitras), but which is aggravated by depletion. The prurigo senilis, so vexatious and obstinate in advanced life, yields to the popular remedy of beef-brine, with saltpetre dissolved in it. These few observations, respecting the nature and treatment of lichen, may not be out of place on the present occasion.

The foregoing account is not a very satisfactory one; and it is for this reason that I have reserved it to the last, and been at the pains of drawing it up thus succinctly. It is surprising how many loose opinions are afloat upon vaccination, and pass current for truth among the public. But if we deduct the few facts that are really known, we shall find the absolute data are only three: viz., 1, the source of genuine lymph, *i. e.*, the cow; 2, the natural history of the vesicle; and 3, its power of protection, when rightly performed. Other points, of not less vital importance, meet us at every step; but they are enveloped in doubt, elude our grasp, and escape from sight. They remain as subjects of investigation for the philosophic student; and it only requires a school, regularly organized, appointed, and authenticated, in order to bring them within the focus of enlightened research. The cow might be variolated from time to time, so as to procure a genuine supply of fresh lymph whenever it is called for; vaccine wards might be opened; vaccinators, as well as a lecturer on vaccine, might be officially installed; and pupils, accurately educated, might be sent forth, capable of discerning between a true or false pock, as well as skilful in the art of keeping up a constant succession of approved vesicles. At present we have nothing of the sort. The legislature may shift the scenery for us; but the chief and real actors in the drama must be those who preside over the destinies of the medical profession as its preceptors, guides, and friends.

Brighton, May 1853.

FREE WILL. "There is a certain difficulty in reconciling a free will with a superintending and guiding Providence. But take an analogous instance, where a man stands in the relation of a guiding providence to an animal. The horse has a will. Breaking in, the harness, the reins, the whip, the spur, all are proofs of the animal's will, and of the necessity of its training. The horse is harnessed to a vehicle, and guided by a man. So far as the animal's free will is exerted in the direction the driver chooses, the animal fulfils his purpose. Let him exert that will in opposition to his ruler, and he is driven by the lash to submission. So with man. He has a self-determining power, and as long as he submits that will to the obedience of his reason, enlightened by the Divine light, he is fulfilling his duty; he is working with and by his Maker; his will is in harmony with the Divine will. But deprive it of its freedom, and it becomes instinct; responsibility ceases, and the foundation of all freedom—law and self-culture—is destroyed."—*Evening Thoughts*. By a Physician. P. 29. Second edition. London: 1853.

BIBLIOGRAPHICAL NOTICES.

ON NEAR SIGHT, AGED SIGHT, IMPAIRED VISION, AND THE MEANS OF ASSISTING SIGHT. By WILLIAM WHITE COOPER, F.R.C.S., Ophthalmic Surgeon to St. Mary's Hospital. Second edition. Pp. 320. London: 1853.

WE are not surprised that this useful little work has reached a second edition. It has in many respects been thoroughly recast, and enlarged on the more practical topics; the chapters on Light and on the Physiology of the Eye having been judiciously omitted, to allow of that enlargement.

Many of our most esteemed works on ophthalmic medicine contain but an imperfect account of the changes in the optical powers of the eye, and of the effects of over use and misuse of the organ,—subjects which it is of at least as much importance thoroughly to understand, as to be acquainted with the varieties of ophthalmia, and the *minutiae* of the operations for cataract. Ophthalmia no doubt spoils most eyes among children; misuse, we fear, most among adults; and those whom cataract has deprived of sight are but as a drop in the bucket, compared to the multitude whose vision has been lost, or seriously impaired, by the diseases treated of in Mr. WHITE COOPER'S volume.

Chapter I treats of Myopia. Shortsightedness may in the first place depend upon original malformation of the refractive media of the eye; the image being formed in front of the retina, and the defect being, as every one knows, remedied by the use of a concave lens. Common, nay, even fashionable as this state is, it now and then happens that an eye has been considered by its owner as amaurotic, while it was only short of sight. Mr. Cooper gives a curious case, in which a very short-sighted person was enabled to read easily at twenty-five inches, by making gentle pressure with his finger and thumb on the upper and lower part of the eyeball, and so altering its figure.

It is of consequence, that when the aid of lenses is required, they should be worn in the shape of a pair of spectacles. It is a foolish custom to use a single eyeglass. Why throw one eye out of employment at the expense of overloading the other with double work? The glasses should also be of a power as low as will enable the wearer to see distant objects; and they should not be used in reading and similar occupations; but, on the contrary, every effort should be made to increase the distance at which near objects can be viewed, for "constant practice will lengthen the focus for near objects, and will enable the myope to read and write at an increased distance; but experience shows that, where the defect is congenital, little alteration takes place in respect to distant vision." (P. 40.)

Mr. Cooper describes the myopia which depends on chronic inflammation of the aqueous membranes, and consequent distension of the cornea; but he does not notice the temporary short-sightedness often occurring after iritis, apparently in connexion with some affection of the ciliary processes.

The second kind of myopia arises from a loss of the adjusting power of the eye. It occurs in those who have employed their eyes too much in study, or on minute objects, and is known by there being no change in the *reading distance*, while distant objects can be distinguished only by the aid of a concave lens. It is usually accompanied by more or less ocular congestion, and is to be treated by rest of the eye, improvement of the general health, and abstinence from the use of glasses. Mr. Cooper has, to a certain extent, mixed up together these two varieties of myopia.

The subject of Chapter II is Presbyopia; the long-sightedness, usually of age, remedied by the convex lens. There are some curious cases in which old persons, long accustomed to the use of powerful glasses of this kind, come to be able to see once more without spectacles as well as in their youth. One very remarkable instance of this kind

has fallen under our own observation; but we can, as little as Mr. Cooper, venture to adopt any of the explanatory theories which have been offered.

Long-sightedness may occur in early life, perhaps may be congenital; and it is often combined with, or even dependent upon, various congestive disorders of the eye. In such cases, the erring patient often resorts to glasses of increasing power, in the vain hope of curing by lenses a defect which can be removed only by a due attention to the vascular and nervous systems of the eye.

Chapter III is on Impaired Vision from overwork; a subject to a certain extent anticipated in the preceding pages, and under which general heading Mr. Cooper classes together a great variety of pathological conditions of the nervous, the vascular, the muscular, and the secreting tissues of the eye. Amblyopia, or irritability of the retina; amaurosis, or palsy of that membrane; asthenopia, or weakness of the adjustive power of the eye; choroidal congestion; nay, even external and internal ophthalmia of various kinds, are all alluded to, and the interesting cases given afford examples of most of these conditions. Each might have been separately considered; but we think Mr. Cooper has, on this occasion, judiciously abstained from such an analysis, which could be rightly given only in a work intended solely for the profession. This remark, however, bears not upon the execution, but upon the plan of the volume, which certainly exhibits traces of the inconsistency of purpose and want of harmony of parts inseparable from a treatise meant both for the profession and the public. We do not for a moment find fault with the latter aim; it is most praiseworthy, and none can write more usefully or more pleasantly than our author; but for our own part we must say, that we should choose to attain the objects in view by means of two separate treatises.

Achromatopsy, or the Inability to distinguish Colours, is the subject of chapter IV; and, like the essays on eye-protectors, and on snow-blindness, forms an interesting addition to the work in the present edition.

Males are most commonly the subjects of colour-blindness; but in an article on this subject which appeared lately in this Journal (April 15th, p. 334), the fact stated by Mr. Cooper was overlooked,—that M. Cunier had observed thirteen female cases of this defect in one family, and that four female cases occurred in the family of Dr. Pliny Earle.

We wish our limits would allow us to transfer to our pages Mr. Cooper's interesting analysis of the facts respecting colour-blindness, put on record by Wartmann and others. We are as little satisfied as he appears to be with the explanatory theories which have been proposed; and are inclined to the notion that the defect may turn out to be neither in the retina (of vision), nor in the brain (of perception), but in the optic ganglia (of sensation); and to be analogous neither to deafness nor to a want of taste for music, but to the deficiency in the power of discriminating between certain notes.

Chapter V treats of Glasses. After a demonstration of the optical power of simple lenses, and an interesting notice of the history of spectacles, which appear to have been earliest used by the Chinese in Asia, and by Roger Bacon in Europe, Mr. Cooper notices the mode of making lenses. He recommends that when irritability of the retina renders tinted glasses necessary, a *neutral* tint should be selected, and that the ordinary double convex lenses should be preferred to the periscopic. His rules for choosing spectacles are good. The eye should neither be strained by using too feeble lenses, nor have its focal power still further damaged by the employment of those which are too strong. When in the important matter of selecting spectacles, do people act so generally on their own opinion, while they consult professional advice necessary in matters of far less importance? Two points are often overlooked: each eye ought to be tried separately, lest they should differ in focal length, and the frame ought to be suited to the form of the individual face, so that the centre of each glass may be exactly opposite the pupil of the corresponding eye.

are next described; and those exceptional cases are noticed in which the eye preserves, after the operation, the power of forming a distinct image of moderately distant objects, without such assistance.

An experiment of M. Cunier's is recounted, in which he succeeded in restoring vision to an amaurotic (?) eye, by causing the patient to practise reading with magnifying glasses. This was in all probability merely a case in which the retina had become deficient in sensibility from disease of that eye.

Chapter vi contains an account of Eye-protectors. In an appendix to the work, an interesting description is given of the Snow-blindness, to prevent which in arctic regions, the eyes must be defended by an apparatus presenting only a small aperture or narrow slit for vision. Excessive intolerance of light, and intense pain, speedily followed by blindness, are the most prominent effects apt to be produced by the exposure of the eyes to the glare of light reflected from snow; but as complete recovery may take place in a very few days, without other treatment than rest of the organ, and the application of cold, it would appear that the disease is rather of the nature of determination of blood, with irritation of the retina, than inflammation.

Various useful forms of shades, goggles, and pierced diaphragms, with or without lenses, are described. The last-named apparatus is often of great service when the pupil is permanently enlarged, from disease or operation. Mr. Cooper appears, however, to place more confidence than we are inclined to do in the use of shades and other mechanical applications for the cure of strabismus. We venture to think that these will, in the great majority of cases, be found of no avail.

The last chapter contains a full discussion of the subject of Artificial Light; of the properties of the various lamps and candles, and of gas; and of the evil effects so often produced, not only by the overuse or the misuse of artificial light, but also by the want of ventilation of the rooms in which our artisans in many cases work. We have not space to follow Mr. Cooper throughout this discussion; but we would simply state that, the desideratum being a steady white light, of moderate intensity, and which can be easily managed, we are of opinion that the best form of artificial light is *gas*, burned in a swallow-tailed jet, the flame being surrounded by a globe of ground glass tinted of a pretty deep purplish-blue colour, deep enough, we mean, thoroughly to neutralise the excess of yellow rays in gas-light; the effect, of course, to be judged of during the day. The whole apparatus ought to be suspended at least three feet above the table, so that the luminous globe may be quite out of the field of view of the reader's or worker's eye; the room being, we need hardly add, well ventilated.

Such is a brief epitome of Mr. Cooper's work. It is throughout well and elegantly written, and remarkably free from accidental errors; the only one of any consequence which we have noticed is in p. 71. No one knows better than our author that the *index* of refraction is quite independent of the *form* of the refracting body.

ATLAS OF PATHOLOGICAL HISTOLOGY. By Dr. GOTTLIEB GLUGE. Translated from the German by JOSEPH LEIDY, M.D. Twelve Copper-plate Engravings. 4to, pp. 100. Philadelphia: 1853.

THE beautifully executed *Atlas* of Dr. GLUGE goes far to fill a desideratum in pathological science; for, while we can readily refresh our knowledge of the characteristics of healthy tissues by frequently examining them with the microscope, it is not so easy to pursue a similar course with regard to pathological formations, many of which come but rarely under notice—especially of those who do not enjoy the opportunities afforded by the operating theatre and dead-house of an hospital. Some of our fellow-associates have doubtless experienced this difficulty. Desirous of keeping pace with the advance of knowledge, they have, in their rural retirement, endeavoured to make out by the

microscope what was the nature of this tumour which they had removed, or of that structural change which some tissue seemed to have undergone; but, either from not having seen the appearance before, or from having forgotten it, they have relinquished in despair the pursuit of their investigation. Representations of pathological formations indeed exist; but they are too widely scattered in different books to be accessible to the isolated practitioner.

Dr. Gluge commences his work by an introduction on the magnitude and weight of the organs of man in the normal and abnormal conditions. In this we find the following important suggestion:—"I deem it essential" (in determining the size and weight of organs in health) "that all the important organs of an individual should be healthy, and not merely the one examined; for the reciprocal influence of organs during life is too great to lead to correct results, without their general condition being taken into consideration." The same introductory chapter contains a summary of the "pathological phenomena and truly characteristic anatomical alterations" in cholera.

Section I treats of the Development of the Elements of Tissues. Dr. Gluge is thoroughly impressed with the idea of analogy between physiological and pathological cell-development; and, in a subsection on the parallelism of these processes, he demonstrates this analogy by examples. In speaking of inflammation-corpuscles (exudation-corpuscles), he says:—

"It has been very learnedly shown that similar bodies appear in the colostrum and in the egg; but I have in no case asserted that they are found only in inflammation; and, on the contrary, I have ever tried to harmonize the pathological alteration of organs as much as possible with physiological development; for I have always viewed disease as nothing more than a physiological process modified by accidental causes." (p. 33.)

There is a deal of truth in this observation.

Section II is devoted to an examination of the Elements of the Tissues combined in Perfect or Imperfect Tissues, and arranged according to the Processes of Disease.

Section III contains an examination of the Formation of the Blastema. In this section, the phenomena of inflammation—congestion, hyperæmia, stasis, exudation, and gangrene—are reviewed.

Section IV treats of the Histological Metamorphosis of the Blood, within and without the Blood-vessels.

Section V is devoted to Pyæmia. Opinions, as is well known, are divided as to the nature and cause of this condition. Dr. Gluge says:—

"Pyæmia consists in a commingling of pus with the blood. The pus is either the result of the transformation of a portion of the latter, or it obtains entrance into the circulation through veins accidentally opened. The consequence of the admixture almost always, though not necessarily, is stasis in the capillaries, and the conversion of the blood of these into pus, with the formation of abscesses; and in this manner the latter may originate in greater or lesser number in the liver, spleen, kidneys, lungs, brain, and more rarely in other organs, as beneath the skin, in the muscles, and in the joints. This transformation of blood into pus is most frequently induced by the spontaneous conversion of coagulated blood into that material." (p. 51.)

"The irritation of the lining membrane of veins by means of foreign bodies, according to my experiments, neither induces redness in nor deposit upon it; and the same is the case with the lining membrane of the arteries." (p. 52.)

"The principal cause of pyæmia is coagulation of blood in the veins, which then undergoes conversion into pus, and is thus conveyed into the capillaries." (p. 53.)

"It is not pus-corpuscles which form metastatic abscesses; but, with fibrinous flocculi, they give rise to stasis and transformation of the blood in the capillaries, and exudation from these, which result in the abscesses." (p. 55.)

If space allowed, we should like to examine Dr. Gluge's views of pyæmia, comparing them with those of other observers; but we must, having made the above brief extracts, merely recommend his statements to the careful consideration of our readers.

Section VI treats of Gangrene.

Section VII consists of a collection of Observations in Histology.

The twelve plates contain three hundred and twenty figures.

Plate I represents Transformation of the Blood: Inflammation-Corpuscles: Pus. (When not otherwise specified, the figures are magnified 255 diameters.)

Plate II represents Granulation: Hyperæmia: Exudation.

Plate III contains representations of Stearosis, or fatty degeneration.

Plate IV represents Cartilaginous and Osseous Growths and Transformations.

Plate V contains delineations of Cells, Fibres, and Cell-fibres, in Tumours.

Plates VI and VII represent the Formation of Fibres and Cells in Cancer.

Plate VIII represents the Glands and Epithelia in Typhoid and Scarletina: Tubercle: Glanders: and Gangrene.

Plate IX contains representations of the Glands and Epithelia in Cholera.

Plates X, XI, and XII represent Entozoa, Epizoa, and Epiphyta.

Great credit is due to Dr. LEIDY for the manner in which he has performed his task, and for having rendered accessible to the Anglo-American practitioner and student the valuable *Atlas* of Dr. Gluge.

WHITE, RED, AND BLACK; or Sketches of Society in the United States during the Visit of their Guest. By FRANCIS AND THERESA PULSZKY. In three volumes. London: 1853.

THIS is a most instructive and entertaining work; but it scarcely comes within the sphere of the medical reviewer. There is one passage, however, which we have marked for quotation, as it gives one of the most graphic sketches which we have met with of a peculiar form of epidemic insanity, which has lately reached Europe from America. It has broken out with considerable violence in London, where those afflicted with it are furnishing an abundant harvest for professional swindlers.

As both in America and Europe young ladies form the vast majority of those who have to do with spiritual rappings, we quote, along with the sketch to which we have referred, a portion of the context, which gives us a little insight into the routine of female education in the United States. The writer dates the following from Cincinnati.

"SPIRITUAL RAPPINGS, MESMERISM, AND PSYCHOMETRY.

"On the 23rd, we visited Farmer's College. We could not insist in detail, for we had to hear a speech of one of the teachers, to which Kossuth was expected to answer. The students and the pupils from the Ladies' College in the neighbourhood, formed a very numerous audience. One of the trustees of the establishment introduced the girls to us, saying, 'These are the sweethearts and the future wives of the students'. The indelicacy of this remark appeared to me very inappropriate, both for the students and for the young ladies; yet, except our party, no one else seemed to observe it. Here in the West, I noticed a style of conversation, very different from what we are accustomed to in the society of Europe, and of the Atlantic cities of America.

"Large schools for young ladies, where they board, are to be found all over the United States, but home education is still rarer in the West than in the East. The wealthy merchant or lawyer sends his daughter to the fashionable schools of New York and Boston; but the shopkeeper, mechanic, or farmer, wishes likewise to have his daughter instructed in sciences and arts, and therefore we see often here such monster establishments, where two and three hundred girls live under the same roof, and learn something of every science and art—classics and mathematics, mental philosophy and astronomy, drawing and music, dancing and languages; then they marry a Western man, and must cook and sew, and often wash and iron, when they cannot get a servant; in short, they must set about just the very things which they have never been taught in the college.

"Another phase of female life in the Western cities struck

me very much. When in Columbus, a very sensible gentleman mentioned to me, that there are persons in the United States, and especially in the West, who have communications with the spirit of deceased persons. I was much amused by hearing this, and began to speak jestingly about the matter. To my great astonishment, however, I found that the gentleman was in good earnest. He told me, that some years back, in a certain house in Rochester, Western New York, rappings were heard, which could not be accounted for in any natural way, and tables and chairs were moved without any visible agency.

"This is the German goblin, the *Poltergeist* of the nursery tales,' exclaimed I; 'you can trace him to the Arabian Nights. Is it not quite curious to find him here, residing in the far West?'

"No, no,' said the gentleman, 'these are spirits of deceased persons.'

"How can you prove it?'

"Well,' answered he, 'we Americans investigate everything, and it was soon found out that three rappings mean *yes*, and two *no*. Questions were put, and the replies proved almost always correct; they often were quite astonishing. The communications became more frequent, and several ingenious inventions were made to get longer answers from the spirits. For instance, an alphabet was taken; the letters were numbered, and the spirits marked by rapping the number of the letter which they wished to be reported. For *a* they rap once, for *b* four times, and so on. But later, the spirits prepared for themselves *writing* and *speaking mediums*, who write and speak without any volition. They don't know what they are writing; their hand is moved by the spirits. Most of them do it with closed eyes, and often about matters and in languages they do not understand. Several books have been written in this way.'

"And what are the subjects of these revelations?'

"They treat on the condition of the spirits in the other world. How they are taught there by more perfect spirits, and how they migrate to higher spheres, until they reach the seventh. But we have as yet no description of the highest spheres.'

"Justinus Kerner, the German poet,' said I, 'would here have his delight. What you tell me is the continuation of his *She-Seer of Prevozt*. Do spirits here too drink beer, as the German spirits of Justinus Kerner did? And is the American free-school system also possibly introduced in heaven? At least, one of Kerner's *Seers* (as the Germans call your mediums) found the Würtemberg school-system introduced there.'

"You jest,' said the gentleman; 'but I can assure you, that sincere men of sound judgment and of good education have had visions. Judge Edmonds, for example, of the New York Supreme Court. And is not the last communication from Benjamin Franklin, by rappings through a young girl of twelve years, entirely in his style and his turn of mind? To use time well, does not mean to do the most in an hour, but in a lifetime.'

"Then you believe in all these manifestations, sir?' asked I, astonished.

"There are,' said he, 'I must confess, statements which are not to be relied upon. In one of those chronicles of spiritual manifestations which abounds in poetical beauties, we find that the spirits are taught French and Italian in the other world, that they may understand Racine and Dante, which is rather strange, so much the more as the German language is not mentioned. Besides, the spelling of the spirits is sometimes wrong. Nevertheless, the rappings I myself have heard repeatedly, and I cannot find any physical explanation for them. Like many other people in the United States, I do not believe; but I do not disbelieve. I register the facts, and wait either for a natural explanation, or for an evident proof of supernatural communications. Horace Greeley has, as I hear, offered to a medium a hundred dollars for every leading article of the *London Times*, communicated to him in advance of the steamer.'

"And has this test been successful?'

"No,' answered the gentleman; 'the medium declined the proposal, but positively stated that Sir John Franklin is yet alive, and will be discovered in September.'

"I dropped the conversation. I remembered that in Germany, such alleged manifestations had been fashionable for some time, but they soon disappeared in this *arctic* ~~land~~ and merged into the phenomena of Mesmerism. Some others, in the midst of rappers, and mediums, and ~~table-turners~~ ~~and~~ the first week of our stay in Cincinnati, Captain ~~Edmonds~~ ~~and~~ that the Misses Fox, with whom the rappings were first heard in Rochester, were staying at the ~~Bureau~~ ~~of~~

rooms. He had already paid them a visit, and was astounded by the rappings themselves, and by the answers conveyed in this manner. Yielding to his entreaties, I went with Mr. Pulszky into the room, where we found the two very handsome Misses Fox, their mother, several of the Hungarian gentlemen, and two reporters.

"The manifestations immediately began. The young ladies requested us to put questions. I naturally asked: 'Shall we return to Hungary?' Three distinct raps were heard on the table from below; the table was uncovered, Miss Fox stood near it, keeping her hand on the edge of the table. I closely watched her movements; the rap did not proceed from her. I asked several other questions of a similar kind, and got just as favourable replies as I could wish. Of course, I did not care for them, though one was remarkable. Asking the age of my eldest boy, I was bid to write down a series of different numbers; at the right one, the spirit would rap—and this was the case. But such things have been exhibited often, by Bosco and similar magicians. It interested me more to investigate how the raps were produced. At my request, raps were heard on the window-pane, on the door from without, and under the floor. Miss Fox even put four tumblers on the table, and stood upon them, to convince us that it was not she who rapped, and yet the rappings were heard on the table. Doctor Spaczek, our clever physician, was likewise present. He too could not tell in what way the rappings were produced, but he rejoiced at least to get an evident proof that they came not from the spirits of deceased persons. He asked whether his father was in heaven? Three raps answered 'yes,' whilst the father of our friend lives in good health in Poland. The spirits likewise were at a loss to guess how old Mrs. Spaczek was; they added ten years to her actual age. When the doctor began to protest against these manifest falsehoods, Miss Fox coolly replied, that she and her sister were not responsible for anything the spirits said, as they, in fact, could not tell whether the spirits who manifested themselves were veracious or lying spirits. That there were lying ones amongst them, they had found out by experience.

"On the next day, our visit to the rapping spirits was duly trumpeted and commented upon in the papers. As the exhibitions of Misses Fox are for an entrance fee, I was not surprised at this progress of 'the philosophy of advertising'. But the newspaper report became an introduction to us for the spiritual circles of the city. We were mistaken for believers, and got invitations to several of them.

"I understood that a spiritual circle is formed in the following way:—a number of persons who are not sceptic, and amongst whom one at least must be a spiritual medium, sit silently around the table, holding one another's hand, and concentrate their minds. If they meet in such manner at least once a week, the spirit manifestations begin. Rappings are heard, writing mediums are formed, others become clairvoyants. There are several such circles in Cincinnati, and the spirits who manifest themselves through the mediums, are generally George Washington, Andrew Jackson, Benjamin Franklin, Zachary Taylor, and Emanuel Swedenborg. There are besides two spirit messengers amongst them, and the spirits of the nearest relatives of those who form the circle. Even Sir Robert Peel has made his appearance, and, strange to say, he has become a thorough republican in the other world, predicting the approach of republican governments all over Europe, and even in England.

"When I saw how far this singular belief had spread here, my curiosity was roused, and my husband began likewise to interest himself in the psychological problem, how it comes that such a practical people as the Americans can entertain such fantastic and extravagant ideas. One of our American friends, in whose family several female mediums were found, professed to have examined the matter earnestly, and to have come to the conclusion, that the manifestations really proceeded from spirits; that there was no cheat, no imposture, though some of the spirits were evidently lying spirits. He had cross-examined one who had pretended to be Emanuel Swedenborg, and had found that he did not understand Latin, and did not know the titles of his own works. But the belief of this gentleman was yet unshaken; it was a lying spirit, but a spirit it was! He assured us, that all the spirits took great interest in Kossuth and his cause, and prophesied the speedy liberation of Hungary.

"In the evening, we visited one of the spiritual parties to which we had been invited. We found there about twelve persons: gentlemen, ladies, children. One of the ladies shook her right hand violently and nervously. 'She will become a

writing medium,' whispered our host to me; and pointing to another lady, who seemed to be asleep, 'we do not know yet,' he said, 'what medium she will become.' Among the others, there was a good deal of laughing and chatting, certainly no solemn mood prevailed. At last they grew silent, the circle was formed by the connexion of the hands. We listened, eyes were closed, breaths audible. But the spirits did not seem to like us; for no manifestation ensued. One of the gentlemen present laid his ear on the table, and said: 'he knocks, but very slightly.' I remarked, that I had not heard anything. 'Amos!' exclaimed one of the ladies, 'are you present?' The gentleman again listened to the table, and said: 'he knocks.' 'Amos!' continued the lady, 'will you bring us any manifestations to-night?' The gentleman assured us, that he had heard but two knocks, a negative reply. 'But who is Amos?' inquired I. 'It is the spiritual messenger,' was the answer.

"In the meantime, a very handsome lady, with a sweet expression, had fallen asleep, and began to be clairvoyant; but she saw only her father, and did not reveal to us any transcendental thoughts or facts. The bell of the street-door was now rung, a letter was brought in, and our host read aloud:—

"'Can you spare Amos to-night? We have formed a circle, and have summoned him, but he does not appear; we presume he is detained with you.'

"'We cannot spare him,' was the general answer, and Amos was not dismissed. He must have been annoyed, for he remained obstinately silent. We got no manifestations, no rappings, no letters, no speeches; we went away, and were invited for another day.

"We called again on the 23rd of February, the anniversary of the birthday of Washington, at Mr. —'s, and were told that the spirits had promised a series of manifestations. We entered the room, followed by a young lady and her husband; she was introduced to us as a medium. In the second room, an elderly lady, clad in sprightly green, with a smile on her radiant face, sat on a chair, and shook both her hands violently. As she beheld Mr. Pulszky, she stretched her arms out over his head, and advanced towards him. He retreated to the wall. 'What is she doing?' inquired I. 'She is blessing him, in Washington's name,' replied our host. 'We do not know her; she was sent to us by the spirits, who told her that you would visit us to-day. She came at their bidding. There is also an old gentleman whom we do not know, and who likewise was sent by the spirits.'

"We sat down to the table, and scarcely was the circle formed, when the elderly green lady began to shake her grizzly curls, whilst an old periwigged gentleman, on the opposite side of the table, uplifted his tearful eyes. The green lady stretched out her hands, and spoke with a solemn tone, word after word, as if it were dictated to her:—

"'Let the Lord have all the praise! To me this is the happiest anniversary, and there will be lasting good come of it, to all who will receive me and all I may say. I am rejoiced to meet all who are here. And the Lord will be with His viceroy, who has been kept away by physical infirmation. I bless you all in the name of the Lord, who rules over heaven and earth.'

"GEORGE WASHINGTON."

"I thought the communication was not less strange than the style of George Washington, and glanced at our host. He seemed to understand me, and asked the green lady whether they had ever before had communications of George Washington in this circle.

"'You shall have them in future,' said she.

"'But who was then the spirit who wrote through our medium, signing George Washington?'

"The green lady did not answer, but closed her eyes, and began to bless Mr. Pulszky and me, and kissed Madame Kossuth, and gave her a blessing in her mother's name.

"'What is the name of Madame Kossuth's mother?' asked our host.

"'So many names are fluttering before me,' said the green lady; 'I see them, but I can't read them. Names, names, names, hosts of names. Mary, Sarah, Margaret, is it not one of them?'

"Madame Kossuth shook her head, the company seemed disappointed.

"A young lady had fallen asleep, and wrote a couple of verses. But the poetry of the spirits was as poor as their prose; yet her brother exclaimed, surprised, 'She never in her life has made verses before!' Another very pretty young lady leant backward on her chair, as if exhausted, in a very becoming statuesque position. In the streets drums were heard, the

militia passed the house, and one of the ladies exclaimed, 'An army, an army all around me!'

"Can you tell me which army?" inquired our host. 'I dare not ask, I promised to obey,' was the answer. 'All curiosity must be laid aside, all will be cleared in the right time.'

"But meanwhile, our guests should be convinced by a test," remarked our host. 'Will you answer some questions in respect to their relatives?'

"The lady nodded.

"Where is my uncle?" asked I, in Hungarian.

"All shall be done in the right time," was the answer.

"This was conclusive enough; yet the gentlemen in the circle seemed not to feel how ludicrous they appeared. One of the ladies wept, another laughed; a medium handed a line to Mr. Pulszky, containing the words, 'You had better go!' and so we did. I was no longer astonished at the great number of insane persons in this country, above 15,000 in twenty-three millions; '150 per cent. more, in proportion, than in Hungary.'

"The Americans, especially here in the West, have little leisure to enjoy nature, no art to refine their feelings; their manners proscribe the amusements of Europe. The soul must grow weary of the tinkling of dollars, of the purely material aim of their life. They long for excitement; the ladies grow nervous, and work themselves into trances and visions, and cheat themselves and others. Spiritual circles are formed in lieu of balls, and concerts, and theatres. The gentlemen attend these representations, and are too much worn out by business to look deep into the matter. Besides, such fancies become epidemical. I remembered that it is here in the West, where, in the camp-meetings and the forest-gatherings of the Methodists, people get spasmodic contortions, and begin to roll, to jerk, to dance, and to bark. They have visions and trances, and are thrown into a state of ecstasy similar to a protracted catalepsy. One of the gentlemen who had come from Turkey with Kossuth, said, that when he saw at Broussa, for the first time, the *howling Dervishes*, when they began slowly to move their head forward and backwards, repeating incessantly, 'God is great', and went on accelerating their movements and raising their voice until they got fits, and foamed and fainted, as if possessed, he himself was nearly tempted to join their chorus, and to exclaim with them, 'God is great'. It was in the same country that the orgiastic dances of the followers of Cybele astonished the world, edified the illiterate, and disgusted the learned. And similar psychological phenomena returned again, after centuries, here in the West! I fear that the great progress of which our age boasts is only a progress in the instruction of the understanding, not in the education of feelings. The believers of spiritual manifestations are on a level with the early believers in witchcraft in New England.

"Far more interesting, though not more convincing, than the 'spiritual manifestation', for me, was the *Psychometry* of Doctor Buchanan. He is a clever phrenologist, an able author, an adept of Mesmer and Spurzheim. He told us that he had often found persons of such delicate perception, that when a letter is put on their forehead, they can describe the moral character of the writer, and he calls this phenomena 'Psychometry'."

SIGHTS AND SOUNDS: the Mystery of the Day, comprising an entire History of the American "Spirit" Manifestations. By HENRY SPICER, Esq. 8vo. pp. 480. London: 1853.

THE monstrous improbabilities and transparent fooleries recorded in this volume, find crowds of readers and believers in this metropolis. The librarian, from whom we borrowed it, informed us that no novel of this or any season had been more eagerly or more extensively in demand among his clients. In connexion with this fact, its perusal cannot fail to suggest to the student of psychology themes for meditation. We have our own notions on spirit rappings and turning tables, which we propose some day to lay before our readers.

"TO DAIMONION", OR THE SPIRITUAL MEDIUM: in Twelve Letters to an Inquiring Friend. By TRAVERSE OLD-FIELD. 12mo. pp. 167. Boston: 1852.

WE cannot concur in all the views of the writer of this little volume; but his remarks upon *re daimonion* are, upon

the whole, so ingenuous and so imbued with religious feeling, as to command respect, and convey instruction. The work is not yet much known in London. It may be had from Trübner and Co., 12, Paternoster Row, to whom we are indebted for the copy now before us, as well as for other recent transatlantic publications.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

SPASMODIC ASTHMA.

IN No. 1 of the *Glasgow Medical Journal*, Dr. EBEN WATSON has commenced a series of contributions on the pathology and treatment of Diseases of the Chest. In the paper before us, he treats of spasmodic asthma. The following is an abstract.

We find from Dr. Strang's statistics (Report on the Glasgow mortality bill for 1851, p. 46), that in the year 1851, 213 persons died of asthma in Glasgow; and in 1852 (Report on the Glasgow mortality bill for 1852, p. 28), rather fewer, viz., 202. Now, by the same tables, we also find that the total deaths from all causes, among persons above fifteen years of age, amounted in 1851, to 4543, and in 1852 to 4853; and seeing that asthma very rarely attacks persons below fifteen years of age, it follows that these two numbers afford the means of ascertaining the ratio between the general amount of mortality, and that accruing from asthma. Regarding, therefore, the adult population alone, viz., persons above fifteen years of age, one death was caused by asthma, in 1851, for not more than 20.4 by all other diseases put together; and in 1852, one death was caused by asthma for 23 by all other diseases. Or, to take another view of it, of all deaths happening to persons above fifteen years of age, 4.6 per cent. in 1851, and 4.1 per cent. in 1852, arose from asthma.

The name of spasmodic asthma was originally founded on the mere supposition of a spasm in the air passages, occurring so as to cause the sudden paroxysms of dyspnoea, to which the patient is liable: and now that the structure and functions of the bronchial tubes have been thoroughly investigated and made familiar to every one, we do not suppose, but we know, that such a spasm really occurs; so that in this instance modern science has confirmed ancient hypothesis. There are only two portions of the air tubes where spasm can at all take place, so as to cause dyspnoea. These two portions are at the rima glottidis, and at the extremities of the bronchial tubes, where, instead of cartilaginous rings, there exist muscular fibres. In all other parts of the bronchi, the rings of cartilage in their outer walls prevent anything like complete closure.

Laennec observed that during the asthmatic paroxysm there was great diminution, or even complete absence, of the respiratory murmur; a fact which is explained by the small tubes being obliterated by the spasm, so that the air cannot pass into and distend the air-vesicles. When the spasm begins to relax, the patient inspires slowly and with difficulty; a vibratory sound, accompanying the inspiration, is heard by the bystanders, and much more loudly through a stethoscope placed over the thyroid cartilage. It is caused by the vibration of the glottis, still partially stretched over the entrance to the windpipe. Sufficient importance has not been attached to the spasm of the glottis in asthmatic cases; it is the glottidean contraction which chiefly hinders the patient from overcoming that of the much weaker fibres of Reisseissen in the smaller bronchial tubes. As soon as the muscles of the glottis relax, and not till then, does the respiratory murmur become re-established.

Observation thus teaches us that the *superior constriction* is the last to give way; and Dr. Watson believes that, in early cases of asthma, it is the first to occur. There are two circumstances which prove this satisfactorily to his mind: first, the fact that many cases of purely laryngeal disease end in spasmodic asthma; and, second, that there are cases, though perhaps not very common, in which the affection is confined to the glottis.

In a paper on Chronic Laryngitis, published in the *Dublin Quarterly Journal of Medical Science*, in November 1850, Dr. Watson stated it as his opinion, that inflammation of the larynx, especially if ulcers have formed, constitutes a not infrequent cause of bronchial asthma, and supported this opinion by the relation of a case, occurring in a lady, who had acute laryngitis producing ulceration, and passing into the chronic state. Afterwards, not only the usual symptoms of the laryngeal disease remained, which were persistent, but she was excited, viz. spasmodic asthma, in a most violent manner.

The bronchial tubes ultimately became altered by the violence of the morbid agency that had attacked them. It was not to be expected that at this late stage of the disease any treatment could produce a perfect recovery; but it is satisfactory to be able to state, that after the cure of the laryngeal ulcers by the topical application of solution of caustic, the lady had no such severe asthmatic paroxysms as those from which she formerly suffered.

The occurrence of a kind of asthma confined to the glottis will be sufficiently illustrated by the following case.

CASE. A young lady consulted Dr. Watson about two years ago, for sudden attacks of breathlessness. She had no cough of any consequence, and in the intervals of the attacks she breathed freely enough; but as she seldom enjoyed a night's rest, her general health was somewhat disordered. Her pulse was quiet and natural, and there was no evidence of heart-disease; but her complexion was slightly florid, and her lips were of rather a bluish tinge. When he saw her, there was none of the bronchitis which generally attends asthma, and her age forbade the supposition of its being the ordinary kind of that disease. The respiratory sounds in the larynx were loud and harsh, and the exaggerated length of the inspiratory sound was exaggerated.

The fits of dyspnoea were worst at night and in the morning. When the disease was mild she could, by keeping very quiet and still during the evening, avoid the breathlessness for the early part of the night, and thus she got sleep for a time; but soon after midnight she was sure to awake with frightful dyspnoea, and was obliged either to rise from bed, or, at all events, to spend in a sitting posture the rest of the time usually allotted to sleep. Before she came to Dr. Watson, however, she was always attacked in a similar violent manner in the evening, so that it was only after being completely worn out that she obtained a short repose, from which she was again roused by extreme breathlessness. There was no approach to hysteria.

No other treatment was used but the regular application of a solution of caustic (3i to 3i) to the affected part, at first every day, and afterwards every second day. About six weeks of this treatment sufficed to remove the symptoms, and the lady remained quite well until the following winter, when she caught a slight cold and became affected in a similar way, but she applied to Dr. Watson sooner than on the former occasion, and half the time of the same treatment again produced a cure. During the autumn she again had another attack of her disease; but this time it was so slight, and treated so early, that it did not resist the topical application above a week. Since then she has been entirely free of the spasms, notwithstanding the very changeable and trying weather of the past winter.

Dr. Watson then concludes, 1st, that local causes of irritation in the larynx may produce spasmodic contractions, not only of the glottis, but also of the lesser bronchial tubes; and 2nd, that spasmodic affections of the glottis may occur periodically for a length of time, without involving the small bronchial tubes in any great or important contraction. These conclusions, if correct, prove that asthma commences in the upper and not in the lower parts of the air tubes; and that, in the rational treatment of that disease, the remedies most likely to benefit the patient are such as may be applied to the laryngeal lining and to the glottis itself. But it must be remembered that in many of these cases, universal bronchitis exists along with the spasmodic affection of the upper and lower tubes: this may arise either from causes capable of exciting both diseases, or the bronchitis may have existed previously to the occurrence of an asthmatic paroxysm. The former is then probably the exciting cause of the latter; and he admits that it is difficult, nay, perhaps impossible, to ascertain with accuracy, in this class of cases, whether the spasmodic affection was first excited in the small tubes, or at the top of the larynx. It is enough for practical purposes, however, to know that the latter region is always affected in such cases at the same time as the inferior bronchi, and with even greater intensity; and, moreover, that it is the spasm of the glottis which chiefly maintains that of the bronchi, by preventing their expansion during the forcible inspirations of the patient.

The ordinary treatment by bleeding, general or local, by emetics, antispasmodics, opiates, and mercurials internally, with blisters and various other counterirritants externally, has seldom been followed by even a partial success in these cases. It is established both by clinical observation and by Dr. Williams' experiments,* that bleeding carried to any length can never diminish the tendency to spasmodic contraction in the air-tubes;

but during a bad fit of asthma, such a measure may be absolutely necessary to relieve congestions, arising secondarily, either in the brain, or in the lungs themselves. Again, though emetics cannot save the patient from a renewal of the spasm, they may assist in overcoming that which exists, as well as in clearing away the mucus which clogs up the smaller tubes; and antispasmodics may assist in prolonging their good effects for a short time. In some cases where there is much bronchitis, blisters have a good and more lasting effect, but they do not exercise much influence over the spasmodic asthma. In like manner, a slight mercurialization often benefits the bronchitis of the more sthenic variety, as indicated by the expectoration containing plastic matter, mixed with mucous globules, but it can have no effect on the paroxysmal disease. Opium only lulls for a time—an effect by no means to be lightly esteemed—but when the paroxysm becomes severe it utterly fails.

There is here, therefore, an evident blank in therapeutics. There is no agent hitherto proposed which is capable of removing or greatly diminishing the morbid contractility of the air-tubes. And Dr. Watson thinks that a solution of caustic applied to the interior of the larynx supplies this defect. In proof of its having this exhausting effect on the irritability of the glottis, and ultimately on that of the air-tubes, he refers to the results of its use in whooping-cough, a disease which is so analogous to spasmodic asthma in its pathology, that it is almost enough to show the efficacy of a remedy in the treatment of one of these diseases, to prove its suitability for the other. Now, in proof that the topical treatment of whooping-cough is most efficacious and successful, it is enough to state, that, combining the cases treated by him since he first proposed the plan in 1849, with those treated by M. Joubert, of Cherion, and published in the *Bulletin de Therapeutique*, for January 1852, we have as follows:

	Cases.
A speedy cure (in ten to fourteen days) resulted in .	78
Shortening of disease (three or four weeks' duration) .	39
No change was effected in .	8
Total number treated .	125

There was not one death among all the cases treated, and taking their per centage, we have

62.4 . . .	were cured within a fortnight.
31.2 . . .	were cured in three or four weeks.
6.4 . . .	resisted the treatment.

100.0

He feels assured that no similar statement could be made regarding the results of any other method of treating whooping-cough.

He cannot, as yet, speak of great numbers of cases of spasmodic asthma treated in this way; but he has been very successful with the topical method in some cases that had previously been treated without much benefit in the ordinary manner. Of this he gives two instances.

Heart-disease is a frequent concomitant of asthma, and in such cases it is often supposed that the former is the cause of the latter disease; but this is by no means the constant relation of the two morbid states, for the disturbance to the pulmonary circulation, occasioned by frequent asthmatic paroxysms, is quite as likely to produce the heart-disease as the reverse. It is, however, more important to call attention to the fact of the great difference between simple spasmodic asthma, and that which coexists with heart-disease. The pathology of the former has already been explained as an affection wholly confined to the bronchial tubes. But in cardiac asthma, this is, Dr. Watson ventures to say, never the case. In that disease, the substance of the lung is always more or less altered; generally the air cells have become much distended, their walls atrophied, and even in some places ruptured; and it is this vesicular emphysema, not spasmodic contraction of any part of the bronchi, which produces the urgent thirst for air so distressingly experienced by these patients. There could be no good object served by introducing solution of caustic into the larynx in such cases.

There are, besides the topical application to the larynx, two other remedial measures which Dr. Watson has for some time employed in cases of spasmodic asthma, but regarding which he is not able to speak with precision. The one is electricity, applied, in a gentle current, as much as possible along the course of the larynx and bronchi. In his experiments on the lower animals, Dr. C. J. B. Williams found that such a current destroyed the contractility of the tubes,* and in several instances

* Report read by Dr. C. J. B. Williams, at the meeting of the British Association in Glasgow. See his work on *Diseases of the Chest*, p. 320.

* See Report formerly referred to.

Dr. Watson has thought that it co-operated with other means, in diminishing the frequency and severity of the asthmatic paroxysms. This, however, might be the effect, not only of its local, but of its general action as a tonic on the nervous system. The other agent referred to is strychnia, which he has used in repeated small doses of one-twentieth, or one-sixteenth part of a grain, and he believes with good effect in some cases. Dr. Williams found that when animals had been poisoned by this substance, the air-tubes did not exhibit contractility, and he thought that they were retained in a tonic spasm by the operation of the poison. This very probably was the case, but of course the use of strychnia in medicinal doses produces totally different effects on the human system, and the benefit accruing therefrom must have another explanation. Dr. Watson believes that this medicine, in the doses mentioned above, is a powerful equalizer of nervous action, and therefore a good means of diverting that action from concentrating in any particular organ, such as the bronchi in spasmodic asthma.

In conclusion, Dr. Watson recapitulates the chief propositions sought to be established.

i. Very many cases of bronchial asthma have their origin in laryngeal disease; that some remain for a variable period, as a spasmodic affection of the glottidean muscles, and that in all cases of the disease in question, although the bronchi have long been affected, the chief contraction still occurs in the larynx.

ii. If this contraction at the glottis be in any way overcome, that of the smaller bronchi either simultaneously or speedily relaxes.

iii. The usual remedies employed in spasmodic asthma are either directed against the complications of the disease, and not against its proximate cause, or have been found in practice incapable of accomplishing its removal. The latter are therefore useless, and the former unfit to fulfil the indication referred to above.

iv. This indication may be answered more or less perfectly in different cases, by the application of a solution of caustic of moderate strength (gr. xv., or ᶒi to ᶒi) to the glottis, which is the organ chiefly affected.

v. Cardiac asthma, as it is called, does not usually depend proximately on simple spasmodic contraction of the bronchial tubes, but rather on vesicular emphysema. Cases of this kind are therefore unfit for topical treatment.

vi. Electricity passed in gentle currents, as much as possible along the bronchial tubes, may be found to diminish their contractility; and repeated small doses of strychnia may co-operate with the other means of treatment, probably by withdrawing the nervous energy to other parts at a distance from the affected air-tubes.

TREATMENT OF ECZEMA.

The following is an abstract of an article by M. DEVERGIE, on the treatment of eczema, published in the *Journal de Médecine et de Chirurgie Pratiques* for May 1853. It is extracted from a work which he is about to publish on Diseases of the Skin.

The treatment of eczema ought to be local and general. regard must be paid to the acute, stationary, or decreasing stages of the disease; to its chronic form; to its causes; to the modifications which it may present, according to the part affected, and the age of the patient.

Acute Stage. In all cases of acute eczema, the general health must first be attended to. In some cases, where plethora is strongly marked, it may be necessary either to employ general blood-letting, or to apply leeches to the anus; and this is especially necessary in the spring. As internal remedies, refreshing acidulated drinks must be used, and solid food should be very sparingly used. This treatment must be continued during the whole of the acute stage. When there is much redness, heat, and smarting, M. Devergie employs, with much benefit, irrigations of water, at first lukewarm, then cold, for an hour or an hour and a half daily. The following is the method of applying the irrigations. A vessel of water is placed two feet above the part affected; with the vessel is connected a spout or a wooden tube, to which is fastened a band, divided into two at the lower part. The limb (a leg, for example) is placed horizontally on a waxed cloth disposed in the form of a gutter, so that the water may run off. The two ends of the band are placed one at the upper the other at the lower part of the leg; the tap is turned a little, and the water flows over the part. Under this treatment, the inflammation rapidly diminishes, and the eczema passes, in a few days, from the acute to the stationary stage. This treatment, however, can only be employed in summer, and in subjects in good health, and in whom the effects of cold are

not to be feared. The temperature of the water, and the duration of the application, can be modified as circumstances may require.

With regard to permanent local remedies, some cases of eczema in the acute stage will be found aggravated by aqueous emollient applications, while they receive benefit from pulverulent applications. Poultices, even under the most favourable circumstances, may remarkably increase the intensity and the extent of inflammation; while powdered starch may cause it to diminish rapidly. Other cases will not bear ointments; while they will be benefited by liquid emollients or resolvents, such as compresses wetted with elder-flower or marsh-mallow water, poultices of potato-starch (linseed-meal poultices are not well borne), sifted starch applied in a thin layer, and general emollient baths.

With the above remedies laxatives may be combined.

Stationary Period. The emollient treatment must be continued for some days, until the desquamated cuticle is removed, and in this period the general treatment of the predisposing cause must be commenced. If the patient be of a lymphatic temperament, sulphur, iron, and bitters must be given. If there be gastro-intestinal irritation, or suppressing of some habitual discharge, the proper remedies must be applied.

Of all general remedies, iodide of sulphur, sulphur, elm-bark, and arsenic, are the most efficacious. Iodide of sulphur was first used by Dr. Escobar, a Spanish physician. M. Devergie often administers it in doses of from three quarters of a grain to a grain and a half daily. This substance is readily decomposed by exposure to air; hence M. Devergie recommends it to be formed into pills. He first gives a pill night and morning in a cup of bitter infusion, increasing the dose by one pill every six days, until four pills are given daily.

The treatment by elm-bark has been abandoned for fifty years, although it once enjoyed considerable reputation. M. Devergie gives the elm-bark in the form of syrup, of which a dessert spoonful is taken morning and evening: the dose is increased every three days by a spoonful, so that at length three spoonfuls are taken in the morning and three in the evening. This remedy should be continued for six weeks or two months. Its efficacy probably depends on the large quantity of tannin present.

Arsenic is administered in the same forms as in squamous affections in general.

Period of Retrogression. There are here two special indications: to apply resolvents to the eczema, and to administer purgatives. In the winter, M. Devergie gives a mild purgative of Seidlitz powder twice a week. He prefers salines, because castor-oil does not stimulate the mucous membrane, and drastics are liable to produce obstinate constipation.

When ointments are not borne in the acute stage, it is easy to substitute pulverulent applications; but this is more difficult in the diminishing stage. The only powders which can be used are those of oak-bark and of old wood. M. Devergie has several times attempted to combine with these alum and oxide of zinc, but has found irritation produced. In these cases, he finds benefit derived from lotions of vinegar and water, of alum, of acetate of lead, or of bichloride of mercury. Alum and subacetate of lead are generally prescribed in the proportion of one part in three hundred; corrosive sublimate in that of one in two thousand five hundred. The cloths with which they are applied must be renewed or washed, otherwise they become impregnated with the salts, and a strong solution is applied instead of a weak one.

Ointments, when tolerated, should contain substances to relieve and to put a stop to the itching. To fulfil the first of these indications, oxide of zinc, calamine, tannin, nitrate of bismuth, or acetate of lead, may be used; always adding camphor or chloroform as a sedative. The effect of chloroform in relieving itching is more marked, but less permanent, than that of camphor.

M. Devergie, with other practitioners, sometimes employs juniper-tar oil and tar in ointment. These are most useful in old cases of eczema, especially in the psoriasisiform variety.

When eczema follows a steadily diminishing progress, recovery is remarkably promoted by the use of juniper-tar oil (*huile de cade*). Three conditions are here important: 1. That the oil be pure; for oil distilled from tar is frequently sold in its place, and this, although beneficial, is less so than the juniper-tar oil. 2. It should be used only every three days. 3. It must be spread over the diseased surface, and wiped up immediately with dry cotton, so that the thinnest possible layer of oil may remain. If there is too much, it produces irritation.

This remedy should not be used except in the latter stages.

If applied at a more early period, it either cures or aggravates the disease; and, in the latter case, it changes a case which would have been cured in a few days into an obstinate chronic case.

M. Devergie says, that collodion impedes the exit of serosity, and produces swelling of the skin; the small amount of serum exuded becomes purulent; and the skin becomes more diseased. He has hence abandoned the use of this remedy.

When eczema is general, existing in the form of larger or smaller patches on different parts of the body, internal medication is essential. Emollient and resolvent baths, especially vapour baths, are important; and sometimes it is useful to employ alkaline or sulphur baths.

Nummulated eczema requires the same treatment; and towards the end it is generally necessary to touch the diseased surfaces with solution of nitrate of silver twice or three times, at intervals of four or five days. M. Devergie follows the same treatment in *eczema unguiculorum*, and in all cases of local eczema.

Eczema of the scalp occurs in very early age. It only requires cleanliness, and the use of lotions of elder-flowers, marshmallows, or linseed. The hair must not be cut; and poultices must be applied but rarely, and then for a very short time. When the eczema is diminishing, M. Devergie would give mild purgatives, and apply a blister to the arm. He regards the disease as a means of evacuation set up by nature, the intensity of which ought to be moderated, but not entirely checked.

In very obstinate cases, which are almost always confined to a very limited surface, M. Devergie observes, that quacks often succeed better than physicians, because they employ remedies which will produce stimulation of the affected parts; such as ointment of nitric-oxide of mercury, or of sulphate of copper; or alkaline lotions and frictions. M. Devergie has tried a remedy employed in Berlin, viz., friction with a strong solution of carbonate of potash. He finds, however, no advantage in this treatment over that with juniper-tar oil.

M. Devergie has found dextertine bandages highly useful, especially in varicose eczema. He treats eczematous ulcers of the leg by strapping from the foot to above the ulcer.

CASE OF DIPLOSIS AVENS SUCCESSFULLY TREATED.

The following case is related by Dr. F. L. KEYES, in the *American Journal of the Medical Sciences* for April.

C. W. C. P. called at Dr. Keyes's office on the 22nd January, 1851, complaining of excessive thirst, which had increased very much during the previous three months. He was obliged to drink frequently during the day, and to have a pail of water at his bedside during the night, which he usually drank before morning, without the least abatement of thirst. In other respects, he enjoyed perfect health. He had suffered from excessive thirst (though not to the same extent) for ten years. Medical treatment had failed.

Dr. Keyes, considering the thirst to depend upon a morbid condition of the stomach resembling gastrodynia, prescribed as follows:—

R Hydrarg. deut-iodidi gr. iv.
Potassii iodidi ℥j.
Aque destillatæ ʒj. M.

Fiat solutio cujus æger sum. ℞v. ter in die.

He was also desired to chew pieces of the root of the rhubarb, and to swallow the juice.

In a few days, the thirst became less urgent; and, before the medicine was nearly all taken, the patient considered himself well. Up to Dec. 27th, 1852 (the date of the author's paper), the patient had had no return of the complaint.

SURGERY.

CYSTIC SARCOMA OF THE MAMMA REMOVED BY OPERATION.

The following case is related by Dr. R. T. CORBETT, in No. 1 of the *Glasgow Medical Journal*.

CASE. The patient was a lady, aged 38, of spare habit and rather weakly constitution, and the mother of six children. Two years and five months previous to August 1852, after weaning a child, she was much troubled with milk in her breasts for two days, but could not be relieved of it, being on board of a ship. From that time she began to fall off in her health, and three

months afterwards, she accidentally discovered a tumour in her left breast, and became Dr. Corbett's patient. The tumour was then the size of a hen's egg, hard, the seat of slight pain, which was somewhat increased on pressure. It was situated at the fore part, and rather to the left side of the mamma; and was quite moveable. Supposing from these symptoms that it might be a simple chronic inflammatory or strumous tumour, he ordered cod-liver oil and fomentation. She went to the country, and remained eleven weeks, but did not follow his advice. At the request of some practitioner in the locality, the swelling was leached four times during that period. On her return, the tumour had acquired the size of a goose's egg, was still hard, unattached, and the seat occasionally, or after exertion, of slight shooting pain. She had quite recovered her general health.

Dr. Corbett now ordered her three grains of hydriodate of potass, in a wineglassful of decoction of sarsaparilla, three times daily. At this time, Dr. McFarlane was called in consultation, and he recommended tincture of iodine to be applied every second or third day, and the internal medicine to be continued. This was done, and persevered in for a month; when there being no improvement in the tumour, Dr. Corbett recommended equal parts of iodine and camphorated mercurial ointment to be rubbed over it twice daily, and continued the other medicine. This treatment was pursued for fifteen days; and fomentations and a teaspoonful of cod-liver oil three times daily, gradually increased to a tablespoonful, for a month, when the tumour was fully the size of a man's fist, hard and lobulated, attached to the mammary gland, which moved with it, but it had no adhesion to the pectoral muscle. It was still only slightly painful. The patient's general health was good. Dr. Corbett was urgent to remove the tumour by operation, but the patient went to Calcutta with her husband.

October 25th, 1851. She had returned from Calcutta, having been ten and a half months away. She was delivered of a son four weeks before her arrival, and recovered well; but she was very thin, and suckled the child with the diseased breast as much as with the healthy one. The tumour, by the time she left Calcutta, five months after leaving Glasgow, had enlarged to the size of a cocoa nut of nearly full growth; but by the time she reached Glasgow it had attained an immense size, the after progress of the disease having been much quicker than at the commencement. The integuments covering the breast were now much inflamed and traversed by many large veins, and she complained of unusual heat and slight pain in swelling, which were removed by cold water dressing. The surface was irregular, the skin being elevated in several places into considerable sized swellings, and thinned, where fluctuation could be felt. The tumour was very moveable and pendulous, requiring to be constantly well supported. The glands in the axilla were not affected. Dr. Lawrie was now consulted, who suggested that a valvular opening should be made where fluctuation was most distinct, as much fluid as possible drawn off, and the aperture then closed. Dr. Corbett punctured the tumour next day, and drew off an ounce of opaque glairy fluid. The breast was not the least reduced in size. Considering the disease to be cystic sarcoma, they recommended the removal of the mass, as soon as she had weaned her child, and had somewhat recruited her system. The patient gave up nursing about the middle of January last, after having suckled her child fully three and a half months, and her health improved much in consequence; but the tumour continued steadily to enlarge in all directions, except downwards.

June 21st, 1852. The patient's general health was reported pretty good, but she was very emaciated. Menstruation was regular. Pulse 76. The tongue clean; the bowels confined. Half an ounce of castor-oil was given, which acted next morning.

June 22nd, 1852. The patient having been put under the influence of chloroform, Dr. Corbett performed the operation with the assistance of Dr. Andrew Buchanan, and Mr. Parker. Two slightly curved incisions being made through the integuments, so as to include only a small section of them with the nipple, at right angles to the pectoral muscle, the tumour was completely removed; and allowing one pound for fluid lost from an incision afterwards made nearly through it, the whole mass and liquid contents must have weighed about eight pounds. The hæmorrhage was moderate; four vessels required ligatures, after which the wound was brought together by five stitches, and cold water dressing applied. There was no secondary bleeding. In the evening, warm water dressings were substituted, and continued for seven days. The stitches were not removed till the wound had united, which it did by the first

intention, and the patient recovered without any untoward circumstance occurring.

DESCRIPTION OF THE TUMOUR. The tumour was examined in a general way immediately after its removal. An incision made completely through it gave exit to a large quantity of fluid, of various colours and consistence. While making the section, the surgeons repeatedly came upon considerable collections of milk in the dilated tubes of the gland. The larger part of the tumour consisted of cysts, varying in size from the smallest point visible to the naked eye to that of a large plum, contained in larger cysts, and attached in many instances to their walls by bands passing from their extremities. These contained cysts were gelatinous-looking and transparent, and presented an appearance similar to tapioca thoroughly boiled in water. Many large cavities also existed throughout the tumour, containing numerous cysts suspended by pedicles. Towards the centre and lowest part, the mammary structure presented a fibrous texture, arising perhaps from pressure, caused by the diseased mass resting upon it while in a state of chronic inflammation. The following morbid appearances were found on more careful examination.

1st. Vascular, firm, fibrous tumours about the size of small plums, contained in large cavities, and having cysts growing from their surfaces; and innumerable clusters of the same in the surrounding structure, in many places resembling miniature bunches of grapes. 2nd. A very vascular fibrous tumour in a cavity, about the size of a large plum, enclosed in a strong capsule, and having a multitude of various sized cysts growing over its surface. These cysts had a delicate cellular tissue within them in which the fluid was collected, so that when punctured it took some time to ooze out. 3rd. Cauliflower excrescences contained in a large cavity, with a few of the milk follicles attached to its walls, dilated and filled with a creamy fluid. 4th. Spongy, vascular, and warty-looking tumours; some of these were very irregular in shape, some were soft, and others were fibrous. 5th. Numerous concrete pearly-looking bodies, varying in size from a small to a large pearl, were also observed.

Towards the lower and internal part of the tumour, the mammary gland was found free from disease, with the exception of increased solidity of structure. The openings of the milk-ducts were patent, and the tubes themselves healthy, with the exceptions mentioned.

Judging from the facts ascertained from the history of this tumour, and its dissection, Dr. Corbett believes that the disease commenced in the cellular tissue in front of the mammary gland, but beneath its fibrous envelope, and not in the ducts of the gland. The fact of large collections of milk having been found in the lactiferous tubes and in the milk follicles, seems to strengthen the opinion, that the mammary gland was the part which became last affected. These collections, in Dr. Corbett's opinion, could only be accounted for by the effect of pressure of a contiguous growth, seeing that the milk flowed very freely, even when the disease had advanced considerably, and became less free, only when the disease pressed on with increased rapidity.

In Sir Astley Cooper's work on the *Diseases of the Breast*, chap. III, on Hydatid Disease, case 3 resembles the one narrated in many particulars. In it, the tumour when first observed, was hard and moveable, and gradually became larger, till it measured two inches in diameter. Mr. Bransby Cooper removed the tumour, and when cut into, a single cyst containing fluid was opened, formed in the cellular membrane of the breast, and surrounded by a solid effusion of fibrine. In all probability, such was the structure of the tumour now described at its commencement; and had the swelling been removed at that time, the mammary gland might have been saved. Case 10 of Sir Astley's work is also of a similar character; but the original situation of the tumour, besides being sub-areolar, may be intra-glandular, or sub-glandular, in which latter circumstances the mammary gland must always be removed with the diseased mass. Mr. Birkett, in his work on *Diseases of the Breast*, says: "The anatomy of the new developments of this class presents an almost inexhaustible variety, at least in appearance. Cysts of every variety of size, blended with fibrous growths varying in the same way, cysts containing fluid only, cysts with fluid an intra-cystic growths, vascular and pendulous, very soft and gelatinous, in other instances of the most fibrous and solid nature, present themselves in different parts of one and the same tumour."

ENTRANCE OF AIR INTO THE SAPHENA VEIN DURING THE REMOVAL OF A TUMOUR CONNECTED WITH THE SARTORIUS MUSCLE.

Dr. J. MASON WARREN recently related to the Boston Society for Medical Improvement the following, as having occurred when he was removing a tumour incorporated with the Sartorius muscle, and spread out on its back.

When the tumour "was lifted up, in order that the dissection might be prosecuted underneath it, on cutting the Saphena vein where it pierces the fascia, a distinct sucking sound was heard, as of the air being pumped into the vein. The finger was immediately placed over the mouth of the vein, and the farther admission of air prevented. The pulse remained for some time quite slow, and the patient did not revive from the effects of ether, the dose of which had been small, as readily as is usual."

Several cases of the same description have been published by Nysten, Amussat, and Dr. Cormack. Vide *London Journal of Medicine*, vol. ii. for 1850, p. 928, and Dr. Cormack's Thesis, Edinburgh: 1837.

CASE OF EXCISION OF THE HEAD OF THE FEMUR.

In No. I of the *Glasgow Medical Journal*, Dr. M. S. BUCHANAN thus relates and comments upon a case of this description.

Although the head of the femur was successfully removed by Mr. A. White, of Westminster Hospital, in the year 1831, the operation found no advocates, till Mr. Fergusson revived and performed it in several cases with the best results. Within the last five or six years it has been practised by other surgeons, and it may now be ranked among the established operations of surgery. Hitherto it has only been had recourse to in those more advanced cases of morbus coxarius, in which the head of the bone had become dislocated on the dorsum of the ilium. In the following case of excision of the head and neck of the femur, performed by me in the infirmary with a very successful result, it will be remarked that there is a striking contrast to most of those on record, in the above respect, as well as in the age of the patient, his previous robust health, and the whole history of the case.

CASE. James Downie, aged 41, Irish, plasterer, was admitted into the Royal Infirmary, 2nd November, 1850. In September 1849, he became incapacitated for his employment, and was unable to walk without a stick. From that period, till admission into the surgical wards of the hospital, he had been under the care of several intelligent surgeons, by whose advice he was repeatedly cupped, blistered, and cauterized over the affected hip joint, and had calomel and opium till typhalism was induced; as also some other medicines, the nature of which cannot be ascertained.

On the 2nd of November, 1850, the appearances and symptoms were as follows:—Patient cannot walk without the aid of crutches, and while in the recumbent posture is obliged to lie on his back, being unable to rest on either side. The right leg is semiflexed on the thigh, and does not admit of extension, apparently from contraction of the hamstring muscles, induced in consequence of the limb having been long kept in that position, as the one in which he lay with greatest ease. The knee joint appears to be unaffected. There exists considerable fullness around the right hip joint, over the trochanter major, and down the thigh for about four inches. In this swelling, fluctuation is distinctly perceptible. Over the whole gluteal region of the affected side there is felt a constant pain, greatly aggravated by the slightest motion of the limb, or on impinging the head of the bone against the acetabulum. He also complains much of pain in the inner side of knee. Pulse 110, feeble. Tongue dry and foul. Great thirst. Bowels regular.

An incision was made into the lower portion of tumour, through which was evacuated a large quantity of sero-purulent fluid mixed with flakes of coagulated lymph. Head of thigh bone found to be in its normal position. Fomentations were applied. *Full diet. To have six ounces of wine.*

Nov. 20th. The abscess daily discharges a large quantity of pus, now of a healthy appearance. Appetite much improved. Thirst continues. On pressing the head of the bone against the acetabulum, crepitation is distinctly perceptible. Continue the wine, and let him have four ounces of whisky daily.

Dec. 12th. To-day, while the patient was under the influence of chloroform, the opening in communication with abscess was enlarged, and a careful examination made with finger and probe, when no opening into the joint could be detected.

pressure over the trochanter still elicits a gritty feel, seemingly in the seat of the acetabulum.

From this date to the 22nd, the medicines prescribed were sulphuric acid, quinine, and opium. During this period, he had perspiration and diarrhoea.

On the 22nd, a consultation of the medical officers of the hospital was held, and, after careful examination of the case, failing to detect symptoms of other disease, it was recommended that the operation of excision of the head of the femur should be performed, as the only means by which life could be prolonged. The nature and extreme danger of the operation having been explained to the patient, he urgently requested its immediate performance, saying he would take his chance, small as it was, rather than endure any longer the excruciating agony he had been constantly suffering for some months back.

Dec. 23rd. The operation was performed in the following manner, the patient being under the influence of chloroform. Having been placed on the table on his left side, an incision to the extent of six inches was made perpendicularly over the dorsum of the ilium, in continuation with that previously made below the trochanter major, through the gluteus medius and minimus. A transverse one, forming the letter 'T', was then made, extending from anterior edge of pyriformis muscle to a line drawn from anterior superior spine of the ileum downwards. On exposing the joint, the capsular ligament was found entire, with the exception of a small portion of its inferior border, which was perforated by ulceration. The capsule being incised, the head of the bone was with care disarticulated, and made to project out of the wound by crossing the leg over its fellow. The head of the bone was found completely denuded of cartilage, and, along with the greater part of the neck, in a carious state. The section was made at the root of the great trochanter by means of a common saw, and the diseased bone removed. The apex of the trochanter major, being found in a carious condition, was also removed by the cutting pliers. The shaft of the femur below the trochanter was sound. The acetabulum was completely denuded of cartilage, and rough; the cotyloid and round ligaments were gone, ulceration having extended to the above parts. The edge of the cavity, which was carious, was removed by the forceps. No vessels requiring ligature, the lips of the wound were approximated at once by means of stitches and adhesive plaster, over which was applied the usual dressing supported by a bandage. The operation was completed in a quarter of an hour. About three ounces of blood were lost, and at no time did the pulse flag, although the patient was perfectly unconscious during its performance.

Dec. 25th. Progresses favourably. No return of the diarrhoea since the operation. Pulse 100, firmer. Appetite improved.

Dec. 29th. The stitches were to-day removed. The wound cicatrizes rapidly. The discharge is diminished, and more healthy. Sleeps well. Pulse 84, of good strength. Perspiration greatly diminished. Says he feels no pain in the seat of former disease, and, except at time of dressing, or in attempting to move limb, is quite easy. Omit brandy and quinine. Six ounces of wine daily. Two grains of opium three times a-day.

Dec. 31st. Continues to improve daily. With the exception of a small opening, where the perpendicular incision meets transverse, immediately below the trochanter major, the wound has united, and healed kindly underneath. The posterior edge of the trochanter major is slightly projecting through the lower opening already alluded to, and feels rough; but, on introducing the probe, the bone is found to be sound underneath. Pulse firmer. Two grains of opium at bed-time only. Continue wine.

January 2nd, 1851. Yesterday, towards evening, bowels became relaxed, and during the night he had four loose stools; but, by the administration of four grains of powdered opium in a starch injection, the diarrhoea was checked. He had taken during the day a larger quantity of soup than usual. Has taken a beef-steak to-day, instead of soup, with relish. The projecting portion of the trochanter is nearly covered with healthy granulations. A Probe introduced into the opening in the wound communicating with the acetabulum, discovers the surrounding parts in a healthy state, and only about the size of a shilling of the inferior edge of the cotyloid cavity is felt rough.

Jan. 11th. Has continued to improve since last report. The acetabulum is covered now with healthy granulations, with the exception of a small portion about half an inch in circumference, which the probe detects rough. The trochanter major is also covered completely with healthy granulations, over which cicatrization advances rapidly. Can now turn himself with ease round upon back, from left side, without experiencing the least pain.

Jan. 21st. Discharge being so small, wound has been

dressed only every second day since last report. The opening in communication with the cotyloid cavity, and through which the pus escapes, is now so small as hardly to admit the passage of a quill; and a probe introduced into this fails to detect any carious bone, healthy granulations having filled up whole of the acetabulum and surrounding parts. Superficial ulceration over the seat of incision and the trochanter major is almost completely cicatrized. On examination of the knee-joint, flexion and extension can be performed without pain; but on continuing extension, the hamstring muscles resist, and prevent the limb from being straightened.

Jan. 24th. These last three days, appetite has rather failed. Is troubled with acid eructations, which last symptom was removed yesterday by the administration of one drachm of Gregory's mixture. Ulceration over the seat of former incisions is completely cicatrized; the opening already mentioned, now about the size of a crow-quill, alone existing. From this a small quantity of healthy pus is daily discharged. Motion of the femur on the os innominatum can be accomplished to a considerable extent without pain. The whole cavity of the acetabulum is found to be filled up with osseous plasma and healthy granulations. Pressure on the dorsum ilii, and all around spot where disease existed, causes no uneasiness. In consequence of his long confinement to the hospital, the wards of which have been of late much crowded, his general health has suffered slightly; he was removed to the country by railway, and he stood the journey very well.

After this time, Dr. Buchanan visited him weekly, and found him progressing as favourably as could be desired, acquiring new strength, his appetite good, and in every respect feeling comfortable, and in good health. About two months after leaving for the country, he was seized with an attack of dysentery, having in the interval enjoyed great ease and freedom from pain. This affection, acting on a constitution already weakened by protracted suffering, speedily reduced him, and in the course of two or three days he died.

AUTOPSY. The wound was almost entirely healed up, a small opening admitting a probe alone remaining open. The whole course of the incision underneath was completely consolidated. The cut surfaces of the neck of the femur and great trochanter were quite sound, being coated with a cartilaginous incrustation. The circumference of the acetabulum, from which the edges had been removed, was studded with spicula of new bone, showing the progress which nature had already made towards a cure. The acetabulum was filled up with granulations, but in some points was still rough, the reparative process having not yet extended over the whole seat of disease. At the upper part of the cavity, there was a small isolated piece of rough and porous bone, loose, and evidently in the course of being discharged, piece by piece. Around this, the bone was rough, but not spongy; while other parts were solid and smooth.

Dr. Buchanan makes a number of interesting remarks upon excision of the head of the femur, in the course of which he states that his case will be found to differ from all others previously reported, in the following particulars:—

First. The capsular ligament was found entire, with the exception of a small opening at its inferior border, from which the pus made its escape.

Second. The head of the femur was consequently found in its normal position.

Third. Although the acetabulum was diseased, still only a part was removed; and yet a successful result followed.

Fourth. The advanced age of the patient; most of those operated upon by Messrs. Fergusson, Smith, and Norman, having been under twenty, some of them in childhood.

Lastly. Dislocation of the head of the femur has been regarded as another indispensable requisite for the performance of its excision, as, till that event occur, a cure by ankylosis may occur.

MIDWIFERY AND DISEASES OF WOMEN.

DR. G. HAMILTON ON THE USE OF THE FORCEPS IN TEDIOUS LABOURS.

Among the original communications in the *British and Foreign Medico-Chirurgical Review* for April 1853 is one by Dr. G. HAMILTON, of Falkirk, on the mortality from the use of the forceps in tedious labours. His object is to advocate the employment of this instrument much more frequently than is usually inculcated in the precepts of obstetric writers, or than is generally believed to be necessary or justifiable.

Dr. Hamilton says, that he first derived his notions of the

advantage of more frequently using the forceps from the late Dr. Reid of Edinburgh; and that he believes that this doctrine has been gaining ground among intelligent practitioners. A recent notice of Dr. Murphy's work on "Obstetric Medicine," in the *British and For. Med.-Chir. Review* for last October, has, to his disappointment, shown him that a very different line of practice is still advocated. He proposes to compare the statistics as furnished in the review, with those of three hundred cases of labour attended by himself.

The general conclusions from the statistical facts collected by Dr. Murphy are: "1. That in the forceps deliveries occurring in 78,892 midwifery cases in the hands of British, French, and German practitioners, nearly one in every four of the children was still-born. 2. That in protracted labours, 'so far as the children are concerned, the proportion still-born is very much the same, whether the forceps be employed or not; the difference, if any, being in favour of leaving these cases to nature'. 3. That the use of instruments is to be discountenanced in all but exceptional cases of this kind, in which the habit of the patient is too feeble to admit of her enduring a protracted labour without risk of exhaustion'. 4. That Ramsbotham employed the forceps once in 729 cases, Joseph Clarke once in 742, Collins once in 684, Kilian once in 78, Carus once in 14, Siebold once in 9; and 'Dr. Murphy's recommendation is, to employ them only in cases of positive arrest', unless dangerous constitutional symptoms are present."

Dr. Hamilton next gives the results of his own practice in three hundred cases of labour, among a generally robust and healthy population, composed partly of the upper and middle classes, and partly of the agricultural and working classes. The deductions which he afterwards makes are supported by a similar practice, extending to at least a thousand cases.

1. There were 306 children, five of the labours having yielded twins. Of these, eight were dead at birth; five being putrid, and one having been destroyed in a case of placental presentation. Of the other two, one died before the labour began; the other was a case of breech-presentation, in which much force was required to deliver the head. Setting aside, therefore, the first seven cases, the mortality to the children at birth was 1 in 298.

2. In the 300 cases, the forceps were used forty-one times—rather less than 1 in 7; and all the children were born alive.

3. Of the whole children born alive, ten died within about a week; six having been delivered naturally and easily, and four with forceps. Of the former, two, and of the latter one, were premature; so that, of children who might have lived, 4 in 256, or 1 in 64, died within a week when the labour was natural; and 3 in 41, or about 1 in 14, when the forceps were used.

4. The forceps were used chiefly in first labours, and in females who had a particular form of pelvis. They were used ten times in primiparae, and seventeen times among seven other females. Deducting these twenty-seven, we have the forceps used in one case in twenty-one.

5. The labour process proved fatal to three mothers, or 1 in 100 in all; of these, one had a natural labour, and two were delivered by forceps. The mortality to mothers was thus 1 in 259 in the former class, and about 1 in 20 in the latter.

6. In none of the cases did any local injury to the parts arise from the use of the forceps.

Dr. Hamilton hence concludes, that the mortality to the children from the labour-process was in his practice 1 in 298; while Dr. Clay gives the mortality in the Dublin Lying-in Hospital, in 156,000 cases, as 1 in 17; Dr. Simpson, in the Edinburgh Maternity Hospital, as 64 in 1417, or 1 in 22; Dr. Lawrence, of Montrose, as 1 in 46. The mortality from the use of the forceps also varies from one in four or five to two in three; while Dr. Hamilton states that, in his practice, forty-one consecutive forceps-cases have occurred without a single death. The mortality to the mothers he has also found for the most part smaller than in most of the tables which he has consulted. He suggests, that perhaps this may be accounted for by differences in the circumstances, and in the treatment employed; for, instead of the crowded, debilitated, and often ricketty population of large towns, from which these statistics are mostly drawn, his cases have occurred in a robust and healthy population, free from puerperal epidemics.

The author divides labour into two stages; the first ending when the os uteri has been dilated to about double the size of a crown-piece. In the first stage, he does not interfere as a general rule; but in protracted cases, if the pains are not very urgent, he allows the labour to go on for twelve, twenty-four, or more hours; sometimes giving an opiate. He believes that the safety attending protraction of this stage invalidates Dr.

Simpson's statistical deduction, that the ratio of mortality increases with the length of labour.

With the second stage of labour, according to Dr. Hamilton, commences the great danger from delay; and hence he endeavours to shorten it. He first endeavours to clear the head from the uterus; and for this purpose he ruptures the membranes, if this has not already occurred; and supports the anterior and lateral parts of the os uteri with his two forefingers during the pains, which are thus increased in force and efficiency, till the uterus slips over the head. When necessary, he introduces the whole hand, and pushes up the uterus all round the head. In two or three of the forceps cases, he did not succeed in this procedure, although the head got pretty far down in the pelvis: in these, he applied the instruments within the neck of the uterus, using the two forefingers of the left hand for pressing the uterus upwards as the forceps brought the head down.

If the ear is exactly opposite the symphysis pubis, or slightly to either side in the wrong direction for making the turn into the hollow of the sacrum, he generally soon applies the forceps, if little or no change occurs in the position of the ear. When the ear does not indicate a revolution of the head, he is convinced the labour will be tedious; and within from an hour to two hours, he applies the forceps. When the broad transverse form of the pelvis is decided, as in flat or squat-made females, where the ear is on the wrong side, where the pains are severe but no progress is made, where the mother is a primipara, or where the first half of labour has been tedious, he interferes at an early period. He states, that he has not been able to turn the head with the fingers or hand, as has been advised by some authors. Of the forty-one forceps cases, he says that at least eight-tenths had the head in the transverse position; and the rectification of this position is one of the endeavours which he has in view. In the other cases, the child was larger, or the pelvis smaller, than usual; or the pains were deficient.

Dr. Hamilton's practice has extended to one thousand cases; and he says that he "goes back to his three hundred and eighteenth labour, and forty-fourth forceps case, before he meets with a still-born child"; and this was a case in which perforation was necessary.

He thinks that "it clearly follows, from the statements made, that it is, in such instances as have been referred to, the delay in the second half of labour, and not the application of the forceps, which is usually fatal to the child"; and he infers "that instruments should be used much sooner and much oftener than is generally done".

In six of the forceps cases, chloroform was given: in five of these, the deliveries were easy; but, in the other, the chloroform decreased the strength of the pains, and prevented the head from being brought by them within the reach of the forceps. Ergot was used only three or four times in the 300 labours.

The forceps used are those invented by Dr. Ziegler of Edinburgh; they are thirteen inches in length. The blades are of equal length, and strength.

[This is an interesting paper: but we cannot sanction the doctrines which it teaches.—EDITOR.]

ULCERATION OF THE CERVIX UTERI TREATED BY THE APPLICATION OF COLLODION.

The *Bulletin Générale de Thérapeutique* for January 15th, states that M. ARAN employs collodion with success in certain cases of ulceration of the neck of the uterus, especially those which depend on, or are kept up by, the friction of the vagina against the cervix, directed either forwards or backwards. An illustrative case is related of a woman, aged 29, who was admitted into the Hôpital de la Pitié, who had for two years suffered from headache, dyspepsia, leucorrhœa, and dragging pains in the lumbar and hypogastric regions. These symptoms had for six months become much more severe. On examination, M. Aran found the uterus in a state of anteversion; the neck was large and extensively ulcerated, principally at the posterior part, which was directed towards the hollow of the sacrum. Rest, slight cauterisation from time to time, with nitrate of silver, baths every two days, poultices, enemata, and emollient injections, were tried for more than three months without any marked result. When lying down, the patient did not suffer; when erect she was troubled with dragging sensations in the loins and hypogastrium. M. Aran applied collodion over the cervix, by means of a brush. The patient only felt a slight burning sensation when the speculum was removed. Three days afterwards, most of the collodion had run off, and the ulcer, which could be seen through it, appeared to be rapidly progressing towards cicatrisation. The application of collodion was repeated three times within a month; and at the

end of this period, cicatrization was nearly complete. At the same time, the dragging in the loins and the pains in the stomach had diminished, and the leucorrhœa had completely disappeared. The patient walked without pain or difficulty; her general health seemed excellent; and, with the exception of a little weakness in the loins, and some heaviness of the head, she felt quite well.

This is satisfactory enough as far as it goes; but has the cure been permanent? On this subject we have some fears; for it is stated that "the anteversion is still much marked"; and in this case the tilting of the cervix backwards, and the consequent friction of its posterior lip against the vaginal wall, may reproduce the ulceration.

DRY-CUPPING A SUBSTITUTE FOR ERGOT.

The *Charleston Medical Journal and Review* for January 1853, quotes a paper on this subject from the *Nashville Journ. of Med. and Surg.*, of which we give an abstract.

Dr. WASHINGTON has recently discovered that dry-cupping, applied to the lowest part of the sacrum, produces dilatation of the os uteri; and, applied higher up, contraction of the uterus.

In a case, where the pains had endured fourteen hours without producing any perceptible effect, in consequence of rigidity of the os uteri, Dr. Washington applied a dry-cup as low down on the sacrum as possible, so as to cover the origin of the nerves to the os uteri. Complete relaxation ensued; at the next pain, the head descended to the outlet; and at the second pain the patient was safely delivered; and that in less than ten minutes from the application of the cups. In tedious labour, the cup should be applied first to the lowest point of the sacrum, and if, in the course of ten or fifteen minutes, the patient is not delivered, another should be applied higher up, so as to cause the uterus to contract. *The lower one should always be on when the upper one is applied, so as to insure relaxation of the os uteri when the pains come on.*

In retained placenta, the cups are to be applied higher up, so as to cause the uterus to contract at once, the relaxation of the os uteri being always sufficient after the fœtus has passed.

When ergot is administered, the woman is delivered by main force, without any relaxation except that produced by the most fearful pains. By dry-cupping, two or three pains are sufficient, and the amount of suffering is not more than ordinary.

LITZMANN ON OVARIAN TUMOURS AS A CAUSE OF DIFFICULT LABOUR.

The *Deutsche Klinik*, for 1852, Nos. 38, 40, and 42, contains an article by Professor LITZMANN, of Kiel, on the influence of ovarian tumours in producing difficult labour. The following is an abstract of this interesting paper.

It is a recognized fact, that conception is no more prevented by the degeneration than it is by the extirpation of one of the ovaries. Pregnancy seems in many cases to induce a more rapid growth of the ovarian tumour: this is especially true with reference to cystous and cancerous tumours. Fatty growths, as a rule, are not affected by gestation. Gestation is also prematurely interrupted by ovarian tumours; partly from their mechanical pressure on the uterus, and partly, (especially in cancer,) by the setting up of a profound disturbance of nutrition and innervation. Small ovarian tumours, which entirely or partially sink into the pelvis, are apt, from their pressure, to bring about abortion at an early period of pregnancy.

If pregnancy reaches its full period, the labour may end naturally, both as regards mother and child; but more frequently ovarian tumours give rise to impediments endangering the life of the mother as well as of the child. To thirty-one cases collected by Puchelt, jun., Dr. Litzmann has added fifteen from various sources, and one case described by himself—making in all forty-seven cases, in which labour was impeded by ovarian disease. Of these cases, in twenty-five the diagnosis of ovarian tumour was confirmed by section or by puncture: four of the tumours were simple cysts, three were compound, twelve were fatty cysts, and six were scirrhus growths. In the other twenty-two cases, the relation of the tumour to the ovary is not pointed out. The diagnosis during life is by no means easy, and can for the most part be considered only as more or less probable. In general, large tumours, lying entirely or partially over the entrance of the pelvis, are readily distinguished; while in small tumours, occupying the posterior part of the pelvic cavity, the diagnosis from other tumours which occur in this part is difficult. These ovarian tumours are always found in the space between the vagina and the rectum. The principal signs by which they can be distinguished from fibroid cystic growths,

etc., between the vagina and rectum, are their gradual direction from the synchondrosis on one side toward the middle of the hollow of the sacrum, and the possibility of pushing them more or less easily above the entrance into the pelvis. But commonly the tumour is first detected only when it is entirely in the pelvis, and when its reposition during labour is not unfrequently prevented by the pressure of the gravid uterus or by adhesions. Fibrous and scirrhus growths from the inner surface are distinguished by their not easily mistaken place of origin, as proved on examination *per rectum*. More difficult, and often even impossible, is the diagnosis from other tumours in the recto-vaginal space, as cysts of the uterine ligaments, or of the Fallopian tubes, or tumours of the posterior wall of the uterus. As the latter are found very rarely to produce hindrance to labour, the detection of a tumour in doubtful cases affords a strong suspicion that it is ovarian. It is of especial importance to discover whether the tumour be solid, or a cyst, whose contents may be let out by puncture or incision. Fluctuation, if present in the least degree, will be best detected by examining the tumour simultaneously through the vagina and rectum in the intervals of the pains. The smoother and more equally developed the swelling is, the greater is the probability of its being a cyst.

Ovarian tumours are most dangerous to the progress of labour, when they are wedged more or less deeply in the pelvis: but tumours lying above or upon the entrance into the pelvis may, in certain circumstances, produce a great mechanical impediment.

The forty-seven cases related contain a notice of the progress of, in all, fifty-six labours. In ten, natural delivery took place, mostly after tedious labour and severe pains. In two cases natural labour was assisted by the death and putrefaction of the child, in another by the pliability of a hydrocephalic head. One child was born alive; the reports do not state the fate of the others. Four of the mothers died.

In seven cases, the tumour was pushed above the pelvic entrance. In three of these cases, turning was performed; in one, the forceps were applied; and in three, the labour proceeded naturally after the reposition of the tumours. Two of the children were still-born; and of five born alive, two soon died. One of the mothers died.

In nine cases, puncture or incision of the tumour was performed; once through the abdominal parietes; twice through the rectum; and in all the other cases through the vagina; always with the effect of diminishing its volume. In three cases, labour proceeded naturally; in three, perforation and extraction had to be performed; in one case, turning was necessary; and in one, the forceps were applied. Only one child was born alive; and five of the mothers died.

The forceps were applied in altogether eleven cases: once after puncture; once after reposition of the tumour; once to extract the head in a case of turning; and in one case they were ineffectual, and delivery had to be effected by embryotomy. In all the other cases, the forceps were the only instrumental means employed; in these, two of the children were still-born, and four of the mothers died.

Turning was performed in eight cases; in three after reposition of the tumour, and in one after puncture. The results to the life of the mother and of the child are not stated with sufficient accuracy. Extraction in foot-presentation was performed in three cases; all the children were dead.

Embryotomy was performed in seventeen cases; in four after puncture (in which three of the mothers died); and in one case in artificial premature labour; of the remaining twelve cases, five were fatal to the mothers.

Premature labour was induced in two cases.

Of the whole, seven children were born alive, thirty-five were still-born, while there is no account of fifteen; of the mothers, thirty-two recovered, and twenty-four died.

In the treatment of these cases, a principal rule is not to delay operative interference too long, as it is very rarely that a favourable termination to the labour, as regards both mother and child, is to be hoped for from the powers of nature. By delay the life of the child is almost always sacrificed: its skull usually undergoing pressure between the tumour and the wall of the pelvis, as in a case of narrow pelvis. As regards the mother, besides the tediousness of the labour, the unavoidable bruising of the tumour and of the weaker parts of the pelvis is to be feared; and when the pains are violent, there is risk of rupture of the uterus or of the tumour. The result of every operation, to which recourse has been had at a late period, is doubtful.

During labour, we must first attempt to push the tumour, *per vaginam* or *per anum*, above the pelvic entrance. The most convenient period for this appears to be immediately after the rup-

ture of the membranes, or as soon as more active pains have set in. If reposition is not possible, no time must be lost in ascertaining whether it is possible to diminish the size of the tumour by evacuation of its contents. This is best performed by puncture through the vagina with a curved trocar; and if the contents are too firm, the aperture may be enlarged by incision. If this operation is ineffectual, the choice lies between embryotomy and the Cæsarean section. Extirpation of the tumour during labour seems to have not yet been attempted. No help can be expected from the forceps or from turning, unless the size of the tumour have been previously reduced. With regard to the indication of premature labour, Dr. Litzmann thinks it but rarely indicated; as the narrowing of the pelvis by ovarian tumours is mostly so remarkable, that without previous reposition, a living child cannot be delivered even prematurely. He says that it should be performed only in those cases in which there is a narrow pelvis as well as an ovarian tumour.

ASSOCIATION INTELLIGENCE.

PROVINCIAL MEDICAL & SURGICAL ASSOCIATION.

ANNIVERSARY MEETING, 1853.

The members and friends of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION are informed that the twenty-first anniversary of the Association will be holden at Swansea, on Wednesday, the 10th, and Thursday, the 11th of August next.

The Council of the Association will meet at seven o'clock on Tuesday evening, August 9th, by permission of the Worshipful the Mayor of Swansea, in the Guildhall.

The First General Meeting of the Association will be holden in the Guildhall, on Wednesday morning, August 10th, at ten o'clock, when the President, JAMES ADEY OGLE, M.D., F.R.S., will take the chair, and afterwards resign it to GEORGE GWYNNE BRID, M.D., President-elect.

The Report of the Council will then be read by the Secretary, after which Augustin Prichard, Esq., Lecturer on Descriptive and Surgical Anatomy at the Medical School, Bristol, will deliver the "Address in Surgery". Cases and communications will also be read, and other business transacted.

At one o'clock the meeting will adjourn.

The meeting will resume its sitting at two P.M., when the Report of the Benevolent Fund will be presented, after which cases or short communications may be read.

At five o'clock the meeting will adjourn.

Conversations. The President and Local Committee have proposed to receive the members of the Association at eight o'clock in the evening, in the National School-rooms.

On Thursday morning, the members of the Association and their friends will breakfast together, at half-past eight o'clock. Tickets two shillings and sixpence each.

At twelve o'clock the same day, a General Meeting of the members will be holden at the Guildhall, when the "Address in Medicine" will be delivered by Dr. C. Radclyffe Hall, M.D., Torquay, Devon, and cases and other communications read.

On the evening of the same day, the members and their friends will dine together at six o'clock. Tickets one guinea each, including wine and every expense.

Due notice will be given of the places at which the breakfast and dinner parties will assemble.

The principal hotels are the Mackworth Arms, the Castle, the Commercial Inn, the Bush, the Cameron Arms, and the King's Head.

The Local Committee will gladly attend to any application for securing beds and lodgings at a reasonable charge.

The Local Committee consists of the following gentlemen:—

Council of the South Wales Branch.

Dr. Bird, President-Elect.
Dr. Morris, President-Elect of the South Wales Branch.
Dr. Howell, Swansea.
J. Brewer, Esq., Newport.
E. Davies, Esq., Merthyr.
Dr. Lawrence, Carmarthen.
Dr. Vachell, Cardiff.

J. D. Brown, Esq., Haverfordwest.
E. Evans, Esq., Cardiff.
W. P. Evans, Esq., Swansea.
F. C. Batt, Esq., Abergavenny.
Dr. Sylvester, Cowbridge.
T. French, Esq., Neath.
W. H. Michael, Hon. Secretary.

Other Members of Committee.

J. S. White, Esq., Dowlais.
W. Rowland, Esq., Swansea.
Dr. Williams, Swansea.
T. A. Essery, Esq., Swansea.
J. G. Hall, Esq., Swansea.
H. L. Prichard, Esq., Taibach.
Dr. T. J. Whitty, Briton Ferry.
J. Cook, Esq., Morriston.

Members and visitors arriving at Swansea, are requested to apply at the Guildhall on the Wednesday morning, when, on registering their names, they will be supplied with tickets of admission to the meetings of the Association, with such local information as their convenience or necessities may require.

Gentlemen who purpose to join the breakfast or dinner parties are requested to make intimation of such intention to the Honorary Secretary, W. H. MICHAEL, Esq., Swansea, on or before Thursday, August 4th, that means may be adopted to secure suitable accommodation. Local circumstances render this arrangement indispensable. The Committee of Management therefore request that the members of the Association will kindly pay due attention to this request, otherwise great inconvenience and disappointment will certainly accrue, and very considerable expence be unnecessarily incurred.

The Secretary of the Association will be in attendance to receive the subscriptions and arrears from those who have not previously had an opportunity of paying them; and those members who do not attend the meeting, and wish to remit their subscriptions, may readily do so through friends who attend the meeting, or through their own bankers, to Messrs. Roberts and Co., London, for Messrs. Barwick and Co., Worcester, the bankers of the Association; or the same may be remitted by Post-office order to Sir Charles Hastings, or J. P. Sheppard, Esq., Worcester.

J. P. SHEPPARD, F.R.C.S.,

Secretary to the Association.

The objects of the Association will be much promoted by members making its advantages known among their medical friends and acquaintance. Gentlemen desirous of joining the Association are requested to apply to some member of the Council residing in their immediate neighbourhood; or where there is a Branch Association, to the Secretary of the Branch.

EDITOR'S LETTER BOX.

MORE EASY TO AMEND THAN TO OBTAIN A MEDICAL REFORM ACT.

LETTER TO THE EDITOR.

SIR,—It seems to me most injudicious in medical reformers to show lukewarmness or opposition to the present Medical Bill merely because it does not happen, in all respects, to suit their notions. I wish you would impress on our members that it is much easier to get an Act amended, than to get a Bill passed through Parliament for the first time; and that the hope of obtaining a measure which will never require to be amended, is utterly visionary, and ought to be discouraged.

I am, etc.,

A GENERAL PRACTITIONER.

London, May 17, 1853.

COMPULSORY VACCINATION.

LETTER FROM GEORGE KING, ESQ., TO THE EDITOR.

SIR,—I have read the compulsory Vaccination bill passed by the House of Lords, and I consider their lordships are deserving of the thanks of the country for this act of humanity and philanthropy. It is very clear that the small-pox prevention act of 1840 has not produced the effect intended, as this malignant and frightful disease is now raging in some parts of the country. I hope that in the Commons, by the assistance of the profession, the bill will be made more practicable, and much of the machinery removed. All that is required is, that every child should be vaccinated before a certain age; and that, if this has not been done, the parents or relations should be subject to a fine. If such an act as this were passed, and published by mayors of cities, parish officers, and others, parents would soon enough get their children vaccinated. They would not require a register to inform them of the consequences of their neglecting to have it done. Most people know that, if they rob or steal, they will be punished; and if they commit murder, the chances are that

they would be hanged; and they must also know that there is a law to enforce it. It has never yet, that I have ever heard of, been considered necessary to give parents a certificate to tell them that, if their children should ever rob, or steal, or commit murder, the law will be carried into effect against them.

Those that have had much to do with vaccinating have often wished that they were armed with some authority to enable them to contend with not only the prejudices of the lower classes, but the opposition and obstinacy of the educated portion of the community against their children being vaccinated. It is useless for the government to pass laws for the prevention of contagious and epidemic disease, and allow the rising generation to go unprotected from such a loathsome disease as the small-pox. We should expect and suppose that the laws of reason and good sense would compel persons to adopt vaccination; but it is a lamentable fact, they do not. It is this that renders compulsion, or some legal authority, absolutely necessary. We are not allowed to do each other any personal injury with impunity; neither ought any one, by their neglect, or through ignorance, prejudice, or apathy, be permitted to kill or injure their neighbour by propagating a malignant and pestilential disease; and there is much credit due to the nobleman who is endeavouring to put a stop to such a state of things; and, instead of our opposing him, as medical men and friends of humanity, we ought to advise with and aid him in his philanthropic and praiseworthy intentions—the extinction of small-pox: and I think this will be done if the compulsory bill is passed. The vaccination bill of 1840 is still to remain in force; therefore, the poor will be able to get their children vaccinated by those vaccinators appointed by the guardians; and the public will very soon find the ways and means to get their children done, when they find that they will be subject to a fine if it is not done before they are a certain age. Their being compelled to have their children vaccinated then, the only thing wanted will be the proof or the certificate that it has been done. This proof may be obtained without the establishment of any new office or officer. It is well known to the profession, that the clerks of the unions supply the union vaccinators with a certificate-book, in which they register all that are vaccinated by them now. If the Registrar-general of births and deaths were to send to every qualified medical practitioner a similar book, he could give to the parents of the child that he had vaccinated a certificate that the child had been effectually vaccinated: this certificate should be taken to the registrar of the subdistrict, to be registered in the same manner as is done in the registering the cause of death; and the registrar of the district to give the parties a certificate in return, as he does to the undertaker in case of death; and this certificate would show, or should be taken as legal proof, that the child had been vaccinated. All this might be done without any charge to the parents; the registrar to be paid by the clerks of the unions, in the same way as he is paid for registering births and deaths. Whether the fee for doing it should be sixpence or a shilling, I will leave the legislature to decide. To this plan I do not think the public or the profession would object. There is no union here with the poor-law guardians or the poor-law commissioners. Although the public would be by the compulsory vaccination act obliged to get their children vaccinated, they would be free to get it done by whom they pleased. There would, no doubt, be every facility offered them. I, like hundreds of others, vaccinate gratuitously, and shall continue to do so; and am willing to give the certificate to boot. For the registrar to give to the parents a certificate, when they call to register the birth of their child, as is recommended in the bill, to tell them that they must do what we should suppose duty and parental affection would prompt them to do, would be very annoying, and by many, I fear, would be considered an insult.

The great object that Lord Lyttelton seems to have in view is to get rid of small pox. I do not think that he is wedded to any particular plan of doing it; and we, instead of opposing him, ought to render him all the assistance we can in his benevolent endeavours. If we wish to get rid of one of the most contagious and frightful diseases that we have to contend with, we must support compulsory vaccination. I am, etc.,

GEO. KING.

Bath, May 20th, 1853.

[If Lord Lyttelton require the assistance of the profession, time must be granted. That is the point for which those who have most studied the vaccination question are now contending. Arguments on all sides can then be fairly stated and weighed. EDITOR.]

COMPULSORY VACCINATION.

LETTER FROM JAMES WILLIAMS, M.D., TO THE EDITOR.

SIR,—My experience for nearly ten years in a large poor law district, enables me to question many of the statements in the ASSOCIATION JOURNAL in regard to vaccination. I admit that we are miserably paid; still, on the other hand, I do conscientiously and positively assert that vaccination has been both skilfully and honestly performed, by a body of practitioners as well qualified as any in the united kingdom. (Vide Lord Lyttelton's speech, April 12th, Journal 15th.) To this assertion I also add my own testimony as to the readiness, on all occasions, with which *good lymph* is supplied by the National Vaccine Institution, whence I never have, in any one instance, experienced the least difficulty in obtaining it. Believing, therefore, with Lord Lyttelton that the principal obstacle to universal vaccination is the *ignorance and indifference* of the poor and uneducated; and further, while as an Englishman I would not renounce a title of my right to freedom of opinion, yet I perceive a decided contrast between *wholesome coercion for the benefit of the many*, and absolute tyranny for the advantage of the few. I therefore give my unswerving support to a compulsory medium of vaccination, without which I believe that universal vaccination cannot be attained.

I would ask two simple questions: Could such a compulsory measure as the one already before the country at all interfere with the right of the rich, by preventing them from employing their own private medical attendant? Or would it impose any hardship on the poor, by compelling them to seek the poor law medical officer, instead of his now being obliged to look after them for their own benefit, and even then meeting with difficulty—nay, often insult—in endeavouring to persuade them into a willing acceptance of the same?

Another point of argument occurs to me. Were public vaccinators to be appointed, in lieu of the poor law medical officer, for the vaccination of the poor, would it not unjustly deprive us of those extra fees intended (and contracted for) to make up the regular union salary? I am as anxious as any one that the new bill should be both just and practicable; yet believing you to have somewhat misunderstood the measure, I have felt it my duty to present to the profession my thoughts on what I conceive might be a great and important advance in sanitary reform.

In the discussion on vaccination at the Metropolitan Counties meeting last week, Dr. Cormack stated "that clause v specially provides that there is to be no remuneration legally due for the highly responsible and troublesome duties imposed by the act", *omitting the important words* at the end of the clause—"other than is provided by the first-rected act"; this act enabling boards of guardians to contract for the performance of vaccination."

Also, clause i was styled as absolutely ridiculous (?), which states, "that in all practicable cases, the vaccination is to be performed from the arm of a healthy child". This plan I have more frequently done than otherwise; and always, if practicable, give the parents the choice of the child's arm from which the lymph was to be taken. The latter part of the clause may be improved or omitted.

Upon a review of the whole subject, I cannot but conclude that the measure has been received in that bad spirit which has too often distinguished our profession when medical reform has been attempted by *non-professional statesmen*. Thus we have often lost the good we might have attained, by cooperating with and assisting such laudable efforts for the relief of suffering humanity. Why not forward suggestions for improvement, instead of condemning the measure wholesale?

I am, etc.,

JAMES WILLIAMS, M.D., M.R.C.S., & L.A.C.
Medical Officer of the Woburn Union.

THE ECONOMIC INSURANCE COMPANY.

LETTER FROM JOHN FRANKED, Esq., TO THE EDITOR.

SIR,—About a fortnight since, I received a letter from the "Economic Insurance Office", containing the usual questions relative to the health of a patient of mine, to which I replied by a note, stating that it should be attended to, on receiving the customary fee or a reference. I heard no more, until, a few days

* The entire Act as amended is reprinted at p. 424 of the number for May 13th. One shilling and sixpence is the legal fee per case. Some Boards of Guardians contract for sixpence a case. EDITOR.

afterwards, a medical practitioner from an adjoining town called on me, and in the course of conversation stated that he had been requested to see the same patient, and give an opinion on the life. I told him of my reply, and I understood that he was to be remunerated for his opinion. About a week after, I received another letter from the "Law Life Insurance Office", respecting the same patient, and gave a similar answer, when I received a communication from some solicitors in London, stating that my fee would be paid by them. I then waited on my patient, and found that, having a slight cough at the time of the neighbouring practitioner's visit, he had most likely given an unfavourable report, and the Economic Office had declined to assure, though it had a previous insurance on the same life; but as I was well acquainted with the patient, I could give a very favourable opinion, and I believe the life is now insured; therefore, in this instance, the Economic Office has lost an insurance for want of liberal conduct to the medical profession.

With reference to insurance offices generally, my own experience is, as a rule, that the old offices decline to remunerate medical men, or, at all events, remunerate their own officer only; but the younger offices invariably give a fee. Some offices, such as the "West of England", always refuse the fee; but if the insurance is a good one, they will pay the fee rather than lose the business; and I believe it only remains for medical men steadily to decline giving the opinion except on remuneration, and the difficulty will entirely cease.

Your publishing the names of companies which do, and which do not pay, enables medical men to lay the subject before patients, and to advise them to select those which act with equity.

I am, etc.,

JOHN PRAKKEED, M.R.C.S.E., and L.A.C.

Langport, Somerset, May 10th, 1853.

PHYSICIANS, SURGEONS, AND GENERAL PRACTITIONERS, BY NOT KEEPING THEIR RESPECTIVE PLACES, CAUSE HOSPITAL ABUSES.

LETTER TO THE EDITOR.

SIR,—Being connected with a metropolitan hospital, where large numbers of out-patients attend, I would add my testimony to the justice of many of your remarks upon hospital abuses. I for one should feel greatly obliged to you for suggesting an efficient remedy. The great mass of gratuitous patients are, as far as I know, of no advantage to the hospital surgeon. A few proper cases, carefully attended, would furnish him with much better means for clinical instruction.

As far as the profession is concerned, the great evil which has arisen appears to me to be, that the physician or surgeon and the general practitioner no longer maintain their respective positions in regard to each other. Many cases, which ought to be treated by the general practitioner, become hospital patients; and, on the other hand, many patients, who really ought to have the benefit of the opinion of a physician or surgeon, are kept away.

This is a subject which has two sides. It is manifestly to the advantage of both parties that a better understanding should prevail. An evil like that under consideration cannot be confined to one class of the profession.

With a better regulated system, and with increased mutual confidence, a large class of patients, who now consider that they have a right to seek hospital relief, would be attended by the general practitioner, and would be seen occasionally, either at the hospital or in private, by the physician or surgeon. The patient, under this system, would be better attended; the physician or surgeon's time would be saved; and the general practitioner would be remunerated.

I will conclude by furnishing you one example in illustration of the above remarks. A very few days ago, a well-dressed man came before me, with a great degree of independence, and with his hat on, wishing to be made an out-patient. The following dialogue ensued:—

"What is your business?"

"A grocer."

"Surely you are not a proper person to seek hospital relief?"

"My governor subscribes to the hospital, and I consider I have a right to apply."

"You must give my compliments to your governor, and inform him that you have no right whatever. The hospital is for the poor."

I am, etc.,

A SURGEON.

May 23rd, 1853.

NEWS AND TOPICS OF THE DAY.

THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION OF IRELAND. A society with the above name is about to be established in Ireland by means of a revival of the old Medical Association. We will notice this important movement at some length in an early number.

THE VACCINATION BILL. The Manchester Medico Ethical Association has presented to the House of Commons, through Mr. Bright, M.P., a petition in which they express their entire approbation of the principle of compulsory vaccination; but at the same time point out that several of the provisions of Lord Lyttelton's bill are defective in themselves, and oppressive to the medical profession. The clauses to which this remark is more particularly made to apply are, the appointment of stations not more than a mile from the furthest limit of the district; the vaccination from the arm being made compulsory; the reporting every exceptional instance to overseers or guardians; the vesting of power in the guardians to vacate the contract; the want of provision for supplying the medical officers with lymph; the onus of transmitting a duplicate of the certificate to the Registrar; and the inadequate remuneration of the medical officer.

The medical practitioners of Hull have addressed to Lord Lyttelton a memorial on the subject of his bill. They submit, that "the attempt to make vaccination compulsory will probably have a tendency to make a beneficial and salutary boon odious and unpopular, simply because it is compulsory and not voluntary; they would therefore suggest, that every facility should be given for extending the benefits of vaccination, but that the compulsory enactment of that operation should be confined to those children who may not possess the advantage of the protection of their natural guardians". They also protest against the amount of service required being at the maximum, while the rate of remuneration is at the minimum; and they suggest adequate remuneration as a necessary means for securing the efficient performance of vaccination. They also complain that no efficient means are provided for supplying an available supply of lymph from some central establishment. The clauses which make the vaccinators responsible to the guardians, or some more highly constituted authority, and which require vaccination to be performed from the arm of a healthy child, are approved of. The memorial is dated May 11th, and is signed by John H. Gibson, M.R.C.S.; William Lunn, F.R.C.S.; Robert Hardy, M.R.C.S.; William Joseph Lunn, M.D.; Henry Munroe, M.R.C.S.; F. R. Horner, M.D., M.R.C.S.E.; Henry Cooper, M.D., F.R.C.S.; Owen Daly, B.A., M.B.; Robert M. Craven, jun., M.R.C.S., L.A.C.; James Dosser, M.R.C.S.E., L.A.C.

THE INCOME TAX. The new bill on the income tax is now published. The new law is to date from the 5th of April last; and, according to its phraseology, is to continue to the 6th of April, 1860, "and no longer". The duties to be imposed are as follows: During the term of two years, from the 5th of April, 1853, the yearly duty of 7d. in the pound; and during the further term of two years, from the 5th of April, 1855, the yearly sum of 6d.; and during the further term of three years, from the 5th of April, 1857, the yearly sum of 5d. On lands and tenements, etc., for the first two years, in England, the duty is to be 3½d. in the pound, and in Scotland and Ireland 2½d.; for the second two years, 3d. in the pound in England, and 2½d. in Scotland and Ireland; and, for the last three years, 2½d. on property in England, and 1½d. on property in Scotland and Ireland. Houses let in several tenements are to be charged on the landlord. To exempt persons from the operation of the measure, their incomes must be under £100; and, if under £150, they are entitled to an abatement. Persons who have made insurance, or contracted for a deferred annuity on the lives of themselves or wives, are to be allowed an abatement of duty in respect of the annual premiums.

UNIVERSITY OF LONDON. Petitions in favour of extending the Parliamentary franchise to the University of London have been presented to the House of Commons from the following places and persons since the 10th instant:—Great Yarmouth, Hastings, Dublin, Westminster, Stepney, Bradford, Stockport, Norwich, Brecon, Wandsworth, Canterbury, Royal Free Hospital, Brenchley, Huddersfield College, Leeds School of Medicine, and from the inhabitants of Bucks. The total number of petitions presented now amount to 90.

THE SURGEONS AND THE GUARDIANS OF THE POOR OF THE BISHOP STORTFORD UNION.

THE Surgeons of the Bishop Stortford Union have formed themselves into a Society, and have lately passed a resolution to resist a reduction in their salaries without good reason being shewn to justify the reduction. They have refused offers to continue their appointments, because the offers were upon a scale of reduction unexplained, and because the treatment they have received at the hands of the guardians was wanting in proper courtesy to them as professional men.

The surgeons have explained their conduct in a sensible and temperate address, which we subjoin for the benefit of those who may be similarly placed.

THE POOR LAW AND ITS MEDICAL OFFICERS.

While changes are being made from year to year by the powers which move the machinery of the POOR LAW, it may not be out of place to enquire into the position of the MEDICAL OFFICERS; how they are regarded by those who immediately appoint them; what evil keeps alive mistrust between both officers and guardians; and why the profession loses caste by the present contract system?

Is the profession, to serve the purposes of the poor law, supposed to be needy? Is it supposed to be ready to undertake, at the instance of its employers, any district, however much to its own inconvenience? Is it supposed to hold a jealous fear of its fellow-labourers? Can it offer a manly resistance against such oppression as weak minds and false economy alone suggest, and not fear lest a successor be appointed in its place? Is it supposed to be the creature of a year's appointment? that its reappointment may carry with it any changes, however off-hand, frivolous, or vain those changes may be, either in stipend or district? Is it supposed to bow to some local interest which keeps it in its place? If so, well may it be felt to move in degradation.

Does not the poor law believe that the above is the condition necessary to be found and treated with? and if not, why has the profession had so many reasons for thinking so?

The medical profession has long entertained a great grief against the poor law agents, and has long endured a *sic volo, sic jubeo* treatment, oppression without redress; but instances have lately proved that a better spirit is capable of being aroused on its behalf: it believes that the time is come when its cause will be acknowledged beyond the limits of the union house, and that the public will sympathize with it in all its wrongs, and raise its voice to assist in securing for it its rightful claims; or, as can be seen in many unions, respectable members will fall away from the undertaking, and the care of the poor be literally sold to adventurers.

It will be necessary to view the district, the stipend, and the contract, as the three principal features of this appeal; it is hoped, that each, in the bearing it takes, will help to prove that the profession only claims a higher standing than is usually awarded to it by poor law dealings; and that its own strength, while the public is with it, is all that is required to place it firmly in its true position.

The district should be considered a widely-spread infirmary or hospital; the approaches to the wards being neither ready nor convenient, and hospital nicety adding nothing to accommodate the intended cures; but however rude or inconvenient its character, let it be considered a widely-spread hospital, the medical care of which, as in all hospitals, should be entrusted to those who, with reputation and experience can fulfil all its requirements; but in no case should the claims of him who has faithfully discharged the duties, and whose pleasure it may be to continue those duties, be supplanted upon *little misunderstandings*, or from the wrong desire to make insignificant and worthless changes.

In the stipend agreed upon, be it what it may, the poor law insists that the profession is called upon, by reason of its private interests, to yield its time, its advice, and appliances to the poor law cause as to the mainspring of its own existence. That the profession is called upon to do much for the poor, no member disputes, but surely they who concede so largely to a necessity, should have, not only a voice in the limits of that concession, but should always, in matters in any way affecting their duties, be *considerately and delicately*, not to say *honestly* consulted, or allowed to form part of the council upon any business in which their services are involved: this would add nothing to the

expense, and might entirely remove mistrust on both sides; for the profession has as keen a sense of right and wrong as other men have; is willing to make any concession at need, and under explanation, which might be demanded at its hands. The poor law at present prefers to treat the profession as if it had always something to propose and carry out, the reason for which would not bear publicity, implying an overreach in the bargain, and so establishing the very mistrust it ought to be but too anxious to dissolve.

The necessity spoken of is that the poor law cannot afford to pay the ordinary *professional remuneration*; the concession is that which the profession makes to the poor law in its difficulty; it undertakes to sacrifice eight out of ten parts of its *usual remuneration*. It is everywhere admitted that the remuneration of private practice is always *hardly earned*, and usage has established the present day remuneration as the *standard value* of its time, its advice, and its cares. The difference between the poor law stipend and this standard, is the difference between £2 and £10, or between £20 and £100; and does not this concession claim for the profession *higher considerations*? Ought it not to have a voice in that council which has charity for its object? Should the poor law keep back one single thought in treating with those who serve the public and the poor to this extent? Or should it, under the cloak of a *public purse*, try by cunning to outwit an unsuspecting confidence? The effect of this is to build up an antagonizing power, and not to secure attachment and strength in carrying out a public duty.

The medical relief of a union is *about* one-twentieth of the gross expenditure; but as government pays one-half of that, one-fortieth is the real cost of such service and advice as the profession supplies to the poor. Upon what pretext must a reduction in such an item stand, when those who pay, or those who appoint, rationally and seriously open their minds to the subject? For, by a reduction of £7, £10, or even £15 per cent. upon the present medical outlay, the largest rate-payer could not be relieved by more than the fraction of a penny at the year's end; and when, as is often the case, such change is offensively proposed, who but the servile would acquiesce?

It seems but too true that the contract, without other consideration, lowers the character of the profession, which becomes a *servant* by a monied contract, and that of a debasing kind; it loses its dignity by showing (however nobly) how little it can work for; its charity, its good heart, its endurance, are never thought of, never uttered, are imputed to base motives; and if instanced under oppressive changes, are replied to by the *monied conditions*. The contract builds up mistrust in the minds of the guardians, because they know that without probity and honour the terms cannot be fairly complied with; they doubt the due fulfilment of the contract, and they hold in contempt while they doubt; and offence is done to the mind of the profession, because without other considerations being named and made to take a prominent feature in the contract, it enters into a bare commercial bargain. The profession does not ask for the *ordinary remuneration*; it does not seek to be estimated by obtaining £5 more for its supply of advice and remedies to 100 sick poor: it is content with what custom has awarded for some years past, but it does firmly and manfully demand to be placed in its proper position; it claims that the contract shall be considered an *honorary contract*,—the stipend being only analogous to the *customary fine* in a lease, its periodical and legal acknowledgment.

This, and the right to be present whenever medical subjects are discussed, are its due; to say nothing of the good that would result to the poor law cause by the harmonizing effect that would necessarily accompany such an understanding. Let the profession only be treated with upon this ground, and with what different feelings might the work be done, and how differently might it be respected? It would prosecute its labours without mistrust from those who appoint, and without offence to itself: for an honourable admission is beyond value in money.

Let the poor law on its part concede in *spirit* what it may not concede in *money*; let it cease to value the *mental and corporeal sacrifices* of the profession in the same list with the *marketable produce* of the soil; let it take to its council those who are most capable of assisting in its deliberations, and it will find its own working power improved, and will see how oppression may be removed from a class whose life is made up of hardships under trials, revolting in most instances to patience and common sense, and whose complaint is against the purely commercial spirit of the treaty as it now exists.

KING'S COLLEGE HOSPITAL. The anniversary festival of this institution was held on Wednesday evening, the 4th instant, at the Albion Tavern, Aldersgate-street, when about 150 gentlemen sat down to an excellent dinner. His Royal Highness the Duke of Cambridge presided, and amongst those present we noticed Admiral Lord Radstock, Lord William Paulet, the Bishop of Chichester, Sir Benjamin Brodie, the Rev. Dr. Jelf, Colonel Fergusson, Mr. William Fergusson, Sergeant Storks, Dr. Budd, Dr. Arthur Farre, Dr. Johnson, Dr. Tanner, Dr. Guy, Mr. Bowman, Mr. Henry Lee, and others. The noble chairman in proposing the toast of the evening—"Prosperity to King's College Hospital," remarked, "that since the establishment of this hospital in 1839, it had afforded relief to 230,941 patients, of whom 16,000 had been treated within the wards, and 215,000 as out-patients. The object therefore for which the institution was established had entirely succeeded; but unfortunately its future operations could not be satisfactorily carried out without receiving liberal support from its patrons. He was sorry to inform them that it was considerably in debt; and that it would be impossible to carry it on effectively unless its friends came forward in a spirit of increased liberality. He had been over the hospital only that morning, and although the building itself was quite unsuited for its present purpose—having been originally a poor-house—still, notwithstanding this disadvantage, the general arrangements were admirable; and he doubted not that when the new hospital now building was finished, it would form one of the most complete establishments of its kind. He had learnt that in 1852 the expenditure was £4,944, and for that sum 1,250 in-patients and 25,000 out-patients had been received, and 500 attended at their own homes; unfortunately, however, there was an excess of expenditure over the receipts of £1,979. He thought it better not to gloss over any difficulty, but to look it manfully in the face; and he trusted that the subscriptions of the present company would show that they were determined to give the institution their cordial support and encouragement." Donations and annual subscriptions were then announced to the amount of £2,111:13:11, including twenty guineas from the chairman. Several other toasts having been proposed and responded to, the company separated.

ST. MARY'S HOSPITAL. The annual meeting of subscribers was held on the 17th instant, in the Board-room, the President, Earl Manvers, in the chair. From the report it appeared that the accommodation had been increased from 50 to 150 beds, and these were insufficient for the demand. Although the progress of the institution was satisfactory, yet a sum of £7,000 was required to complete various important designs, such as a medical school on the collegiate plan, a chapel, and a dead-house. It is also the intention of the Governors to procure a charter of incorporation. The total number of cases treated during 1852 had been 6,541. The receipts for the year were £7,814:14:7, and the disbursements £7,979:14. The report was adopted, and after a vote of thanks to the chairman the meeting separated. We have received a copy of the report, which we may afterwards notice at more length.

ROYAL FREE HOSPITAL. The annual festival of this institution was celebrated at the London Tavern, Viscount Maidstone presiding. The chairman, in proposing "Success to the Royal Free Hospital" stated, that since the opening of the charity, 403,533 patients were relieved. The hospital was in debt to upwards of £1,000, and as the principle upon which it was founded was that of affording medical and surgical relief without the delay of making inquiry as to the applicants, he knew of no charity which was more in accordance with the example of the Founder of Christianity, and none which had more claims upon public benevolence. The donations announced during the evening amounted to £1,360.

WESTERN DISPENSARY FOR DISEASES OF THE SKIN, (21A, Charlotte Street, Fitzroy Square.) A meeting of the subscribers and friends of this charity was held, on Tuesday, 24th May, at the rooms of the dispensary, the Rev. Canon Dale, the President of the institution, in the chair. The report stated that during the eighteen months' existence of the Dispensary, a large amount of good had been effected: that, although chronic cutaneous diseases are often found incurable, yet, out of 442 patients admitted, 192 had already been discharged cured, 44 benefited, and "the remainder, with very few exceptions, advancing as rapidly towards recovery as is possible under the chronic character and protracted duration of the disease". Not one case had been discharged as incurable. The medical gentlemen present spoke in strong terms of satisfaction at this grati-

fying result, and complimented Mr. Hunt, the surgeon to the institution, for his perseverance and success in the treatment of these refractory and tormenting diseases. The report stated that the finances were very low, and that the assistance of the charitable much needed.

ROYAL DISPENSARY FOR DISEASES OF THE EAR, DEAN-STREET, SOHO-SQUARE. The thirty-sixth anniversary meeting of the above institution was held at the Dispensary on Wednesday, the 11th instant, the Rev. J. D. Lamb in the chair, supported by the Rev. W. Brock, Dr. Tilt, J. F. Clarke, Esq., F. Falkner, Esq., and others. During the past year, 1,388 patients were admitted on the books, afflicted with various diseases in the ear, head, and throat, with numerous cases of deafness arising from rheumatism, gout, influenza, and other faulty conditions of the system at large. Of these 559 were discharged cured, 308 discharged relieved, and 521 remain in weekly attendance. The following statement was made by Mr. Harvey, the surgeon to the institution:—"In a large proportion of the cases, the disease may be traced to living in confined and damp localities, to bad drainage, intemperance, want of cleanliness and exercise in the open air, insufficient or adulterated food, wet feet and clothes, and sleeping in damp rooms; incapacitating many from holding situations or following their ordinary employment, and compelling them in too many instances to become the inmates of workhouses."

MEDICAL BENEVOLENT COLLEGE. The first festival of this institution was held on Wednesday, the 4th inst., at the Freemasons' Tavern. The chair was taken by Earl Manvers, President of the Institution: there were also present, the Bishop of St. David's, Mr. Freshfield, M.P., Mr. Pownall, Colonel Hammer, Sir C. M. Clarke, Dr. Conolly, Dr. J. A. Wilson, Dr. Locock, Dr. Forbes, Mr. South, and a large number of practitioners from the metropolis and the provinces. The total number was about two hundred and fifty.

In responding to a toast, the Bishop of St. David's said, it was a source of much happiness to find the medical profession had supported their character as society expected. It had strong claims on the public at large, and upon the whole nation, for the support of an institution like this. No one could deny the usefulness as well as the honour of the profession. It was a very laborious profession, and required much study and care before parties were allowed to practise. A medical man had to pass many sleepless nights, never knowing any regular repose, but always at the call of any person. He exercised his art and gained his triumphs in the chamber of the sick, and so equally alike to rich and poor, that he believed they must have some higher and more noble motive than mere worldly profit. He trusted that this institution would be an object which the public of all classes would join in supporting.

Earl MANVERS proposed "Success and prosperity to the Medical Benevolent College, and to John Probert, Esq., the founder".

Mr. PROBERT said, that a grand principle or rallying point of union in the profession was to prevent their poor brothers going to distress. In his own parish, a brother practitioner was an inmate of the workhouse. They wished to have a union of their own, but not a union workhouse. He was proud and thankful to see the noble-hearted members of the profession come forward as they had done. They could not go on without the "sinews of war", and he had much pleasure in reading a list of subscriptions, which exceeded £7,000, including from the Surrey Medical Society the sum of £2,000 for the endowment fund, and £500 to the building fund.

Mr. Probert proposed "The Honorary Local Secretaries". The exertions were most satisfactory. In the last three days even, they had opened fresh ground, and had contrived to extend the society throughout the length and breadth of the land.

This toast was responded to by Mr. CARDEN, of Worcester. The Chairman retired about eleven o'clock, when Sir C. M. Clarke was called to the chair, and the festivities were prolonged to a late hour.

SERMON IN AID OF THE MEDICAL BENEVOLENT COLLEGE. The sum of £130 was collected in the Church of St. Peter's, 100 Street, on Sunday, May 8, after a Sermon preached by the Bishop of Oxford. His lordship contributed £30.

THE CRIMINAL ABORTION CASE. Mr. Charles O'Connell, alias Smith, alias Taylor, and Mr. James Thomas, alias George, (?) and Mr. George Thomas, chemist, who have been in custody for some time on a charge of procuring abortions, were

use of instruments on the person of Miss Eliza Morden, were, on Saturday last, again placed at the bar of the Lambeth Police Court for further examination.

Superintendent Lund asked for a further remand, on the ground that the principal person accused—the Rev. Mr. Gordon—was not yet in custody, and for the production of other evidence. He stated that he knew where Mr. Gordon was, but whether he should be able to take him he was not prepared to say.

Mr. Binns, on behalf of the prisoners, did not object to a remand, particularly as the case would eventually be submitted to a jury; but he hoped that on the next occasion Mr. Lund would be in a position finally to close the evidence, in order that there might be time for preparing the defence.

Mr. Lund said he hoped he should be able to do so.

The prisoners were then remanded.

It appears that the penalties to which the accused are liable are very severe, for the 6th section of the act holds the crime to be a felony, and those convicted to be liable, at the discretion of the Court, to be transported for life, or for any term not less than fifteen years, or to be imprisoned for any term not exceeding three years.

CHARGE OF RAPE AGAINST MR. SHORTHOUSE, A UNION SURGEON: ACQUITTAL. At the Croydon Sessions, a young girl named Duff, residing with her parents at Carshalton, charged Mr. Shorthouse, one of the surgeons to the Croydon Union, with rape, committed in his surgery while she sought his professional advice. The prosecutrix swore that Mr. Shorthouse applied some lint to her face, when she immediately became insensible; and that during her unconsciousness he committed the felony, which in five months afterwards he repeated. The father was examined as a corroborative witness. Mr. Doubleday, surgeon, the Rev. Mr. Eaton, and Mr. Shorthouse, so satisfactorily disproved the charge, that the magistrates, without retiring, immediately dismissed the summons; stating that Mr. Shorthouse left the court without the slightest stain upon his character. Anne Duff was held to bail to answer the charge of perjury. She has recently been tried, and acquitted.

THE SPECULUM: CRIMINAL CHARGE AGAINST A PHYSICIAN. Dr. Banks, a physician of considerable standing and extensive practice, residing at Louth, in Lincolnshire, and a magistrate for the borough, has been committed for trial at the next Spilsbury Quarter Sessions, for an assault with intent to commit a rape on Emma Lockwood, a girl of 16 years age, the daughter of a respectable tradesman at Tetford, near Horn-castle. It appeared from the depositions, "that John Tatam Banks did, on Wednesday, the 20th April 1853, at his consulting room, in Eastgate, assault Emma Lockwood, with intent, etc.; that the prosecutrix had been his patient for a year past, for an imaginary disease of the womb; that her mother had come with her, and had been sent by the doctor into the town, and during her absence he, under pretence of a medical examination, behaved improperly, and made an attempt, etc., but met with resistance." The magistrates, after some discussion on a point raised by Dr. Banks's counsel, Mr. Adams, as to whether the offence was merely a common assault, finally decided on committing the doctor to take his trial for the graver offence, and admitted him to bail, himself in £500, and two sureties in £250 each.

[The accused is innocent, we sincerely trust; but the occurrence of such charges points out the care which ought to be taken, not to allow even a suspicion of improper conduct to arise, or the possibility of such an accusation having even a semblance of truth. The presence of a third party is a prudent precaution; and the unnecessary use of the speculum ought to be more guarded against than it is at present. EDITOR.]

TESTIMONIAL TO W. J. T. MORTON, Esq. The students of the Royal Veterinary College, London, presented, on the 16th ult., to their lecturer on Chemistry, a magnificent flower-vase mounted in ormolu, with a pair of candelabra to match; also a pair of richly ornamented silver covers. On the vase was the following inscription:—"Presented, with other articles of vertu, by the students of the Royal Veterinary College, to W. J. T. Morton, Esq., professor of Medical Chemistry and Materia Medica in that Institution. A tribute of esteem and gratitude, equally in acknowledgment of his assiduousness as a teacher and his kindness as a friend. Session 1852-3."

THE STAMP DUTY ON DIPLOMAS. The following letter has been received by Dr. Hawkins, the registrar of the Royal College of Physicians, from the Secretary of the Chancellor of the Exchequer:—

"Downing Street, May 5, 1853.

"SIR,—The extreme pressure of public business which has lately engrossed the attention and entire time of all those connected with this department, has occasioned the delay which has occurred in the acknowledgment of the representation, which, on behalf of the Royal College of Physicians, you submitted to the notice of the Chancellor of the Exchequer.

"I am directed by him to assure you, that he will not fail to investigate and give his careful attention to the subject of the Stamp Duties now imposed upon the licenses and diplomas of the College of Physicians.

"I am, etc.,

"FRANCIS LAWLEY."

THE MEDICAL PROFESSION AT THE ROYAL ACADEMY EXHIBITION. Among the portraits and busts of the present year, there are some eighteen or twenty of medical practitioners. We may point out two pieces of sculpture well worthy of inspection. The first, numbered 1400, and described in the catalogue as a "Marble Bust of James Moncrieff Arnott, Esq., F.R.S., late President of the Royal College of Surgeons; executed by (H. Weeks, A.) order of the Council," is an admirable likeness, and a fine specimen of the sculptor's talent. The second, numbered 1450, is a bust in marble of the late J. Dalrymple, Esq., F.R.S., and is about to be presented by some of this gentlemen's medical friends to the College of Surgeons. The likeness is good and pleasing. This testimonial was first proposed, we believe, by Dr. Bence Jones.

COMMON LODGING-HOUSES. Lord Shaftesbury has laid on the table of the House of Lords a bill, which has been just printed, for making further provisions with respect to common lodging-houses. Among the alterations, it is proposed that a conviction for a third offence shall disqualify a person from keeping a common lodging-house. Power is to be given to inspect common lodging-houses. All such places are to be registered before they are used. A certificate as to character may be required for common lodging-house keepers. Sick persons may be removed from common lodging-houses; and compensation for loss of bedding, etc., is not to be paid to offenders against the act. The term "common lodging-house" is to extend to other houses than at present.

LUNATICS. The House of Lords has printed a return of the number of lunatics under inquisition who are resident in asylums, and the amounts of their respective incomes and allowance for maintenance. There are 238 persons confined in asylums, including licensed houses. In many of the cases, the whole income is applied for maintenance. The largest income in one case is £5,000 a-year, of which £700 is for the support of the lunatic, and £2,500 for keeping up Hazelwood Castle.

THE LUNACY BILLS IN THE HOUSE OF COMMONS. On the motion of Mr. Walpole, the three bills on this subject which have lately been passed by the House of Lords, were read a first time on the 12th of May.

YELLOW FEVER AT RIO DE JANEIRO. By the *Severn*, which arrived at Southampton on the 17th, it was reported to Mr. Wiblin, the medical superintendent of Quarantine, that this disease continues on the increase, both amongst the shipping in harbour, and on shore. During the month of March, one hundred and forty-five cases had occurred at Rio, and about fifty cases weekly amongst the shipping in that harbour. At Bahia the disease had broken out, and forty-five cases had occurred during the same month. The *Severn* had six cases of yellow fever on her homeward voyage. Fifteen days having elapsed since the last new case, pratique was given to her, after answering in great detail the new quarantine questions. The R.M.S.Co.'s ship *Oromoco*, arrived at Southampton on the 18th, having had fourteen cases of yellow fever, and two deaths. In consequence of one man being an invalid, and as yellow as a guinea, Mr. Wiblin had the vessel detained for four hours. There were several invalids, but he thought it prudent to order one man to be detained at the company's Buoy, in charge of a company's officer, for a day or two, with the yellow flag hoisted. Yellow fever is again very bad at St. Thomas's, nearly all the above cases having occurred before departure.

UNIVERSITY OF ST. ANDREW'S. List of gentlemen who had the degree of Doctor of Medicine conferred upon them May 6th, 1853:—William Field Bellin, M.R.C.S., L.A.C., Great Yarmouth; Frederick James Chaldecott, M.R.C.S., Dorking, Surrey; Henry James Collett, M.R.C.S., L.A.C., Worthing, Sussex; Clarence Cooper, M.R.C.S., L.A.C., Brentford, Middlesex; Frederick Charles Cory, M.R.C.S., L.A.C., London; James Davidson, M.R.C.S. Ed., R.N.; José Maria De Mier, M.R.C.S., London; Thomas George Dixon, M.R.C.S., L.A.C., Northwich, Cheshire; Joseph Ewart, M.R.C.S., Guy's Hospital, London; John Gallagher, M.R.C.S., R.N.; Henry Joseph H. Griesbach, M.R.C.S., L.A.C., King's College, London; Richard Savill Hanbury, M.R.C.S., L.A.C., Mirfield, Yorkshire; William Harrison, M.R.C.S., L.A.C., Yorkshire; Richard Cleve Heighway, Lic. Fac. Phys. and Surg. Glasgow, Shrewsbury; John Hilliard, F.R.C.S., L.A.C., H.E.I.Co.'s Service, Bengal; Thomas James Holmes, M.R.C.P., M.R.C.S.; L.A.C., Lyme Regis, Dorsetshire; Edward Jones, M.R.C.S., L.A.C., B.A. Paris, Dover, Kent; John Livy, M.R.C.S., L.A.C., Bolton-le-Moors; Draper Mackinder, M.R.C.S., L.A.C., Gainsborough; Henry Montford, M.R.C.S., L.A.C., Douglas, Isle of Man; James Nicholas, M.R.C.S., L.A.C., St. Columb, Cornwall; Andrew Graves Power, M.R.C.S., L.A.C., London; William Henry Rean, M.R.C.S., H.E.I.Co.'s Service, Madras; Alexander C. Ross, M.R.C.S., M.B., Inverness; Hugh James Sanderson, M.R.C.S., L.A.C., London; Benjamin Simpson, M.R.C.S., B.A., Trin. Coll. Dublin, H.E.I.Co.'s Service, Dublin; John Tibbits, M.R.C.S., Warwick; George Lawson Thomson, M.R.C.S. Ed., Coldstream; Henry Turner, M.R.C.S., Clonakilty, Co. Cork; Joseph Haydon Ward, L.A.C., Epsom, Surrey; Heaton Lloyd Williams, M.R.C.S., Denbigh, North Wales; Andrew Wynter, London.

UNIVERSITY OF GLASGOW. At the April Graduation of this University the degree of M.D. was conferred on the following gentlemen, who were examined in the various branches of medicine and found duly qualified:—Henry Hancox, England; George H. B. McLeod, Scotland; Richard Stanistreet, Ireland; John H. West, Ireland; Robert Harmer, England; Connell F. Loughnan, Ireland; James W. Frame, Scotland; Robert Paterson, Scotland; John E. Corbett, Scotland; John McCulloch, Scotland; James Dick, Scotland; Gilbert Adams, United States of America; Bruce Goff, England; Robert A. Allen, Ireland; John R. Brown, Scotland; Charles D. Campbell, Ireland; Daniel Dewar, Scotland; David Pollock, Ireland; William Stevenson, Scotland; Walter S. D. Yates, India.

ROYAL COLLEGE OF SURGEONS.—PASS LISTS. MEMBERS admitted at the meeting of the Court of Examiners on the 29th ult.:—Humphry J. Gillett Atkinson, Dublin; Edwin Stephens Collins, Sherborne, Dorset; W. Harrison, Gargrave, Yorkshire; Marcus George Hill, Chelsea; Frederick Abell Humphry, Balham-hill; John Jones, Ruthin, Denbighshire; William Kaye, Knaresborough, Yorkshire; John Robert Low, London-fields, Hackney; Henry Frederick Marley, Port Isaac, Cornwall; Herbert Eady Proctor, Brackley, Northamptonshire.

On the 6th inst.:—Henry Toussaint, Ceylon; George Alder Watson, Scarborough, Yorkshire; Jesse Conway Davies, Holywell, Flintshire; Charles Hemming, Kimbolton, Huntingdonshire; Philip Warren Sutherland, Hon. East India Company's Service; David Mathias, Cardigan; James Ray, Lowestoft, Suffolk; Peter Williams Rolston, Devonport; Arthur Anthony Harris, Warrington, Oxfordshire; Edward Snell Wallis, Dublin; Lloyd Herbert, St. Mary Bourne, Hants.

FELLOWS admitted at the meeting of the Council on the 12th inst.:—James Penn Harris, Clarence Street, Liverpool, diploma of membership dated May 3rd, 1841; Samuel Belton Gwynn, Wem, Salop, Aug. 2nd, 1844; Richard Barwell, Maddox Street, Oct. 6th, 1848; Thomas Bryant, Montague Place, Clapham Road, Aug. 6th, 1849; Timothy Holmes, Hamilton Terrace, St. John's Wood, not a member.

LICENTIATES IN MIDWIFERY admitted at a meeting of the Board of Examiners in Midwifery, on the 11th inst.:—W. Field Bellin, Great Yarmouth, diploma of membership dated July 12th, 1852; George Fowler Bodington, Sutton Coldfield, Nov. 9th, 1849; John Matthew Butler, Woolwich, Dec. 10th, 1852; Thomas Henry Cheate, Burford, Oxon, Oct. 15th, 1852; Geo. Connor Cornelius, St. George's Villas, Canonbury, July 28th, 1853; Thomas Frederick Hale, Petworth, April 1st, 1853; Lloyd Herbert, St. Mary Bourne, Hants, May 6th, 1853; David Mathias, Cardigan, May 6th, 1853; John Benson Pritchett, York, March 23rd, 1853; Henry Joseph Stormont, Wallingford, July 23rd, 1850; William Walker, Hermitage Place, St. John Street Road, July 15th, 1856.

APOTHECARIES' HALL.—PASS LIST. Thursday, April 28, 1853:—George Stewardson Brady, Gateshead; Frances Russell Hall, Fulhouse, Cambridgeshire; James Ireland, Provost-street, Hoxton; John Phillipson Langham, Forest of Dean; Edwin Moore; Richard Burford Searle, Bridport, Dorset; John Smith, Wheatley, Oxon; Eustace Carey Summers, Rothbury, Northumberland; Edward Swales, Helmsley, Yorkshire.

Thursday, May 5th, 1853:—Thomas Brookes, Whitchurch, Salop; Edward Clapton, Stamford Lincolnshire; Thomas Fred. Hale, Petworth, Sussex; Joseph Porter, Rotherhithe Street.

Thursday, May 12th, 1853:—John Charles Barrow, Loughborough; Wm. Thomas Bell, Great Grimsby; George Fowler Bodington, Sutton Coldfield; William Lucy, Bristol; Broome Pinniger, Westbury, Wilts; Robert Bath Smart, Balsham, Cambridgeshire.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BEALE, Lionel J., M.B., elected Joint Professor of Physiology with Mr. Bowman at King's College.

HASSALL, Arthur Hill, Esq., elected Physician to the Metropolitan Free Hospital.

HEADLAND, F. W., Esq., B.A., appointed Lecturer on Botany at the Charing Cross Hospital.

RADCLIFFE, Charles B., M.D., elected Assistant-Physician to the Westminster Hospital.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

BIRCH, Wm. Richard, Esq., aged 20, a student of St. Bartholomew's Hospital, at the residence of his brother-in-law, Frederick Wood, Esq., apothecary to the hospital, on May 15th. He died of typhus fever, accompanied with the usual maculated rash, after only a few days' illness. This gentleman was much esteemed by his fellow-students for his talents and kindness of disposition. Another of the students is severely ill of the same disease. Both gentlemen were holding the appointment of clinical clerk.

DAWSON, Edwin, Esq., Surgeon, at Wainfleet, Lincolnshire, of carcinoma of the stomach, aged 67, on May 18.

RICHARDSON, Robert, Esq., Surgeon, late of Harrogate, Yorkshire, at Ross House, Cheltenham, on May 20th, aged 80.

STEVENS, Alexander C., Esq., late of Falmouth, Jamaica, at Duncan Street, Edinburgh, on May 19.

WALKER, David, M.D., younger son of Mr. W. Walker, schoolmaster, Earlstoun, N.B., at the residence of his brother, Tyndale Place, Islington, on May 1.

WESTALL, William, Esq., Assistant Surgeon of H.M. 94th Regiment, on board the *Zemindar*, while returning from Australia to rejoin his regiment at Madras, aged 30.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

ALDERSON, James, M.D., F.R.S. *PATHOLOGY AND TREATMENT OF ACUTE RHEUMATISM.* 8vo. pp. 107. London: 1853.

A PHYSICIAN. *EVENING THOUGHTS.* Second edition. pp. 143. London: 1853.

DALZIEL, John, M.D. *REMARKS ON HYSTERIA.* 8vo. pp. 30. Edinburgh: 1853.

*FORBES, John, M.D., D.C.L., F.R.S. *MEMORANDUMS MADE IN IRELAND IN THE AUTUMN OF 1852.* 2 vols. pp. 308 and 414. London: 1853.

FRANCIS, D. J. T., M.D. *CHANGE OF CLIMATE IN CHRONIC AFFECTIONS.* pp. 339. London: 1853.

HINDS, William, M.D. *THE HARMONIES OF PHYSICAL SCIENCE IN RELATION TO THE HIGHER SENTIMENTS.* pp. 195. London: 1853.

HUBERT-VALLEUX, M. E. *Introduction à l'étude médicale et philosophique de la SURDI-MUTITÉ.* 8vo. pp. 126. Paris: 1853.

*TOYNBEE, Joseph, Esq., F.R.S. *ON THE USE OF AN ARTIFICIAL MEMBRANA TYMPANI.* 8vo. pp. 46. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXII.

LONDON: FRIDAY EVENING, JUNE 3, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL.

The Annual Meeting will be held at Swansea on the 10th and 11th of August. Vide p. 470 of last number.

PROGRESS OF MEDICAL REFORM.

We content ourselves to-day by reporting the progress of events, and congratulating the profession on the spirit of zeal and conciliation which is every day abounding more and more in our ranks.

To-day, at 3 P.M., about the hour at which our paper will reach our readers in London and the adjacent towns, Lord Palmerston will be engaged with a deputation from Dr. Lankester's committee, whose mission it is to press upon his lordship the urgency of the evils under which the profession of medicine now groans, and the favourable opportunity which now exists for removing at least some of them. As a definite YES or NO must be given by the minister to the question, whether government is willing to introduce a Medical Reform Bill during the present session of Parliament, we shall be able in our next to announce either the certainty of a speedy termination being put to much of the anarchy which now prevails in the medical profession, or to indicate the outlines of a new and more aggressive campaign against monopoly and oppression, than any which the great body of the profession has yet found itself sufficiently united to undertake with the confidence of victory.

As regards what is going on within the pale of our ASSOCIATION, we may state generally, that much is in preparation, and that several active auxiliary committees have been formed. The Medical Reform Committee of the Metropolitan Counties Branch met on Friday last. The proceedings of the Committee will be found at p. 492.

So far as we can learn, the statistics of petitioning up to this date are as follows:—

Places formerly mentioned . . .	18
London	6
Banffshire	1
Yorkshire Branch	1
Wisbeach	1
Bath	1
	—
Number of Petitions	28
	—

Many other places have petitions in course of signature. We have only mentioned those petitions which have been

actually presented, or placed in the hands of members of Parliament for presentation.

Another indication of the progress which the medical reform question is making, is the attention which it is exciting among influential writers on general politics. We formerly alluded to the aid which the cause was receiving from the *Daily News*; and we may now mention two other metropolitan papers unconnected with medicine, which have not only written with power and clearness upon the present aspect of our professional affairs, but have expressed a feeling decidedly favourable to the present movement.

The *Legal Examiner* of May 28th, says—

"The medical profession, who have made so many abortive attempts to get the anomalies of their present condition removed by legislative enactment, are just now engaged in another effort for this purpose. The Provincial Medical Association, who have, since their first organization more than twenty years ago, gradually grown into the most powerful of all the professional bodies, some time since presented a bill to Lord Palmerston which represented their opinions, and aimed to carry out the views they always advocated. They, however, pointedly stated, that they had no object except to obtain a measure that should be acceptable to the whole profession, and that they should therefore support any bill that the Government might frame, provided only it was based on the same *principles* as their own."

The *Morning Post* of May 20th, remarks:—

"As medical laws at present stand, a gentleman, even though he may have obtained the highest university medical honours, *has no right to practise in London*. He must also obtain a license from the College of Physicians, and this license, strangely enough, does not qualify him to practise out of London; nor has the extra-metropolitan license a fuller reciprocity. Meantime, amidst all these conflicting privileges and powers, the empiric plies his vocation with impunity and *éclat*. If he self-impose the title of 'Doctor', the law is powerless to check him; or, if too conscientious for this, he long for the real prefix, this boon he can obtain, such as it is, from many a German university for the trifling consideration of a few pounds sterling. There ought to be an end to these disgraceful transactions. Seeing that the medical profession is well-nigh unanimous, and the legislature disposed to act, we trust to witness an efficient medical reform.

"Having touched upon this subject, it is no more than an act of simple justice to direct public attention to the magnanimous liberality of sentiment which has actuated the London College of Physicians. This ancient and learned incorporation, although invested by law with numerous and stringent powers—although possessing highly remunerative vested rights in relation to their medical brethren—has, *proprio motu*, ranged itself in the foremost rank of medical liberals."

THE QUEEN AND CHLOROFORM.

WE should not have again alluded to this subject, unless to protest against the very unsound principle in medical practice, that there is one treatment for the higher, and another for the lower classes, and that a queen is not to be treated medically like the poorest of her subjects. If the risk of giving chloroform in midwifery is too great for the Queen, it is too great for her meanest subject. Disease is no respecter of persons, nor ought the healers of disease to respect persons. Buonaparte, with his intuitive sagacity, said this when he told the accoucheur to treat the Empress as he would a market-woman. He well knew that this was the only safe course in extremities. The opposite course, however, is a very common one. No one who inspects himself as well as others, can have failed to feel that respect of persons is a constant source of bad practice, and that the most successful are those who can calmly and fearlessly treat the highest and most important life as they would the humblest. There are often good reasons, owing to greater delicacy of organization, for prescribing differently for the high and the low, but this is not the question at issue. The rank and standing must be forgotten, and the human being alone remembered. Indeed, it is one of the penalties which the highest pay for their greatness, that they may not be treated with the same promptness and fearless decision as those whose lives seem less important. "If I could only prescribe for my wealthy patients with the freedom I do for the poor, I should be much more successful," said a good practitioner who knew his infirmity. We can imagine that in this recent instance the royal patient would have scorned that fear which would deprive her of the advantages which her subjects enjoyed, and would admit no excuse founded on her high position; courage and honesty are known to be her royal characteristics. The fears, the hesitations, the traitorous doubts engendered by respect of persons in the medical mind, when forced to a prompt decision in the treatment of important persons (and importance here is a relative term, taking in an extensive series of grades), are evidences of a condition of mental weakness so prejudicial to the healing art, and so common, as to justify us in learning a lesson from the historical fact which we formerly announced and commented upon.

THE LAW OF SCOTLAND AND THE MORE FLAGRANT FRAUDS OF MEDICAL QUACKERY.

SOME weeks ago, two quacks appeared in Edinburgh, under the names of "Professors Curtis and Campbell, the celebrated Botanical Physicians". By means of large hand-bills, of the most varied and imposing typography, the rogues were enabled to levy a considerable tribute upon the valetudinarian quack-fanciers of Edinburgh and the suburban villages. One of the hand-bills is now before us. It is surmounted by the Royal Arms of the United Kingdom,

and the words *NIL DESPERANDUM* in bold characters. Premising that we do the Professors injustice by quoting their manifesto, bereft of its diversified capitals, long lines, and short lines, we extract a portion of the hand-bill to which we have referred.

"The art of healing had its origin in the woods; and the forest is the best medical school. Professors Curtis and Campbell, the celebrated botanical physicians (from the Royal Botanic College of Health), Kingsland Road, London; Princes Street, Edinburgh; and 124, Shore, Leith; beg leave to inform the inhabitants of this neighbourhood and environs that they have but recently arrived from America, and are at present on a professional tour for the benefit of those afflicted with diseases who cannot undertake the fatigue and expense of applying to the doctors at their own residence; and likewise for the purpose of establishing agents for the sale of the following medicines—all of which may be relied on as purely vegetable, and as having under their directions effected many cures. Deafness, and all diseases of the eye, perfectly cured, provided the sight is not gone, or the drum of the ear broken. Ruptures permanently cured without a truss, provided the patient is not too old. The following complaints effectually cured."

[Then follows a list of thirty-five diseases, very similar to the lists usually adopted by advertising empirics.]

In Scotland there exist two excellent guardians of the public, which are very much required in England, viz., a public prosecutor, and a wholesome comprehensive statute, enacting penalties for those who are guilty of "falsehood, fraud, and wilful imposition". Professors Curtis and Campbell did not reckon on the risks they ran when they crossed the border as "botanical physicians". The public prosecutor (the "procurator-fiscal" for Midlothian), as in duty bound, came forward to protect the lieges, and arraigned the swindlers before the sheriff of Edinburgh. It appeared on the trial, that they had represented themselves as able to cure all manner of diseases. They charged five shillings for their boxes and phials. A Musselburgh victim having discovered that the chief ingredients of the mixtures were cod-liver oil, soap, and rhubarb, though represented as composed of other ingredients, informed the authorities. The case was clearly made out; and the sheriff sentenced the quack doctors to "nine months imprisonment, with hard labour".

We hope to see the same course adopted in the north with reference to other medical pretenders, such as the "galvanists", and the "practitioners in synovial disease", who cure all maladies by rubbing. Let us also trust that a protective legal machinery, as effectual and as simple, may ere long be granted to England. This is a point to which we are anxious to direct public and professional attention; and it is for this purpose chiefly that we have prominently set forth an example of the way in which the law of Scotland is made to bear upon the more flagrant frauds of medical quackery. The want of a public prosecutor is a glaring defect in the criminal jurisprudence of England, which ought at once to be remedied.

ORIGINAL COMMUNICATIONS.

ON THE ANÆSTHETIC PROPERTIES OF THE LYCOPERDON PROTEUS, OR COMMON PUFF-BALL.

By BENJAMIN W. RICHARDSON.

[Read before the Medical Society of London, on May 28th, 1853.]

A FEW months since, I had a conversation with my friend Mr. Henry Hudson, a Leicestershire surgeon, on the management of bees; and was particularly interested in his description of an old, and, as I now find, very prevalent custom, of stupifying these insects with the smoke of the fungus known under the name of puff-ball, before extracting the contents of the hive. By this stupifying process, the bees, I was told, could be rendered inactive and insensible for several minutes; but that they all recovered eventually in the most perfect manner, and that the cruel practice of destroying them with the fumes of sulphur was thus avoided.

This practice of rendering bees insensible by inhalation is so much like the modern plan of producing narcotism in men and animals by ether and chloroform, that my mind very naturally seized the analogy; and I was induced to perform a series of experiments on animals with the fungus.

My first experiment was made on the 28th of last March. A kitten was placed in a bell-shaped glass vessel, open at bottom and top. Smoke from a piece of the fungus ignited was allowed to rise pretty freely into the bell; but several interruptions occurred, so that thirty-five minutes elapsed before any positive effect took place. By that time, however, the creature was fairly narcotized: a cut in the ear produced no sign of pain. The breathing was reduced to eight respirations per minute, and the temperature of the body was lowered. From time to time, after removal from the bell, I counted the breathing and the heart-beat, and found them gradually increasing in number, and the body becoming warmer. The sleep, however, was profound; and, after a period of two hours, no sign of sensibility to pain could be elicited. I laid the animal down by the side of her mother, and in the morning found her skipping about as well as ever.

The second experiment was performed on a dog. It was placed in a box, in which it had sufficient room to turn round, and in which the atmospheric air could enter freely from the top. The smoke of the fungus was admitted through the bottom of the box, and the animal was fairly narcotized in a quarter of an hour. On removing it on to a table in the narcotized state, a deep puncture was made in the nose: blood of a bright red colour flowed freely, but no sign of pain was given. The symptoms that preceded the narcotism were those of intoxication; the animal turned round several times; power in the legs ceased; and it fell down at last on its side, insensible; the bowels acting involuntarily. For five minutes after the anæsthesia had come on, the respirations numbered forty-eight per minute; but the heart-sounds were steady, and comparatively slow; the first sound corresponding to each inspiration. The body was warm. Five minutes later, there was a convulsive fit; but the body was still insensible, and the pulse forty per minute. The pupil was dilated and fixed, but the head was drawn back when a light was brought near to the eye. Three minutes later, the animal was becoming conscious, and wagged its tail when spoken to, but showed no pain when pricked with a knife. At a quarter past nine, it commenced to wince when pinched, and crawled about in a reeling manner. From this time, the recovery was rapid; and in ten minutes the creature seemed as well as though nothing had been done to it.

In a third experiment, at which Dr. Crisp was present, a dog was again the subject. There were the same symptoms of intoxication, but complete narcotism set in in six minutes. In this case, the narcotizing agent had been

given more freely and steadily than in the previous cases. Eighteen minutes after removal from the box, the animal remained insensible to pain, but was conscious when spoken to. Blood drawn from the nose was of a bright red colour. The other symptoms were very similar to those described in the last experiment. Two minutes later, rallying commenced; and in twenty minutes the creature had quite recovered. We remarked, that the sensibility returned in the fore legs previous to returning in the hinder ones.

Finding that the impure fumes of the burning fungus were rather painful to breathe, as they produced some degree of irritation in the throat, and caused the eyes to water, I made them pass through a solution of caustic potash, previous to exposing the animal to their influence. This was easily done. The smoke, being produced in a large closed vessel, was forced by water-pressure through a Wolff bottle containing a solution of caustic potash, and was received in an inverted glass bell. I thus obtained a perfectly clear gas, free from carbonic acid. A young cat was now placed under the bell; she became slightly convulsed in thirty seconds, and was profoundly narcotized in two minutes. The heart-beats were not much affected, and recovery took place in seven minutes after removal from the vessel.

This experiment was performed on the 13th of April; and on the following day I repeated the experiments, both with the impure and clarified vapour, in the presence of Dr. Willis and Dr. Cormack, with complete success.

Mr. Sampayo, a gentleman residing in Barnes, had a favourite dog, which was very old, was constantly troubled with cough, and had a large and painful tumour over the abdomen. As the owner of the dog wished to have this tumour removed, Dr. Willis thought there would be a good opportunity for trying the anæsthetic power of the fungus during an operation. He therefore kindly undertook to cut out the growth, if I chose to produce narcotism. I did so with the impure smoke of the fungus. The animal was narcotized in six minutes; and the operation, which occupied ten minutes, was done without the merest sign of pain until the last suture was being put in, when wincing took place. Neither the heart nor the respirations seemed much affected in this instance. The recovery was so rapid, that, in six minutes, it would have been impossible to tell, without previous knowledge of the fact, that the animal had been subjected either to narcotism or operation.

I need not occupy time in giving the details of several more similar experiments; I will, therefore, refer only to a few others, which are of special interest.

On several occasions I have given the narcotizing vapour in limited quantities, and for a long time. This dilution of the narcotic has been effected either by mixing the clarified fumes of the fungus with a large quantity of atmospheric air, or by using a preparation of the fungus, which has been deteriorated by charring it, as I think, and which is sold in the shops under the name of "prepared fungus for fumigating bees". In this diluted shape, the narcotic produces a modified class of symptoms. Narcotism is induced very slowly, the animal reeling for a long time, and seeming to be paralysed, without being altogether free from pain. Convulsions, too, and vomiting, are apt to come on, and the animals recover gradually, but surely. I experimented on three animals, in the presence of Dr. Snow, in which these results followed. One of the animals vomited; and in all the cases, the anæsthesia, though sufficiently marked, was not so perfect as in some other instances. By continuing the exhibition of the narcotic, however, we succeeded in destroying a rabbit. The symptoms which the very diluted fumes of the fungus produce in animals, are somewhat like the effects of tobacco in persons who are not accustomed to smoke, with the addition of more decided narcotism and insensibility. It is worthy of remark, that an animal can be made to tolerate this narcotic by inhaling it frequently. I have a dog on which I have experimented from the first. Originally, the creature would come under the influence of the narcotic in six minutes; she will now inhale it, in liberal proportions, for an hour, at the end of which time she is intoxicated, and vomits if she has had a meal previously;

but she is quite conscious, answers to her name, and tries to walk; the sensibility of the body being absent altogether, and the limbs occasionally convulsed. It requires a space of half-an-hour for her to recover from this condition. I have noticed that young animals, whose respirations are quick, although rapidly narcotized by a large dose of the substance, resist the action of a diluted dose very obstinately. I have kept young kittens for more than an hour in the vapour, and, under its influence, rolling about in the most drunken manner, but not absolutely insensible; when, however, complete narcotism does set in, it continues for a long period.

It occurred to me to give the narcotic in connexion with oxygen gas: the fungus was therefore burned in oxygen, and the dense fumes produced were clarified by caustic potash, and were passed into the glass bell, together with some free oxygen. A young cat was placed under the bell: she became uneasy in thirty seconds, and was fairly narcotized in a minute and a half. On removing her from the glass, the respirations were forty-six per minute, and the insensibility of the body was perfect. She recovered in four minutes, and ran out of the room.

It was a matter of some importance to ascertain if the narcotic principle of the fumes of the fungus would be given up to any fluid substance through which they might be passed. Yesterday, therefore, the fumes arising from the burning fungus, mixed with a large quantity of atmospheric air, were first driven through caustic potash, and then, in this diluted state, were passed, through alcohol, into a glass bell. A kitten placed under the bell soon became uneasy, at the end of an hour was taken out insensible, and recovered slowly.

I have intentionally destroyed a great many animals with the narcotic, in order to observe how it would produce death. The respirations fail in a gradual and progressive manner, until they cease altogether, and the breathing sounds are dry and loud. The pupil is usually dilated and fixed for several minutes previous to absolute death. The temperature of the body sinks slowly. The heart continues to beat quickly for some time after respiration has ceased. The blood is always red, and generally not readily coagulable; but in a cat which had breathed oxygen gas with the narcotic, it coagulated with great rapidity. The lungs are of a pale or pink colour, never congested, nor is there congestion of any other internal organ. The heart is empty of blood in most cases; and its contractions may be excited for long intervals of time. The respiratory muscles and the bowels may also be excited to motion for a long period after the body is laid open. In four kittens which I opened before respiration ceased, I saw the rhythmical action of the heart, and regular respiratory acts, for twenty-five minutes after the opening. The peristaltic action of the bowels remained for not less than forty minutes. In no case have I found the brain and spinal chord congested, or in any degree visibly affected. Cadaveric rigidity soon becomes very marked.

On the table before the Society there lies a full-grown dog, which has this day been destroyed by the fumes of the fungus. The body is laid open for the inspection of the Fellows. The animal was placed in a box filled with the impure fumes of the burning fungus. It was fairly narcotized in ten minutes. As I did not wish it to recover, I kept it in the vapour five minutes longer, and then found the respirations to be eleven per minute, and the heart-beats sixty; the pupils a little dilated, and fixed; the body warm. I continued to expose it to the action of the fumes for fifteen minutes more, when it was removed from the box. It was less warm, but there were still six respirations per minute, and the heart was beating steadily, with both sounds distinct. It was as insensible to pain as if really dead, and the body was flaccid. The pupil was fixed. Red blood flowed from the ear on puncture. I have not the shadow of a doubt that the animal would have recovered from this prolonged narcotism, had I kept it from the narcotic influence; for the respirations were increasing while I was taking the above observations. I returned it to the box; in five minutes more the respirations ceased, the

heart-beats continuing for some minutes later. The blood was fluid; the lungs, and all the other internal organs, were free from congestion, and the heart was pretty firmly contracted.

The fumes of the fungus, when clarified with caustic potash, and diluted pretty freely with atmosphere, are not unpleasant to breathe. On Thursday, I inhaled them myself in this form, for four minutes. They produced decided symptoms of stupor; the pulse was excited, and I was glad to sit down. These effects, however, passed off in three minutes, and I felt none the worse, except that the throat was somewhat irritated, and the voice a little hoarser.

My experiments would not have been complete, without having given some of the fungus itself to an animal as food. I have done so to two dogs, without effect. In one case, a large quantity of the fungus was cut up, and boiled in milk, and the milk was given to a dog. No narcotism or other effect followed. On a second occasion, a piece of the fungus (Ξ) was chopped up with beef, and given to a hungry dog. The animal swallowed the mess greedily, but showed no sign of injury. Withering states, on the authority of Marsigli, that the puff-ball is fried with salt in Italy, and is eaten as food; and I am told by Mr. Butler, the herbalist, in Covent Garden (from whom the fungus can be obtained), that he has eaten it himself when fried; and that Mr. Smith, the well known stationer in Long Acre, esteems it a great delicacy, and eats it regularly when in season (in autumn).

To sum up the results of these experiments: there is, it is evident, a principle in the fumes of the puff-ball capable of causing anaesthesia in animals. The physiological effects brought out by this anæsthetic are also very marked. In a liberal dose, it narcotises rapidly and effectually, without unpleasant symptoms; and the narcotic effect soon passes off, leaving the animal in perfect health. In diluted doses, it produces intoxication and convulsions; is longer in causing anaesthesia; sometimes excites cough and vomiting, and leaves the animal for a long time stupid and unwell. When it is carried to the extreme, the respirations cease before the beat of the heart. Indeed, in observing animals under influence of the narcotic, it is only necessary to watch the respiratory movements; if these remain, even though reduced to the lowest, the animal will certainly recover on removing it from the cause of the narcotism. In this respect the narcotic principle of the fungus resembles the Woorali poison.

Experiments with the fungus may be performed in various ways. If the impure smoke is to be used, it is only necessary to let it pass freely into a box, through a hole in the bottom. A large tin funnel fixed beneath the box in an inverted position will readily convey the smoke. The box having been filled with the smoke, the animal is placed in it, and the lid is laid lightly on. Narcotism will generally take place in eight or ten minutes, often sooner.

To clarify the fumes arising from the fungus, two small tin funnels are made to fit mouth to mouth, and the nozzle of one funnel is connected with a Wolff bottle containing a solution of caustic potash. Another tube, connected with the Wolff bottle, will convey the clarified fumes away. If, now, a piece of the fungus be placed in a burning state between the funnels, the smoke can either be drawn by the mouth from the exit tube of the bottle through the ordinary double valve apparatus for chloroform, or it can be driven over into a bell jar, by fixing the nozzle of a pair of bellows to the free end of the funnels, and blowing gently. The glass bell into which the vapour is received should be placed on a nicely fitting board, and the animal must be passed into the bell quickly, after it is charged with the narcotic vapour.

Some one, perhaps, will ask, What is the nature of the narcotic principle contained in the fumes of the fungus? Is it a product or an educt of combustion? On this subject I have no direct information. That several of the fungi possess a narcotic principle, has long been known; and some analysis has as yet thrown much light on the subject. In some countries fungi are used for making intoxicating potions. Our very distinguished countryman, Dr. ...

Taylor, in the second edition of his valuable *Manual of Medical Jurisprudence*, thus remarks on the fungi :

"Most of the narcotic irritant poisons, just considered, owe their deleterious effects to the presence of an alkaloidal principle similar to morphia, and susceptible of insulation by complex chemical processes. There is, however, considerable difficulty in extracting these alkaloids from the respective vegetables; and when extracted, the chemical differences among them, in respect to the action of tests, are so slight, as to be scarcely appreciable, even in the hands of a practised analyst."

The few conclusions, therefore, which it is in my power to offer with regard to this subject, are very insignificant; and are derived more from physiological observation than from chemical inquiries. However, they had better be stated.

I. The narcotic principle is given off freely during the combustion of the fungus; and, as it exists in the fumes produced, is highly volatile.

II. Combustion of the fungus in oxygen gas does not destroy the anæsthetic principle.

III. The anæsthetic principle is not quickly absorbed or destroyed, either by water, alcohol, or strong alkaline solutions.

I present these researches to the profession with great deference. I am aware that they are not so extensive as they ought to be, but they have cost me many weeks of incessant labour; and I put them forth as being calculated to lead to further inquiry into the narcotic effects of the fungi, by other and abler minds, rather than from an estimation of their own value. I have been desirous only to show that there is a principle in one of the fungi capable of producing narcotism in animals by inhalation. It remains to be seen, whether other plants of the same family possess similar powers; and whether a narcotic agent can be obtained from a fungus that shall admit of being employed in practice with no more trouble to the operator, and with less danger to the patient, than are entailed by the anæsthetic agents now in use. So important a subject is at least worthy of further investigation.*

Mortlake, May 1853.

CASE OF EXTREME LATERAL CURVATURE OF THE SPINE, OF MORE THAN FIFTEEN YEARS' DURATION.

By SAMUEL HARE, F.R.C.S.Eng.

CASE. SUMMARY. GREAT ACCOMPANYING DEFORMITY OF THE CHEST: THE HEART BEATING BETWEEN THE SECOND AND THIRD RIBS OF THE RIGHT SIDE: UNFAVOURABLE STATE OF THE GENERAL HEALTH: IMPROVEMENT UNDER TREATMENT: INCREASE OF THE BREATHING CAPACITY OF THE LUNGS.

Miss —, aged twenty-nine years, residing in the north of England, came under my care on April 15th, 1850.

History. She was born of very healthy parents, and her general health was stated to have been good during childhood, though she had suffered from some of the diseases incident to that period of life. When about twelve years of age, she suffered severely from an attack of scarlet fever, from which she was not expected to recover; and subsequently from inflammation in one ankle, from which period is dated the commencement of her future sufferings. The inflammation was accompanied with a great swelling of the part, and was so severe as to confine her more or less for six or seven months. She consequently became very weak and delicate, and suffered much from violent headaches, especially in the forehead.

It was when she was fourteen years of age that the curvature of the spine was first discovered, though it is probable that it had existed for some time previous. It was indeed supposed by herself and friends to have been caused by the improper or too constant use of the crutches, which she was obliged to use when she first began to walk, on gradually recovering from the affection of her ankle. The upper curve of the spine was noticed to be towards the right side, while a slighter one also existed towards the left, in the lumbar region. At that time, she was growing rapidly in height; and the progress of the deformity was equally rapid.

As the deformity advanced, her bodily weakness increased; she felt languid and tired, and complained of a dull, heavy pain in the spinal column, with a sensation of its being too weak to support the weight of the head and upper extremities. Instead of being extremely active, as she was wont to be, she became inanimate, and unable to go about without a tendency to faintness, and sometimes actually fainted: she had also a numbness both in the upper and lower extremities. She suffered likewise from nervous depression, painful sensibility and anxiety of mind, and a want of power to concentrate her attention upon anything, while her memory failed her very materially; her breathing became shorter and more difficult, attended with palpitation of the heart on using any exertion, or being subject to any excitement; her appetite sometimes failed her; at other times she feared to take food, from its causing severe pain afterwards, though, if she did not take it, she suffered from faintness and a sinking sensation.

The symptoms fluctuated from time to time, but, on the whole, got worse; the languor, lassitude, and weakness, continuing to increase: indeed, her symptoms were such as to cause considerable alarm and anxiety to her friends. Some time afterwards, and when the spinal deformity had made considerable progress, the heart was observed to beat to the right side of the sternum, which it continued to do up to the time of my seeing her. For two years prior to this time, her health became much worse, and for twelve months she had at times scarcely been able to walk at all, owing to her general weakness and the severe pain in her back, and her increasing deformity.

Condition on April 15th, 1850. She was rather tall, of good figure and conformation, with the exception of the spine and chest; of a sanguineo-nervous temperament, fair complexion, and brown hair; and of an habitually cheerful disposition. She complained of much lassitude and weakness, and of great fatigue on using the slightest exertion; and had fainted that morning on rising from her bed. She was thin, had very little colour in her cheeks, or even in her lips; and her skin was not so clear as natural. Her spirits were depressed; she was still subject to headaches, and slept very indifferently, having startings when in bed. She suffered much from the shortness in breathing, especially on using any exertion, or after taking food; and was much oppressed when in a close atmosphere.

The left side of the chest moved very little during respiration; the ribs on that side (in consequence of the deformity presently to be described) being so small, and so close to each other, as to render the intercostal spaces scarcely discoverable. She was free from cough and expectoration; palpitations were not constant, but were induced by any trifling exciting causes, and sometimes even without any assignable reason. In the morning, she was troubled with nausea, retchings, and sometimes with vomiting. Her appetite was at best capricious, and generally very bad, so that at times she had a loathing of food; her digestion was weak; and she often suffered from considerable epigastric pain, flushes of heat, and perspirations after her meals; while, at other times, she had a severe and distressing sinking sensation in the same region, and her feet were generally cold.

On examining the spine, I found an exceedingly extensive sigmoid curvature, which had caused so much general deformity of the trunk, that the level of the left shoulder (the acromion process) was no less than four and a half

* I return my deepest acknowledgments for many valuable suggestions, and much kind interest, to Drs. Willis, Cornack, Snow, and Crisp, to Mr. Thos. Taylor, and to Mr. Henry Hudson. I have also to thank my friends, Messrs. Leupner and Beresford, for the practical assistance they have rendered me in my experiments. And lastly, I am exceedingly grateful to the Fellows of the Medical Society for the kind manner in which they received this paper.

inches below that of the right one; while, on the left side, there was a space or hollow of two and three-quarter inches between the ribs and the arm. The convexity of the dorsal curve, which was the most striking, and included the whole of the dorsal vertebrae, was to the right side; while the curve in the cervical and lumbar regions projected to the left. The dorsal vertebrae, besides being curved to the right, were so twisted upon their own axes, that their spinous processes were directed to the left side; and a rather deep depression, corresponding to the groove between the spinous and the right transverse processes, marked, in the middle part of the dorsal region, the course of the vertebral column: in this manner, the right transverse processes projected more backward than the spinous ones. The ribs of the right side, especially above their angles, were so deformed as to project still further back than the transverse processes; and, by thus forming a prominent ridge, they tilted the scapula upwards and backwards to such an extent, that its internal border looked almost directly backwards: the projection of the eighth right rib about its angle was the greatest. While the ribs were thus prominent on the right side, those on the left were quite as much deformed, but in the opposite direction; for, at the lower part of the scapula, and below it, they were so depressed as to form quite a hollow, while the ribs themselves were felt to be in the most close contact with each other, to be exceedingly diminished in their diameter, and, instead of being flattened, they were rounded in shape, and in size were about equal to a swan-quill. In the upper part of the left interscapular region, the ribs were so deformed as to cause a somewhat circular prominence.

The anterior part of the chest presented proportionally as much deformity as the back; the ribs on the left side being prominent, and those on the right being flattened. Owing to the condition of the ribs (itself primarily dependent upon the deformity of the spine), the sternum was so far from occupying the mesial line, that its centre corresponded with the inner border of the left scapula; and, on standing exactly in front of the patient, the part of the chest seen to the left of the ensiform cartilage measured transversely only three and a half inches, while that seen to the right of it measured six and a half inches; and similar measurements, made at the level of the nipples, were, on the two sides of the midsternal line, four and a half and seven and a half inches respectively.

Owing to the flattening and depression, already alluded to, of the ribs of the left side posteriorly, the antero-posterior diameter of that side of the chest was very much diminished; indeed, in a patient of the same size as Miss —, I do not remember to have met with a chest in which the diameter from the nipple to the scapula was so small as two and three-quarter inches, which was the measurement in this case. As may well be supposed, when chests are so much deformed, it is not unusual to find the normal relation between the parietes and the position of the heart somewhat altered; but in this case the position of the heart was most remarkable, for it pulsated most distinctly between the second and third ribs of the right side; while, to the left of the sternum, its pulsation could not be detected. Beyond this displacement, there were no signs of disease in this organ; and the lungs, although their action was interfered with so as to cause much shortness of breath, seemed to be otherwise healthy. The right hip, as is always more or less the case in this kind of deformity, was depressed or flattened, and the left one was preternaturally prominent.

During the course of the disease, every pains had been taken to relieve her; and various plans of treatment, which had been suggested, were adopted. Thus, at one time she had been recommended to employ the old plan of carrying a weight (as a vessel of water, etc.) upon her head. She wore braces, which crossed her back, and passed round her body. At one time, she had a back-board, which was daily held by passing her hands backwards, above the shoulders; and at another, a back-board such as is used in the army. Other plans were employed, all supposed to have the power

of improving the muscular power of the left side; but, notwithstanding these, the disease continued to progress.

Having, in the history of several other somewhat similar cases of this disease which I have published, as well as in my work on *Curvatures of the Spine*, detailed the plan of treatment I adopt, it is unnecessary to enter at length into it on this occasion: suffice it to say, that exercises of any kind fail altogether to produce good effects in cases so advanced as the preceding; while I also consider that the recumbent position, when used *alone*, is capable of effecting but little. The recumbent position was used in this case; but it was combined with gentle extension, and with moderate pressure upon the projecting parts, in such a way, that its tendency was to restore them to their natural position. Great attention was also paid to the improvement of the general health by the use of appropriate remedies.

This was the plan which was commenced with; and the same, modified a little from time to time, according to circumstances or symptoms, was perseveringly pursued during the whole time that the patient was under my care. She had a course of alteratives with warm and mild purgatives, until the action of the digestive organs was improved; and the same remedies were afterwards prescribed, according as they appeared to be indicated, with occasional tonics.

It would be tedious to detail the notes taken from time to time of the progress of this case, extending over a period of more than twelve months; suffice it to say, that before she had been under treatment many days, she experienced, in consequence of having the weight of the head and shoulders removed from the diseased spine, and from the greater freedom with which she could expand her chest, very considerable relief as regarded the pain in her back, while the palpitations were less frequent, and the breathing more easy and comfortable. By the end of three months, her appetite had also very much increased, and she had almost ceased to feel any inconvenience after taking her food; while, with reference to her spine, she had already become somewhat straighter; the shoulders were flatter, and the chest less contracted; and the heart pulsated two inches lower down, though still to the right of the sternum. Her health continued to improve, and with it her spirits and her strength; while in the course of two or three months more she had entirely lost the pain in her back, which had troubled her so much and so long; the improvement in her form continuing at the same time to progress.

My notes, after she had been five months under treatment, were:—"She is decidedly better than she has been before, being free from ache or pain of any kind; she has good nights; her appetite and digestion are good, and she is able to take her food without any fear of suffering afterwards. She has lost all her faintness and weariness, and is free from palpitation, the heart having more nearly resumed its natural position. The inspirations are considerably deeper, and the breathing capacity of her lungs is much increased, being now fifteen inches more than in April last, and her spirits are excellent; her general appearance is much more healthy, her figure is considerably improved, and she is gaining strength, being able to take a little exercise without fatigue. The angle formed by the projecting ribs on the right side of the chest is less acute, and the hollow on the left has so much diminished, that while the distance from a line drawn vertically from the humeral end of the clavicle to the most receding point of the hollow, was at first three inches, it is now only two and one-eighth inches, showing a diminution of nearly an inch; the cartilages of the left false ribs project less; and the intercostal spaces of the right side are less marked, in consequence of her having become stouter and straighter."

The amelioration of all her symptoms continued to progress, so that, at the end of twelve months, and even before that time, she was able to walk about with ease and comfort; and when she left my care, after having been under treatment eighteen months, she was entirely free from the kind of pain, and from the lassitude which had hitherto been so distressing to her; while her strength had

tionally increased. Her complexion was much clearer; she had more colour; her appetite was good; she could take her food with a relish, and did not suffer from the dyspeptic symptoms. At times, she had a little faintness; but for many months she had not had the difficulty of breathing and palpitations from which she formerly suffered so much. There was still, of course, as must be expected in such a very serious case, some curvature of the spine, with consequent deformity of the ribs; but the figure was nevertheless erect, and the spine and ribs had each assumed a much more natural appearance; the hollow in the left side, and the projection on the right, having diminished very materially; and, as a necessary result of these changes, not only were the shoulders much flatter, but they had assumed very nearly the same level, so as to make in this respect also, especially when seen anteriorly, a most marked alteration and improvement in the figure.

In February 1852, a most favourable opportunity offering, I strongly advised her to take a sea-voyage; and she consequently crossed the Atlantic, and is now staying at one of the Colonial Islands. The reports which she has sent to myself and her friends are highly satisfactory, as she describes herself as being able to take considerable exercise both on foot and horseback; and there is reason to suppose she will remain some time in her present locality, from a letter I have lately received informing me of her marriage.

REMARKS. Although almost every case of spinal disease presents some points peculiar to itself, there are, on the other hand, certain features common to many of the examples of this affection, by which they become, naturally as well as conveniently, divided into certain classes or groups. Excluding from consideration examples of angular projection, dependent upon caries and absolute destruction of the vertebræ, there are three forms of curvature which are generally readily distinguishable, which are each usually accompanied by some peculiar symptoms, and which are dependent for the most part on distinct causes. These divisions constitute the classes of lateral curvature, excurvation, and incurvation; and of the first of these, the case under consideration presented a very marked example, whether we consider the extent of the deformity itself, or the severity of the general and local symptoms to which it gave rise. The progress of cases of lateral curvature after the disease has once manifested itself is by no means uniform; for the rapidity, or the reverse, with which the deformity advances, is dependent upon the time of life when it first appears, the state of the general health at the time and subsequently, the continuance of the causes which first induced it, the remedial measures employed, etc.: but, notwithstanding these circumstances, as the tendency of the deformity, unless efficient means be adopted, is to increase, the amount of the deformity is, to some extent, proportioned to the time it has existed. In this instance, both the duration of the disease and the degree of deformity were very great; the former having extended over a period of more than fifteen years, and the latter being such as not only very materially to shorten the trunk, but also to interfere much with the functions of the lungs and other important organs, and to cause considerable distress from dyspnoea and palpitations.

Each particular form of spinal distortion is accompanied with a condition of deformity of the ribs peculiar to itself, and different therefore from the deformity which they present in the other varieties of spinal disease. As incurvation affects almost exclusively the lumbar vertebræ, this is the kind of spinal disease in which the ribs are least affected; in excurvation, the ribs and their cartilages often lose their natural curve, become straighter near their anterior extremities, and join the sternum more or less at an acute angle, while the sternum itself may either project too much forwards or may be unnaturally forced inwards. In severe cases of angular projection and of lateral curvature, the ribs are always much more extensively and seriously implicated, though in very different ways. In the former, the ribs of each side, after curving forwards at about their angles, project downwards and somewhat towards the median line in

almost a straight direction, so that their extremities frequently fall quite within the iliac fossæ, and sometimes even rest upon the bodies of the pubic bones. The chest, therefore, in such cases presents a very flattened appearance laterally, and the anterior parts of the ribs are not only so close as to render the intercostal spaces very narrow, but the ribs are often actually in contact; nor do the changes stop here, for the ribs themselves undergo an interstitial alteration, by which they not only become much smaller, but they lose their flattened character and assume a more cylindrical shape. With the extremities of those ribs the cartilages form a very acute angle on proceeding to join the sternum, the lower end of which is usually very prominent. The condition of the ribs is widely different from and more complicated than this in lateral curvature; for while, in angular projection, the ribs of the two sides are tolerably symmetrical, they assume very opposite appearances on the two sides of the chest in lateral curvature. In this disease, the condition of the ribs is indeed dependent upon that of the spine; but their deformity adds very much to the general appearance of distortion. The foregoing case follows the very general—the almost universal—rule of the principal or dorsal curvature having its convexity directed towards the right; when this is the case, the right ribs become much bent backwards, at a point from two to three inches from their head, so as to form a hump, which tilts backwards the right scapula, while the left ribs become flattened posteriorly, and the scapula of that side is depressed; in a word, all the changes ensue which occurred in so marked a degree in this case, and which, therefore, have been detailed in the account given of it. It may, however, here be added, that while in angular projections the anterior part of all the ribs become attenuated, in lateral curvature this only takes place on the concave or left side of the thorax, in which also the intercostal spaces are much narrowed, while on the right side they are very considerably increased in size.

An interesting point, in reference to the above case, is the cause giving rise to it. This was believed by her friends, as well as herself, to be the use of a crutch for a considerable length of time; and, as the disease appeared during the time the crutch was in use, it is not improbable that this may have had something to do with it. At the same time it must be remembered that for such a cause to be effective in producing permanent deformity, the general health must have been in a very delicate state; for it is very uncommon to find permanent affection of the spine amongst the many who, from different causes, are obliged to have recourse to the aid of crutches; it is possible, however, that the first tendency to deformity may have been given in the way supposed, and, if so, the ordinary female dress, with its tight-lacing, would be a very powerful agent in increasing a disease which, in delicate persons, it is quite sufficient of itself to give rise to. On the mode in which this is effected, I have elsewhere very fully entered.

The disease, however, progressed for years, and scarcely could the deformity be called the worse part of the case; for, though in one point of view the primary affection, the secondary symptoms to which it gave rise were such as almost to embitter the patient's life, though they are only such as are frequently met with (often fortunately in a less degree) in similar instances of curvature.

That the functions of the heart should have been interfered with will be little wondered at when its position relatively to the parietes of the chest, on my first examining her, is taken into consideration; nor are palpitations, with frequent tendency to fainting, more than might be expected. Again, the surprise is as little that the patient should have been habitually subject to dyspnoea, when it is remembered that the antero-posterior diameter of one side of the chest from near the sternum to, and including the scapula, did not exceed two inches and three quarters; while the pressure to which the stomach and other organs were subjected, and the other circumstances of the case, were just such as would be likely to produce dyspepsia and its various concomitants.

But the patient had not been allowed thus to get worse without efforts being made to arrest the disease. Yet they had failed. And why? Because the remedies employed were not (and I believe such remedies cannot be made so) equal to cope with the requirements of such a case. General and local means must go hand in hand; the former to improve the general health, and the latter to rectify the deformity; but in a severe case, the last-mentioned indication can neither be effected by balancing a weight on the head, nor by gymnastics or other exercises, nor by endeavouring to throw certain muscles into action. In cases of angular projection, such plans are absolutely contra-indicated, and can only tend to aggravate the disease; while in cases of lateral curvature they fail, as in this instance, because, though the bones are not affected by caries, a certain alteration has taken place in their form, and it is necessary that, after the spine has been by gentle pressure according to the anatomical and pathological condition of the parts, and by slight extension, improved in form, it should be kept in that improved condition until, by the reparative powers of nature, such improvement has become consolidated. The reason why cases of very long standing cannot be improved to the same extent as more recent ones is, that in many of them ossific matter has been thrown out along the concavity of the spinal curve as the mode adopted by nature for the support of the weakened spine, and to prevent such further progress of the disease as might be incompatible with life. If the deposition of ossific matter take place to a great extent when the spinal column is in a deformed position, it necessarily tends to perpetuate the deformity; but the object to be aimed at is, in the manner I have alluded to, to restore the spine as much as possible to its natural shape, and to keep it there until, when the health improves and the reparative powers of nature ensue, the consolidation may take place while the spine is in a more natural position. Such, at least, are the views I entertain; and I feel that they are justified both by the success which in this case has attended treatment based on such principles, and by the result of very extensive experience which I have had in cases of a similar character.

9, Langham Place, London, May 11th, 1858.

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CONTINUOUS MOLECULAR CHANGES, MORE PARTICULARLY IN THEIR RELATION TO EPIDEMIC DISEASES; being the Oration delivered before the Medical Society of London. By JOHN SNOW, M.D., Vice-President of the Society. pp. 38. London: 1853.

ONE of the most valuable customs followed by that venerable and highly useful body, the Medical Society of London, is the annual election of a Fellow of the Society to deliver an oration on some subject connected with medical science.

Of all the orations that have been delivered before the Society—and we have read most of them with interest and instruction—we know not of one which upholds better the scientific character of the Society, than that to which we now direct attention.

As the subjects treated on by Dr. SNOW are all open to free discussion, and belong especially to a class of subjects in considering which many minds may fairly differ, it may be that, in reviewing his special opinions, we shall find reasons for questioning many of his arguments. Before descending to particulars, however, we must delineate in a few sentences the general character of the oration.

A distinguishing feature of this production is the abundance of the information it conveys. It is not a book made up of milk-and-water originality, with conceited omissions of other men's thoughts and labours; neither is it a mere patchwork display, containing a fact from Adams, a sentiment from Hecker, and notes from everybody, with nothing at all from the author except the stitches, and

those too small to be visible to the naked eye. No; it is just what a book should be; it is written out of the fulness of the writer's knowledge—is original sometimes—interesting in every part—honest always.

The oration embraces numerous questions, and indicates on the part of its author a large amount of general knowledge, which is, however, introduced on all occasions in such a modest, brief, and incidental manner, that the writer himself seems scarcely to be aware of its introduction. The attraction of matter, the combination of the elements that compose the atmosphere, the processes of combustion and putrefaction, the temporary suspension of what is called vital action, procreation, the origin and prevalence of communicable diseases, the origin of endemic diseases, the important subject of cleanliness, the effects of communicable diseases on the social condition of the human race, the value of quarantine, and the labours of Jenner, are the subjects on which the readers of this comprehensive pamphlet will find themselves feasted.

In the preface, Dr. SNOW enters on the knotty point, the meaning of the terms physical, chemical, and vital; and observes, that "it is especially desirable to have a general term to include what is understood by the words physical, chemical, and vital, in order to avoid the disputes respecting these two latter words, and the needless antagonism in which these words are sometimes placed towards each other." We quite agree with Dr. SNOW on this matter; but we wish that bold man joy of his task, who shall dare to fuse the two terms into one. Dr. SNOW himself seems inclined to offer a compromise. "All changes of composition," says he, "whether occurring in a test-tube or in the living brain, are properly included amongst chemical changes; and all that takes place in living structures has a right to be called vital, whether it differs from what occurs elsewhere, or not." But why this compromise? We confess ourselves unable to tell. If every change of composition in the body is chemical, then the word chemical is quite sufficient of itself to indicate the nature of the change; and the term vital is dead, and had better be buried where no one can find it: but if the changes in the composition of the body are something more than chemical, *i. e.*, vital, then let the word chemical be abandoned altogether in relation to bodily metamorphoses, and let us endeavour to discover what this peculiar, this vital action, is.

The oration opens with the consideration of the two kinds of attraction, "the attraction which the atoms of matter exert on each other at all distances, and the attraction which exists only at all insensible distances". These definitions of the attractive force are up to the present day orthodox; they cannot remain unquestioned much longer. "Attraction at insensible distances"—what can this mean? What is an insensible distance? In truth, there is no such a thing, there can be no such a thing, as an insensible distance. That between the atoms of bodies, or betwixt combinations of atoms, there may be spaces or distances which we cannot discern with the unaided eye, or even as yet with the microscope, we admit; but this is no proof that the distance alluded to is, in the abstract, insensible; the distance is only inappreciable to the visual organ, and to the imperfect optical instrument; it is perfectly understood by the mind; and the day may come when more than this will be arrived at. Moreover, if the attraction of very small bodies, or of the atoms of bodies, is to be called attraction at insensible distances, because of the minuteness of those atoms, then should we say, in like manner, that the power of attraction resident in bodies of stupendous magnitude, but so far removed from us in space as to be invisible even to the aided vision, is insensible attraction also, inasmuch as such attraction can only be inferred from other circumstances—cannot be seen. To be short, if the word distance conveys to the mind the idea of space, the space may be great or small, but space it is; and, as the mind can be brought by education to appreciate distances of any kind, the term "insensible distance" becomes a source of great obscurity and great error.

With an eye to the unity of the laws of nature, Dr.

Snow aptly illustrates the connexions that exist between the two forms of attraction which it is said there are. The whole of the important subject, the force of attraction, deserves, however, to be reconsidered by the philosophic world—a task for which our American brethren seem better prepared than ourselves.

In the second and third pages of the oration, there occurs a most singular contradiction—a contradiction which arises more from the curious nature of the experimental evidence that has been referred to, than from any inaccuracy or false reasoning on the part of the orator. He has been speaking of what is called “the balance of affinities” between portions or elements of matter, and he expresses a belief that the “idea that the nitrogen of the atmosphere manifests no attraction for the oxygen, is not quite correct; for,” he continues, “a red-hot iron wire is incapable of abstracting oxygen from the atmosphere, although it combines very briskly with that gas in the absence of nitrogen. A lighted candle, or a piece of ignited charcoal, has the power of abstracting only about one-fourth of the oxygen from a limited quantity of air, when the combustion ceases; whilst, in the absence of the nitrogen, it would consume nearly the whole of the oxygen. When animals are placed in an atmosphere made by mixing together equal parts of nitrogen gas and atmospheric air, they exhibit more distress, and die much sooner, than in an atmosphere of the same extent in which the oxygen and nitrogen are both reduced to one-half by the air-pump.”

From these experimental results, Dr. Snow infers, “that the nitrogen of the air exerts an influence over the combination of oxygen with other bodies. This depends chiefly on the affinity between the nitrogen and the oxygen—an affinity which is not great enough to cause their combination under ordinary circumstances, but is sufficient to counterbalance, to a certain extent, the affinity between oxygen and other bodies.”

Our readers will observe that these arguments tend to confirm the beautiful modern chemical hypothesis “of counter affinities”—an hypothesis which has been thought to account for the antiseptic properties possessed by many spirits, solutions, and gases; and, if Dr. Snow had left off at this point, and had proceeded to some other subject, there would have been no cause for surprise; but, singularly enough, he immediately brings forward another chemical experiment, which in a great degree clashes with those he has already referred to. It will be remembered that he stated, that a red-hot iron wire would not abstract oxygen from the atmosphere, because the nitrogen held the oxygen in check; but would oxidize in pure oxygen. He now shows, from no less an authority than Professor Graham, that, if another oxidizable substance be operated upon in the same manner, the results will be precisely reversed.

“Phosphorus is not acted on by pure oxygen at the ordinary temperature and pressure of the atmosphere; but, on diminishing the pressure, or adding a little nitrogen, the phosphorus begins to be oxidized. The reason of this probably is, that the attraction of the molecules of oxygen for each other prevents their union with the phosphorus, till this attraction is diminished by their increased distance.” (p. 4.)

Are not these experimental results very strange? Where does the contradiction lie? Does it arise from errors made in the experiments related, or in an erroneous endeavour to account for two opposite experimental facts on one and the same hypothesis? The error must be conveyed in one or other of these queries. For it is absurd to suppose that the nitrogen should play the double and contrary part of holding back oxygen from a burning wire, and of assisting the oxidation of phosphorus. And again, if the molecules of oxygen have such an attraction for each other that they will not unite with phosphorus, why do they not exhibit the same amount of attraction when brought into contact with ignited charcoal or a red-hot wire?

A captious critic might be inclined to dispute the first statement made by our orator, viz., that a red-hot iron wire will not oxidize in atmospheric air; for it is well known

that a red-hot wire will oxidize in the atmosphere to a certain extent. The correction, however, would not meet the difficulty, for the three succeeding experimental facts remain; and as they are most ably and correctly stated, Dr. Snow's position would not be altered, if the experiment with the wire were removed from the field of argument altogether. Instead, therefore, of criticising Dr. Snow for placing what seems to be a contradiction on a leaf of his book, we prefer to spend a few lines in an endeavour to show how the different experimental results to which we have called attention may be explained and reconciled.

There cannot be a doubt that the repulsive power of all molecules resides in the caloric by which they are surrounded, as Metcalfe so admirably shows, and as Dr. Snow takes occasion also to opine. Take away caloric from any substance, and its molecules no longer repel each other, but, on the contrary, fall together, and form a mass, compact and dense in proportion to the quantity of caloric extracted. But as the extraction of caloric is limited, it follows that the molecules of every body in nature are mutually repulsive in a greater or less degree, as they are surrounded with greater or smaller quantities of caloric. Still more, there is every required proof that the mutual attraction of every molecule of matter for another molecule becomes lessened in direct ratio to the square of the distance. The further, therefore, that the molecules of oxygen are removed from each other, whether by dilution in caloric, or in some form of matter for which they have little affinity, or by a vacuum, their mutual attraction for each other diminishes; and, to a certain degree of extension, their attraction for the molecules of other bodies with which they may be thrown into contact, and for which they have an affinity, increases. Now if a piece of iron wire is made red-hot in the atmosphere, i. e., in diluted oxygen, the radiation of heat from the wire expands the gaseous medium by which it is surrounded, and dilutes the oxygen to such an extent, that the union of the two is prevented almost entirely, from actual absence of oxygen; and, for the same reason, the combustion of the charcoal and the taper in atmospheric air is moderate in amount; but when the burning or fused material is dipped in pure oxygen, the caloric evolved rarefies the gas sufficiently to destroy its molecular attraction, but not to such an extent as to drive it off almost altogether; and hence a rapid combination between oxygen and iron ensues. And for the same reason, if by rarefaction, by the air-pump, by caloric, or by such a gas as nitrogen, oxygen is moderately diluted, phosphorus will combine with it; although in the pure oxygen, where the molecular attraction of the gas is unbroken, no combination will take place.

If, then, these views are correct, it follows that the first four experimental facts, adduced by Dr. Snow, do not in any way show that nitrogen exerts a counter-affinity over oxygen, except in so far as it acts as a mere diluent of oxygen.

We have ventured on putting forward this hypothetical explanation of two very singular chemical phenomena, believing that it affords a fair solution of the difficulty involved; and without wishing in any way to deny the hypothesis of “counter-affinities” in reference to other chemical phenomena.

We do not always approve of the analogical reasonings of Dr. Snow. It is Campbell, if we remember rightly, who remarks that “analogical evidence is but a feeble support, and is seldom honoured with the name of proof. It is the defensive, not the offensive, weapon of the orator.” This is very true. Analogies are apt to deceive speaker and listener, writer and reader. Sometimes, again, they are seized upon hastily by the writer, and lose their effect on the reader. In page 4, our author offers an analogy betwixt the increased force which an ordinary body obtains in falling from a height, and the continuance and extension of those changes which result from attraction at insensible distances. Such an analogy is, we think, far-fetched, and quite unnecessary for elucidating the subject in hand.

In alluding a second time to vital action, the orator observes, "that the most characteristic property of vital actions probably is, that they are always caused by similar processes which have preceded them, whilst all other molecular changes may arise occasionally at least from other causes." (p. 6.) There is no ground for this distinction. Dr. Snow does not fall into an error, as many do, of supposing that one living cell generates *per se*, i. e., unconditionally, another or second cell, and that organic matter is thus made up of self-generating cells; but at the same time he does not illustrate the independent origin of each cell in a clear manner, and he attaches to these formations a higher degree of importance as phenomena, than he does to other natural formations. This is not faithful philosophy. Let there be given certain required elements and conditions in the infinite space, and there shall be formed, by virtue of immutable laws, a world, worlds, or even a system of worlds, according to the amount of the elements and conditions supplied; and these worlds not square worlds, not hexagonal, but round, like other worlds—casts, we had almost said, of one mould.

Let there be given, in the laboratory, certain elements and conditions, and there shall be formed, by virtue of laws also immutable, a crystal, and a crystal only of one kind or shape, however often produced. Lastly, let there be brought together, either in the laboratory of the chemist, or in the laboratory of nature, certain conditions and elements, and a cell will be the necessary result. But as the first cell ever formed must have been formed independently of any other cell, and as the formation of the second, or second trillionth cell, is but a repetition of the first, it follows that the production of every cell is quite conditional and quite independent of any previous cell, the proximity of cells being a secondary and mechanical arrangement, intended for the generation of a mass, and having no more to do with the origin of the cell itself, than the aggregation of the atoms of matter has to do with the origin of atoms. We are quite aware that this view of the subject is not adapted for every mind: we believe, however, in its correctness, and must proclaim it at all hazards. We know that the formation of one cell within the other, and other parts of the cell-producing process, may lead, and that right readily, to the idea that cell propagates cell; but much more powerful is the evidence in favour of the opposite opinion. The writer we are now following assists us here, indeed, by showing that an absence of certain external conditions leads to a suspension of cell-formation: "The process of change," he observes, "may, as in certain insects and plants, be suspended for a time, on account of the deficiency of warmth, of moisture, or of oxygen; but, when it recommences, it is in precisely the materials in which it left off." And, a little further on, he illustrates that the same suspension of continuous changes may occur, in other instances, out of the circle of moving things: "For instance," he explains, "if a seam of coal is on fire at a great depth from the surface, the combustion can be entirely arrested by cutting off the access of air; but, if no means are taken to cool the lately-burning materials, they may remain for months at a bright red heat, ready to enter again on the process of combustion, should air be accidentally admitted."

Our author has not yet done with the vital process; it is with him, as with all men of philosophic mind, an important subject,—a subject which is not to be looked at through smoked glasses, as astronomers look at the sun, nor to be passed over as a solemn mystery; but one which requires, as the Central Americans would say, "to be looked right down into". On the seventh and eighth pages the following remarkable passage occurs:—

"There is no distinct line of demarcation between vital processes and those that are not vital. Vinous fermentation, for instance, has been generally looked upon as a merely chemical change; yet it has great claims to be entitled a vital process. It is always accompanied by the formation of the cells or sporules of the yeast fungus—the decomposition of the sugar into alcohol and carbonic acid bearing a direct relation to the quantity of yeast produced. Many persons would doubtless say that

the formation of the sporules is a vital process, and the production of alcohol and carbonic acid a chemical process inseparable from it. According to this view, whilst cell development is undoubtedly a vital process, digestion and the formation of compounds to be secreted or excreted are chemical processes. There is no objection to such a distribution of terms, but it must be remembered that the decomposition of sugar into alcohol and carbonic acid is as closely connected with a process of organization as are the sensibility and contractility of animal tissues. This blending together of what we call vital and what we call chemical, need not surprise us, however, when we consider that all changes of composition, with their attendant phenomena, whether taking place within the living body or not, are alike the result of the attraction or affinity which exists amongst the ultimate atoms or molecules of matter."

We are bound to look upon this passage as highly unsatisfactory in its points of argument; nay, it is not made up of true and clear ideas. Take the illustration of vinous fermentation. It is admitted that certain matters and conditions being brought together, certain results will ensue; that three new substances or products will be formed, viz. sporules of yeast-fungus, carbonic acid, and alcohol; and it is said that the decomposition of the sugar into alcohol, bears a direct relation to the quantity of yeast produced. This is, of course, true; but not the whole truth, nor does it make the sporule of primary importance. The alcohol, the carbonic acid, and the sporule, are all products, as Schleiden opines, and their relation to each other may be varied as often as there can be variations in three bodies. The carbonic acid and alcohol are formed in proportion to the yeast produced. Certainly. But are not the yeast and the alcohol formed in proportion to the quantity of carbonic acid produced? and is not the alcohol formed in proportion to the amount of yeast and carbonic acid produced? In truth, these changes admit of no abstract analysis. Effects may be watched, and some results captured, and, to the eye of the superficial observer, a cause and an effect may be evident; but the candid philosopher sees less clearly, and in the process of vinous fermentation, as in other similar processes, cannot place either the one or the other product first or last.

The truth of our statements is confirmed, indeed, by the orator's own observation, "that all changes of composition are alike the result of the attraction or affinity which exists amongst the ultimate atoms or molecules of matter".

The diminution of molecular action, without actual extinction of the process, the connexions or similarities of some organized materials, and the resuscitation of suspended molecular changes, under certain circumstances, are discussed at great length by Dr. Snow, and are aptly made to precede the observations he is anxious to introduce on the subject of communicable diseases. This most important question is thus brought under notice at page 12:—

"In addition to the series of continuous molecular changes having for their result the preservation of the individual and the species, there are others, occurring in living beings, which have an opposite tendency; they divert part of the substance of the individual from the actions which are natural to the species to another kind of action, in consequence of which this substance is employed in the multiplication and increase of the materies morbi of communicable diseases—an extensive group of maladies, each case of which is caused by some material that, as a general rule, has been produced in the system of another individual. The origin of these diseases, for aught we can tell, may be as remote as that of the beings they infest and exist on."

Dr. Snow objects to the adjective "contagious" being connected with the noun "disease", and suggests that the word "communicable" would be more accurate. We see no reason why the old word "contagious" should be discarded, by its etymology what it may, if one understood and simply meaning is attached to it,—such, for instance, as this by Adams: "Nothing can be called a contagious disease unless the person affected by it can induce a similar disease in others, whether regard to season, climate, or any local circumstances."

The following is Dr. Snow's catalogue of communicable diseases: "Syphilis, small-pox, measles, scarlet fever, &c."

typhoid and relapsing fevers, erysipelas, yellow fever, plague, cholera, dysentery, influenza, hooping-cough, mumps, scabies, and the entozoa." Many of our readers will be inclined, we doubt not, to question the propriety of including all these diseases under the head of contagious or communicable diseases; but, if the general doctrine of contagion be admitted at all, it certainly extends to the disorders specified, and might include several more, such as hydrophobia, glanders, puerperal fever, and varicella.

After again asserting the self-reproductive power of organized matters, and after making a few observations on the period of incubation of a communicable disease, our author goes the whole contagionist, and says: "One character of communicable diseases, is, that they are apt to be extremely prevalent at particular times and places. This character, which arises strictly out of their communication from individual to individual, has obtained for many of these diseases the name of epidemics."

It is exceedingly gratifying to see how ably Dr. Snow treats on the cause of the increase, at intervals of time, of the communicable diseases: "The extent of population and of intercourse," he observes, "has great influence over the epidemic character of a communicable disease. The various eruptive fevers are constantly present in London, and are only liable to fluctuations in their prevalence. In less populous districts, however, there are not enough subjects to support their constant presence. One or other of them is often absent for a number of years, and, when reintroduced, spreads to a great extent." The cholera, he thinks, "is so difficult of support that the world seems scarcely large enough for it; and, were it not for its pasture in India, it would be in danger of passing altogether out of existence, like the dodo of the Mauritius." On this last question, we can only exclaim with Hamlet—

"Tis a consummation
Devoutly to be wished."

Dr. Snow is of opinion that the communication of diseases was not recognized until a recent period. Sydenham, he says, recognized the communicability of the plague alone. In making this assertion, however, Dr. Snow has fallen into an error. It may be quite true that Sydenham did not verbally recognize any disease contagious, except what he calls the plague; but then the extended meaning of the word "plague", as it was used by Sydenham and by all the old writers, must be taken into consideration. Not a shadow of doubt is there that every epidemical disease has, over and over again, been described under that title. Sydenham himself, there is every reason to believe, considered the malignant scarlet fever as plague; indeed, so many diseases were, in the course of the fifteenth, sixteenth, seventeenth, and even eighteenth centuries, included under the name of "pestis", that we are told, in the preface to a pamphlet by Thomas Phayer, republished in 1772, of an eminent member of the faculty, who, on being asked why he did not join in the "plague dispute", said ironically, "that he had never seen the plague". Moreover, the communicability of small-pox was recognized almost universally by the ancients. The system pursued by the Turks, of inoculating for the small-pox, is of ancient date, and implies distinct knowledge, on the part of a whole nation, of the communicability of the disorder. In the Highlands of Scotland there was also a very old and prevalent custom connected with the disease now named, which deserves especial notice. When small-pox was epidemical, healthy children were put into the same bed with children that were suffering from the disease in its mildest form, in order that a mild form of the affection might be obtained. In the Arabian school, the doctrine of contagion was freely admitted; and some of the Greek physicians entertained a similar notion,—to say nothing of the historians and poets who have written to the same effect. The whole question of the ancient opinions concerning contagion has been discussed briefly, but with consummate skill, by our learned countryman, Francis Adams, in his translation of the works of Paulus Ægineta. Referring, first, to the Mosaic description of the communicability of leprosy, Adams next proves, on indis-

putable evidence, that the general doctrine of contagion was held by Thucydides, Lucretius, Ovid, Silius Italicus, Livy, Dionysius, Diodorus Siculus, Appian, Plutarch, Quintus Curtius, Dio Cassius, Eusebius, Gregory of Nyssa, Evagrius, Aristotle, Isocrates, Marcus Antonius, Virgil, Pliny, Seneca, Chrysostom, Isidorus Hispalensis, Aretæus, Galen, Cœlius Aurelianus, Aëtius, Paulus, Rhases, Haly Abbas, Avenzoar, Avicenna, and Boccaccio. Nor was it merely in regard to pestis that this opinion was held by all these writers, for Paulus and Aretæus spoke also of the contagious nature of elephantiasis. Rhases described elephantiasis, itch, consumption, pestilential fever, ophthalmia, and malignant pustules, as contagious; and Avicenna remarked that small-pox and measles were, of all diseases, the most contagious. Plato also spoke of the contagious nature of ophthalmia; and the laws of Moses with reference to lepers, and the after writings of Josephus, in comment on those laws, indicate how exceedingly old is the notion of the communication of diseases from one person to another. It would be possible to enlarge greatly on this subject by referring to the establishment of pest and lazaret-houses, to the origin of quarantine, and to many other matters. Sufficient, however, has been written to show that the old writers held the doctrine of contagion; and, if Sydenham does not describe, in words, the contagious nature of small-pox, we think his silence can only have arisen from the circumstance that the fact of the communicability of the disease was so notorious in his day, that he did not think it necessary to allude to the matter at all. We have entered deeply into this historical question, because it is of great importance to have correct views on the subject of medical literature.

In an easy and earnest style, Dr. Snow tries to throw overboard the opinion, that epidemic disorders are propagated by the agency of the atmosphere. He shows good argument, too, in refuting the idea that there is such a thing, in some persons, as an innate predisposition to disease; and he criticises unmercifully all speculations on the effects of the new principle in the atmosphere, concerning which the philosophic world is now so mystified, ozone; perhaps on this subject he is too critical. If, in truth, a peculiar principle—call it ozone, or anything else—can be produced by various processes (and no one who will put his nose near an electric machine will doubt the fact, we presume), and if this principle is always present in the atmosphere in a greater or lesser degree, as such men as Schönbein and Faraday assert, there is more in the subject than deserves to be sneezed at. However, it must be admitted that actual knowledge does not support all that has been said on the matter.

The influence of climate and season in inducing epidemic diseases, has, Dr. Snow most properly observes, been very much overrated. Locality, he imagines, has a greater influence. He does not admit that such endemic complaints as intermittent fever arise from malaria or miasmata, but offers several proofs that the drinking of impure water is a more common cause. There is great reason for accepting the position which our author here takes; and we have ourselves recently heard of an instance, occurring in the eastern counties, where several persons suffered from ague, in consequence of drinking stagnant water; the disease passing off entirely when a fresh supply of water was procured. At the same time, we think that it is going a little too far to say that "the disease of the liver and spleen, to which persons are subject after attacks of intermittent fever, also confirms the view that its material cause enters the system by the alimentary canal, and not by the lungs." (p. 25.)

It will surprise many of our readers to be told that so excellent a thinker as Dr. Snow disbelieves the common opinion, that gases arising from the decomposition of animal matter cause no fevers or other epidemical diseases. The close observer will not be so surprised at this disbelief, and will agree with Dr. Snow in believing that it is a mistake to attribute the excess of epidemic disease found in crowded and poor localities, to what are called noxious effluvia. Few, however, are there, not excepting those who believe with him in specific causes of disease, who will go so far as he does in chanting the gentle innocence of those "soft and balmy gales" which

any nature-loving traveller may find in the wynds of Glasgow, the cellars of Liverpool, or the sewers of London. Mr. Grainger, we imagine, would come to a different conclusion; and there cannot be a doubt that impure states of the atmosphere do assist most importantly, if not in the propagation of epidemical diseases, at least in favoring their rate of mortality. Dr. Snow himself indirectly admits this, indeed, a little further on, where he preaches, in powerful language, the worth of universal cleanliness.

We said a little ago, that Dr. Snow referred to those hard swellings of the spleen and liver which attend ague, in support of his notion that the seeds of this distemper were taken into the system by the digestive organs. At page 29, he uses a similar argument, and infers "that the specific cause of influenza and measles is drawn in with the breath, as these diseases chiefly affect the respiratory organs." We, with all deference, must enter a second protest against this line of argument. Neither Dr. Snow, nor any one else, can prove as yet that the affections of the lungs which attend the diseases last named are not secondary affections, arising from general systemic derangement. Nay, is it not evident that another writer might, with equal fairness, argue from appearances, and say that the poison of measles, scarlet fever, small-pox, and sweating sickness, was taken in by the skin, because in those diseases the skin is chiefly affected, just as past writers were wont to attribute diabetes to a disorder of the kidneys, because the function of those organs is peculiarly active in that disease.

Some readers may possibly not be aware of the fact that a few years since the distinguished author of the oration before us broached an ingenious and, in some respects, a novel theory, on the propagation of communicable diseases. The immortal Howard held an opinion, that the poisons of contagious diseases are only carried to very short distances by the atmosphere. Dr. Snow entertains a similar opinion, and supplies the place of that hypothesis which supposes that the poisons of the contagious diseases are drawn in with the breath, by another hypothesis, that the said poisons are taken in by the stomach—are, in truth, swallowed. Now Blackburne, in a treatise on scarlet fever, written in 1803, says that "infectious effluvia may be propagated along the olfactory nerves to the brain, or pass through the mouth into the stomach, or be gradually admitted into the circulation through the medium of the lungs"; and he then goes on to offer proofs from Drs. Lind and Johnstone, that poisonous effluvia may be taken into the stomach. Dr. Snow's hypothesis is, however, different from that of Blackburne, inasmuch as he presumes that the seeds of many diseases, but especially of the Asiatic cholera, pass off with the excretions of patients, find their way into rivers, wells, etc., are thus actually swallowed by other persons previously healthy, and finally set up disease in the healthy body that has received them.

On the present occasion, as we have previously hinted, he is anxious to extend this theory of the propagation of communicable diseases. "There is evidence," he tells us, "tending to show that typhoid fever, yellow fever, and plague, as well as cholera, are communicated by accidentally swallowing the morbid excretions of the patients, and that these latter may sometimes be conveyed to a distance with drinking water, or other articles of diet, without losing their specific properties." (p. 30.) And he then goes on to offer proofs of this opinion, which our space will not allow us to reprint. The subject deserves much consideration, and we here offer what will, we hope, be considered a fair opinion upon it.

The first question that has to be considered is, whether or not such diseases as those we have named in the course of this review, are, as Dr. Snow imagines, transferable from one person to another by means of sporules, germs, or some other form of organized matter. With reference to some of these diseases, this theory is highly probable, as in the instances of syphilis and small-pox, and although it does not seem to be applicable to some others, we are willing, for the sake of discussion, to extend it to all. This point gained, the next question is, How does a

healthy system receive the presumed organized disease-giving material?

It is impossible to suppose more than two channels by which such reception can take place: the first by inoculation, or direct transference of the morbid matter into the circulating fluids; and, secondly, by indirect transference, viz., by absorption through mucous membrane or through the skin, which is a modified form of mucous membrane. The transference of any morbid matter into the system by inoculation is so easily understood, that it requires but little comment. The possibility of transferring disease from one person to another by this means, has long been recognised as the only positive proof of the communicability of any disease; and if Dr. Snow could show that cholera might be induced by the inoculation into a healthy body of some morbid product, thrown off by a body suffering from cholera, he would establish an astounding fact, and supply convincing evidence of the correctness of his theory. In the introduction of morbid materials into the system through mucous membrane, the difficulty increases. We know that through the mucous membrane of every part of the body, and even through the skin, the act of absorption goes on—nay, we know that at a push these structures will do compensating duty for each other in a great degree. In instances where drinking water is wanted (as occurred in Bligh's voyage after the mutiny of the *Bounty*) the pangs of thirst may be relieved by surrounding the body with wet cloths; and counter instances might easily be found. But the application of this principle is not general, i.e., it does not extend to the absorption of all materials. It is possible that absorption through equal portions of the skin, or of the mucous surface of the lungs, vagina, or urethra, is not widely different in degree; but the difference betwixt absorption in the intestinal canal and in the above-named parts must be much greater, inasmuch as the substance to be absorbed will of necessity be brought into contact and commingled with the digestive fluids, and will also be altered materially in character. How far the process of digestion lessens or increases the activity of morbid matters, is as yet an open question. That it will produce modifications is evident: that it sometimes destroys the power of certain animal substances which, when otherwise absorbed, act as poisons, there can be no doubt; and that it does not prevent—nay, rather increases—the action of some other poisonous substances, there is also no doubt.

The great problem, therefore, that has to be solved is, whether the presumed organised materials which give rise to the diseases named by Dr. Snow,—namely, typhoid fever, yellow fever, plague and cholera, can pass through the process of digestion, and afterwards being received into the system, light up the peculiar classes of symptoms by which those diseases are characterised. Dr. Snow certainly does show several very curious facts in proof of the communicability of cholera by the swallowing process; and as there is no evidence to the contrary, who can say that typhoid fever, yellow fever, and plague, cannot be propagated in the same manner?

The question of the spontaneous origin of communicable diseases is very fairly discussed by Dr. Snow. He supposes that some of these diseases may arise, "so to say, spontaneously, that is, from other causes than their communication; just as ordinary combustion, putrefaction, and some other continuous molecular changes, very often commence anew, from various causes, without any continuity with previous changes of the same kind." Erysipelas is one of those diseases which Dr. Snow imagines may thus arise. The following curious instance, which occurred a few years since, under our own observation, bears in a remarkable manner on this subject:—

In a little village in Essex, two farm labourers were thrashing corn in a barn. They had arrived nearly at the end of their task; and whilst turning up some loose masses of straw that were lying amongst a considerable quantity of dust on the barn floor, they were both simultaneously seized

with sensations of nausea, and other disagreeable symptoms. They continued at their work for some time, but at last were fairly obliged to give in, and were very kindly ordered by their employer to go home, their pale, distressed faces indicating that they were really ill. We saw them a few hours afterwards; they were complaining of shiverings, had a loaded state of tongue, and pains in the back and limbs. In the course of the following day, an erysipelas bluish appeared on the face of each patient, and each passed through a most severe and dangerous attack of erysipelas of the head and face, ending in formation of pus under the scalp, and attended with extreme debility. The men recovered. There was, at the time, no other case of erysipelas in the village or immediate neighbourhood, nor did any other cases spring from these.

The remarks made by our author on universal cleanliness, as a means for preventing the propagation of epidemic diseases, have been referred to already, and are very important.

"It should not be a cleanliness," he truly observes, "for mere appearances; it should be a rational cleanliness, like that by which the chemist keeps his tests pure and distinct, and the farmer his land free from weeds. There should be not only personal cleanliness, but cleanliness in every department of the household—cleanliness in builders and owners of house property, to deter them from sinking wells so near to cesspools and drains, that their contents may percolate without proper filtration—cleanliness in water companies, to prevent them from sending water containing sewage to their customers—and cleanliness in sanitary reformers, to deter them in their fear of offensive effluvia, from abolishing cesspools and having the sewers flushed, and thus sending all the recent excrementitious matters into the rivers, until they have ascertained that people are no longer obliged to drink the water of those rivers."

These are golden maxims—maxims, the practical accomplishment of which, throughout the world, would do more to civilize our species, and increase human happiness, than all the profound eloquence, and mystic symbolism, that has been thrust on the ear and the eye of mankind, since the earliest rostrum was erected, or since the first bull was sacrificed by Egyptian priest, and with solemn pomp, on the altar of Epaphus.

Like many other epidemiologists, Dr. Snow hurls, with dexterous hand, a stone at the quarantine system. Quarantine has been held in various degrees of estimation by the medical profession. When first started in Venice in the latter part of the fifteenth century, it met with opposition from the physicians, and was suggested and carried out by the legislative mind alone. In later times, however, many medical men have spoken of its worth in the highest terms, and no one more than our own countryman, Blackburne. In this day, medical men are strongly inclined to the abolition of quarantine. Dr. Snow puts the question, as we think, in a proper light, by explaining that now, "when the commercial interest and influence preponderate over every other, the day is gone by for strict quarantine; which, indeed, was ever but a doubtful measure, as it was liable to evasion, and could not be enforced on the smuggler." (p. 36.)

We now turn over the last page of Dr. Snow's entertaining and instructive oration. Our comments have, it is true, been carried to a great length; but, as it is a rare thing to find ourselves in possession of so suggestive and important a book as the one now in our hands, we have sufficient reason for pleading an excuse. The criticisms we have felt it our duty to make have arisen out of a sincere love for earnest and truthful scientific discussion, and are submitted to our professional brethren, and to Dr. Snow especially, with all good feeling and with profound respect.

PERMANENT CURE OF REDUCIBLE HERNIA. By GEORGE HAYWARD, M.D., of Boston, Mass. Presented to the American Medical Association, May 1852. pp. 25. Philadelphia: 1852.

A COMMITTEE of the American Medical Association addressed, a few years ago, a number of questions to their professional brethren, on the best means for producing a permanent cure of reducible hernia. The book before us is the report of this committee. To the questions sent out, only seven answers were returned, and these, say the committee, "though interesting and valuable, do not throw so much light on the subject to be investigated, as they had hoped to derive from that source." Under these circumstances, the committee thought that it would render their report to the Association more worthy of consideration, to introduce into it information derived from other sources. In a brief and practical manner, therefore, the authors have collated all the recorded methods, ancient and modern, that have been employed for the permanent cure of reducible hernia.

A short abstract of the report is subjoined.

The operations that have been performed till within these last fifty years, have been of a severe character. These operations were, *cauterization, ligature, sutures, excision of a part, or of the whole, of the sac, and castration.* "The object of all of them was to obliterate or contract the neck of the sac, and thus prevent the protrusion of the abdominal viscera."

Barbarous in character, dangerous as barbarous, performed often by ignorant quacks, and even by women, these operations must have destroyed more lives than all the ruptures that have been left untouched by surgical hands since the world began. The American committee, in summing up their remarks, justly quote the saying of Mr. Lawrence, that, "since the enlarged state of the tendinous opening is not removed by the processes adopted for a radical cure, since a recurrence of the disorder is not prevented, we may assert that these operations do not afford any greater chance of relief than the employment of a truss."

The committee also direct attention to the following modern operations for the radical cure of hernia: 1. Closing the neck of the sac, by leaving a piece of omentum in the inguinal canal, and by forcing the testicle into it, and then bringing on inflammation by incision, so as to cause effusion of fibrine; 2. Closing the external ring and the canal by means of the hernial sac, as performed by Petit and Garengot; 3. Gerdy's method of crowding the integuments into the inguinal canal, and removing the cuticle from them by caustic alkali; 4. Balma's operation of introducing gold-beater's skin and gelatine into the upper part of the hernial sac, so as to induce inflammation; 5. An autoplasmic operation by Dr. Jamieson; 6. Graefe's barbarous plan of cutting out a piece of the sac, and then introducing a piece of lint, besmeared with stimulating ointment, into the inguinal canal; 7. The seton; 8. Bonnet's system of passing pins through the neck of the sac, and Mayor's modification of needles for pins; 9. Acupuncture; 10. Subcutaneous scarification of the neck of the sac (Guerin), and scarification of the inguinal canal (Velpeau); 11. The operation by injection; by laying open the sac (Velpeau); by the subcutaneous method (Dr. Pancoast); 12. Scarification of the ring; 13. Closing the ring with sutures, as proposed by Dr. Thomas Wood of Cincinnati.

The committee offer several remarks on these operations. They relate a very instructive case, in which strangulated enterocele succeeded upon what was supposed to be a radical cure from a closure of the canal with omentum. They describe Dr. Pancoast's operation by injection:—

"The hernial sac, its contents having been previously returned, was punctured with a small trocar passed through a canula. Having ascertained that the instrument was fairly in the sac, by the freedom with which it could be moved about, the point of it was then directed upwards, so as to scarify the internal surface of the upper part of the sac. The trocar was then withdrawn, and half a drachm of the tincture of iodine, or an equal quantity of tincture of cantharides, was thrown in

slowly by means of a small syringe fixed to the canula. The canula was then withdrawn, and a compress was applied just above the external ring; and the pad of the truss which had been put on before the operation, was brought down over the compress."

We shall be anxious to learn what will be the success of Dr. Wood's operation, that, viz. of closing the ring with a suture. Dr. Wood admits that his experience is at present too limited to warrant him in saying much in its favour. He seems, however, to have great hopes as to its ultimate success. The committee do not describe the operation, but inform their readers that an account of it may be found in the last volume of the *Transactions of the American Medical Association*.

The committee close their report by offering the following opinions.

"I. That there is no surgical operation at present known, which can be relied on with confidence to produce in all instances, or even in a large proportion of cases, a radical cure of reducible hernia.

"II. That they regard the operation of injection by the subcutaneous method as the safest and best. This will probably in some cases produce a permanent cure, and in many others will afford great relief.

"III. That compression, when properly employed, is, in the present state of our knowledge, the most likely means of effecting a radical cure in the greatest number of cases." (p. 20.)

Three letters by Drs. J. M. Warren, Parkman, and H. J. Bigelow, are added as an appendix, but these letters contain nothing novel, although very nicely written.

From the remarks and extracts which we have supplied, our readers will see that their attention has been directed to a most valuable and practical pamphlet, and will probably join with us in returning our best thanks to Dr. Hayward and his colleagues for their labours; labours which may be continued at some future day with infinite advantage to the science of surgery.

THE MEDICINAL SPRINGS OF HARROWGATE. By GEORGE KENNION, M.D. 16mo. pp. 31. London: 1853.

THE author informs us in his preface, that his "pages are not intended as a 'Guide to the Harrowgate Waters', nor as a 'Hand-book to the locality'; and still less as a 'Watering-place puff'." This, we think, is a correct estimate of the work.

The fresh and bracing air of Harrowgate makes it a suitable residence for certain classes of invalids; and its mineral waters are of undoubted efficacy in many diseases. From the stimulating and aperient properties which some of them possess, they are often of great advantage in the complaints of advanced life, attended with debility and impurity of the blood from imperfect elimination of effete matter. Patients suffering from gout and chronic rheumatism are often cured by their judicious use. It must be borne in mind, however, that there are at least forty different springs in Harrowgate, varying considerably from each other. Dr. KENNION places them in four groups, viz.:

1. Strong sulphureous waters.
2. Mild sulphureous waters, with alkaline impregnations.
3. Saline chalybeate waters.
4. Pure chalybeate waters.

Dr. Kennion mentions the popular error which considers sulphureous waters as universally applicable to the treatment of skin-diseases, as a frequent cause of disappointment to those who resort to Harrowgate. As these affections are distinct in their origin, so are they amenable to remedies distinct and different from each other. The improper use of mineral waters is a well known source of dangerous and even fatal consequences; still, the following caution is worth quoting.

"The waters of Harrowgate are," he says, "powerful for good, but no less productive of evil, when improperly taken. No year unfortunately passes without carrying off some victims to their own imprudence, who, in the hope of more speedy benefit, take large and unmeasured supplies, and thus precipitate the fate which they were only too anxious to avert. A

very short time has elapsed since this occurred to a most gallant and distinguished officer. He came here to drink the waters for some slight complaint, and in the course of two or three days, he drank a quantity which ought to have been the supply for as many weeks. The effect was to produce an apopleptic seizure, which rapidly proved fatal." (pp. 18-19.)

Dr. Kennion's tract may be described as a very condensed, and yet an instructive, account of the general and specific characters of the different waters of Harrowgate.

PERISCOPIC REVIEW.

MICROSCOPICAL DISCOVERY.

THE DEVELOPMENT OF THE TEETH.

A very interesting paper on this subject has appeared in the third number of the *Journal of Microscopical Science*, p. 149, from the pen of Mr. T. H. HUXLEY. Our readers are doubtless aware that the dentine, or proper substance of the tooth, is usually supposed to be formed by ossification of the cells of the pre-existing pulp, and consequently by layers added *within*; while the enamel is considered to be superimposed on it *from without* by a secreting layer, the "enamel organ", folded over the crown of the tooth. This account Mr. Huxley contradicts; the main object of his paper being to prove that the dentine is formed, not by ossification of the pulp, but rather by a process of deposition in, or on its outer layer, and that the supposed "enamel organ" has no function such as that attributed to it, the enamel being separated from it by a membrane (the persistent capsule of Nasmyth) and formed, in some manner not yet explained, on the surface of the crown of the tooth. An analogue of this he finds in the dermic bones of the skate, where there is distinct enamel, and no "enamel organ" whatever; and he brings out the fact by actual observation of the teeth of man.

If a young tooth capsule be opened, it will always be found that a space filled with fluid exists between the inner surface of the capsule and the outer surface of the pulp. The two are perfectly free from all adherence to one another; the only substance between them, besides the fluid, being a more or less abundant whitish matter, which sometimes adheres to the one and sometimes to the other. If the tooth be very young, a structureless membrane may be traced over the whole surface of the pulp; and it is not at all difficult to trace this in perfect continuity on the inner surface of the walls of the capsule.

The whitish substance, just mentioned as lying in the closed sac formed by the membrane so reflected, is delicate, friable, composed of cells, and, in short, is plainly the altered epithelium of the reflected membrane: it is this layer of epithelium which has been dignified with the name of "enamel organ", and invested with the function of secreting or forming the enamel.

Mr. Huxley next proceeds to inquire into the relation of the dental tissues to the tooth-capsule.

If a very young tooth, say from a foetus of the seventh month, be carefully examined, especially after the addition of acetic acid, under the microscope, the thin cap of tooth-substance may be seen to be everywhere covered by a very delicate membrane, evidently continuous with the reflected capsule described above; and the enamel fibres can be distinctly seen *under* this delicate membrane; making it of course obvious, that the so-called enamel organ, being *above* the membrane, can have no such function as that attributed to it. Between the dentine and enamel no trace of membrane can be found.

The next question examined into is that to which we have already alluded—the exact mode of formation of the tooth substance from the tooth-pulp.

The dental substance, our author holds, is not formed by simple ossification of the cells of the pulp (Nasmyth), but is deposited within the pulp in definite masses, the gaps between which eventually constitute the dental fibres, *parenchymate materiam suppeditante* (Raschkow.)

When the ossifying boundary of a tooth-pulp is examined, it is seen that where dentification has not begun, the membrane so often mentioned is in immediate contact with the substance of the pulp, which is composed of a homogeneous transparent base, in which closely arranged nuclei are imbedded. Passing towards the ossifying edge, we see in the profile view a clear, more strongly refracting layer, gradually increasing in thickness, which begins to separate the proper substance of the pulp

from the investing membrane, and is the young dentine, as transparent as glass, and at first quite structureless in appearance. No trace of "nuclei" can be seen in it; the bodies which have been described as such being, according to Mr. Huxley, simply lacunæ, and being afterwards found to form the canals of the dentine. He "believes that these facts afford sufficient demonstration that the pulp is *not* converted directly into the dentine; and that the structure of the latter does not depend upon the calcification of pre-existing elements."

In a morphological point of view, the relations of the *cement* show it to be homologous with the enamel. In a very beautiful section of a human tooth from Mr. Busk's cabinet, the upper portion of the cement exhibits in places a very distinct transverse striation, resembling its perfect enamel; and in the tooth of a young calf the transition of the one structure into the other was well shown. The enamel and the cement, therefore, according to Mr. Huxley, are formed on the surface of the dentine, not by the "enamel organ", but in some way which he does not explain. Is it not possible, that not the epithelium, but the very membrane itself, is the agent?

In conclusion: the tooth-pulp being a protrusion of the dermic tissue of the gum, and the capsule an involution of the same, the reflected membrane is the analogue of the basement membrane of the mucous lining of the mouth, and the "enamel organ" merely its epithelium, inclosed in the sac formed by the involution of the capsule.

The teeth, therefore, are, true dermic structures, and are analogous to the hairs.

THE TRANSMISSION OF ENTOZOA.

M. HERBST (*Annales des Sciences Naturelles*, xvii, 63), in dissecting a badger, found its voluntary muscles full of the minute and curious parasite called trichina. This, as our readers are probably aware, is a minute vermiculus coiled up within an oval semicartilaginous cyst, about one-twentieth of an inch in length. With the flesh of this badger he fed three puppies, about six weeks old; and on killing them some time afterwards he found the voluntary muscles of all of them full of trichinæ. Now, as these worms are not common, there can be no doubt that their presence in the three dogs in question was owing to their having eaten the flesh of the badger. How the parasites passed into the circulation, and reached the muscles, the author does not attempt to decide; but the fact which he records is a most interesting one, and highly important as a contribution to the history of entozoa.

CAPILLARIES OF THE LIVER.

Mr. RAINY writes to the editor of the *Journal of Microscopical Science*, p. 231, as follows:

"In the last part of Todd and Bowman's *Physiological Anatomy*, a doubt is expressed concerning the nature of the ultimate passages through which the blood circulates in the liver. Whether the smallest bloodvessels of this organ are true capillaries; that is, are possessed of a single tunic like other vessels of this description, or whether the blood passes along mere spaces or channels formed by the hepatic corpuscles, so as to be in actual contact with their cell-walls, is regarded by these authors as a question yet to be decided.

"Having at this time in my possession a portion of injected human liver, in which I have no difficulty in showing the smallest capillaries, and in demonstrating their tunic, the following observations will, I hope, be considered worthy of a place in your valuable Journal; first, because any doubt proceeding from such high authorities cannot fail to unsettle a point of minute anatomy which the microscope has satisfactorily established; and secondly, because the supposed fact of mere blood-channels existing in the liver, whilst true capillaries are demonstrable in other glands, seems to depart too widely from a general law to have even the sanction of probability in its favour.

"The examination necessary to show the capillaries of the liver is best made on a very thin slice of injected liver, taken from a part where the injection begins to fail; but, before examining this section, it must have been submitted to a gentle current of water, in order that the biliary corpuscles may be entirely washed away from the meshes of those capillaries which project from the thinnest part of it.

"In respect to their structure, these capillaries differ but little from those of other parts. Their calibre in the liver I have always observed to be very unequal, arising most probably from the manner in which they are compressed by the corpuscles which lie in immediate contact with their walls, and fill up the areolæ produced by their numberless inoculations. Their

average diameter is about 1-3000th part of an inch. Their tunic is remarkably thin and transparent. The meshes are generally circular or oval, and about 1-1000th of an inch in diameter.

"The difficulty of displaying the capillaries of the liver I believe to arise from the close connexion of the hepatic corpuscles with their walls, (there being in this organ no visible basement membrane), and the extreme fragility of the latter; so that the means employed to remove the corpuscles from the meshes of the capillaries will break away the vessels also. This, I think, will not be so likely to take place if the part have been kept a few days before being examined, and be treated in the manner above described."

PRACTICE OF MEDICINE AND PATHOLOGY.

INTESTINAL OBSTRUCTION FROM TRANSPPOSITION OF STOMACH AND DUODENUM: CONCEALMENT OF COLON BEHIND THE DUODENUM.

In the *American Journal of the Medical Sciences* for April 1853, Dr. DAVID PRINCE relates the case of a little girl, aged 6 years, who had been through life subject to slight colic. On January 30th, she was attacked with pain in the abdomen, which gradually increased, and was attended with tenderness on pressure, and with vomiting. She died early on the morning of the 31st.

On *post-mortem* examination, the following appearances were discovered.

The ascending ramus of the colon was of a chocolate colour and greatly distended, with its cæcal extremity in the left iliac region, and free, the mesocolon allowing it as much freedom of position as any loop of small intestine. About a pint of brown serum was removed from the cavity of the peritoneum, and some flocculi of coagulable lymph were seen, but no adhesions. The parietal peritoneum presented everywhere numerous minute points of arterial congestion, in contrast with the dark hue of the intestines. The rectum, and sigmoid flexure, and descending colon were collapsed and pale, but the transverse colon did not at once appear. The stomach, of its natural hue, and collapsed, was found reversed, the large or cardiac extremity being on the right side under the large lobe of the liver, and the small or pyloric extremity pointing to the left. The head of the pancreas rose from its ordinary confined position to meet the duodenum, which pursued its course to the right, passing *anterior* to the colon, and closely binding it down, and acquiring the usual length of mesentery as it became jejunum. The mesenteric artery, with the accompanying veins and nerves, passed by the side of the duodenum anterior to the colon, causing a permanent encroachment upon the colon for the space of an inch and a half; so that, upon being released from this congenital confinement, the canal would only admit the passage of the middle finger. The valvular structure characteristic of the colon was here absent, the mucous membrane presenting a smooth surface. Upon relieving this natural stricture, the contents of the ascending ramus passed freely into the hitherto collapsed portion. The line of demarcation between the inflamed and uninfamed parts was as distinct on the cæcal side of this stricture as if a ribbon had been tied around the intestine, and the ascending ramus painted up to this band. No substance was found within the intestine capable of causing the obstruction.

CASE OF STRANGULATION OF THE SMALL INTESTINE BY A DIVERTICULUM OF THE ILEUM.

Dr. SAMUEL GORDON relates the following case in the *Dublin Quarterly Journal of Medical Science* for May 1853.

CASE. A powerful, tall, muscular labourer, aged 46, was admitted into the Whitworth Hospital, in Dublin, on February 20th, 1853. He lay with his knees drawn up, and his head and shoulders slightly raised. The face had a livid pallor; the countenance was depressed, but very anxious; the eyes sunken and dull, surrounded with a bluish circle; the intellect and sensorial faculties perfect. The pulse was 132, small and compressible; the hands were cold and blue. The abdomen was very tense; the lower part had a doughy feel, but without fluctuation; the upper part was tympanitic. There was no pain, except on deep pressure; and it was confined to the right iliac region and the umbilicus; it was a dragging sensation rather than pain, and was increased by motion. He had also obstinate constipation, with tenesmus, and constant vomiting of yellow fecal matter.

His bowels had been moved freely on Feb. 13th, but not on the 14th, on which night he was attacked with a gradual swelling or increasing sense of fullness spreading through the abdomen. On the 16th he was attacked with vomiting, at first very bitter; on the following night it assumed the characters of yellow colour, feculent odour, and most disgusting taste. He had had no evacuation *per anum*, except some which was described as like the droppings of a hare.

The diagnosis formed was, that there was peritoneal inflammation from intussusception or some other obstruction of the intestinal canal.

He was ordered to take every two hours a pill containing nearly gr. iv. of calomel and one-sixteenth of a grain of opium; to have warm and stimulating fomentations constantly applied to the abdomen, and occasional enemata of warm water to obviate the tenesmus. Small doses of warm wine and water were also directed to be administered.

The following day the vomiting was relieved; the pain on pressure over the abdomen was not increased; his brother, who remained with him, said that he had passed from his bowels a "soft substance like a piece of gut". This, however, could not be seen by Dr. Gordon: and he suspects that there must have been some error. It reminded him, however, of the preparation placed by Sir A. Cooper in the museum of Guy's Hospital, in which, in a case of intussusception, coagulable lymph was effused, forming an accurate mould of the intestines; and also of those cases of intussusception, in which the invaginated portion had sloughed away, leaving the canal of the intestine pervious. The only complaint which he made on this day was of tightness of the chest and difficulty of breathing—of which he had before complained. The remission of the symptoms was not of long duration; for he died not many hours after the morning visit.

EXAMINATION OF THE BODY. Part of the small intestine was much distended and vascular; while in the right iliac fossa was another portion perfectly collapsed, not thicker than the intestine of an infant, and of various shades of colour from a dark purple to a light red. There was no soft lymph or purulent matter in the peritoneum; the serous membrane was vascular, in some parts seeming almost gangrenous; it was also remarkably dry, and in several places had a punctated appearance. The intestines were in some places very slightly agglutinated. A large portion of small intestine was strangulated by a diverticulum, which came off from the ileum about eighteen inches from the cæcum, opposite the attachment of the mesentery, being large enough at the commencement to admit the middle finger. It immediately turned over the ileum; and first passing in front of a large loop of intestine and corresponding mesentery, encircled it near its juncture with the cæcum, appearing to press most on the mesentery. It then again closely constricted the ileum about five inches from where the diverticulum was given off, and passed upwards and forwards, to be united by strong membranous bands to the anterior wall of the abdomen at about the juncture of the right iliac and hypogastric regions. The lower portion of intestine which was constricted contained only mucus; the internal coat was much congested, and the lower part was of a very deep colour. The diverticulum was seven inches and a half long; it was very narrow in the centre, and again dilated at the termination; it contained only mucus. The mucous membrane of the stomach was softened, and presented several minute bloody spots; it contained much thin slimy mucus. The distended portion of small intestine contained yellow fecal matter, like that which had been vomited during life. The collapsed portion was perfectly empty. The large intestines were greatly reduced in size, and contained a small quantity of hard scybala.

The lungs presented interlobular emphysema. The mucous membrane and other portions of the bronchial tubes were perfectly healthy.

REMARKS. Dr. Gordon observes that the evidence of peritonitis in death from internal strangulation are very inconstant; being in some cases, as in the present instance, very imperfectly developed; while, in other cases, the intestines have been found matted together with lymph. The amount of peritoneal inflammation does not appear to be connected with the condition of the stricture, nor with the age or strength of the patient. It generally commences at the stricture; but sometimes is entirely wanting at this point, although there may be distinct evidences of most acute inflammation in the rest of the abdomen.

ASSOCIATION INTELLIGENCE.

MEDICAL REFORM COMMITTEE OF THE METROPOLITAN COUNTIES BRANCH.

The Committee met on Friday last, Dr. SEMPLE in the Chair. The following gentlemen were present.

Dr. Snow Beck.	Dr. Fraser.
J. Bowling, Esq.	Dr. A. Henry.
C. T. Carter, Esq.	C. F. J. Lord, Esq.
T. Charles, Esq.	Dr. O'Connor.
W. Collins, Esq.	Dr. Semple.
Dr. Cormack.	Dr. Ogier Ward.
Dr. R. P. Cotton.	

Dr. ALEXANDER HENRY was appointed secretary to the committee.

After considerable discussion, the following resolutions were unanimously adopted.

1. That this Committee think that it is the duty of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association to support a Medical Reform Bill, so far as it shall give effect to the great principles of uniformity of education, reciprocity of privilege, and the registration of legally qualified practitioners; but that they forbear to express an opinion on the details until an amended bill is before the Committee.

2. That Mr. Hastings, the secretary of the Medical Reform Committee of the Parent Association, be requested to furnish this Committee with a copy of the amended bill, as soon as it is possible for him to do so.

3. That the Committee, in accordance with their powers to increase their numbers to twenty-five, do request Dr. F. W. Mackenzie & Dr. R. H. Powell to become members of the Committee.

4. That Dr. Semple be requested to call the next meeting of the Committee when it may seem most expedient.

Names of the absent members of committee.

Mr. Ansell.	Mr. Shillito.
Dr. Risdon Bennett.	Dr. Sibson.
Mr. Richardson.	

NORTH WALES BRANCH.

THE Annual Meeting of the North Wales Branch will be held at Holywell, on Tuesday, the 21st day of June, 1853, at half-past eleven in the forenoon.

ED. WILLIAMS, *Hon. Secretary.*

EDITOR'S LETTER BOX.

THE OUT-PATIENT NUISANCE.

LETTER FROM BENJAMIN TRAVERS, ESQ., JUN., TO THE EDITOR.

SIR,—I always read your remarks on hospital abuses with interest, as it is a subject to which my attention has long been directed. While I concur generally in your views, I would like to see your advocacy of the repression of that vile hospital nuisance—OUT-PATIENTS—go the length of a proposition for its TOTAL ABOLITION in all the London hospitals. The dispensaries are more than enough for the gratuitous work which can be legitimately imposed upon the profession. More ample in-door accommodation could be provided, if a stop were put to the present waste of means in the out-patient department. The only persons who ought to be regarded as having any claim as out-patients at our hospitals, are those suffering from the effects of poison, or from surgical casualties, such as wounds, retention of urine, and hernia.

The question which I have now submitted for your consideration is one which I raised some years ago, when I resided in the Borough. I sent a memorandum on the subject to the present treasurer of St. Thomas's Hospital; but I suspect that it has long ago been laid in forgetfulness, the usual tomb of kind suggestions. I have not forgotten it, however; and I believe I am correct in stating generally, that the feeling which I have expressed regarding the out-patient system, is as general within as without the walls of the great metropolitan hospitals. The system is a nuisance which ought to be abolished.

I am, etc.

8, Dover Street, Piccadilly, June 1st, 1853.

ADVICE GRATIS: PHYSICIANS AND GENERAL PRACTITIONERS.

SIR,—I have been a not inattentive reader of your various leading articles upon the subject of Hospital Abuses; and being myself attached to a large institution, I daily see how applicable the remarks of yourself and correspondents are in reference to an evil, which threatens ere long to injure our noble profession, by rendering its claims to *individual* respect nugatory and inoperative, though the readiness with which it supplies all and sundry with gratuitous aid.

But while you blame the physician for giving his time and talents to these so-called charities, it were well to consider his present position, in reference to what in modern times is called "the claims of the general practitioner". I presume your correspondent "OBSERVATOR" is one of those "physicians to nine-tenths of the community", who now find fault with an evil which they have brought upon themselves. I am old enough to remember the profession thirty years ago, when "advice gratis" was a thing almost unknown, an anomaly and excrescence which was then slowly creeping in, but which has of late largely increased in growth *pari passu* with the educational requirements of the Apothecaries Hall, whose licentiates now-a-days being so highly educated, repudiate the very idea of superiority in the physician. In the days of old, the apothecary, when in doubt or difficulty, invariably called in a physician; and, for the honour of the grade to which I belong, their services were at the call of the very poorest of the community. Now, alas! consultations are rare, and when needed they are grudgingly accorded by the very men whose duty it is to suggest them!

Thus our rooms are crowded with a class of people far from poor, whose almost invariable cry is, when remonstrated with, "Sir, I have been three months under Mr. Dosewell, who has done me no good; I have a large bill to pay, I hear you are good enough to give your advice gratis, and I have come to you." Now, if Dosewell had two months before asked us to visit poor Quinsey, and told us that he was unable to pay more than one fee for two or three consultations, we should have been called in; but our friend is chary of his reputation, and wishes to take all the credit and the cash himself. And thus, were the physician not to adopt the "advice gratis" system as a means of introduction to practice, he would starve; repudiated by the general practitioner, he throws himself upon the public, and by patching up the constitutions of the poor, he hopes eventually to make a name with the rich; for he knows that if he depends upon his brethren in the profession to consult him voluntarily, he must either be independent of it altogether, or starve in his endeavours to succeed in it.

Thus driven by the general practitioner from his legitimate sphere of consultation, how is he to gain reputation? Anxious to keep *au courant*, he daily peruses the Medical Journals, and anxiously seeks for an appointment to a public charity; and failing in this, or even if he succeeds, he opens his rooms for seeing a better class of patient. The cases which thus present themselves are for the most part chronic, and which have been for some time past under the care of the general practitioner; these he succeeds in curing, but no sooner is his name and fame blazoned abroad, than he is subjected to the rancorous jealousy of his brethren, and his chance of consultation practice is farther off than before. If I take an obscure case, my will, or the lease of my house, to a solicitor, he invariably advises me to take counsel's opinion; but I may daily see, chronic and obscure cases of disease requiring correct diagnosis, under the care of one general practitioner, wherein, if ever a physician's advice is sought, it is on the sly, at the earnest solicitations of friends, and contrary to the advice of the general practitioner. I for one will never refuse to give my time to the consideration of such cases, until my neighbour feels it his duty to consult the higher grades of his profession; for then, and not till then, will the present anomalous system of indiscriminate hospital relief, and "advice gratis" cease and determine.

It is useless to complain, until we can act together as an undivided body—class interests warring with each other are the cause of all the many evils which afflict the profession. I maintain that when the general practitioner *again* feels it his duty to consult the physician in cases where his advice is needed, there will be no occasion for the physician to resort to the crowded consulting room of the hospital or dispensary for experience and practice; no occasion for him to see a single "gratis" patient that does not come to him with a letter from his neighbour and friend, his fellow practitioner, and fellow labourer.

I could relate many instances which have come under my own observation, where the practitioner has voluntarily surrendered

his patient rather than meet a physician in consultation. As long as the present system continues, not one in ten of the physicians can possibly earn a livelihood; he must be independent of his profession, for his profession is seeking to be independent of him. As the late Earl Grey once said in parliament, we must support our own order; so my present remarks are not intended either to insult or annoy the general body of medical practitioners, but rather to show that evils have sprung up in the medical body politic, the seeds of which have been sown broad cast by themselves; and that as long as the general practitioners repudiate consultations, so long will specialities, hospital abuses, and advice gratis, continue.

I am, etc.,

A SENIOR PHYSICIAN.

May 21st, 1853.

[The subject of this letter will on a future occasion engage our attention.—EDITOR.]

CHLOROFORM IN LABOUR.

LETTER FROM CONWAY T. EDWARDS, Esq., TO THE EDITOR.

SIR,—I have used chloroform in labours for several years, and now rarely attend them without exhibiting it.

I pour a little on a handkerchief, and the patient inhales the vapour as a scent. The first attempts are usually failures; but soon, as a certain calmness steals over her, she becomes desirous of continuing the inhalation, feeling the perfume to be agreeable. At this point, the practitioner will show her the way to breathe it, so as to produce the effect he may require—a kind of dreaminess. In this condition, all seem to experience, what some few express, "patience to bear their sufferings". And in this state may Her Most Gracious Majesty have been placed by Dr. Snow, and that tranquillity induced in the pauses of uterine contraction, which finds expression in the words—"I feel I have patience to bear my pains".

One case has occurred in my practice in which insensibility was produced. The duration of anæsthesia was only whilst the head and body were passing the outlet. The return to consciousness was attended by a disbelief that the labour (so far as the fœtus was concerned) had terminated. This was in 1850.

The convalescence, as in all other instances where chloroform is used, was unusually rapid.

It is, therefore, satisfactory to feel assured, that whilst a partial anæsthesia is attended with no danger, or any unpleasant symptom, it mitigates suffering; does not interfere with that regular, and equal, and powerful uterine contraction, so necessary for proper fetal and placental expulsion; greatly modifies nervous irritability; and materially accelerates convalescence.

Another point of some importance to the mother, and one which I do not remember to have seen noticed by any practitioner, is this: that the infants of mothers confined under chloroform are particularly quiet and gentle in their tempers. Should any practitioner have made a similar observation, perhaps, with Captain Cuttle, he will "make a note of it".

Such being some of my experiences in chloroform, it was with no ordinary feelings of gratification that I perused your able article on the accouchement of Her Majesty, and entirely concur with you in your opinion "that the cautious inhalation of the vapour of chloroform during labour is entirely free from danger, and calculated to afford *merciful relief* from pain, in one of the most agonizing trials of humanity".

I am, etc.,

CONWAY T. EDWARDS.

Batheaston, May 28th, 1853.

MEDICAL REGISTRATION UNDER THE PROPOSED ACT.

LETTER TO THE EDITOR.

SIR,—Would you be good enough to tell me, Whether, under the reformed system of medical qualifications proposed by the ASSOCIATION, I can register as a general practitioner, without undergoing a further medical examination?

I am a surgeon (London), of five years standing, and hold a diploma in midwifery from the Dispensary Lying-in Hospital. I am now an assistant; and a very startling hypothesis founded upon this fact having been hinted to me is the reason why I thus trouble you.

I am, etc.,

E. W. S.

Ilford, May 24th, 1853.

[You will be entitled to register without undergoing any additional examination.—EDITOR.]

NEWS AND TOPICS OF THE DAY.

MESMERIC IMPOSTURE AT ASHTON-UNDER-LYNE.

[The following paper has been forwarded to us by Robert Wood, Esq., of Ashton-under-Lyne. We congratulate Mr. Wood upon the moderation and success with which he has vindicated himself from the insolence and gross calumnies of Mr. Light. The attempt at Mesmeric imposture was clumsy and contemptible.—EDITOR.]

The Rev. John Light, *senior* curate of the parish church, Ashton-under-Lyne, has been unusually busy of late in what he calls a duty, but which I consider, at least, a gross misstatement (and in my mind a wilful one), viz., that in "the repeated applications of the ammonia" to test the reality of Mesmerism, at the Town Hall, on the 26th ult., my "conduct was cruel, and throughout unbecoming as a medical practitioner", etc.

The rev. senior's *duty* (alas! for his parochial duties,) has not been without effect; he has rendered himself liable to serious consequences, which, as I feel no vindictiveness, I will not specify.

In order that the public may the more fully appreciate the case, I think it desirable to state that, at a meeting of the Ashton Medical Association, a letter to Captain Hudson was signed by the members present, requesting him to allow them to test his competency to produce the so-called Mesmerism by a meeting, either public or private, as they had no wish to prejudice him in any way with the public.

A messenger was sent with this, and desired to bring an answer. No answer, however, was returned. The messenger made two subsequent applications with a like result; and as Captain Hudson had spoken of the letter publicly at the Town Hall, on the evening of the 22nd ult., two of us (members) called upon him. We stated that we could not credit any part of his practice, and after a time it was arranged that we should meet him at his room, in the Town Hall, at three o'clock on Tuesday, the 26th ult.; and as we could place no reliance upon the honesty of the people in his pay, it was reluctantly conceded that we should find him subjects to operate upon. He announced from the platform on the 23rd, when the meeting would take place, and many attended.

On entering the room, I found Mr. Light (who had no right there except as a spectator) in very loud talk and great gesticulation, exclaiming "Great is Diana of the Ephesians, the *craft* is in danger". I could only understand from this, that he intended to impute unfairness, as he styled the medical profession a *craft*. I would respectfully refer the clerical gentleman to a text, "1 Corinthians, chap. xiii, verses 4 to 7", and leave the public to decide whether he has practised its precepts.

I saw that the intention of Mr. Light was to make himself obnoxious, and this being the opinion of others, it was thought desirable to have a chairman; and we were fortunate in having present Wm. Bass, Esq., of the Lodge, Dukinfield.

On commencing proceedings, the rev. gentleman insisted upon Captain Hudson operating upon his own people, contrary to our previous agreement. This was of course objected to; for on this condition, I am sure none of us (the Medical Association) would have had anything to do with the business. Great clamour was made by Mr. Light, on the ground that Captain Hudson could better operate upon others after he had obtained a magnetic current of sufficient power in his own people. We then conceded everything, with an understanding that Captain H. would undertake to place one of his own people in a state of total unconsciousness of all external sensations; that this state should continue till he chose to "de-Mesmerize" him, and that he should be put to any test we liked as to its reality, which I promised should be void of everything that would create pain, or have the slightest appearance of cruelty. With this understanding, the captain proceeded by placing one of our people upon a form between his own subjects. His servants were soon, and to our minds collusively, "Mesmerized": not so, however, with ours, notwithstanding the great supply of magnetism; and of course the experiment was a total failure.

At this stage of the proceedings, the captain whistled continuously the Old Hundredth Psalm, to the very evident edification of the senior curate; and on touching the bump of veneration, two of his subjects placed their hands in an attitude of devotion, and slowly sank on their knees: a continuation of this mockery was stopped by the chairman, at the request of a part of the audience that we should proceed to business.

The captain then brought out a bottle containing, as he stated, the strongest "Harmonier", (ammonia) with which he proposed to test his man; he had so far had his uninterrupted sway, but it was for others to apply the test, and this was insisted upon by the chairman. I was prepared with a bottle of pure liquor of ammonia, of the strength of hartshorn, totally different in colour and every other feature from that produced by the captain, and what I daily use in practice. The man was then turned about by the Mesmerizer, and to our amusement, instead of being rigid, he moved his legs, and placed himself with his head very much back. The bottle was then with much difficulty (owing to his posture) got near to the man's nostrils; but knowing all that was going on, he resolutely held his breath. Captain Hudson, supported by Mr. Light, soon interfered, by seizing my arm and drawing the bottle away, in time for him to breathe, accompanying this with some very disgraceful language: he thus allowed of no application whatever, for it could take no effect unless the man inspired. Hence Mr. Light's misstatement in speaking of "repeated applications". Where is the cruelty if the ammonia had been applied?

At this point, the senior curate sprang forward, and heaped abuse upon me, stating, amongst other things, that my conduct was "diabolical". I noticed him no further, than by observing, that, as I had before stated, I would be no party to cruelty.

Captain Hudson then brought forward a young gentleman, whose character, he said, was well known to some of us; but it was found convenient for the captain's friend (the reverend gentleman before mentioned), through a third party, to excuse his inhaling the hartshorn, on the plea of ill-health. This fact, it seems, had escaped their notice, till it was discovered that an exposure must be the inevitable result; and thus no test was applied in his case.

Mr. Light himself then came forward, loudly demanding whether he was a man of character? It was admitted that he had established his reputation by frequent communion with his friend the captain; and he was operated upon to our infinite amusement.

"Doubtless, the pleasure is as great,
Of being cheated, as to cheat;
As lookers-on feel most delight,
That least perceive the juggler's sleight;
And still the less they understand,
The more admire his sleight of hand."

After all this nonsense, Captain Hudson was asked to try a few in the room, whose *imaginings* would not carry them beyond the bounds of propriety. Ten were thus tried, and, I need not say, all failed, as was the case with ten at his private meeting the night before, to the supreme disgust of all. The captain declined to try again.

He was then invited to give us a sample of clairvoyance, of which he has boasted so much in other places: this was declined, no doubt because he was thoroughly taken down in Rochdale. How does the senior curate reconcile Mesmerism and clairvoyance with the doctrines he professes to teach?

The chairman then took the sense of the meeting on two propositions:—

I. Whether Captain H. had succeeded with the people he himself brought forward? This, of course, included Mr. Light; it was negatived, although the captain's people voted.

II. Whether Captain H. had produced any effect upon those with whom he had had no previous dealings? This was also negatived.

Captain Hudson is said to have shewn a bloody pin to his audience on the evening of the 26th, and to have said, that after he had left the meeting with the medical men, it had been drawn from the thigh of one of his people, and to have insinuated that it was placed there by one of us. This is really too good a joke to be believed, except, indeed, by such as the senior curate, who, I understand, has lost no opportunity of making the most of it.

Had he thought during a very small portion of the valuable time it has taken to heap slander upon the medical profession, he would have seen facts sufficient to have shewn this to be a falsehood, and might not then himself have swallowed the pin.

"Slander, that worst of poisons, ever finds
An easy entrance to ignoble minds."—HARVEY.

"His lustful orgies he enlarged,
Even to the hilt of scandal."—MILTON.

"I do fawn on men, and hug them hard,
And after scandal them."—SHAKESPEARE.

The same evening I wrote to Mr. Light, as follows:—

"Warrington Street, April 26th, 1853.

"REV. SIR,—At the Town-Hall, this afternoon, you were pleased to say, in reference to the part I took in Captain Hudson's proceedings, that my conduct was diabolical. I ask for an explanation. I am, etc.,

"(Signed) R. WOOD.

"To the REV. J. LIGHT."

I received his answer immediately.

"The Rectory, Ashton-under-Lyne, April 27th, 1853.

"SIR,—I don't remember having said any such thing as you charge me with, and feel certain I did not.

"Had I said this,—that the repeated application of the ammonia was cruel, and your conduct throughout unbecoming a medical practitioner, and the investigation of a grave scientific subject, I should have said what I shall feel it a duty to confirm anywhere, or for the satisfaction of any one.

"I am, etc., JOHN LIGHT."

Feeling that the reverend gentleman had quibbled about the charge I made against him, had added another insult in his letter, and stated a direct falsehood about "repeated applications of ammonia", as I have before shewn, I forwarded his note to Mr. Bass, to Mr. Alfred Aspland, and to the Rev. Mr. Quirk. The following were the results:—

"The Lodge, April 28th, 1853.

"DEAR SIR,—In answer to your inquiry, whether I saw anything in your conduct on Tuesday last, to justify the expression contained in the accompanying note of Mr. Light, I readily give you the assurance, that from the most impartial and attentive observation I was able to give to the proceedings of that day, I could discover neither cruelty or anything whatever unbecoming the character of a medical practitioner; but on the contrary, I am of opinion that you and your professional brethren shewed great forbearance under the treatment you were subjected to in your endeavours to investigate a grave scientific subject.

"I am, etc., WM. BASS."

"Dukinfield, April 28th, 1853.

"MY DEAR SIR,—At your request, I send you the following statement. I was present at the Town-Hall, on Tuesday last, and saw you apply the ammonia to the nostrils of the person who was stated to be rendered Mesmerically unconscious; you did this with discretion and care, using the stimulant as medical men do with fainting persons. The man resolutely held his breath; but when it became evident that he must inspire, the Mesmerizer hastily drew him away, using some abusive language.

"The Rev. Mr. Light twice declared that your proceeding was diabolical. This was heard and commented upon by several gentlemen near me. Amongst them, I may mention Mr. Boyd, of the 4th regiment; Mr. Hope Vere, of Manchester; and two surgeons living in the district. At the close of the business, I remonstrated with Mr. Light for his violent language. He denied the use of the word *diabolical*, but used other terms, which not being publicly spoken, I need not further allude to.

"Regretting very much that you and the medical profession in the neighbourhood should have been subjected to obloquy and insult, for the exposure of a miserable imposture,

I am, etc.,

"ALFRED ASPLAND."

"R. WOOD, Esq."

"April 30th, 1853.

"MY DEAR SIR,—Most willingly do I accede to your request that I should give my opinion of your conduct at the meeting on Tuesday last. And my opinion is this, that your object was to test in a fair manner, the truth of the propositions then stated, and the honesty and sincerity of the persons operated upon. I believe that you were open to conviction had these persons stood the tests which you, in concert with other medical men, thought proper to apply, and if additional proofs had been exhibited. And I am quite sure, that not under any circumstances would you be guilty of an act of cruelty, or put any person to the slightest pain, except under the expectation of benefit to result from it. And I am further of opinion that your conduct was quite becoming a professional man on such an occasion.

I am, etc.,

"ROBERT WOOD, Esq."

"C. T. QUIRK."

I may say these are not all I have had, denying the base and malicious aspersions. I did not, however, then send any of them to Mr. Light, from the hope, that after he had had time to deliberate, a further appeal might have some effect; and I wrote as follows:—

"Warrington Street, April 29th, 1853.

"REV. SIR,—Your note of the 27th inst. does not satisfy me. I think I have a right to a definite explanation of what I charged you with. I am, etc.,

"R. WOOD."

"To the REV. J. LIGHT."

I got his answer immediately.

"The Rectory, Ashton-under-Lyne, April 29th, 1853.

"SIR,—If it takes you two days to quite assure yourself that my reply to your first note—which any reasonable man would deem explicit enough—is unsatisfactory, then there is but one alternative. I must leave you in your present condition of mind—dissatisfied.

I am, etc.,

"JOHN LIGHT."

"R. WOOD, Esq."

To this, I responded.

"Warrington Street, April 29th, 1853.

"REV. SIR,—I am in receipt of your note of this morning. I hoped that the two past days had afforded you time for deliberation, and that you would have taken a different course; and I have hitherto forbore sending you the accompanying copies of letters from Wm. Bass, Esq., chairman of Tuesday's meeting, and from Mr. Alfred Aspland; but now I have to ask you to retract all offensive expressions you have used towards me, both personally at the Town Hall, and in your letter of the 27th; and as you have put in practice your declaration and threat as contained in that letter, the retraction must, of course, be expressed to all parties you may remember thus to have spoken to.

"Besides this, I have to request a suitable apology for all your abusive and injurious language which may otherwise apply to me in my private life, as well as in my professional calling.

"If you refuse to accede to the conditions I have above expressed, I shall feel called upon to take such a course as my friends may advise.

"I shall be glad to hear your determination by Monday next.

"I am, etc., R. WOOD."

"To the REV. J. LIGHT."

"P.S.—Since the above was written, I have received communications from the Rev. Mr. Quirk, expressive of his opinion of the proceedings of Tuesday. I send you a copy also of this letter.

"R. W."

And I received his ultimatum.

"The Rectory, Ashton-under-Lyne, April 30th, 1853.

"SIR,—As I have no time, and less disposition, for any unnecessary correspondence, I beg, once for all, to assure you that I shall not apologize for what I have not said, or retract what I sincerely believe, or allow the opinions of your friends to interfere with mine, in any way or degree.

"I write thus immediately, that there may be no delay in your applying for any advice which you may deem expedient, or your friends may be able to give you.

I am, etc.,

"JOHN LIGHT."

"R. WOOD, Esq."

The last letter is an excellent sample of the man, and carries with it a brilliant dash. I own myself at a loss in any problem that will resolve itself like the first part of the reverend gentleman's letter into less than nothing; and the second is but a common example of his consummate assurance.

As regards his allusion to my friends, I will simply observe, that I had not the pleasure of Mr. Bass's acquaintance, until I met him at the Town Hall; the reverend gentleman, however, came direct to the meeting from his (Mr. Bass's) hospitable board.

Other parties I have alluded to, and whose advice I had sought, have been hitherto considered fast friends of Mr. Light; but I much regret, after communication with several of them, to find that it is quite common for him to contradict and affront them. I keep to the opinion I first formed of the man, and have still in my own mind to compare so reverend a divine with the renowned Bombastes Furioso.

ROBERT WOOD.

Warrington Street, Ashton-under-Lyne, May 7th, 1853.

Some delay has occurred in printing the report of the meeting, in consequence of Mr. Light having declared that he would take care it was published; probably, he found a verbal report to the public would place him under less restraint.

R. W.

MEDICAL BENEVOLENT COLLEGE. At a meeting of the Council, held in the Hanover Square Rooms, on the 31st ult., the President, the Earl Manvers, in the chair, a Committee was appointed to make the necessary arrangements for receiving His Royal Highness Prince Albert, on the occasion of His Royal Highness laying the foundation-stone of this National Institution, on the 4th July. Thanks were voted to the Bishop of Oxford, for his Lordship's effective Sermon on the 8th ult., in behalf of the College, and his Lordship was elected a Vice-President; as was also Sir James Clark, Bart., M.D.

ANNUAL DINNER OF THE MEDICAL OFFICERS OF THE ARMY. On Saturday, May 21st, the medical officers of the Queen's army held their annual dinner at the Thatched House Tavern, St. James's Street: G. J. Guthrie, Esq., F.R.S., in the chair. This dinner is held yearly upon the day of the meeting of the Friendly and Benevolent Societies of the medical officers of the army; and the proceedings of the evening had special reference to these admirable and flourishing institutions. The Friendly Society affords annuities to the widows and orphans of its members; the Benevolent Society is purely charitable. Both owe their origin, and much of their success, to the late Director-General of the Army, Sir James M'Grigor. The capital fund of the Friendly Society now reaches £77,000, and that of the Benevolent Society £15,000. Among the toasts of the evening were, Dr. Paris and the College of Physicians; Mr. Caesar Hawkins and the College of Surgeons; the Apothecaries' Society and Mr. Parrott of Clapham (one of the Wardens, the Master of the Company being unavoidably absent); Dr. Andrew Smith, Director-General of the Army Medical Department; Sir James M'Grigor, late Director-General; Sir De Lacy Evans, and the friends of the profession in the House of Commons; Dr. Semple, Dr. Tyler Smith, and Dr. Cormack, in connexion with the medical press of the metropolis. In returning thanks for the toast, Dr. T. Smith remarked, that his connexion with journalism belonged more to the past than the present: and Dr. Semple stated, that he was only an interim editor—that he had no wish to be anything else, for he thought there were other professional occupations less responsible and more respectable. The proceedings were enlivened by the band of the Coldstream Guards; and altogether the evening passed off merrily and happily.

NEW DISPENSARY, CLAPHAM. Last Friday week, Captain Bowyer, the Lord of the Manor, laid the foundation-stone of this dispensary, on a site which he had given for that purpose. The ceremony was performed under a splendid awning, and was witnessed by 400 spectators, including the Bishop of Winchester; the Rev. H. Wentworth, the Rector; Lady Napier; Lady Pollock; Drs. Sylvester and Topson; and Messrs. Mainpress and T. H. Hewit. The Bishop of Winchester having pronounced a benediction, A. Bowyer, Esq., presided at a *déjeuner* given at the rectory, on which occasion he stated that, since the dispensary originated, in 1849, the medical officers had gratuitously rendered their services, and that during that period 3,000 sick poor had been visited and prescribed for by those gentlemen. Was this dispensary wanted?

PHARMACEUTICAL SOCIETY: DEPUTATION TO LORD PALMERSTON. On Friday, May 27th, a deputation of members of the Pharmaceutical Society waited on the Home Secretary (Lord Palmerston), to call his lordship's attention to the illegality and injustice of the proposed New Bye-laws of the Society, with a view to induce his lordship to withhold from them his confirmation, as he is empowered to do by the Act of 1852. His lordship listened with the utmost courtesy to the representations of the deputation, requested a copy of any documents bearing on the subject, and promised that the whole subject should receive his best consideration.

EPIDEMIOLOGICAL SOCIETY. At the ordinary meeting of the society, to be held June 6th, at half-past eight P.M., a paper, by Dr. Milroy, will be read, entitled "Sketch of the most striking Results of Quarantine in British Ports since the beginning of the present Century".

TREATMENT OF CHARLES II., DURING HIS LAST SICKNESS. All the medical men of note were summoned, and one of the prescriptions was signed by fourteen doctors. He was bled largely, a hot iron was applied to the head, and a volatile salt, extracted from human skulls, was forced into his mouth. He survived this treatment four days.—*Macaulay*.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. MEMBERS admitted at the meeting of the Court of Examiners on the 20th instant:—George Evans, Harewood Square; Charles Lambert

Evershed, Billingham, Sussex; William Hamilton, Tullick, co. Tyrone; Andrew Henderson, Kirkaldy, Fifeshire; William Hopkins, Leamington, Warwickshire; Augustus Johnston, Dublin; William Henry Moor, Durham; John Pichall, Hon. East India Company's Service, Bengal; John Rains, Bonsal, Derbyshire; Edward Malcolm Sinclair, Manchester; Robert James Wilson, Westminster.

APOTHECARIES' HALL:—PASS LIST. Thursday, May 19th, 1853:—Edward Atkinson, Little Woodhouse, Leeds; Richard Wafford Eve; Henry Hancock, Bilston, Staffordshire; Robert Walker Jenkins, Charing, Kent; Charles Scholefield Richard-son; John Tibbits, Warwick; Peter Wright, Wigan.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BISHOP, John, Esq., F.R.S., appointed one of the Lettsomian Lecturers to the Medical Society of London, for the session 1853-4.

GOODEVE, C., M.D., Professor of Materia Medica in the Bengal Medical College, to be *ex officio* Second Physician of the College Hospital, and Professor of Clinical Medicine.

MOUAT, F. J., M.D., Professor of Medicine in the Bengal Medical College, to be *ex officio* First Physician of the College Hospital.

O'SHAUGHNESSY, R., Esq., F.R.C.S.Eng., Professor of Surgery in the Bengal Medical College, to be *ex officio* First Surgeon of the College Hospital.

STEWART, D., M.D., Professor of Midwifery in the Bengal Medical College, to be *ex officio* Obstetric Physician of the College Hospital.

•**THOMPSON, Theophilus, M.D., F.R.S.,** appointed one of the Lettsomian Lecturers to the Medical Society of London, for the session 1853-4.

WEBB, Allan, Esq., Professor of Descriptive and Surgical Anatomy in the Bengal Medical College, to be *ex officio* Second Surgeon of the College Hospital, and Professor of Clinical Surgery.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

COLVILLE, Eliezer, Esq., Surgeon, at Ayton, Berwickshire, aged 66, on May 21.

FOX, Samuel, Esq., Surgeon, at Shoreditch, aged 77, on May 23.

•**MINES, William, Esq.,** Surgeon, at Diss, Norfolk, aged 77, on May 14. Mr. Mines had been in practice for forty-nine years, with much success.

SIDLEY, —, Esq., Surgeon, R.N., at Southampton, suddenly, on May 15. He is believed to have died from an overdose of prussic acid.

STOCKER, Henry Medland, Esq., Surgeon, at St. Austell, Cornwall, aged 21, on May 12.

TRAYERS, Joseph, Esq., F.R.C.S., at Mossell Bay, South Africa, in March last.

WATKINS, Dr., Civil Surgeon, and formerly Garrison Surgeon at the Bombay Presidency, at Breach Candy, of dysentery, on April 2. He was in extensive private practice. He served during the whole campaign in Scinde and Afghanistan, and was present at the storm and capture of Ghuznee.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

+**LITTLE, W. J., M.D.** THE NATURE AND TREATMENT OF DEFORMITIES OF THE HUMAN FRAME. pp. 412. London: 1853.

STEVENS, William, M.D., D.C.L. Oxon. NATURE AND TREATMENT OF ASIATIC CHOLERA. 8vo. pp. 449. London: 1853.

PORTRAIT OF MR. LUKE. We have received from Mr. T. M. Stone, of the Royal College of Surgeons, an admirable portrait of Mr. Luke, of the London Hospital. It forms one of Mr. Stone's beautiful series.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXIII.

LONDON: FRIDAY EVENING, JUNE 10, 1853.

NEW SERIES.

THE ART OF PRESCRIBING, IN ITS RELATION TO GENERAL PRACTICE.

WHEN the philosopher said, that "God has not been so sparing to men to make them barely two-legged creatures, and left it to Aristotle to make them rational", he meant that mankind possess a native faculty to use their reason without being instructed in methods of syllogizing, and that the shepherd has no need of the courtly arts of ratiocination to teach him that "the property of rain is to wet, and fire to burn; and that he that wants money, means, and content, is without three good friends." Now, if Touchstone had lived in this golden age of quackery, we think he must have included the clown's way of dealing with sham physic among his "Instances" of "Natural Philosophy".

We are acquainted with nothing in the whole history of our science more striking than this fact, which is known to every parish doctor in the realm,—that not only are all forms of spurious medicine dependent on the educated and wealthy for their support, but that if any board of guardians in England were to attempt to condemn their poor to the supervision of a professed disciple of Meamer, Hahnemann, or any other heretic, the serfs of the soil would rise to a man, and resist the abominable fraud. With this preamble, we proceed to the main points of our argument.

It has been frequently said, that our forefathers brought upon us the homœopathic incubus, by their system of drenching; in fact, that when people had been surfeited with physic, they naturally ran to the opposite extreme, and eagerly embraced a creed which promised their gustatory nerves an exemption from "nasty stuff". If this assertion, then, be true (and there is every reason to believe that it is so), another and a far more weighty effect has followed in the wake of this popular movement; viz., the determination on the part of the profession at large to abandon the universal practice of drugging their patients, for one less disgusting to the sick, and equally advantageous to the doctor. The plan which is now coming generally into use, of charging for visits and attendance, is in itself every way desirable; but it cannot be forgotten that the new doctrine is suggestive of new methods of prescribing; and it may be worth while to consider whether we are not losing substantial good, in our endeavours to satisfy the whims of patients, by attempting to reduce our prescriptions to the attenuated formulæ of the medicine chest.

We now propose to examine into this matter a little more narrowly; and, for convenience sake, we shall divide the subject into two parts.

First, let us inquire how far we may with safety depart from old-established forms of prescribing; and, second, whether the progress of such a reform is affecting, or is likely to affect, those who dispense the physic that is swallowed. Let it be once for all understood that our observations do not in any way apply to the operations of the retail apothecary or druggist, since we are now concerned

only with the acts and prospects of that large body of men, who prescribe and send out their own medicines from their private houses—namely, the general practitioners.

The art of prescribing is to the doctor what the art of colouring is to the painter. Both have the power of producing the same results by different processes. The painter, by the aid of "hand and eye", will compound on his palette two or more tints, which are identical in appearance and in their effects on the canvas, from a variety of colours; so the doctor, from the stores of his *materia medica*, will prescribe remedies derived from many sources, all of which shall have the same property, namely, that of removing some given symptom. In both cases, the real skill consists in judiciously applying the material to the thing to be done. Now we are very much inclined to carry our analogy further, and to suggest that what has been found to be true, and acknowledged universally, in the art of painting, may likewise be believed in that of medicine. The methods of mixing and laying on colours are settled by common consent among painters, and any deviation from academical rules is regarded by them as a piece of quackery; indeed, they have a precedent for the authoritative tone they adopt in the success of their time-honoured processes, as they appear in the works of the old masters; and can we point to no such precedent in the history of our art? The convenient forms, the exact quantity to be swallowed, the division of doses into four, six, or eight parts corresponding with our arbitrary divisions of the twenty-four hours, are among the first examples of the usefulness of the old system which occur to us; but we would come to closer quarters with our subject, and ask why it is that hospital authorities, which have the power to dictate their own laws to those who seek their aid, prefer holding fast the elder traditions, to adopting any scheme of pharmacy which seems to promise less labour, and at least equal efficacy? We recommend to our readers the *Pharmacopœia* of the Royal Hospital of Saint Bartholomew, as an illustration in point. That institution has for many years profited by the services of men not only among the ablest in the profession, but the least likely to be led away by their prejudices in favour of the omnipotence of physic: and yet the formulæ in use at that charity are both found to be the most advantageous to the inmates, and are copied and carried away into private practice by the students who are educated within its walls.

Now let us ask, Is there no other power at work than the will of the prescribers in this matter? We cannot but confess that the strong common sense, and native wit of the poor man, with which we set out, are the most active antagonists to all sweeping innovations; and we affirm that nowhere is this force from without made more apparent than in our dealings with the ordinary parish pauper. Your acknowledged pauper is a person who, having his mind encumbered by no metaphysical abstractions, has leisure and opportunity to concentrate his attention on things as they are: and, if you offend him, he at once gives you to under-

stand, either by direct word of mouth, or by a significant absence from your consultation room, that he thoroughly comprehends the nature of your reciprocal relations; and that, among other duties which he feels you owe to him and his, is that of supplying him with his remedies in a lawful and pharmaceutical manner. For example, let any union surgeon who affects to despise the mysterious *omne ignotum pro mirifico*, which his clients have been accustomed to believe in, venture to lay bare the naked truths of Epsom salts and magnesia, or systematically to instruct his patients to make their own infusions, (we speak now from actual observation of the results which have followed such practices,) and one of two things will happen; either his patients will scorn him as a niggard, or avoid him as a pretender.

The second division of our subject, to which we now address ourselves, will, we think, be found by no means so easy to dispose of as at first sight might appear.

The health of the million is certainly entrusted to the care of the general practitioner: it is therefore equally of importance to the public and the profession to watch narrowly the tendencies of the popular mind with regard to medicine, and to ascertain, if possible, from past experience, what effects any given condition of an existing state is likely to produce in the future. We are well aware that persons are to be found who believe that the laws of social government are just what men choose to make them, and that there are no boundaries to the decrees of human authority in the arena of politics. To such a doctrine we cannot subscribe, since daily observation of the *mores hominum multorum et urbes* convinces us that many results cannot be carried into effect, through an unalterable incompatibility in the elements which compose society. Let us see, then, whether some such restraint as we have mentioned is not at this moment tending to prevent the onward march of certain new methods, which have been introduced among general practitioners.

There has been, of late years, a strong bias, both in and out of the profession, in favour of separating the duties of the prescriber from those of the dispenser: many have adopted the plan; and there appears *primâ facie* no valid reason why it should not be generally carried into execution—at least, in cities and towns where druggists abound. In villages and country places the thing would be impracticable; and if it ever came into common use, the village doctor must either undertake to maintain at his own charge a druggist near his residence: or, what is more probable, consent to be divided from his brethren and to rank a little below them. We do not, however, anticipate any such vital change in our constitution; for we believe that the genius of the English people is wholly opposed to it. We have seen what happened in the olden time to the system of inductive philosophy which Bacon endeavoured to construct; how completely it fell to the ground without producing any practical results; and this failure has been shown to have been owing to a haughty disregard, so universally prevailing at the time, of those very mechanical arts at which we are, in our way, aiming a blow, when we seek to abandon the so-called servile offices which have hitherto been part and parcel of our art.

The assumptions and vapid hypotheses of the philosophers of the middle ages were mainly due to their contempt of manual operations. They missed, by their neglect of experiment, the only path by which they could obtain a

knowledge of the real properties of objects; and while they surveyed nature from their lofty position, and forged theories to account for the *causes* of things, totally disregarding the more immediate investigation of *effects*, they founded a school of false philosophy. The workers of those menial arts which were permitted to survive the dignified suppression of such resources, could not help adopting the speculative notions of their betters; and thus arose, from the shadows of observation without patient experiment, the creed of the alchemists.

We do not mean to say that the prospects of science will be absolutely forfeited by any radical reform in our professional manipulations; but we do mean to assert (and we appeal to history for the truth of what we state) that the tendency of all systems which aim at separating the doctrines of science from manual labour, is to give a wrong direction to the speculative mind; and, if generally followed out in our case, seriously to cripple the usefulness of medicine.

THE MEDICAL DEPARTMENT OF THE ROYAL NAVY, AND THE DISMISSAL OF DR. J. F. HENRY.

FIFTY years ago—in May 1804—Lord Nelson wrote as follows (from on board the *Victory*) to his friend Dr. Baird:—

“The health of this fleet cannot be exceeded; and I really believe that my shattered carcass is in the worst plight in the whole fleet. I have had a sort of rheumatic fever, they tell me; but I have felt the blood gushing up the left side of my head, and the moment it covers the brain, I am fast asleep: I am now better of that, and with violent pain in my side, and night-sweats, with heat in the evening, and quite flushed. The pain in my head, nor spasms, I have not had for some time. Mr. (now Sir George) Magrath, whom I admire for his great abilities every day I live, gives me excellent remedies; but we must lose such men from our service, if the army goes on encouraging medical men whilst we do nothing. I am sure much ought to be done for our naval surgeons, or how can we expect to keep valuable men? I look to you, not only to propose it, but to enforce it to Lord St. Vincent, who must be anxious to preserve such a valuable set of men to the navy.” [Clarke and M'Arthur, vol. ii, p. 367.]

When we see how distinctly, in the words which we have quoted, the hero of Trafalgar appreciated the importance of the medical department of the navy, and how essential he felt the maintenance of it to be for the health and efficiency of a fleet, it becomes utterly perplexing to find that the same indifference which existed when he wrote should still prevail at head-quarters, as to the obtaining and preserving valuable medical officers for the navy. The medical journals dutifully proclaim the scandalous position of affairs, and patriot statesmen demand from Parliament, upon the double plea of economy and humanity, the best medical talent for our gallant sailors which the resources of the nation can command; and yet naval assistant-surgeons are denied the consideration due to gentlemen, and the accommodation required for that conscientious study and registration of their experience, without which their duties can be but half performed. The tone in which admirals and other superior officers publicly speak of our profession is so disparaging as to scare the *élite* from a service which every patriot should wish to see them ambitious to enter, as a career pre-eminently honoured and esteemed.

We cannot help suspecting that the harsh sentence, of dismissal from the service, recorded at p. 515, as having been pronounced upon our colleague, Dr. J. F. Henry, Surgeon of H. M. Sloop *Star*, depended more upon an anti-medical animus than upon the justice of the case. The excitability of brain induced by service in unhealthy seas, and the general good conduct of Dr. Henry, were clearly proved, and ought surely to have been considered sufficient to suggest a milder sentence, even if not deemed enough to justify an absolute acquittal. We venture to make this remark, because the medical officers of the navy are, as a body, habitually treated with injustice; and also, because it is evident that, had the accused in the present instance been righteously sentenced—which, from the report, does not appear—the crime would have been most chargeable upon those who, having the power to attract the best men of our profession into the navy, use every means in their power to make it a mere refuge for young surgeons who can get no other employment.

THE PROSPECTS OF MEDICAL REFORM.

ON Friday last a deputation from the London Medical Reform Committee, headed by Dr. LANKESTER, waited upon Lord Palmerston. It received the following reply; which, we fear, means that Government has no intention of bringing any Medical Bill into parliament during the present session. The profession must, therefore, for the future show more determination and self-reliance.

"Lord PALMERSTON said he had understood from some quarters that unanimity existed in the profession, and from others that there were many objections to the present system. It was therefore evident that the question was one of a complicated nature; and the details were new to him. The question, however, should receive his attentive consideration, and he should be glad to be favoured with a copy of the bill to assist him, as the subject was doubtless one of an important and pressing nature."—*Daily News*.

At page 516 will be found Lord Palmerston's answers to certain pertinent questions addressed to him, in the House of Commons, by Lord Dudley Stuart. It appears that the College of Physicians is to have its Charter during this session. This measure, and the Pharmacy Act of last session, must, ere long, produce very great changes within our ranks.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the meeting of the Committee of the Medical Benevolent Fund, held on May 31st, the Treasurer announced that since July 1st, 1852, the sum of £365:15:0 had been received in subscriptions; and £354:14:0 in donations: £584 had been spent in grants. The expenses had amounted to £53:14:3; and the balance due to the Treasurer was £51:10:3.

The Treasurer also announced that a poor gentleman, who had been elected an annuitant at the previous meeting, had been killed by a blow from a cab in the street.

The following cases were presented:—

I. An old medical man and his wife, so reduced in circumstances as to become inmates of an almshouse. They had been previously relieved, and they were now voted £2:10:0; and it was resolved that the name of the husband should be placed on the list of candidates for annuities.

II. The widow of a medical man who lived in the neighbourhood of London. He died in 1847, leaving seven children, the eldest of whom is subject to epileptic fits. The widow has endeavoured to maintain her family by teaching in private families. Recommended by Dr. Cormack, Dr. Ridge, and Mr. Shillito. Voted £20; £10 to be given at once, and £10 in November.

III. The widow of a medical man, aged 65; the husband formerly lived in Lincolnshire. The widow is now reduced to get her living by manual labour. Recommended by Dr. Gordon Latham and Mr. Phillips. Voted £5.

IV. The widow of a medical man, who keeps a school in order to provide for her five children, one of whom is now ill and at home from school ill. Voted £10.

V. The daughter of a physician, who endeavours to obtain a livelihood by literary pursuits, is in great difficulties and obliged to exist on the poorest food, which is scarcely sufficient to support life. Voted £10 a-year for three years.

NORTH WALES BRANCH:—NOTICE OF ANNUAL MEETING.

THE Annual Meeting of the North Wales Branch will be held at Holywell, on Tuesday, the 21st day of June, 1853, at half-past eleven in the forenoon.

ED. WILLIAMS, } *Hon. Secs.*
D. KENT JONES, }

SUFFOLK BRANCH:—NOTICE OF ANNUAL MEETING.

The Annual Meeting will be held at the Assembly Room, Ipswich, on Friday, the 24th of June.

The chair will be taken at 2 o'clock, by Robert Martin, Esq., of Holbrook.

JOHN KIRKMAN, M.D., *Hon. Secretary*.

SOUTH EASTERN BRANCH:—NOTICE OF ANNUAL MEETING.

The Anniversary Meeting of the South Eastern Branch will be held at the Sussex Hotel, Tunbridge Wells, on Wednesday, 20th June, at 12 o'clock precisely; Isaac Hargraves, Esq., President. Dinner will be provided at half-past 4 o'clock.

PETER MARTIN, *Hon. Secretary*.

METROPOLITAN COUNTIES BRANCH:—NOTICE OF ANNUAL MEETING.

At a Meeting of Council, held on the 7th of June, it was resolved that the Annual Meeting be held at Mr. Lovegrove's Brunswick Hotel, Blackwall, on Tuesday, July 19th, at 4 P.M., precisely. The Members will dine together at 6 o'clock. Members who intend to dine are requested to furnish their names to the Secretary as early as possible, and not later than July 10th.

Tickets for the dinner 10s. 6d. each, including ices and dessert.

JOHN FORBES, M.D., *President*,
T. OGIER WARD, M.D., *Hon. Sec.*

N.B.—Members of the Provincial Medical and Surgical Association have the right of becoming Members of this Branch by simply paying the Annual Subscription of 2s. 6d. to JOSEPH TOYNBEE, Esq., Treasurer, or T. OGIER WARD, M.D., Secretary.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL.

The Annual Meeting will be held at Swansea on the 10th and 11th of August. Vide p. 470 of number for May 27.

ORIGINAL COMMUNICATIONS.

ON THE ADMINISTRATION OF CHLOROFORM DURING PARTURITION.

By JOHN SNOW, M.D.

It is unnecessary now to employ or allude to any of the abstract reasons which have been given for using or withholding chloroform during labour, since a sufficient number of observations have been made to enable the question to be decided by experience. I believe that no one disputes the power of chloroform to relieve the sufferings attendant on parturition; and, therefore, the only consistent objection that can be made to it is, that some danger or disadvantage may arise from its use. It is well known that, out of the vast numbers of patients to whom this agent has been administered for the performance of surgical operations, a few have unfortunately died whilst inhaling it, or a minute or two afterwards; but it is satisfactory to know that no accident of the kind has happened in the practice of midwifery. This should not be looked upon as a mere coincidence, for there are sufficient reasons for concluding that there is no danger from the exhibition of chloroform during labour by a medical man using ordinary care, even though he may have had no previous experience in its employment. In the first place, the effect which it is necessary to produce in parturition is so much slighter than is required for a surgical operation, that it is not necessary to approach even half way to a point that would be dangerous if it were exceeded; and, in the next place, the chloroform never requires to be given except whilst there is pain, the relief of which serves as a sign for its discontinuance; which sign is not present in exhibiting it preparatory to the commencement of a surgical operation.

There have, however, been some cases in which death has been attributed by certain authors to chloroform, which had been administered during labour. Dr. Ramsbotham relates one such case;* but I doubt whether he would have considered the result to be due to this medicine, if he had had an extensive experience of its use, either in obstetric or any other class of cases. The chloroform was given occasionally, and apparently very judiciously, during the last four or five hours of labour in this case. Dr. Ramsbotham relates that, at the conclusion of the labour, "the uterus contracted well, and the patient appeared comfortable. At the end of an hour and a half, however, distressing dyspnoea came on, attended with excessive lividity of the face, and all the signs of extensive engorgement of the lungs and heart. Her respiration became more natural under the means employed, and in three hours and a half she lay down to rest; but in half an hour she suddenly arose with a return of the most distressing dyspnoea: this was soon followed by convulsions, and almost immediate death." No inspection of the body took place.

A case somewhat similar to the above occurred in the practice of Dr. Murphy, who, however, does not attribute the fatal result to the action of chloroform.† In this case, the chloroform was exhibited very sparingly during the last two hours of labour, the patient not being rendered unconscious. She fell asleep after the expulsion of the placenta, but awoke in two hours with cough and difficulty of breathing. These symptoms increased in spite of treatment, and the patient died a little more than twenty-four hours afterwards. The lungs were found to be greatly congested, and the kidneys were in a pretty advanced stage of granular degeneration.

Fatal congestion of the lungs is one of the results of Bright's disease. I have seen it in the male subject. It is not improbable that, in the case related by Dr. Ramsbotham also, there was either permanent disease or temporary congestion of the kidneys, and that toxæmia existed

in both cases. The occurrence of convulsions a little before death in the latter case renders this the more likely.* At all events, the symptoms in the above cases do not coincide in the least with the known effects of chloroform, even when exhibited much more freely. It must be remembered also, that the unfavourable symptoms did not commence till an hour or two after the effects of the chloroform had subsided; and in this time the system gets more thoroughly rid of this medicine than of a dose of opium in two or three days.

As chloroform is not a preventive of all the "ills that flesh is heir to", it might be expected that puerperal mania should happen after some few of the many cases in which it is used, especially as it has been inhaled more generally by sensitive and susceptible patients than by others. Dr. Ramsbotham alludes, in a foot-note,† to an attack of puerperal mania "which had supervened on the exhibition of chloroform"; but he does not state at what period the mania commenced; whether, for instance, it was an hour or a month after the inhalation. Other cases, or possibly this same one, have been mentioned in the medical societies; but no particulars have been related. I have been told respecting one case of puerperal mania, that the patient had long been in the habit of inhaling chloroform very freely (taking it often when no one was present), to prevent attacks of epilepsy, to which she was subject.

It was said that, in some of the early cases in which chloroform was employed, the uterine contractions were so much enfeebled by it, that delivery had ultimately to be accomplished by the use of the forceps. It is not improbable that the over free use of this agent might lead to such a result; but I believe it would not arise from its judicious use. It has happened that, in all the cases of manual and instrumental delivery in which I have given chloroform, it was exhibited only in consequence of the operation; for the other cases in which I have administered it have all terminated without artificial assistance.

The propriety and advantages of administering chloroform in parturition being admitted, a frequent inquiry is, "In what cases ought it to be employed?" It will be readily conceded that, in cases where the pain is not greater than the patient is willing to bear cheerfully, there is no occasion to use chloroform; but when the patient is anxious to be spared the pain, I can see no valid objection to the use of this agent, even in the most favourable cases. The benefits arising from chloroform in severe cases of labour are experienced in a lesser degree in favourable cases; and the patient may be fairly allowed to have a voice in this, as in other matters of detail which do not involve the chief results of the case. The determination of the kind of labours in which chloroform should be used or withheld is really a matter of not much importance, because, as we pass from cases that are severe and protracted to those which are short and easy, the quantity of chloroform that is used, and the amount of diminution of the common sensibility, and of interference with the mental functions, become so trifling, that very little remains about which to hold a discussion. Indeed, from what I have observed of the continued use of this agent in medical cases, and its use by healthy persons for experiment, I believe that the quantity which is inhaled in a short and easy labour might be continued daily for an indefinite period, without appreciable effect on the health.

The above remarks apply also in some measure to the question as to the period of the labour when the exhibition of chloroform should commence; for, in proportion as the pains are feeble, it must be more sparingly administered. The most usual time when the accoucheur and I have determined that the inhalation should be commenced, has been when the os uteri was nearly dilated to its full extent, and the pains were taking on an expulsive character. In many of the cases which I have attended, it has, however, been commenced much earlier; for the suffering caused by

* Principles and Practice of Obstetric Medicine. Third edition, p. 169.
† See Lectures on Parturition, p. 474.

* See ASSOCIATION JOURNAL, January 31st, p. 66.
† Opus cit., p. 154.

the dilating pains in the first stage of labour is often very great, and the chloroform is consequently of the utmost service when employed at this time.

As regards the manner of giving chloroform, I shall first allude to cases not requiring manual or instrumental assistance. In such cases, when it has been determined to resort to inhalation, the moment to begin is at the commencement of a pain; and the chloroform should be intermitted when the uterine contraction subsides, or sooner, if the patient is relieved of her suffering. It is desirable to give the chloroform very gently at first, increasing the quantity a little with each pain, if the patient is not relieved. The practitioner easily finds, with a little attention, the quantity of vapour which it is desirable to give at any stage of the labour, and in each particular case; his object being to relieve the patient without diminishing the strength of the uterine contractions and the auxiliary action of the respiratory muscles, or with diminishing it as little as possible. At first, it is generally necessary to repeat the chloroform at the beginning of each "pain"; but, after a little time, it commonly happens that sufficient effect has been produced to get the patient over one or two uterine contractions without suffering, before it is resumed.

When the practice of inhalation in midwifery was first introduced by Dr. Simpson, he very naturally adopted the plan which is usually followed in surgical operations, making the patient unconscious at once, and keeping her so to the end of the labour. It was soon found, however, by other practitioners, that this is not necessary; and indeed it would not be safe in protracted cases. Drs. Murphy and Rigby were, I believe, amongst the first to state that relief from pain may often be afforded in obstetric cases, without removing the consciousness of the patient; and I soon observed the same circumstance.* Some persons indeed have alleged that the pain of labour can always be prevented, without making the patient unconscious of surrounding objects; whilst others have asserted that no relief can be afforded unless unconsciousness be induced. But both these opinions are directly opposed to experience. There are comparatively few cases in which the suffering can be prevented throughout the labour without interfering with consciousness, although there are very many cases in which it can be in this way prevented in the early part of the labour. This difference depends in some measure on the constitution of the patient, but chiefly on the severity of the pain to be prevented. It is in accordance with what is observed in medical and surgical cases, that the pain should be removed in some instances without abolishing consciousness, and that in other instances it should not; for, in certain cases of neuralgia, the pain is so severe, that no material relief can be obtained by chloroform as long as consciousness is retained; and in surgical operations, although it now and then happens that the minor and concluding parts of an operation, such as tying vessels and introducing sutures, can be performed without pain, whilst the patient is consciously looking on, a free incision in the skin can hardly ever be made under similar circumstances without pain.

The external evidences of the uterine contractions continue as before, when the patient is rendered unconscious by chloroform; and the muscles of respiration are called freely into play, to assist the action of the uterus in the second stage of labour. The aspect of the patient under these circumstances, is generally that of one who is suppressing the expression of her sufferings; and any relative or friend who comes in, without knowing that chloroform has been given, begins to praise the unconscious patient for her fortitude. On some occasions, indeed, there are groans and cries, as of suffering; but the mind being unconscious of pain, it can hardly be said to exist.

It may be remarked, that complete anæsthesia is never induced in midwifery, unless in some cases of operative delivery. The diminution of common sensibility to a certain extent, together with the diminution or removal of con-

sciousness, suffice to prevent the suffering of the patient during labour; and she never requires to be rendered so insensible as in a surgical operation, when the knife may be used without causing a flinch or a cry. The nerves of common sensation must be allowed to retain their functions to a certain extent during labour; otherwise the assistance of the respiratory muscles, which consists of reflex action, or "motion arising from sensation, without the aid of volition", would not take place, even if the contractions of the uterus should still continue.

The effects of chloroform on the brain should not be carried during labour beyond what I denominate the second degree of narcotism, or that condition in which the mental functions are diminished, but not altogether suspended, except when the effect of the vapour is associated with natural sleep. The patient under the influence of chloroform to this extent, has no longer a correct consciousness of where she is, and what is occurring around her, but is capable of being aroused to give incoherent answers, if injudiciously questioned. In this state, the patient will sometimes assist the labour by bearing down voluntarily, if requested to do so, and be otherwise obedient to what is said; and by withholding the chloroform for a few minutes, she at any time becomes quite conscious. As a general rule, it is desirable not to hold any conversation whilst the patient is taking chloroform, in order that her mind may not be excited. The plan mentioned above, of giving the chloroform very gently at first, also has a tendency to prevent its causing mental excitement, the patient coming gradually under its effects. In surgical operations, excitement of the mind can nearly always be avoided by carrying the patient pretty rapidly into a state of insensibility, in which the mental functions are necessarily suspended. But in the practice of midwifery, it is not allowable to cause a state of coma or insensibility, except in certain cases of operative delivery, hereafter to be mentioned.

I nearly always employ, in obstetric cases, the inhaler that I use in surgical operations.* There is not the same necessity for an accurate means of regulating the proportion of vapour in the air which the patient is breathing during labour, where but a trifling amount of narcotism requires to be induced, as in surgical operations, where a deeper effect is necessary; still I find the inhaler much more convenient of application than a handkerchief, and it contains a supply of chloroform which lasts for some time, thereby saving the trouble of constantly pouring out more. When I do administer chloroform on a handkerchief during parturition, I follow the plan I recommended in a former communication on this subject,† of putting only about fifteen minims of chloroform on the handkerchief at one time.

The quantity of chloroform administered during any one pain, never exceeds a very few minims; but the quantity used in the course of a protracted labour is often considerable. Two ounces and a half by measure is the largest amount I have used in one case; but, as the apparatus was used, this quantity would go as far as seven or eight ounces employed in the most careful way on a handkerchief. I have not kept any patient continuously unconscious for more than two hours; and eight hours is the longest time I have had to administer chloroform in any case, but it has been continued for a much longer period without ill effects, by Dr. Simpson and others.

Chloroform can be best applied when there is an additional medical man, who has not to attend to the ordinary duties of the accoucheur; but it can be given very well by the accoucheur himself, so as to save the greater part of the suffering of labour; although he perhaps cannot always administer it in the perfect way in which he could, if he had no other duties to divide his attention.

It is probable that the use of chloroform has no particular influence over the duration of labour, in the whole

* This plan has been described, *Med. Gaz.*, vol. xlii, p. 848.

† *Lond. Journ. of Med.*, vol. i, p. 54. It should be recollected that minims of chloroform are very different from drops; two minims being equal to nine drops from the lip of a small phial.

* *London Journal of Medicine*, vol. i, pp. 54, 576.

number of cases in which it is employed; but individual labours are occasionally either retarded or quickened by it, according to circumstances. In some cases, the chloroform, even when very moderately employed, diminishes both the strength and the duration of the uterine contractions, and prolongs the interval between them, thereby making the labour somewhat longer—a matter of no consequence, however, as the patient is not suffering in any way. In other cases, the inhalation causes the uterine action to become stronger and more regular, by removing the excess of sensibility by which it has been interfered with. This occurs more particularly in the first stage of labour. In some cases, also, the chloroform seems to act as a direct stimulant to the uterine contractions, increasing their force and frequency—a circumstance at which we need not be surprised, when we remember that both opium and brandy, in moderate quantity, often act in the same manner. Chloroform has also the effect of promoting the dilatation of the os uteri in many cases, even when no rigidity exists; and when there is rigidity of the os uteri, the inhalation is of the utmost service, and shortens labour very much. This is the case, also, when there is rigidity of the perineum.

During delivery with the forceps, or by perforation, the chloroform requires to be administered very much in the same way as in ordinary cases. It must be given at each pain, so as to prevent the suffering of the patient without checking the uterine contractions. It generally, however, requires to be given a little more freely than in natural labour. Dr. Murphy has related three cases of delivery by the forceps, and one by perforation,* in which I assisted him, four or five years ago, by giving chloroform and Dutch liquid, which I was trying at that time. The operations were chiefly undertaken on account of deformity of the pelvis; and the patients all recovered very favourably. I have given chloroform in only one case of midwifery in which the knife was used. It was a case of Dr. Murphy's, in which he had to make an artificial os uteri. Of course, under such circumstances the patient is made insensible at the time of operation.

When it is necessary to introduce the hand into the uterus to turn the child, the chloroform requires to be given in a pretty full dose, so as to suspend the uterine contractions; and as soon as the operation of turning is performed, the inhalation should be discontinued for a short time, to allow the action of the uterus to return, and assist in the expulsion of the child. In the autumn of 1849, I administered chloroform in a case of presentation of the shoulder, attended by Mr. French, of Great Marlborough Street, and in a case of presentation of the elbow, attended by Mr. Marshall, of Greek Street, Soho: the operation of turning was performed with singular facility in both cases, although the membranes had been ruptured, and the liquor amnii evacuated some time. The uterus afterwards contracted well in both cases, and expelled the placenta in a few minutes. In a case of natural presentation, in which turning was performed by Dr. Murphy, on account of narrowness of the pelvis, and the impossibility of applying the forceps, the introduction of the hand was difficult from want of space, but the uterus offered no resistance.

In other cases in which it is necessary to introduce the hand into the uterus, chloroform is of equal service. On Dec. 26, 1850, I was requested by Mr. Cooper, of Moor Street, Soho, to assist him in a case of retention of the placenta. The patient had given birth to a child two hours before, and Mr. Cooper had introduced his hand, but had been quite unable to bring away the placenta, on account of firm contraction of the uterus, in a sort of hour-glass form. On the chloroform being administered, the hand was easily introduced, and the placenta detached and extracted. There was very little hæmorrhage. I may here state that I have seen hæmorrhage, to any considerable amount, in only one case in which I have given chloroform, and the patient had suffered from it in some of her previous confinements.

* Observations on Chloroform in Midwifery.

It is often asked, whether the chloroform has any effect on the child. It is quite certain that the foetus must receive a portion of the chloroform into its circulation, as it does of any other medicine which is absorbed into the blood of the mother; and when sulphuric ether was the agent employed, its odour could be perceived in the child's breath after birth. The foetus must therefore be influenced by the chloroform, though generally to a less extent than its mother, as it receives its dose only at second-hand. It has seemed in some cases that the child was less acutely sensible to the cold air than usual at the time of its birth; and when the mother is unconscious from chloroform, I have not seen it kick and scream in the violent way, and grasp the bed clothes with the force, during the first minute after its birth, that is often observed under other circumstances. With these exceptions, no effects of the chloroform on the child can be perceived.

18, Backville Street, June 1st, 1853.

FACTS RELATING TO SCARLET FEVER.

By BENJAMIN W. RICHARDSON, Esq.

(Read before the Epidemiological Society, on Monday, March 7th, 1853.)

It would be, on my part, a waste of time and of words to offer any introductory observations on the importance of the disease "Scarlet Fever", or to expatiate on the propriety of investigating the laws by which it is governed. Premising, therefore, that in this essay all theoretical questions in relation to the disease will be let alone, and that matters of fact only will be introduced, I proceed to direct attention to the following subjects:—

- I. Types of Scarlet Fever;
- II. Occurrence of Scarlet Fever at different Periods of Life;
- III. Prevalence of Scarlet Fever in the Sexes;
- IV. Influence of the Seasons over Scarlet Fever;
- V. Recurrence of Scarlet Fever in the same Person;
- VI. Mortality of Scarlet Fever.

I. TYPES OF SCARLET FEVER.

There is perhaps some excuse for the practice that has sprung up and engrafted itself on the professional mind, of recognising three shades or types of scarlet fever; but there is no excuse or reason why these shades or types should receive distinct names; and I would strongly recommend what has been recommended, I believe, by Dr. Watson, that medical men, in speaking of scarlet fever, whether amongst themselves or with their patients, should drop the terms *scarlatina*, *scarlatina anginosa*, etc., altogether, and should call every case of the affection *scarlet fever*; for the disease is an unit, and should be spoken of as one. If indeed a multitude of cases are brought together, and are closely watched by one observer, the unity of the disease cannot fail to become evident, from the universal presence of several important and special symptoms; and from the non-recurrence, as a general rule, of the disease under any type in a person who has once suffered from it in one or other of its forms.

I must remark, however, that, in practice, certain cases are occasionally met with, resembling scarlet fever in many points, in which it is highly difficult, perhaps impossible as yet, to determine whether or not they are true cases of that disease. Let me, in illustration, give a brief description of two such cases, which have within these last six months fallen under my notice.

A young woman, a servant at an inn, was seized with slight shiverings, sensations of chilliness, weight in the head, and thirst. These symptoms lasted about twelve hours, when the body became covered with a bright red rash, the throat sore, and the tongue loaded with white. She was kept in bed, and ordered a simple diet.

medicine. Twelve hours after the first appearance of the eruption, it had entirely disappeared, and the patient expressed herself as feeling quite well. Three weeks afterwards, however, the same symptoms returned, and passed off as favourably as before, leaving no secondary disease, and giving disease to no one else.

In the second case, the patient, a young married woman, was placed in less favourable circumstances; her room was imperfectly lighted and ventilated, her dwelling badly situated, and her attendants were indifferent nurses. A class of symptoms appeared, precisely analogous at first to those described above; but in this case, as the sore throat and eruption faded, great bodily prostration succeeded, attended with griping pains in the bowels and copious diarrhoea. This patient recovered very slowly, but communicated disease to none, although her children slept in the same bed with her, and an infant was at her breast.

There were no cases of scarlet fever in the neighbourhood of these patients; and it is difficult, I repeat, to say whether the cases really were cases of scarlet fever. The symptoms certainly resembled the symptoms of that disease; while the evanescent character of those symptoms, the sporadic nature of the cases, and the fact that no extension of disease took place from them, would afford ground for supposing that they could not have been true cases of scarlet fever. I leave the question for future consideration.*

II. OCCURRENCE OF SCARLET FEVER AT DIFFERENT PERIODS OF LIFE.

It has long been known, that scarlet fever is a disease to which the young are peculiarly liable. There are many causes for this; but the most important causes are to be found in the following three facts:

1st. That the second occurrence of the disease in the same person is contrary to the general rule.

2nd. That all persons who have not had the disease are, as a general rule, subject to it.

3rd. That the influences which give rise to scarlet fever are always present in a greater or in a lesser degree.

To answer fully, and from statistical data, the question, At what periods of life is scarlet fever most prevalent? it would be requisite to collect an immense number of cases of scarlet fever, of all kinds, wherever occurring, and however terminating; to obtain the age of every patient included in those cases; and then to ascertain the numbers affected in the different years of life.

Owing to the slight degree of attention that has been paid to such investigations, it is at the present time impossible for the most earnest epidemiological inquirer to construct a table of cases so occurring, extensive enough to set the question now under consideration at rest; but, from my own report book, from the weekly return books of three medical gentlemen holding parochial appointments,† and from the printed returns of two other gentlemen‡ who made statistics from cases of scarlet fever observed by themselves in Birmingham, in the years 1832 and 1835, I have been able to collect accurate records of 431 cases of scarlet fever, which supply the following information:—That, from the first year of life to the tenth, the liability to scarlet fever gradually increases; and that, after the tenth year, the liability decreases remarkably, and continues to decrease in proportion to the advance of life. Thus, out of the 431 cases referred to, no fewer than 329 occurred in children under ten, and 102 only at ages past that point.

These results were, however, so small, and, as a matter of course, so unsatisfactory to me, that I was led to search for information in another direction. The mortality-tables of

the Registrar-General were, it appeared to me, worthy of considerable regard; for, although it might be objected, that, in a few cases, the mortality of a disease was no sure indication of the number of persons attacked, the objection would be modified, and perhaps removed altogether, if multitudes of cases were consulted, as they might be in the reports alluded to. The subjoined tabular statement shows, in mean results, the proportion of deaths from 31,744 cases of scarlet fever, occurring in Manchester in the year 1839, in Liverpool in 1839, in Birmingham in 1839, in twenty-four town districts in 1840, in London in 1842, 1843, 1844, 1845, 1846, 1848, and in England in 1847.*

Total number of deaths.	Under 5.	5 and under 10.	10 and under 20.	20 and under 40.	40 and upwards.
31,744	21,469	7756	1755	552	212
Per cent.	67.63	24.43	5.52	1.73	0.66

These results are very striking, and afford, I imagine, a near approximation to truth, on the question of the occurrence of scarlet fever at different ages. They corroborate, too, the inferences drawn from the 431 cases before described.

In reading over many of the valuable treatises on scarlet fever which enrich so much the medical literature of this and of other countries, I found more than one eminent author making the assertion, that children under two years of age, and babes at the breast, were not subject to attacks of the disease. The illustrious Withering spoke positively on this subject; and Dr. Nieuwenhuys, an Amsterdam physician, and the author of an admirable paper on small-pox and scarlet fever, expresses, in an indirect manner, a similar opinion; and intimates that, on two occasions, he saw "infants escape, whose mothers were suffering heavily under the disease, and who suckled them from time to time".

Now, if the opinion, that infants are not subject to scarlet fever, were correct, it would embody matters of great interest and importance, physiologically and practically. I have therefore conceived that it would be no lost labour to settle the question by reference to facts.

The following particulars have been obtained, and are amply sufficient to disprove the assertions of Withering, and of the other writers who have either accepted his views, or offered similar ones independently of his labours:—In 242 cases, occurring, some under my own observation, and others under the observation of the gentlemen to whom I before referred, cases the majority of which recovered, and in which all ages are included, not less than fifteen were in infants under two years of age. The reports of the Registrar-General also afford good evidence on the question now in hand, inasmuch as these reports may be positively relied on for the present inquiry, and include great numbers of cases. The results derived from these returns are as follow.

Out of a total of 12,962 deaths from scarlet fever in children under five years of age, occurring in the county of Kent in 1843, in London in 1845, 1846, and 1848, and in England in 1847, there were—

Age.	No.	Age.	No.
Under 1 year	1289	Over 2 and under 3	3338
Over 1 and under 2	2674	Over 3 and under 4	3063
		Over 4 and under 5	2398
Total under 2 years	4163	Tot. from 3rd to 5th yrs.	8799

Total from 1 to 5 years, 12,962.

Thus, out of these 12,962 deaths in children under five years, there were, in the first two years, no fewer than 4,163 deaths from scarlet fever.

* At the same meeting of the Epidemiological Society at which this paper was read, another paper on "Scarlet Fever", from Mr. Bower Harrison, was also read. Curiously enough, Mr. Harrison alluded to several cases very similar to those described above, and seemed, like myself, to be in doubt as to their true nature.

† Mr. Browne, of Saffron Walden; Mr. Palmer, of Sheen; and Mr. Beresford, of Northborough, Leicestershire.

‡ Messrs. Byland and Parsons.

* At the meeting of the Epidemiological Society, the above and all the following tables were exhibited in detail. For the most valuable aid in the calculations required for the construction of these tables, the writer is deeply indebted to his friend Mr. Adolph Leipner.

I have one other calculation (No. III) bearing on this subject. In a total of 3,795 deaths in patients under five years, occurring in the London hospitals, in Manchester, and in Birmingham, in the year 1839, in 24 towns in 1840, and in London in 1842, there were—

Age.	No.	Total.
Under the second year	410	3795
Over the second, and under the third :	1797	
Over the third, and under the fifth	1588	

I need not comment on this table. The results are similar to the previous one, and both indicate plainly that infants are highly susceptible to scarlet fever.

III. OCCURRENCE OF SCARLET FEVER IN THE SEXES.

Up to the present time, almost all writers on scarlet fever have expressed an opinion, that it is a disease most apt to attack the female sex. Dr. Tweedie says, arguing on his own general experience, and on the results of an imperfect table, "that females are more subject to the disease than males": with great candour, however, he repeats the opinion of Withering, viz., "that, in children, the number of sufferers are equal in both sexes; but, amongst adults, females suffer most". Fothergill, in writing of the malignant attack of scarlet fever which visited London in 1749, says, a greater number of girls have it than boys, more women than men; Rayer affords similar testimony; but Dr. Binns, in describing an epidemical scarlet fever which occurred in the Ackworth school, tries to show, by reference to a small, but, as far as it goes, fair table of cases, that girls are less susceptible to the disease than boys.

The 431 cases in my own possession, and to which I have before drawn attention, are not sufficient in number to afford anything like satisfactory evidence on the subject. As far as they do extend, however, they show an equality, in the matter of susceptibility to the disease, between the sexes, subject to certain laws, which will be better understood when the subjoined figures have been consulted.

I find, from the Registrar-General's reports, that, out of 102,382 deaths from scarlet fever, occurring in England in the years 1838, 1839, 1840, 1841, 1842, in London in 1842, 1843, 1844, 1845, 1846, and in England in 1847 and 1848 there were—

Amongst males, 51,660 }
 „ females, 50,722 } = 102,382 (938 males in excess.)

This calculation takes in sufferers of every age, and leaves, at first sight, a fair inference on the mind, that males are, on the whole, more subject than females to scarlet fever. To understand the question fairly, however, we must analyse a large number of cases, and find at what ages the deaths occurred.

Below, 31,744 cases of death from the disease, occurring in Manchester, Liverpool, and Birmingham, in the year 1849, in 24 towns in 1840, in London in 1842, 1843, 1844, 1845, 1846, and 1848, and in England in 1847, have been analysed; the relative number of deaths in both sexes, and in certain specified periods of life, being given (Table No. v).

Age.	M.	F.	Total.	Predominance.	
				M.	F.
Under 5 years	11097	10372	21469	725	—
From 5 to 10	3927	3829	7756	98	—
„ 10 to 20	844	911	1755	—	67
„ 20 to 40	261	291	552	—	30
„ 40 & upwds.	97	115	212	—	18
Total	16226	15518	31744		

From this statement, we derive the general fact that, under the age of ten, more males die from scarlet fever than females; but that, above ten, the contrary obtains.

In the next statement, the relative mortality in the sexes, in a given number of deaths from scarlet fever, is stated, together with a reference to the population of the districts in which those deaths occurred.

In the districts of Kent, in the year 1843, there were—

Deaths at all ages, 413 { 205 males } 3 females in excess.
 { 208 females }

The population of these districts, as obtained by the census taken rather more than a year before, was—

Pop. in 1841, 469,113 { 232,228 males } 4,657 fem. in excess.
 { 236,885 fem. }

This last table is, it will be seen, quite contrary to the first in its results; and separate writers, inclined to controversy, might, by referring to only one of these tables, baffle an adversary considerably. Considered, indeed, in their singleness, the tables might and would be made to convey the most incorrect ideas. But when the three tables given are viewed carefully, and with an unbiassed eye, their very differences are found to be of the highest value, inasmuch as these differences place before the mind the true state of matters. Collectively, then, the calculations indicate, I believe, that scarlet fever makes no selection as regards sex, but attacks more males, or more females, according to the relative number of males or females who are resident in any district where it is epidemical.

The last table illustrates this fact exceedingly well. There are more deaths from scarlet fever amongst females in a given portion of country than amongst males; and there are in the same portion of country, previous to the scarlet fever epidemic, a larger number of females than of males in the population.

The table in which ages are specified conveys a similar lesson, when the general laws of population are understood. In the child part of our population—using the word population in its general sense—males preponderate; but in the youth and adult population, there are more females than males, owing to the fact, that youths and men are exposed to more causes of mortality, and are drafted into other countries in larger numbers, than girls and women. Now, the mortality of scarlet fever, as the results given above illustrate, seems to follow this law of number; for our tables show, that whilst more males die under ten years from the disease than females, after the age of ten the mortality begins to take the lead on the female side, and to continue steadily to do so as life advances.

Still more our calculations from the Registrar-General's Report show the same fact; for what can the large preponderance in the deaths of males arise from, except from the circumstance, that at the period of life when the body is most susceptible to the disease (the first ten years), the male population is larger than the female?

I cannot fail to remark, also, that the calculations on which these last conclusions are based, illustrate, although made from mortality returns, the prevalence of the disease in the sexes in all classes of cases; for one cannot but suppose that if females were more subject to the disease than males, the results of the mortality tables would be widely different to what they are, seeing that females are naturally less able than males to bear up against so dangerous an affection.

The discrepancies and contradictions of general writers on the subject of sex and scarlet fever are also removed by the views I have ventured to throw out; for as such writers have written of the disease as they saw it in individual cases, without any regard to the relative number of each sex who were subject to its attacks at the time and place, or to the ages of the sufferers, it is quite certain that their mutual statements must differ. Withering, however, seems to have had pretty correct notions on the subject, when he said, that in children the number of boys and girls who died from scarlet fever was nearly equal, but that females were

number of female patients considerably exceeded that of the male.

IV. INFLUENCE OF THE SEASONS OVER SCARLET FEVER.

I think that, in collating the facts which may be obtained on the subject of scarlet fever, it is possible to show that the disease is influenced by the seasons. The concurrent testimony, in fact, of almost all writers on the disorder, teaches that it is most common in autumn, next so in the summer, next so in the winter, and least so in the spring. In three epidemics which I have witnessed in different parts of this country, the disease has always commenced in the summer, become most violent in the last months of the year, has continued into the new year, and died away with the spring. I believe, too, that sporadic cases are most common in autumn, although I have seen such instances in the month of April. Cases, however, occurring in the spring, even though of malignant character, are more likely to recover than at the other seasons.

I could bring forward several authors, whose testimony is valuable on the question of season in relation to scarlet fever. As the subject is important for numerous reasons, it may not be wrong to refer to some of these authorities.

Sydenham remarks that scarlet fever, though it may occur at other seasons, is most common in the end of summer, when it attacks whole families, and children especially. Fothergill, in describing the malignant form of scarlet fever, observes, "that although it survives different seasons, and all varieties of weather to which we are exposed, yet it seems to show itself most frequently in the autumn, and in the beginning of the winter; at least I have met with more cases from September to December inclusive, than in all the other months together."

Cullen names the beginning of winter as the time when scarlet fever is most prevalent. Withering speaks of the winter and summer months as favourable seasons, and records the particulars of an epidemic which, commencing in summer, was temporarily checked in October, but recommenced, with extreme virulence, in November. The epidemic of malignant scarlet fever that raged in St. Albans, in 1748, is described by Dr. Cotton as occurring in the latter end of the year. The epidemic recorded by Dr. Peart in 1802, did not become violent and extensive until the latter part of August and in September. Willan remarks that the disease, scarlet fever, is most virulent during October and November. Haygarth entertained a similar opinion. Rayer observes that the disease is most common about the equinoxes. An epidemic of malignant scarlet fever, described by Chomel under the title of gangrenous sore throat, and which raged in Paris a hundred years ago, was most violent in the months of October and November. Dr. Nieuwenhuys, in his paper on "the scarlet fever in Amsterdam, in the year 1834", remarks, "the disease first showed itself, in the epidemic form, in the month of June 1834, and its victims were—in June 22, in July 32, in August 50, in September 78, in October 136, in November 106, and in December 61."

Mr. Ryland, in describing the cases of scarlet fever which occurred under his care amongst the out-patients of the Birmingham Infirmary, in the year 1835, states that in the first quarter of the year ending March 25th, he had 5 patients, in the second quarter 7, in the third quarter 35, and in the three last months 59, making 106 cases in all.

Finally, Dr. Tweedie, in his essay on Scarlet Fever (many other authors being omitted), states that the disease is most common in autumn, least so in spring.

Such are some of the conclusions to which general observers have come with reference to the prevalence of scarlet fever at the various seasons of the year; and when these conclusions are tried by statistical facts, their correctness is strikingly established.

In 46,077 deaths from scarlet fever in London in the years 1838, 1839, and 1840; in England in 1841 and 1842; and London in 1843, 1844, 1845, 1846, 1847, and 1848, the

proportions of deaths in the seasons of those years run as follows:

	1st quarter. Jan. Feb. Mar.	2nd qr. April, May, June.	3rd qr. July, Aug. Sept.	4th qr. Oct. Nov. Dec.	Total.
No. of deaths .	10465	9068	11914	14630	46077
Per centage .	22.711	19.679	25.856	31.751	

The above table requires no comment. Derived from an immense number of cases, the inference to which it leads, viz., that scarlet fever is most prevalent in this country in the three last months of the year, least so in the months of April, May, and June, is obvious. One word I must add. If the reader could see an analysis of the above tabular statement, he would find that the rate of mortality is not always the same in the special quarters of the years specified. So that a calculation made from one or two, or even three, of those years, would be likely to lead into a grievous error. When, however, the trouble is taken to reduce the returns of a great number of years to a single calculation, one approaches at least to the truth.

I do not apologise for this digression, because nothing is more important to the epidemiological inquirer than the possession of accurate and extensive statistics. An indolent or an unconscious statician is a literary *ignus fatuus*. The indolent statician will give loose and insufficient statements; the unconscious one can and will prove anything to suit his own purpose. Both would be much more usefully and worthily employed in picking oakum than in penning figures.

V. RECURRENCE OF SCARLET FEVER IN THE SAME PERSON.

In the history of diseases, there is scarcely a more interesting or striking fact than that there should be a certain class of diseases which, as a general rule, do not occur a second time in the same individual. Physiologically, pathologically, and practically, the fact is interesting, and deserves to be made a subject for special study. On the possibility of the recurrence of scarlet fever in the same person, opinion has been divided. The well-known assertion of Willan, that out of two thousand cases of the disease, he had never met with one in which it had happened for the second time in the same person, has been transcribed by almost all writers, and has led many to entertain a belief that the disease could never occur twice in one individual. This belief, however, is quite erroneous. Rayer saw one well-marked instance of recurrence; Bateman and Withering saw several; Blackburne saw two such cases; and Dr. Tweedie observes—"We certainly have met with several well-authenticated instances of a second attack of scarlatina in the same person. Speaking generally, I may say that I have seen second attacks of scarlet fever in the same person on three or four occasions. For particular evidence, the following cases may suffice. A little girl whom I attended in 1850, took scarlet fever. The disease was very decided in character, but passed over favourably. A month afterwards, the little patient complained of feeling sick and cold, and it was feared that the symptoms of dropsy were about to present themselves. Instead of this, to the great surprise of every one, the skin a second time became universally red, and the throat sore; and the patient passed again through a most marked attack of scarlet fever."

I am able, too, to speak from experience in my own persons on this subject. When a child, I suffered, as I well remember, from scarlet fever, during a time when it was occurring epidemically in my native village. The rash was universal, and intensely red; the throat sore; the recovery slow. In the spring of 1850, whilst attending cases of scarlet fever, I sickened, became ill, and passed through a very severe second attack of the disease. The skin was again red, the throat sore and ulcerated, and the recovery gradual. Still more curious, whilst attending a boy, in the month of April 1852, who had a severe attack of scarlet fever, I became exceedingly unwell, suffered from shivering,

and sore throat, and had a faint red blush on the chest and neck. I am minute in these particulars, because it is important to settle satisfactorily all points that admit of being settled in epidemiological inquiries; for by such means difficulties are exhausted, and fewer questions are left for investigation. I have not been able to collect statistical information on this subject of recurrence, so that it is impossible to state the frequency of recurrences. That they are rare is evident, for I have not, in reading or conversation, met with a single author or practitioner who had seen a second attack of scarlet fever prove fatal.

VI. MORTALITY OF SCARLET FEVER.

The most important subject in connexion with scarlet fever is its mortality. Every writer on the disease, since its full recognition as a disease, has described, in mournful terms, its frightful ravages. Mr. Kearsley, of Philadelphia, writing about a hundred years since of the disease, as it appeared in America, says, "it baffled every effort to stop its progress, and seemed, by its dire effects, to be more like the sword of vengeance to stop the growth of the colonies, than the natural progress of a disease". And to this day the yearly victims of the disorder are exceedingly numerous in many parts of the world.

In considering the mortality of scarlet fever, several questions force themselves on our notice, some of which have been answered already incidentally. I allude to the subjects of age, of sex, and of season, as influencing the mortality of the malady.

Two questions still remain: first, the influence of locality on the fatality of scarlet fever; second, the relative mortality of scarlet fever in connexion with other epidemical diseases.

To answer these questions, I have merely had recourse to the pages of the Registrar General, and have referred, therefore, only to the disease as it occurs in our own country. The next table shows the comparative mortality from scarlet fever, in towns and rural districts. To insure correctness, each statement of deaths has been obtained from a population of a million.

Year.	District.	Towns.	Country.
1838.	London, 24 towns, and 12 counties	517	202
1838-9.	London and 5 counties	2522	454
"	24 towns and 7 counties	1654	737
1841.	London, 24 towns, and 12 counties	683	684
	Mean from 1838 to 1841	988	478

The mortality from scarlet fever in a million of people is, therefore, rather more than twice greater in towns than in rural districts.

The following table (No. ix) indicates the different rates of mortality *per million* from scarlet fever, in eleven districts of England, during the years 1838, 1839, 1840, 1841, 1842, 1847, 1848. The last column will supply at a glance the comparative rate of mortality.

District.	Deaths in seven years per million.	Relative order.
North Western Counties	10328	1
Metropolis	7838	2
Yorkshire	7018	3
Monmouth and Wales	6609	4
Northern Counties	6428	5
North Midland Counties	6244	6
Western Counties	5013	7
Eastern Counties	4708	8
South Midland Counties	4694	9
South Eastern Counties	4609	10
South Western Counties	4122	11

The above table needs but few observations. It indicates an extraordinary mortality in the north-western counties. The complete table showed that scarlet fever does not fall on the whole country at the same time, but is, at similar periods, absent to a great extent in one locality, and extensively present in another.

The subject of the relative mortality of scarlet fever in reference to other epidemical diseases, possesses peculiar interest; and I have, therefore, taken some pains to illustrate it by several tables. The following (No. x) shows the relative mortality of seven epidemical diseases. The returns are, for England in the years 1838, 1839, 1840, 1841, and 1842, and for London in 1843. The calculations are based on the numbers of deaths in a population of a million, as in a previous table.

Diseases.	No. deaths.	Rel. order.
Typhus	6442	1
Scarlet Fever	4015	2
Hooping Cough	3540	3
Measles	3480	4
Small Pox	3183	5
Erysipelas	488	6
Influenza	395	7

Total 21549

In special years, the relative position of these mortality figures is somewhat changed.

In the next table, the relative mortality in a total of 79,256 deaths from six epidemical diseases, occurring in London during the period of twelve years, from 1840 to 1851, is exhibited:

Diseases.	No. deaths.	Rel. order.
Typhus	23064	1
Scarlet Fever	21551	2
Measles	15400	3
Small Pox	10710	4
Erysipelas	4276	5
Influenza	3295	6

Total 79250

In the following and final table the subject of relative mortality is carried further, by a calculation based on 462,227 deaths from seven epidemical diseases, occurring during a period of eleven years, viz., in England in 1838, 1839, 1840, 1841, 1842, in London in 1843, Kent in 1843, in London in 1844, 1845, and 1846, and in England in 1847 and 1848:—

Diseases.	No. deaths.	Rel. order.
Typhus	141,517	1
Scarlet Fever	105,250	2
Measles	63,793	3
Hooping Cough	62,867	4
Small Pox	50,400	5
Influenza	18,553	6
Erysipelas	10,787	7

Total 462,227

Thus, the three tables I have given all prove that scarlet fever, in its rate of mortality, is second only to typhus fever.*

Before I conclude, I shall devote a few moments to a re-statement of the conclusions at which I have arrived. These conclusions are six in number, viz.:

1st. That scarlet fever, in whatever form or type appearing in individual cases, is a single disease in its universal character, and should have only one name.

2nd. That, after the first ten years of life, the liability of an individual to an attack of scarlet fever lessens in proportion to his increase of years.

3rd. That scarlet fever pays no respect to either sex, but

* In the discussion that followed the reading of this paper at the Epidemiological Society, I stated, in answer to a question by the president, that scarlet fever was in all probability a more fatal disease than even typhus fever; inasmuch as the word typhus was often unjustly returned, in cases of death from pneumonia and other diseases, which assume in their last stages what is absurdly called the "typhoid type". In this opinion, Drs. Snow, Sibson, and many other fellows of the Society concurred.

attacks more or fewer of males or of females in a district or country, according to the relative differences in the number of the sexes in those districts or countries.

4th. That the seasons influence the spread of scarlet fever; the disease being most prevalent in the three last months of the year; least so in the months of April, May, and June.

5th. That scarlet fever may occur twice in the same person; that such recurrences are very rare, and never, as far as can yet be ascertained, fatal.

6th. That the mortality of scarlet fever is greatest in children under ten years of age—is equal in the sexes—is highest in the three last months of the year—is, as a general rule, twice as great in towns as in rural districts; and is second in extent only to typhus fever of all the ordinary epidemic diseases.

On this occasion, it has been my earnest endeavour to gather from every trustworthy source to which access could be obtained, such particulars concerning scarlet fever as admit of being styled *matters of fact*; to place these particulars side by side; to compare the one with the other; and, in the end, to draw those inferences from them which were to my unbiassed judgment the nearest to the truth. If anything has been written that may be considered as differing from received opinion or dogma, I can only observe, that such differences have arisen out of the mode of inquiry that has been pursued, and that they are not differences made for the sake of difference; while, on the contrary, if it should occur to any one that certain subjects, already well known, have been restated with too much emphasis of thought, I remark that such restatements, as they have now been made, prove, on *particular evidence*, facts which had before been recorded only from general observation; and that

"Truth can never be confirmed enough,
Though doubts did ever sleep."

Mortlake, April 1853.

[Along with the manuscript of Mr. Richardson, we received the twelve elaborate tables by which he illustrated his paper when it was read before the Epidemiological Society. We much regret that it is impossible for us to publish these tables *in extenso*, from the great amount of space which they would occupy. To prevent confusion we have also omitted the references to the tables by their numbers, as without the tables themselves these references would convey no instruction. EDITOR.]

PERISCOPIC REVIEW.

SURGERY.

EXCISION OF THE KNEE-JOINT.

A VERY interesting paper, on excision of the knee-joint, has been published by Dr. R. J. MACKENZIE of Edinburgh, in the *Monthly Journal of Medical Science* for June 1853. He says that an impression, most unfavourable to its performance, appears to have been generally entertained; but that, from what he has lately seen of its results in several cases, he is convinced that it has been rejected from surgical practice on insufficient grounds, and that it will yet come to supersede, in many cases, amputation of the thigh.

The author gives an account of the cases in which the operation is known to have been performed.

CASE I. Mr. Filkin, of Northwich; in 1702. No satisfactory record of the case exists.

CASE II. Mr. Park, of Liverpool; in 1783. A year after the operation, the patient could walk with great ease and firmness, without the assistance of a stick or any splint; the foot being three quarters of an inch shorter than the other. Seven years later, Mr. Park reports that this patient had been able to perform all the duties of a seaman; but had been drowned by the upsetting of a flat in the Mersey.

CASE III. Same operator. The patient, a very unfavourable subject, died in about four months.

CASE IV. Moreau, some time afterwards. The patient was apparently going on very favourably, when epidemic dysentery

appeared in the hospital; and he was attacked by it, and died three months and a half after the operation.

CASE V. Moreau. The operation was fatal.

CASE VI. Moreau, junior. The patient recovered with a serviceable limb.

CASE VII. Mulder, in 1800, excised the knee-joint of a pregnant female. Two months after the operation, she was delivered of twins, and some time afterwards died of tetanus.

CASE VIII. Mr. (now Sir P.) Crampton, in 1823, removed the patella, part of the tibia, and upwards of six inches of the femur. The patient lived upwards of three years after the operation, and then died of phthisis.

CASE IX. Mr. Crampton, in the same year, operated on a girl. Six months after the operation, the femur and tibia were consolidated by a firm bony union. Upwards of three years after, Mr. Crampton states that the femur and tibia were firmly consolidated; the leg and thigh were not in the slightest degree wasted, but the limb was considerably bowed outwards; and she was able to stand or walk for a considerable time.

CASE X. Mr. Syme, in 1820 and 1830, excised the knee-joints of two children between seven and eight years of age. In 1831, Mr. Syme described the limb in the first case as "stout and well nourished, and, though slightly bowed outwards, not occasioning any disagreeable deformity: it allowed a slight degree of flexion and extension". The heel merely of the shoe was required to be two inches higher than the other. In 1840, however, Mr. Syme says of this case, that "in course of time it was found that the growth of the two limbs was not equal, and that the one which had been the subject of operation gradually diminished in respective length, until it wanted several inches of reaching the ground when the patient stood erect."

CASE XI. Mr. Syme, in 1830. The patient, a child, died about ten days after the operation.

After this, excision of the knee-joint seems to have been abandoned till within the last three years. Of eleven cases, six had died, and five had recovered. Excluding the cases of Mulder and Mr. Crampton, and Moreau's first case, the result in the remaining three fatal cases was attributable to the direct effects of the operation. Of the five cases which recovered, the limb was thoroughly serviceable in three; the amount of usefulness in the fourth case is unknown; and in the fifth case (Mr. Syme's) the limb was ultimately useless.

In 1850, the operation was revived by Mr. Fergusson; and within the last three years it has been performed thirteen times; in three cases by Mr. Fergusson, in six cases by Mr. Jones of Jersey, in one case by Mr. Page of Carlisle, in one case by Dr. H. Stewart of Belfast, and in two cases by Dr. Mackenzie. Of the thirteen individuals, three have died; two directly from the effects of the operation, and one from dysentery. The remaining ten are, so far as Dr. Mackenzie knows, alive. In five, the limb is used freely in progression; in one, the result, as regards usefulness, is as yet uncertain; in one, Dr. Mackenzie is ignorant of the result; in the remaining three, the most favourable expectations may be entertained.

The following is an abstract of the recent cases:—

CASE XII. Mr. Fergusson operated, July 20, 1850. The patient, a male, aged 21, died on the ninth day, from acute necrosis of the femur.

CASE XIII. Mr. Fergusson, October 30, 1852. The patient was a female, aged 21. Considerable constitutional disturbance followed, and convalescence was protracted by erysipelas. Six months after the operation, there were one or two small sinuses in the neighbourhood of the wound. The limb was shorter than its fellow by about three inches, and slightly bowed outwards at the knee. Slight motion (chiefly antero-posterior) existed between the bones. The patient appeared to be going on favourably.

CASE XIV. Mr. Fergusson operated, April 2, 1853. The patient, a female, aged 28, died with all the symptoms of pyæmia, sixteen days after the operation.

CASE XV. Mr. Jones operated, January 19, 1851, on a female, aged 25. Dr. Mackenzie visited Jersey for the purpose of witnessing the results of Mr. Jones's cases; but, as this patient lived at a distance from St. Heliers, he was unable to see her. From an account furnished by Mr. Jones, however, it appears that the shortening of the limb is a little more than three inches, and that, complete anchylosis not having taken place, the patient requires a support on the inner side of the bone. With this she can move about freely, and stand for hours together.

CASE XVI. Mr. Jones operated, April 27, 1851, on a boy eleven years old. The case seems to have been peculiarly unfavourable. Before the operation, the leg (left) was fixedly flexed on the thigh: the boy was emaciated, and numerous

sinuses in the leg and thigh communicated with the diseased bones. Nearly five inches of the femur and tibia were removed. On April 21, 1853, when Dr. Mackenzie examined him, he appeared in perfect health; and the limb was sound, though numerous cicatrices existed. Complete ankylosis had taken place, the limb being a little bowed outwards, and slightly flexed at the knee. The shortening of the limb was rather under four inches; the muscles were well developed; and the boy could walk and run quickly, and stand on the limb alone. No measurement had been made; but, from an examination of the apparatus which had been used, and the convictions of Mr. Jones and the nurse, Dr. Mackenzie was satisfied that the limb had grown upwards of two inches since the operation was performed.

CASE XVII. Mr. Jones operated, September 4, 1851, on a lady, aged 30. Everything went on favourably for eight days, when the patient was attacked with epidemic dysentery, and died on the fourteenth day.

CASE XVIII. A boy, aged 7, was operated on by Mr. Jones, fifteen months ago. The condition previously to the operation, and the results, are very similar to those of case xv.

CASE XIX. This patient, a male, aged 20, was operated on by Mr. Jones, about November 1852. When Dr. Mackenzie saw him, there was shortening to the extent of rather less than an inch and a quarter. He walked with crutches, but could, though not yet easily, walk without them. Dr. Mackenzie has since heard, from Mr. Jones, that this patient is progressing rapidly.

CASE XX. Mr. Jones operated on a boy, aged 9, on April 17, 1853. The patella was not removed; its carious surface having been taken away by the gouge. The head of the tibia and condyles of the femur were removed without division of the tendinous or the ligamentous attachments of the patella. Four weeks after the operation, the patient was progressing most favourably.

CASE XXI. Mr. Page of Carlisle excised the patella, and two and a half inches of the femur and tibia, in a lad aged 17, on June 7, 1852. Eleven months after the operation, there was shortening to three inches; the bones were completely ankylosed; the patient could walk a short distance without a stick, and was daily gaining strength.

CASE XXII. Dr. H. Stewart of Belfast has performed the operation within the last few years; but nothing more is known of the case than that the result is very encouraging.

The above are the cases of which Dr. Mackenzie has been able to find records, or to obtain accounts. The following is an abstract of the history of the two cases in which he himself operated:—

CASE I. W. H., aged 42, an hostler, from Carlisle, came under Dr. Mackenzie's care in the Royal Infirmary of Edinburgh, Sept. 28, 1852. He was suffering under disease of the left knee-joint, of five years' standing. The symptoms were uniform thickening of the parts around the knee, and severe gnawing pain, especially during the night, much aggravated by the slightest motion. Considerable relief was obtained by the joint being kept immoveable in leather splints, and by the repeated application of the actual cautery. The thickening became diminished. A painful spot, however, remained over the inner side of the head of the tibia, on account of which the counter-irritation and the leather splints were continued. He continued in this condition till about the middle of January, when, without assignable cause, the pain in the knee, especially on each side of the head of the tibia, became so severe and constant, that, in spite of the free and frequently repeated use of morphia, he scarcely slept night or day. The swelling of the joint again increased, and the foot and leg became oedematous. On the 26th of January, Dr. Mackenzie called a consultation, as it appeared to him that the removal of the disease by operation was alone likely to save the patient. It was thought, however, that a repetition of the same measures as had been already adopted might still save the joint. No relief, however, was obtained; and, after ten days' further delay, he yielded to the solicitation of the patient to remove the disease by operation.

The operation was performed, February 5, 1853. A straight incision was made across the front of the joint, a little below the level of the patella, and rather less than half round the limb; and, at right angles to each end of this transverse incision, a longitudinal incision of about two inches in length gave the wound somewhat the form of the letter H. The operation was performed according to the plan of Moreau; the patella being first removed, then the condyles of the femur, and lastly the articular surface of the head of the tibia. It was accompanied by smart hæmorrhage from the articular arteries, which was at

once arrested by applying ligatures. On dividing the tibia with the saw, the cavities of two abscesses in the cancellated texture of the bone were laid open, each of a size capable of containing a grape. Dr. Mackenzie carefully removed the remaining portion of the walls of these abscesses with the gouge, and then, finding that the diseased portions of bone had been entirely removed, he placed the ends of the tibia and femur in apposition, united the wound by sutures, and fixed the limb in the straight position, by applying a splint on its posterior surface.

The articular surfaces of the bones were found almost entirely deprived of cartilage; and both the cancellous and the laminated structure of the bones, at various points, were in a state of suppuration and caries. The primary disease evidently consisted of suppuration of the cancellous texture of the head of the tibia. The extent of bone removed in the operation amounted to rather more than two inches—an inch and a half of the femur, and a little more than half an inch of the tibia.

The subsequent progress of the case is expressed in the following summary.

"The patient was suffering under a high degree of irritative fever at the time of the operation. He suffered, from the third to the tenth day following the operation, from severe and incessant hiccough, which, as the subsequent symptoms proved, was referrible to a local source of irritation on the surface of the diaphragm. From the end of the second to the seventh week, he suffered from nearly constant diarrhoea, evidently dependent on hepatic derangement of a serious character, and of old standing. Two months after the operation, he passed safely through a severe attack of pleuro-pneumonia; and in spite of all these untoward complications, the wound, at the end of three months and a half after the operation, was, with a trifling exception, entirely healed, and the bones consolidated, though not quite immoveable, in a nearly straight position."

CASE II. I. J., aged 28, a fisherman from Shetland, was admitted under Dr. Mackenzie's care on February 14, 1853. He was suffering from disease of the knee-joint of about ten months standing. The affection had commenced, without any assignable cause, by pains and swelling of the joint, which gradually increased; and, for two or three months previously to his admission, had entirely disabled him from moving about. The pain was considerably mitigated by the joint being kept immoveable in leather splints, and by the repeated application of blisters. About a month after his admission into the hospital, the pain again became more severe, and was referred chiefly to the outer side of the head of the tibia. The actual cautery was freely applied, but without relief; while increasing deformity of the joint, and pain on slight motion, gave evidence of the morbid changes which were in progress in and around the articulation. Shortly after this he had an attack of modified small-pox, from which he speedily recovered. No improvement, however, took place in the condition of the joint. He continued to lose flesh; the pain and the deformity increased; and symptoms denoting suppuration of the joint presented themselves.

Sir George Ballingall, Dr. Dunsmure, and Dr. Gillespie, who saw the patient with Dr. Mackenzie on the 2nd of May, agreed with him in the necessity of performing amputation, or excision of the joint, to either of which measures the patient gave his consent.

Dr. Mackenzie excised the joint on the 5th May, 1853. Having found the disadvantages of the H-shaped incision, he exposed the interior of the joint by a semi-lunar incision, from the inner side of the inner condyle of the femur to a corresponding point over the outer condyle, the incision passing in front of the joint nearly as low as the tuberosity of the tibia. The flap thus formed was dissected back, the ligamentum patellæ being divided, and the patella left in the substance of the flap. The rest of the operation was completed as already described; but the patella was left in its place, and its immediate attachment left undisturbed. The cartilage which remained on its surface was removed by the gouge, as well as the rough surface of bare bone around its articular margin. The bleeding was very trifling: one of the articular branches and several small vessels were secured by ligature, and the wound was dressed and the limb supported as already described. The interior of the joint presented the usual advanced strumous disease of the synovial membrane, suppuration of the joint, universal thickening and degeneration of the membrane, and ulceration of the margins of the cartilage in nearly their entire extent. Great part of the cartilage covering the articular end of the bone was as yet unaltered. Three-fourths of an inch of the tibia, and fully an inch and a half of the femur, were removed.

When Dr. Mackenzie wrote the paper of which this is an

abstract, the patient, a little more than a fortnight after the operation, was going on favourably.

REMARKS. On the subject of excision of the knee-joint, Dr. Mackenzie makes the following observations:—

"The propriety of attempting to save a limb by excision of the knee-joint seems to depend on the three following considerations:—1st. Is the operation of excision attended by greater or less danger to life than amputation of the thigh? or, may the dangers of the two operations be considered equal? 2nd. In the event of recovery after excision of the knee-joint, is the limb more or less useful and seemingly than a wooden leg? 3rd. Does the long confinement to the horizontal posture, which is necessary after excision of the knee-joint, in any measure counterbalance the benefits of the operation (if such benefits are proved) as compared with amputation of the limb?

"A careful consideration of these questions, and of the recorded results of the operation, led me, several years ago, to doubt the propriety of the operation having been rejected from surgical practice. I satisfied myself, by repeated trials on the dead body, that the operation could be performed without difficulty, and without the risk of wounding any important parts; and, as a teacher of surgery, I have been in the habit of mentioning to my pupils my impression that the operation had been rejected from practice on insufficient grounds.

"With regard to the considerations which I have suggested as principally bearing on the merits of the operation, I would submit,—1st, That the danger of the operation may be reasonably expected to be less than that attending amputation of the thigh. The wound necessary for the removal of the diseased bones is less extensive than the wound of amputation of the thigh, whether performed by the circular or flap operation. The large vessels and nerves are not divided in the operation, the parts involved in the incisions being principally the integuments and ligamentous apparatus of the joint; the medullary canal of the bone is not laid open, a point which has of late years been suggested as of some consequence in diminishing the dangers of amputation; the shock, which always attends the sudden removal of a large part of the body, is avoided.

"Time and experience, however, can alone determine the comparative danger of the two operations. In the mean time, the results of the limited number of cases in which the operation has been recently practised, prove, as far as they go, that the danger to life is not great; and, unless some unforeseen accident should occur to the cases, which are at present in progress of convalescence, that the danger is inferior to that of amputation.

"2nd. With regard to the usefulness and the seemliness of the limb, I need only refer to the account I have given of the results of the operation in Mr. Jones' hands, to show that the limb may retain a degree of usefulness which can never be attained by the wooden leg in common use, nor yet by the most expensive and efficient artificial limb which I have ever seen; and if, in the days of Mr. Park, such a result could be obtained as that a man, whose knee-joint had been excised, could run up the rigging, and perform all the duties of a seaman, surely, with all the resources of modern surgery, we ought to obtain an equally satisfactory result now.

"3rd. The remaining objection to the operation is the tediousness of the convalescence. This, I think, unquestionably detracts, to a certain extent, from the benefits of the operation. I am doubtful, however, after all, whether the recovery can be proved to be, on the whole, more tedious than the recovery from compound fracture of the leg; in some cases, even the limb seems to have been restored to usefulness as soon as the patient would have been able to walk on a wooden leg, had the limb been amputated. In Mr. Syme's case, for instance, 'in the course of four weeks after the operation, the wound was all but healed, and the limb, before the expiration of three months, had regained so much strength, that the patient could make some use of it in walking.'[†]

"Mr. Syme, in another place, says—'It ought to be recollected, too, that, though recovery from amputation of the thigh is usually completed in three or four weeks, it is generally at least as many months before the patient can rest the weight of his body on the face of the stump, so as to use it in standing or walking.'[†]

"Another objection has been brought forward against the

operation, which requires to be noticed; viz., that when the operation has been performed on children, the growth of the limb has been checked, and that, consequently, from the unequal growth of the two limbs, that on which the operation has been performed becomes so disproportioned to the other as to be ultimately useless. The only practical proof of this being so, which I can find, is Mr. Syme's case; and I think it is possible that it might be attributed in this instance to ankylosis not having taken place. Experiments have been performed on animals, to show that bones do not grow when deprived of their heads; but the results do not appear to be conclusive. A few years will be required to confirm this as a valid objection to the operation. Mr. Jones has, in the mean time, made accurate measurements of the limbs of the three boys on whom the operation has been performed, and will have an opportunity of giving further information on the subject hereafter. I have, in an earlier part of this paper, mentioned the fact, that the limb in one of Mr. Jones's cases had already, since the operation, grown considerably, and presented now no appearance of checked growth. As bearing on this question, I would be glad to know if the growth of the upper extremity is checked by excision of the elbow-joint. It is so, as far as I remember to have observed, only in a slight degree. Supposing, however, that the limb is much *respectively* shortened in after years, the objection applies only to the operation being performed on children, and has nothing to do with the question of the propriety of excision in the adult.

"I have suggested that an error has, till lately, been committed in the performance of the operation, which has been allowed to interfere most seriously with its result. I refer to *the removal of the patella*. It is said that the patella is generally extensively diseased in affections of the knee-joint, demanding excision or amputation: this, I have no doubt, is an error. The amount of disease to which it is liable is very limited,—in the great majority of cases consisting only in its being more or less deprived of its cartilage, and of a rough, or perhaps carious condition of its articular aspect. The patella is rarely, if ever, the primary seat of the disease in affections of the knee-joint. The advantage of leaving the patella cannot fail, I think, to be very great. The natural form of the joint is preserved; the attachment of the extensor muscles is left undivided; the wound is less extensive; the annoying tendency to displacement forwards of the end of the femur seems, in a great measure, to be done away with; and there is every reason to believe that the consolidation of the bones will proceed more rapidly, and the limb ultimately be found both more useful and more seemly, than when that bone is taken away. This is a point, however, which remains to be proved. In the last two cases, however, in which the operation has been performed by Mr. Jones and myself, the patella has been left, and the advantages of its having been retained are apparent.

"The semilunar incision seems to me the most advantageous, as being the smallest by which the joint can be satisfactorily exposed, and as giving rise to less bleeding than the H-shaped incision. There is one point, however, to which I wish to direct attention. It has been recommended that a considerable portion of integument should be removed by a double lunated incision, to prevent the redundancy of skin which might be expected from the large amount of bone removed in the operation. I believe that this advice, if followed, will lead to great annoyance. I have not removed any portion of integuments in the cases in which I have performed the operation; notwithstanding which, the retraction of the skin was such as to cause, in each case, more or less gaping of part of the wound. Mr. Fergusson mentioned to me that he had removed a small portion of integuments in the operation, in the case now in King's College Hospital; and that, during the patient's convalescence, he had much reason to regret having done so, as the retraction of the integuments was such as to leave part of the end of the femur uncovered, and a thin cicatrix only now covers this point of bone.

"I shall not add any further details as to the performance of the operation or the after-treatment of the patient. My chief object at present is to present a summary of the cases in which the operation has been recently performed, and the results of these cases as far as they have gone; and I have endeavoured to do this faithfully and impartially. From what I have myself seen, I am satisfied as to the utility of the operation, and I think that the details which I have given of these cases, prove that the operation, till its recent revival, had been banished from surgical practice on insufficient grounds, and that the propriety of practising it in certain cases is still at least an open question."

* Of the last eleven cases in which the operation of excision has been performed, seven have recovered, and two are in progress of convalescence, at the periods of six and three weeks after the operation; two only have died, one from dysentery, and the other from pyæmia.

† Syme, on Excision of Diseased Joints. 1831.

‡ Ibid.

PROVISIONAL CALLUS NOT NECESSARY FOR REPARATION OF FRACTURED BONE.

The doctrine of Dupuytren, that a provisional callus is formed in the reparation of fractures, has been almost universally taught in late years, and is believed by most surgeons to be correct. Yet the observations of Mr. PAGET of St. Bartholomew's Hospital, and Dr. F. H. HAMILTON of Buffalo, U.S., go far to show that this is far from being generally the case.

In his lectures on *Repair and Reproduction after Injuries*, delivered in the Royal College of Surgeons in 1840, Mr. PAGET writes as follows:

"I must express my conviction that the description drawn by Dupuytren and others, from examinations of fractures in dogs, rabbits, birds, and other animals, cannot be applied without great deductions to the case of fractures in the human subject. True as the pictures are of the cases of the animals examined, they are exaggerations of the process in our own case. With a few exceptions, all that is written in these accounts of external and internal provisional and definitive callus, of the formations of cartilage and bone within the medullary tube and beneath the periosteum, can be traced only, as it were, in rudiment in the fractures of the human bones.

"In the ordinary repairs of simple fractures in the human subject, the reparative material, or callus, is merely inlaid between the several fragments; it fills up the interspaces between them and the angles at which one fragment overhangs another; but it does not encircle or ensheath them, in the manner implied in the description of provisional callus; nor is it in any considerable quantity, if at all, deposited either beneath the periosteum or within the medullary tube. In birds, dogs, and other ordinary subjects of experiments, the formation of a provisional, or as it may perhaps be better called, an *ensheathing* callus, is usual: yet even in animals it is not constant. To obtain what would be called good specimens of provisional callus, the injuries must be inflicted upon young animals; and among these I cannot but suspect that particular instances have been selected for description—those in which less callus was formed having been put aside as imperfect instances of repair, though, in truth, they may have displayed the more natural process.

"For fractures in the human subject, the evidence that union is accomplished by the reparative material being placed between, not within and around, the fragments—i.e., as an intermediate, not an ensheathing callus—this evidence may be obtained by the examinations of such fractures even long after they are completely healed. Whether the fragments were in apposition, or nearly so, or wide apart, still there is no appearance of new bone being formed on the outer side of any fragment—I mean on that side which is turned away from the other fragments. And this is the case even in those instances in which there is so much displacement of the fragments, and so much distortion, that we can hardly suppose the repair to have proceeded very quietly. Neither in any of these do we find new bone within the medullary tube. It may be objected by some to these specimens, that the fragments were once ensheathed and blocked up with callus, and that it has been since absorbed. But this is not probable, seeing that in many cases there remain, on the outer surfaces of the fragments, certain marks of their original form and slight irregularities.

"In all the specimens of fracture (with the exceptions presently to be mentioned) that I have been able to examine, in the human subject, within six months of the time of the injury, there has been the same absence of provisional or ensheathing callus. The specimens are—a radius, four weeks after the fracture; another, four or five weeks; a tibia, five weeks; a femur, six weeks; another of the same date; a third, I should think, about eight or nine weeks; a radius, of somewhat later date; a tibia, eight weeks; a fibula, eleven weeks; a tibia, twelve weeks; and a tibia, sixteen weeks after the injury. Here are, also, others of various but unknown dates, all in process of apparently natural repair. All these were cases of simple fractures, and they include (with a few exceptions presently to be mentioned) all the specimens of such recent fractures, in the human subject, as are in the museums of the College and of St. Bartholomew's Hospital. The displacements and other conditions following the injury have been manifestly various: but all agree in this—that the fragments are united by intermediately-placed reparative substance, and that this, whether soft or osseous, in no case surrounds or ensheathes the fragments, or does more than just close in the medullary canal. When present in the large quantity, it is only enough to smooth off the chief irregularities, and to fill up the interspaces and the angles or corners between the fragments.

"If now it be inquired why this difference should exist in the corresponding processes in man and other animals, I believe still that it must be ascribed principally to the two causes already quoted from the catalogue—namely, the quietude in which fractures in our bones are maintained, and the naturally greater tendency to the production of new bone which animals always manifest. Even independently of surgery, in the case of fractures of the lower extremity, the human mode of progression almost compels a patient to take rest; and in fractures of the upper extremity, the circumstances of human life and society permit him to do so far more than other animals can. The whole process of repair is, therefore, more quietly conducted; and, as we may say, there is comparatively little need of the strength which the formation of provisional callus would give a broken limb.

"The exception to the rule of difference in the repair of human bones and those of animals confirm it as thus explained; for the only bones in which, in the human subject, a provisional callus is generally or naturally formed, for the repair of fractures, are the ribs. In cases of fractured ribs one may see, indeed, a very close imitation of that which is described, from experiments on animals, as the ordinary mode of union. The provisional callus is well formed under the periosteum, and encircles, like a broad ring or ferrule, both the fragments, and may almost completely ossify before their union is accomplished, or even apparently begun.

"Another bone for the repair of which, but more rarely, callus is formed around the ligaments, is the clavicle; and the best specimen in which I have here seen it is one in which the fracture was not detected, and the fragments were allowed to move on one another, till the patient died twelve weeks after the injury."

Dr. HAMILTON, in a paper in the *Buffalo Medical Journal* for February 1853, after observing that Liston appears to have noticed the absence of callus soon after the union was completed, and that Mr. Stanley has declared provisional callus not to be uniformly present, says:

"I am now prepared confidently to affirm that the so-called provisional callus never constitutes any part of the reparative process in the union of divided bones, when all those circumstances of simplicity, apposition, quietude, health, just management, etc., obtain, which may properly be considered essential to a normal process—that bones unite most naturally by definitive callus, and that provisional callus is accidental and secondary—the result probably of undue excitement alone.

"Broken bones unite when submitted to the most favourable circumstances, by definitive callus or by a process allied to adhesion—by *first intention*: but under less favourable circumstances by provisional callus, or by a process allied to granulation—by *second intention*.

"Such are the conclusions at which I have arrived, after having examined several hundred fractures, nearly one-half of which were sufficiently recent to have enabled me to discover the callus if any had ever existed.

"There is generally no difficulty in determining the presence of provisional callus in fractures of such superficial bones as the inferior maxilla, clavicle, radius, ulna and tibia, of the metacarpal, metatarsal and phalangeal bones, and, indeed, very often in fractures of other bones. Frequently the swelling is so inconsiderable, that the surface of the bones can be distinctly felt at any period of the process of union. I have seized all such opportunities as were afforded me; and without being able to state numerically the result, I have no remaining doubt that provisional callus is not present in any stage of the reparation where the conditions of health, etc., etc., before stated, exist.

"The accuracy of these conclusions can only be tested by similar examinations upon the dead or living human subject. It is not possible, I think, to put the limb of any brute animal into that condition of rest requisite to determine nature's *first intention*: and here is the source of the fallacy into which Dupuytren and his disciples have been led.

"In the reparation of fractures occurring in certain bones, or in certain parts of bones, provisional callus, it is conceded, seldom or never occurs. Thus it is with the cranium, acromion process, coracoid, olecranon, patella, etc., and with all those portions of bones which are immediately invested with a *synovial capsule*."

Dr. Hamilton concludes with the following recapitulation.

"I. Broken bones unite directly, naturally and by *first intention*, through the interposition of definitive callus.

"II. Broken bones unite indirectly, and accidentally, through the intervention of provisional callus."

"III. The absence of provisional callus does not denote that it could serve no useful purpose.

"IV. Its presence does not indicate its necessity or utility.

"V. It has, therefore, no final purpose, but is the unavoidable result of a certain abnormal condition: and while it is doubtless true that in fractures it frequently renders valuable assistance to the surgeon, it is also equally true that it often proves a source of hindrance."

CYST IN THE THYROID BODY CURED BY INJECTION OF TINCTURE OF IODINE:— ANALYSIS OF FLUID.

In the *Monthly Journal of Medical Science* for June 1853, Dr. DOUGLAS MACLAGAN relates the case of a young lady, who consulted him on account of a pyriform painless swelling in the left half of the thyroid body. It diminished under the external application of tincture of iodine, and the internal use of iodide of potassium; but afterwards returned to its original size. Professor Syme, who saw the case, advised that it should be punctured with a trochar, and injected with tincture of iodine. Two ounces of fluid were drawn off; and about three drachms of tincture of iodine were injected and left in the cyst. The patient suffered little or none, only to a small extent for two days from the inflammatory action excited by the injection, and in a week was able to go about as usual. The tumour entirely disappeared.

The fluid removed was quite clear, in this respect differing from that removed by tapping from other parts of the body. Dr. MacLagan made a careful analysis of it, with the following result:—

Water	989.44
Albumen	1.16
Liquid fat	0.22
Solid fat, with urea (?)	0.34
Soluble animal matter	1.48
Phosphate of lime	0.26
Chloride of sodium	5.80
Chloride of potassium	0.32
Sulphuric acid, lime, magnesia, etc.	0.64
Loss	0.34
Total solids	10.56
	1000.00

This fluid differed from most of those, the analyses of which are recorded, in the absence of colouring matter, and the small amount of solids. The fluid removed from ordinary hydrocele of the *tunica vaginalis* contains from 6 to 17 per cent. of solid matter, of which from 4 to 6 is albumen; while here the total solids were almost exactly 1 per cent., and the albumen little more than 1 per 1000. It is evident, Dr. MacLagan observes, from the variations in size of this tumour from time to time, that absorption and reaccumulation of fluid took place much more readily than is commonly observed in such cases; and this may have been connected with the tenuity of the fluid contained.

CHANCRES SUCCESSFULLY TREATED BY THE LOCAL APPLICATION OF ACETIC ACID.

Some time ago, RICORD stated that, in the course of his experiments upon the inoculation of syphilis, he discovered that acetic acid deprived the pus of a primitive venereal sore of its power of being inoculated. M. HENROTAY drew from this a practical suggestion for the treatment of chancres. He concluded that, if Ricord's observations were correct, the local application of acetic acid might be found to be the very best treatment of a chancre. His trials were crowned with success, and several French and Belgian surgeons (among whom may be mentioned Dechange and Gouze) have confirmed the accuracy of his reports, and recommended acetic acid as an excellent application for healing troublesome venereal sores, and especially as a much better caustic than nitrate of silver for the abortive treatment of chancres. The cases treated are apparently so satisfactory as to warrant us in recommending a trial of this method of treating venereal sores.

MAGNESIA A CURE OF WARTS.

Topical applications in great variety are used for the purpose of removing warts, and many of them often prove successful. Among those which are used with most advantage, and with the least inconvenience, are strong acetic acid, and the recent milky juice of the *euphorbia lathyris*, an indigenous plant, to be found in great abundance at the sides of hedges, and as an inveterate weed in many gardens. When warty growths are luxuriant in

the genital organs, or on other parts of the body, it is often proper to commence the treatment by freely removing them by the knife or nitric acid.

As a constitutional remedy for warts, several authors (commencing with Dr. Eckstein, of Pesth, in 1841) testify in favour of magnesia. The following case is related by Dr. Peez, of Wiesbaden. A man, of cachectic appearance, had taken, for the cure of gastric acidity, a tablespoonful of magnesia night and morning. The symptom for which the medicine was ordered was not alleviated, but a growth of warts, which almost entirely covered his hand, disappeared. This occurrence has led Dr. Peez to prescribe magnesia in many cases of warts; and he reports very favourably of the results.

TOXICOLOGY.

THE STATE POISON OF THE ATHENIANS, USED IN THE CASE OF SOCRATES.

In the *Dublin Quarterly Journal of Medical Science* for May 1853, Dr. JONATHAN OSBORNE enters on an examination, from the evidence afforded by ancient writings, of the nature of the state poison employed by the Athenians, and which was used in the case of Socrates.

The author first gives an interesting historical review of the knowledge of poisons which the ancients possessed, and which is shewn to have been very scanty.

The most complete evidence of the limited toxicology of the ancients is to be found in the work of Dioscorides, written in the reign of Nero. The following were all the vegetable poisons known to him:—Colchicum (*Εφάμερον*): Dorycnion, not identified: Aconite, and the honey of Heraclea in Pontus, where that plant abounded: Coriander (*Κόριον*), identified with our *coriandrum sativum*, but stated to cause a temporary insanity, like that of drunkenness, irreconcilable with any modern observations: Psyllium, identified by Sprengel with the *plantago psyllium*: Conium: The yew (*Σύλαξ*), well identified, and described as fatal to cattle: The juice of carpasus (*Καρπασου ὄνυς*), causing stupor and suffocation; entirely unknown: Sardonian (*Σαρδονία πύα*) a kind of ranunculus, from Sardinia, causing spasmodic motions of the lips (whence the term *risus Sardonicus*), and also affecting the intellect: Hyoscyamus: Mandragora, nearly identified with *atropa belladonna*: Meconium, evidently opium, and described as the juice of the poppy: Phacium: Toxicum, used by barbarians for poisoning arrows; if swallowed, causing inflammation of the lips, with furious madness, requiring the patient to be tied: Fungi, either taken in excess, or from some peculiar kinds intermixed, causing strangulation: White hellebore: Thapsia; doubtful whether *Thapsia gargarica*, or *asclepium*, described as emetic and cathartic.

Dr. Osborne then quotes the account of the death of Socrates, as given in the *Phædon* of Plato.

"When the fatal cup was brought, he asked what it was necessary for him to do. 'Nothing more,' replied the servant of the judges, than 'as soon as you have drank off the draught, to walk about till you find your legs become weary, and afterwards lie down upon your bed.' He took the cup without any emotion or change in his countenance, and looking at him in a steady and assured manner, 'Well,' said he, 'what say you of this drink? May a libation be made out of it?' Upon being told that there was only enough for one dose, 'At least,' said he, 'we may pray to the gods, as is our duty, and implore them to make our exit from this world and our last stage happy, which is what I most ardently beg of them.' Having spoken these words, he kept silence for some time, and then drank off the whole draught. After reproving his friends for indulging in loud lamentations, we are informed that he continued to walk about, as he had been directed, till he found his legs grow weary. Then he lay down upon his back, and the person who administered the poison went up to him, and examined for a little time his feet and legs, and then, squeezing his foot strongly, asked whether he felt him? Socrates replied that he did not. He then did the same to his legs, and proceeding upwards in this way, showed us (Plato is speaking) that he was cold and stiff; and he afterwards approached him, and said to us, that when the effect of the poison reached the heart, Socrates would depart. And now the lower parts of his body were cold, when he uncovered himself, and said, which were his last words, 'Crito, we owe Æsculapius a cock. Pay the debt, and do not forget it.' 'It shall be done,' replied Crito, 'but consider whether you have anything else to say.' Socrates answered in the negative, but was in a short time convulsed. The man then uncovered him; his eyes were fixed; and when Crito observed this, he closed his eyelids and his mouth."

Dr. Osborne thinks that it may be proved that hemlock was the poison used: by examining, first, the name used; secondly, the botanical characters and collateral details; and thirdly, the series of symptoms.

The φάρμακον of Plato is called κόνιον by Xenophon, in his account of the execution of Theramenes, between whose death and that of Socrates only forty years intervened. In the *Frogs* of Aristophanes, also, we find κόνιον mentioned by name. The Latin authors, especially Pliny, always use the word *cicuta*, in mentioning the poison employed at Athens; and, in the modern Greek Pharmacopœia, the name given to hemlock is κόνιον πύλα.

The botanical characters of κόνιον, as given by Dioscorides and Pliny, are such as to lead to its identification with hemlock. According to Dr. Sibthorpe, the *conium maculatum* is very common in Greece, and no other poisonous umbelliferous plant is to be found in that country. Pliny describes the seeds of *cicuta* as the most noxious part; and Professor Geiger, of Heidelberg, has found the conia in the seeds to exceed that of the rest of the plant in the proportion of 133 to 1.

The symptoms in the poisoning of Socrates are viewed by Professor Christison as irreconcilable with those produced by any poison now known. Dr. Osborne, however, makes out a good case in favour of the contrary opinion.

"In the first place, when the executioner informed him that his legs should be the first to become paralysed, he must have done so from the observation of its effects on former occasions; and, to show that hemlock does first paralyse the lower extremities, I cannot do better than quote from the truly valuable series of experiments made by Dr. Christison himself. In the first of these, six drops of conia were dropped into the throat of a puppy ten weeks old. In thirty seconds, there was sudden convulsive respiration, stiffness of the hind legs, immediately followed by great feebleness of these limbs. In a few seconds, the fore legs also became very feeble. In sixty seconds after the introduction of the poison, the breathing ceased, and slight convulsive tremors followed for a single moment more. In the second and third experiments with puppies, the hind legs were first affected. In the last, after all its limbs became completely paralysed, yet, when called to, it wagged its tail feebly, turned its head in the direction of the voice, and made a feeble effort to raise the head, but could not; its movements did not completely cease till forty-two minutes.

"In the fifth experiment, on a rabbit, the hind legs became stiff in one minute and a half, and the fore legs not till two minutes and a half. In the ninth experiment, three drops of conia were dropped into the eye of a strong and furious cat. Instantly it made violent efforts with its fore legs to rub out the poison; while continuing so to do, the hind legs in forty seconds became affected with slight convulsions, and then grew so weak, that it could not support himself on them. Soon after, the fore legs also became weaker and weaker; all voluntary motions, however, did not cease until ninety seconds had elapsed.

"In the fifteenth experiment, when a solution of the extract of hemlock was injected under the skin of a dog's back, in three minutes and a half the hind legs were weak and rather stiff, and in six minutes the fore legs also, and in twenty minutes the respiration ceased. In all, the paralysis commenced in the hind legs; and in no one instance of the sixteen experiments related in Dr. Christison's paper did the symptoms occur in an inverse order. It is also to be noted, that in all, the eyes of the animals under the poison remained open. This was also the case at the death of Socrates; for, in the relation of Plato above quoted, it is stated that, when his body was uncovered, his eyes and mouth were closed by Crito."

The coldness of the limbs was a well known effect of the state poison; and it seems to be alluded to in the *Frogs* of Aristophanes:—

"*Hercules*. Then there is a short and beaten road—by the mortar.

"*Bacchus*. Speakest thou of hemlock, then?

"*Hercules*. Most certainly.

"*Bacchus*. A journey cold and winterly, forsooth; for it immediately congeals the shins.*"

* HP. ἀλλ' ἔστιν ἀτραπὸς ξυρταπὸς τετριμμένη
ἢ διὰ βύβας.

ΔΙ. ἀπὸ κόνιον λόγεις;

HP. μάλιστα γα.

ΔΙ. ψυχρὸν γα καὶ δυσχεμεραν,
δυσὲς γὰρ ἀποτήγγουσι τ' αὐτοκρήμια.

It was also mentioned by Nicander (ἄσπερ δὲ τοὶ φέρεται); and also by Dioscorides and Pliny; and has been referred to in three modern cases, one related by Orfila (*Traité des Poisons*), the second in the *Journal de Chimie Médicale* for August 1842, and the third by Dr. Hughes Bennett, in the *Edinburgh Medical and Surgical Journal*, 1845. We quote the latter case:—

"Duncan Gow, a tailor, forty-three years of age, was brought in the evening by the police into the Royal Infirmary, Edinburgh, apparently in a state of intoxication, but on being taken into the waiting-room was found to be dead.

"Dr. Bennett, who made an examination of the body, recognised a quantity of vegetable matter in the stomach to be the leaflets of the *conium maculatum*. He also identified it by the odour exhaled, when beaten up with a solution of potash, and by an inspection of the plant growing in the locality where it had been gathered.

"The unfortunate man was in extreme poverty, and on this day had taken nothing except a share (along with two others) of half a mutchkin of whisky. The hemlock having been brought to him by his children, in mistake for parsley, he greedily ate it along with bread. Death must have taken place within about three hours and a quarter afterwards. Dr. Bennett was able to collect the following particulars from policemen and others, who saw him within this interval of time.

"He was observed to stagger as he went down some steps. To some children who were sitting on the steps, he said, 'get out of the way of the lame horse.' One witness described that he could not walk rightly, and was staggering as a man in liquor. His mode of progression attracted a number of boys and girls, who laughed at him, believing him to be intoxicated. He was heard to speak to them, but what he said is not known. In reply to a policeman, he desired to be taken to his own house at the top of the Canongate. He also said that he had completely lost his sight, and had not the perfect use of his limbs, but expressed his willingness to walk forwards till assistance could be procured. Although supported by one arm, after moving with great difficulty past four or five shops, his legs bent under him, and he fell upon his knees, and when he was pulled on by the police, his legs were trailed after him. One of the police-officers, on first seeing him, pronounced that he was not drunk, and another confirmed it from the manner in which he was lying, and from the loss of power in the legs. Dr. Tait saw him in about two hours. He found his powers of motion completely prostrated; his pulse and breathing perfectly natural. He thought he perceived the odour of spirits about him, but the policeman thought otherwise. The heat of skin was natural. In forty minutes afterwards, all motion of the chest appeared to have ceased; the action of the heart was very feeble; and the countenance had a cadaveric expression; pupils fixed. In this state he was brought to the Infirmary, and on his arrival was found to be dead. As Dr. Bennett observes, perfect paralysis of the inferior extremities was ascertained one hour and a half after the poison was taken, and that of the arms half an hour later.

"The temperature remaining natural, has not been mentioned whether in the body or extremities; and from Dr. Tait being at first under the impression that it was a case of intoxication, it probably may not have occurred to him to examine this point closely. Besides, as fourpence was missing from his pocket, he may have taken whisky, with the effect of keeping up heat longer than usual."

Dr. Osborne next proceeds to examine into the action of hemlock on the mind, as shewn by the direction given by Socrates "to sacrifice a cock to Esculapius". He believes these words to have been spoken by Socrates while under the influence of a narcotic poison rendering him delirious; and that attentive consideration will add this to the proofs that the poison used was hemlock.

Nicander of Colophon, in his Ἀλεξίφάρμακα, describes hemlock as abolishing the mental powers; and Dioscorides mentions disturbance of the mind as one of the symptoms. Slight delirium and hallucinations are also mentioned by other authors. Furious delirium, stated by many writers on *Materia Medica* to be a symptom of poisoning by hemlock, is believed by Dr. Osborne to be unproved by any credible evidence. In his own experience, he has found that "with the extract, and more especially with the tincture of the seeds of hemlock, when perfect and profound sleep has not been obtained, dreams of a peculiar character have been substituted. In these the hallucination was rather agreeable than otherwise, generally recalling the ordinary occupation of the individual; but yet always accompanied by a sense of some impediment, or of some difficulty arising from a want of bodily power. For example, a

horse-clipper recovering from acute rheumatism, after two grains of the extract, was exhilarated at finding himself working at his professional employment, and the only drawback was great stiffness and weariness in handling the scissors. A young woman, from twenty-five drops of tincture of the seeds, dreamt of her native village, and had all the surrounding scenery full in view, but was obliged to cross a river, and was in great terror from the difficulty of avoiding falling in. The dreams suggested by it are in imaginative range quite inferior to those of opium, and appear to be just of that extent that, when Socrates felt his limbs becoming powerless, he was likely to think of bodily infirmity, and then of medicine, and, by association of ideas, of *Æsculapius* and the cock, the bird usually sacrificed to that divinity."

Dr. Osborne has found that fresh hemlock juice has a cathartic effect, "from which the extract is comparatively free. Hence, if given in this form as a poison, it must have been liable to failure, and could not have been relied on. It would appear then absolutely necessary to combine it with some ingredient to correct this tendency. Nothing was so well suited for this purpose as the juice of the poppy, which was well known, and was also an indigenous plant in Greece. In the course of my trials with hemlock, I was induced to combine it with opium, giving them in half doses conjoined, as an equivalent for one entire dose of either. In this way, not only was the cathartic effect of the hemlock prevented, but a deeper and more certain hypnotic effect was obtained. When the sleep was accompanied by dreams, the latter partook more of the hemlock than the opiate character. Thus one dreamed of his brother, whom he had not seen for two years. In another dream, he was near his home in the country, but was pursued by some kind of nondescript animal, from which he was endeavouring to escape, but ineffectually, on account of a numbness in his limbs. Another went to the fair to sell a cow, but was in great perplexity on account of a cow having strayed away from him. On another occasion he was near his residence, but could not get to it from a want of power in his limbs.

"Now it is proved that some such combination was known at the time, from the following passages in Theophrastus,* who was born only twenty-eight years after the death of Socrates. These are his words:—Thrasylas, the Mantinean, stated that, by making use of the juices of the *σκόπιον*, the poppy, and such other things, he had discovered a substance which occasioned death easily and without pain, and so portable and minute that the weight of a *δραχμή* was sufficient and absolutely irremediable, and it was capable of being preserved for any time without alteration."

The author sums up in the following words:—

"I think it is nearly proved that the *φάρμακον* mentioned by Plato was essentially hemlock, and that there is also a strong probability that it was mixed with poppy juice; that during the operation of the poison, and after the numbness of the legs, it occasioned a slight delirium, under the influence of which the last words of Socrates were pronounced; that these words are to be set apart from the discourse previously delivered by him, and to be considered as the result of a narcotic poison."

FATAL INTESTINAL HÆMORRHAGE PRODUCED BY TARTAR-EMETIC.

The following case is related in the *Gazette des Hôpitaux* for March 26th.

In the early part of February, there was admitted into la Charité, under M. Piorry, a woman, aged 56 years. She was extremely weak; a condition which might be due to the insufficiency and bad quality of her food before her admission.

She was found to be suffering from broncho-pneumonia. As she stated that bleeding had always relieved her in former similar attacks, five hundred *grammes* (3*xxvi*) of blood were taken, without the least improvement. Fifteen *centigrammes* (gr. *iiss*) of tartar emetic were then ordered to be given in a single dose.

On the following night, and without any premonitory symptom being afforded by the digestive organs, profuse intestinal hemorrhage suddenly occurred. More than four pints of black, thick, pitchy blood were discharged *per anum*. There was extreme prostration. The heart and liver were greatly diminished in volume; the veins were empty; the pulse was frequent and very small; the lips were deadly pale. At the same time, the lungs became more elastic and sonorous, notwithstanding the persistence of the rhonchi.

M. Piorry found by pleximetry that the descending colon and

sigmoid flexure were full of fluid; and the blood which he could cause to flow from the anus by dilating the sphincter, and which could be felt in the rectum, pointed out that the fluid in the rest of the intestines was of the same nature. The absence of antecedent circumstances, such as hemorrhoidal tumours, diarrhoea, etc., led him to conclude that there was hæmorrhage from the large intestine, due to a diminution of fibrin in the blood, as occurs in scurvy; and that the hæmorrhage had occurred by exhalation.

Ice was placed and retained on the abdomen; water at 32 deg. Fahr. was injected into the rectum; extract of rhatany and pills of alum and dragon's blood were given; but the hæmorrhage continued, accompanied with dulness in the lower part of the large intestine. The pulmonary rhonchi increased and became general.

On February 26th, the patient died.

A *post mortem* examination was performed on Feb. 28th. The stomach and small intestines were healthy. Two brownish red oval spots, two *centimètres* in diameter, were present in the duodenum. The descending colon, and especially the rectum, presented an appearance similar to that of these spots, but without ulceration: their whole mucous surface was covered with dark viscous blood. There were no hæmorrhoids at the anus, nor any organic lesion in the rectum. There were slight traces of engorgement in the lungs. The trachea and bronchi were filled with sanguinolent froth.

DANGER ARISING FROM THE USE OF COPPER CHIMNEYS TO GAS-LAMPS.

The *Gazette des Hôpitaux* for May 14th quotes the following from the *Journal de Chimie Medicale*.

Persons who employ gas to light their shops or dwellings, and who use an apparatus surmounted by a copper chimney, must have observed on the chimney a white powder like flour. An examination of this powder has shown that it consists of anhydrous sulphate of copper—the same substance which is known in commerce as blue vitriol, its colour being due to the water of crystallization which it contains. Its formation is easily explained. Badly purified gas contains a certain quantity of hydrosulphuric acid: this, under the influence of heat, is transformed into sulphuric acid, and thus sulphate of copper is produced.

That the white substance referred to is sulphate of copper, may be proved by dissolving some in water, when a light azure tint is produced; on adding ammonia in slight excess, a splendid deep blue results. The precipitate formed by adding baryta water proves that it contains sulphuric acid.

The extreme fineness of the dust renders it more dangerous, as the least draught of air or shake may disperse it into the air. Hence arise *malaise* and the pain on the stomach, which are often ascribed to other causes.

It would be wise to substitute chimneys made of glass or porcelain in place of those of copper.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, MAY 21st, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

TENIA AND ITS REMEDIES. BY EDWARDS CRISP, M.D.

Dr. CRISP stated, that kouso appears always to expel the *tænia en masse*, while turpentine and the male fern break it. Out of seventeen cases which he had seen in the last three and a half years, six had been cured by turpentine, one by kouso, and one by the oil of male fern. He therefore concluded, that kouso and the fern oil are not more efficacious in the cure of *tænia* than is oil of turpentine.

Dr. HARE observed, that it is often very difficult to ascertain whether the head of the worm has or has not been evacuated. He thought that kouso had some advantage over turpentine.

The PRESIDENT, in reference to an observation made with regard to the frequency of cerebral disturbance in cases of *tænia*, said that insanity has been cured by the removal of this parasite.

Dr. DAVEY related the case of a boy, aged 14, in whom symptoms of acute mania appeared: calomel, turpentine, and castor-oil, were given, and a quantity of *tænia* evacuated. He recovered in two or three days.

* Lib. ix, 18,

PHYSIOLOGICAL USES OF THE GANGLIONIC NERVOUS SYSTEM. BY
JAMES G. DAVEY, M.D.

Dr. DAVEY's principal object was to prove the independency of the organic nervous system, and the dependency on it of the integrity of the cerebro-spinal system, in common with all the organism. Dr. Davey affirmed, that the ganglia of the sympathetic nerve are the parts first formed in the fetus; and that the same fact probably obtains equally through the whole animal kingdom. Reference was made to two monstrosities recorded by Mr. Lawrence and Dr. Marshall Hall. The first of these was born without a brain, but with the spinal cord complete; but the second was amyelencephalous. Dr. Davey argued, that if, in the latter instance, the vital functions were duly executed without aid from a cerebro-spinal system, then was the latter in no instance necessary to their integrity. The ganglionic nervous system, according to Dr. Davey, is perfect at birth, and its functions are perfect; whilst the brain is a mere pulpy mass, without function or use. Dr. Davey compared the monstrosity of Dr. M. Hall to the lower classes of animal life, as the *medusariae*. The nervous organism of the amyelencephalous monster and the zoophyte was precisely similar; and their animal functions were on a par. Dr. Davey cited some examples of vivisections performed by himself. In frogs and fish, both the brain and spinal cord may be destroyed; and nevertheless all the strictly vital functions will continue to be carried on as before. The phenomena of sleep and disease were referred to, as offering strong and corroborative evidence of the physiological opinions insisted on. Lunatic asylums afford many instances of individuals reduced to a state of mere vegetation or organic existence, by disorder of the brain and spinal cord, but who often live many years, without passion or sensation, and capable of only the most imperfect motion: they nevertheless carry on the strictly vital functions. Dr. Davey referred to the experiments of Sir B. Brodie, to prove that the nerves of cerebro-spinal origin had no influence on the reparation of injuries. He explains the facts recorded by Sir B. Brodie by saying, that the ganglionic nervous power was left intact; and that this caused the wounds to heal and the fractures to unite. The author then referred to the effects of blows and injuries to the solar ganglion and its dependencies. This ganglion he asserted to be the seat of life, the *locale of the impetus faciens* of old writers; the irritability, the motions without force, of Haller. Instinct and animal heat were also treated of as specific functions of the sympathetic nervous system.

SATURDAY, MAY 28TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

NEW METHOD OF APPLYING THE TOURNIQUET IN AMPUTATION OF
THE THIGH. BY HAYNES WALTON, ESQ.

Mr. WALTON introduced a new plan of applying the tourniquet in amputations of the thigh, by which the pad is made to press on the artery just as it is passing over the pelvic bone. The application is effected by carrying the strap over the thigh and the pelvis, in the form of the figure 8. The advantages advanced were, the tourniquet being out of the way of the operator in amputating high; the readiness with which the vessel can be found and compressed in fat or very muscular subjects; and the ready application of the instrument, and its great stability. The only alterations from the common tourniquet which are required are a longer strap and a conical pad.

ANÆSTHETIC PROPERTIES OF THE LYCOPERDON PROTEUS, OR
COMMON PUFF-BALL. BY B. W. RICHARDSON, ESQ.

(This paper is published as an original communication, at p. 479 of last number.)

Dr. SNOW had seen some of Mr. Richardson's experiments, and could confirm his statements. He believed that this was only one of many substances capable of producing anesthesia; and that it might in certain cases be useful; but that it was not likely to supersede the use of chloroform or ether.

PELVIC ABSCESS. BY TYLER SMITH, M.D.

Four cases of pelvic abscess had come under Dr. TYLER SMITH's care in St. Mary's Hospital, within the period of six months.

CASE I. S. B., aged 35, the mother of ten children, was admitted on February 25, 1852. All her labours had been natural except the ninth. She was last confined on January 20. Four days after delivery, the lochia suddenly ceased; and pain soon appeared in the lower part of the abdomen. A month after delivery, she had irritative fever, with suppuration. On

the left side, in the iliac region, and extending into the pelvis, there was a large firm tumour. Under treatment, she recovered somewhat, and was discharged by her own request on March 21.

On April 25, she was again admitted. In two or three days after her discharge, she had had severe pains, obliging her to keep her bed; and in about a fortnight there was a discharge of pus *per vaginam*. No opening, however, could be detected on examination. Soon after re-admission, she complained of pain in the groin; and an abscess burst there, discharging a quantity of dirty pus. During her absence from hospital, her diet had been good. When admitted, she was suckling her infant; but was directed to wean it. She had pain over the left anterior superior spine of the ilium, and a hard mass extended towards the pelvis. When the last was made, the pelvic tumour was much diminished in size, and could not be felt *per vaginam*.

CASE II. C. B., aged 25, was admitted March 18, 1853. Her second labour occurred four months previously. Three days after delivery, the lochia became suppressed; and five days afterwards, she had pain in the abdomen, and a tumour was found in the right iliac region. It was supposed by her medical attendant to be ovarian or fibrous; and leeches and blisters were applied. She had several attacks of inflammation, with discharge from the vagina.

On admission, she was greatly reduced; her pulse was above 100; she had profuse night-sweats. A large swelling was felt above the pubis, extending obliquely upwards, and to the right side: *per vaginam* it could be felt to the right of the uterus. There was some irritability of the bladder. She was discharged, without much change, on April 12. Dr. Smith had heard that she had since been admitted into University College Hospital, and that suppuration had taken place externally.

CASE III. E. R., aged 26, had been confined three weeks before admission. Ten days after confinement, severe pain appeared in the right iliac region. The lochia continued to flow up to the day of admission: the milk had disappeared three days previously.

When admitted, she was much debilitated and exhausted; her tongue was clean and red; her countenance pale and anxious. There was tenderness in the right iliac region, but no tumour could be felt there. On examination *per vaginam*, the os uteri felt small and contracted, and there was apparently a solid mass between it and the side of the pelvis. She was subsequently attacked with rigors, and had a copious purulent discharge from the vagina, with clots of blood. No opening in the vagina could be detected with the speculum. She improved under treatment.

This woman had contracted secondary syphilis from her husband. The child showed symptoms of the disease a fortnight after birth, and died when six weeks old.

CASE IV. J. A., the mother of four children, appeared to have suffered in a previous pregnancy from pelvic abscess, which was evacuated through the rectum. In her last pregnancy, she had had several abscesses in the back.

She was admitted on October 4, 1852, being four months advanced in pregnancy. She had been attacked on 24th September with pain in the iliac and hypogastric regions, which had increased up to the time of admission. The pain extended down the right thigh. Two days before admission, she had severe rigors; but no fluctuation could be detected on examination. Early on the morning of October 6, she had a sudden abortion; she lost very little blood. Vomiting and diarrhoea set in, and continued some time. On October 21, there appeared to be indications of pus in the right iliac region. A small puncture was made, and about two pints of offensive pus were discharged. She soon rallied from her depressed condition: the pus continued to be discharged for some days; and the external iliac artery could be observed pulsating at the bottom of the abscess. On November 2, perforation of the bowel occurred, but was not attended with any unfavourable symptoms. On November 5, the vomiting and diarrhoea returned; and on the 10th she seemed moribund. After this, however, she rallied, and continued to progress favourably until Dec. 16, on which day she was suddenly informed of the illness of her husband, and of other domestic misfortunes. After this she got worse, and died on December 27.

Post-mortem Examination. There was very little inflammatory deposit on the peritoneum. At the head of the cecum, there were firm adhesions, and an opening into the cavity of the abscess. There was extensive burrowing of pus beneath the ascending and the descending colon.

Dr. Smith believed that the disease which he had described was allied to puerperal fever and phlegmasia dolens; and that, in all probability, the earlier changes are identical in all cases.

The parts involved in the disease are the cellular tissue of the pelvis, the lymphatic glands, and the ovaries. He had seen a case connected with procedentia uteri; and also one which was evidently connected with the ovary, as shown by the mobility of the tumour.

The treatment should consist in moderating local inflammation, and keeping up the strength by good food, quinine, etc. He hinted at the possibility of making an opening *per vaginam*, for the evacuation of the matter.

[This was the last meeting of the Society for the session.]

NEWS AND TOPICS OF THE DAY.

VACCINATION EXTENSION BILL:—PETITION FROM THE HUDDERSFIELD MEDICO-ETHICAL SOCIETY.

The following petition has been sent for presentation to the House of Commons by Lord Goderich, from the Medico-Ethical Society of Huddersfield:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The petition of the undersigned members of the medical profession in the town of Huddersfield and its vicinity,

Humbly sheweth,—

That while they regard the Vaccination Extension Bill now before your Honourable House as intended for the benefit and protection of the nation from small-pox, they nevertheless are convinced that many of the provisions of that bill are defective, and some bear unjustly upon the members of the medical profession.

That while the bill enforces vaccination within a certain age, and renders the parents and guardians of the child responsible for its omission, it does not enforce the obligation to return with the child on the eighth day, for inspection, and to supply the medical practitioner with fresh lymph.

That the onus of transmitting a duplicate of the said certificate of vaccination to the Registrar of Births and Deaths, would, to say the least, be unreasonable, seeing that the medical practitioner is shut out from all remuneration.

In conclusion, your petitioners further suggest, that with regard to the poor, the parents be permitted to apply to their usual medical attendant, who shall be remunerated for every successful case of vaccination by a uniform scale throughout the kingdom; and they think the public confidence would thus be better secured, and the full benefits of vaccination obtained.

Your petitioners therefore humbly pray your Honourable House to make such alterations and amendments in the Vaccination Bill as in your judgment you may deem desirable.

And your petitioners will ever pray, etc.

WILLIAM TURNBULL, M.D., *President of the Medico-Ethical Soc.*
GEORGE ROBINSON, Esq., *Vice-President.*

G. W. RHODES, Esq., } *Honorary Secretaries.*
WILLIAM SCOTT, M.D. }

Edward Lees, Esq., Horley.
James Roberts, Esq., Golcar.
J. Hesselgrave, Esq., Marsden.
John Dow, Esq., Lockwood.
Frederick Greenwood, Esq.,
Huddersfield.

William Robinson, Esq., do.
T. A. Haigh, Esq., Meltham.
R. S. Fielding, Esq., Lindley.

S. Knaggs, Esq., Huddersfield.
T. A. Bottomley, Esq., Hud-
dersfield Infirmary.
William Greenwood, Esq.,
Huddersfield.
J. T. Bradshaw, Esq., do.
Richard Sissons, Esq., do.
T. R. Tatham, Esq., do.
Richard Allatt, Esq., Paddock.

KING'S COLLEGE HOSPITAL. The quarterly court of the governors and subscribers was held on the 27th ult. From the report it appeared that the total number of patients in the house on the 1st of January last was 110; admitted during the quarter ending Lady Day, 280; total, 390. Received by letters of recommendation, 77; urgent cases without letters, 180; accidents, 23; total, 280. Of this number 159 were males, and 121 females. The out-patients attended to during the quarter were 4,326; and 164 women were attended to during their confinements.

ST. MARK'S HOSPITAL. The anniversary festival of this institution took place on Monday, under the presidency of the Lord Mayor. The list of subscriptions announced amounted to upwards of £800.

NAVAL COURT-MARTIAL ON DR. J. F. HENRY. A court-martial assembled, the 25th ult., on board the *Impregnable*, guard-ship, at Portsmouth, for the trial of James Falls Henry, M.D. (1851), surgeon of her Majesty's brig *Star*, Commander Warren, on a charge of drunkenness. Evidence was given in support of the charge. The prisoner then read his defence. In this document the prisoner stated, that on the occasion mentioned in the charge he had not taken such a quantity of liquor as would have excited an ordinary individual; that he had served twelve years in the service, with credit to himself and satisfaction to his commanding officers, as would be proved by certificates that would be read to the court; that from serving in tropical climates his health had been greatly impaired, at China most seriously; and in the *Helena* on the coast of Africa, when they had as many as fifty sick, he had never shrunk from his duty, and through that had contracted the fever, which, joined to a nervous temperament, had unfortunately caused him to be so excitable that it was his intention, if this prosecution had not intervened, to have applied for a medical survey, believing himself to be unfit to serve again in a tropical climate. No evidence had been brought to stigmatise him as a confirmed drunkard, nor that he was drunk on the day mentioned in the charge, but that he was in a state of excitement. He called Mr. David Webley Perry, midshipman of the *Star*, who said that when he was sent to call the prisoner he awoke immediately on his calling him, and went on deck directly. He appeared to him to be perfectly sober.—Robert Thomas Mason, clerk of the *Star*, and Mr. Richard Blizard Power, assistant-surgeon on board the *Sanapareil*, who had previously sailed with the prisoner, both spoke to his excitable state of health, the latter having seen him at different times in a state of excitement, when he was perfectly convinced he was not drunk.—Most satisfactory testimonials were read of the prisoner's general good conduct and professional capability, from Captain Richards, of the *Corwallis*; Captain Goldsmith, of the *Wellesley*, in China; and Commander Ricketts, of the *Helena*, on the coast of Africa; with all whom he had served.—The Court considered that the charge had been proved, and sentenced him to be dismissed the service.

EXTRAORDINARY CASE OF LOVE-SICKNESS. BROMPTON COUNTY COURT. This action, brought to recover the trifling sum of 15s., elicited facts as interesting to young ladies as to the medical profession. The plaintiff, Mr. Gay, is a surgeon, and the defendant, Mr. Paine, is an unmarried gentleman. Mr. Gay said he had supplied the defendant with a mixture and a box of pills, and had attended him six times, for which visits he charged half-a-crown each. He had not charged for the mixture. Mr. Delamere, the defendant's solicitor, said that his client resided with a gentleman at Brompton, who had a family of beautiful daughters. Mr. Gay, who was a single man, was anxious to obtain an introduction to the young ladies, with the view to choose a wife. With this object he sought the services of Mr. Paine, who, very foolishly, pretended to be ill, and accordingly the professional services of Mr. Gay were sought to alleviate the sufferings of the patient. Mr. Paine, on being called, stated that Mr. Gay informed him of his wish to pay his attentions to a nice young lady, as he was sick of being single, and he intreated witness to introduce him to one. He recommended the young ladies at his house; but how to get an introduction was, for some time, a poser. It could only be carried out by a stratagem; and it was devised by plaintiff and himself that he (defendant) should fall ill, and write a letter to Mr. Gay to visit him. He felt unwell, and wrote the note proposed by Mr. Gay.—"Dear Sir,—I want to see you immediately. I am alarmingly ill. Yours, etc.—Postscript. Only myself and the Misses — at home, my boy." Mr. Gay came immediately. There was nothing whatever the matter with him, and he never took the stuff that was sent, but threw it to the dogs. As to the six visits the plaintiff had charged him for, it was a downright do. At any rate, five out of the six visits were paid to the young ladies, and Mr. Gay had the impudence to charge him half-a-crown for each of the wooing visits. Besides that, he was invited to dinner each time. He never had any rash, saving the rashness of introducing the plaintiff to his friends.—The Judge (Adolphus): I think, if it be a joke, it ought to be followed out. Fifteen shillings is, perhaps, too much to pay for it. My judgment will be for ten shillings, and that is not too much for a rich joke.

MEDICAL REFORM.

[House of Commons, June 8rd.]

Lord D. STUART wished to put certain questions to the noble lord the Home Secretary, viz., Whether it was the intention of the Government to introduce a Bill during this Session of Parliament for the better regulation of the laws relating to the profession of Physic and Surgery? Whether it was the intention of Her Majesty's Government to introduce a Bill empowering Her Majesty to grant a New Charter of Incorporation to the Royal College of Physicians of London? Whether, in conformity with the Pharmacy Act, there had been submitted for approval to the Home Secretary, bye-laws for the regulation of the Pharmaceutical Society of Great Britain, and whether those bye-laws had been approved of? Whether there had been forwarded to the Home Secretary the opinion of counsel, declaring those bye-laws to be illegal and unjust, and contrary to the spirit and intention of the Pharmacy Act of the last Parliament?

Lord PALMERSTON replied, that with regard to the first question, undoubtedly the present condition of the medical profession in this country was one that required arrangement, for it was a fearful labyrinth and chaos, owing in a great measure to the many different sources from which licenses and degrees were derived. At the same time, the question was so complicated and difficult, that he could not undertake to propose any measure this year. As to the Charter of the College of Physicians, he hoped to be able to bring in a Bill on that subject during the present Session; but at present he was not prepared to say whether it would be better to grant a separate Charter to the College or to incorporate the Charter in the Bill. He had had a new code of bye-laws in reference to the Pharmaceutical Society under consideration, but had not been as yet enabled to decide whether they were in all respects adapted for their purpose or not. Some parties objected to them, and had forwarded to him a legal opinion against them; but that opinion, it must be remembered, was founded upon the case drawn up by the objectors, and must consequently be taken with allowances. It would be his duty to ascertain from impartial authorities, whether those bye-laws proposed were or were not well founded.

OXFORD HONOURS. Yesterday the University of Oxford conferred the honorary degree of D.C.L. upon four members of our profession, viz., Dr. Bright, Dr. Winalow, Mr. J. H. Green, and Mr. Brande. A number of literary and political persons of more or less celebrity received a similar mark of distinction upon this occasion.

ALTERED MODE OF ASSESSING THE INCOME-TAX. The following important modification of the mode of assessing the Income-Tax has been carried on the motion of the Chancellor of the Exchequer. The duty on professional incomes is to be charged on an average of the profits of three years, instead of on the amount of the profits within the preceding year.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. MEMBERS admitted at the meeting of the Court of Examiners on the 27th of May:—John Henry Aldridge, Christchurch, Hants; Arden Hulme Beaman, King Street, Covent Garden; James Oughton Bradbury, Manchester; Samuel Cardozo, Redruth, Cornwall; Francis Lewis Fitzgerald, Cheltenham; H. George Hardy, North Shields; George Henry Hope, Seaforth, Lancashire; Napoleon Kennett, Shoreditch; Michael Mackereth, Guisborough, Yorkshire; Alfred Malpas Tippetts, Islington; John Harrison Walker, Australia; Hutchins Williams, India.

[At the same meeting of the court, Mr. Dugald M'Ewan, a Member of the Edinburgh College, passed his examination for Naval Surgeon.]

May 30th:—Charles Robert Croft, Wimbledon, Surrey; Thos. Gillham Hewlett, Hon. East India Company's Service; William Hoar, Portsmouth; Henry Rooke Ley, London; James Rawlings Monday, Olverton, Gloucestershire; John Jones Petters, Anglesey, Wales; Frederick John Thomas, Park Terrace, Islington; Richard Thomas, Llanelly, Carmarthenshire; Augustus Willoughby Thornton, Dublin; James Turle, Richmond Villas, Holloway; George Clarke Wilson, Dublin.

June 3:—Edwin Sercombe, Somer Place, Hyde Park; Robt. Bianchi, London; Henry Joseph Kelly, Frogna House, Hampstead; Nicholas Hardcastle, Newcastle-on-Tyne; George Jobbling, Morpeth; Edward Lodge Byers, Milford Haven; Samuel Woodall, Dudley, Worcestershire, Alfred Godley Crewe, Broad-sall, Derbyshire; William Powell, Dudley, Worcestershire.

APOTHECARIES' HALL:—PASS LIST. Thursday, May 26th, 1853:—William Cuthbert Blackett, Durham; Richard Carmichael Bourne, Dublin; Robert Anlezark Cunliffe, Garstang, Lanark; John Ivy Mais, Catterick, Yorkshire; James Earl Moreton, Marton Hall, Cheshire; William Hall Ryott, Thirsk, Yorkshire.

Thursday, June 2, 1853:—John Maule Sutton, Greenwich; George Edward Young, Gosberton, Lincolnshire; Henry Leach, Trinity Square, Southwark; Rowland Smith, Boxted, Suffolk; Robert Westcott, Middlesex; John Mayor, Cardell, St. Columb, Cornwall.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

CORNISH, W. R., Esq., elected Resident Surgeon to the Royal Sea Bathing Infirmary, Margate.

*DESMOND, L. E., Esq., elected one of the Surgeons to the Liverpool Dispensaries.

FOLKER, William H., Esq., elected House Surgeon to the North Staffordshire Infirmary, Etruria, Staffordshire.

LEARED, Arthur, M.B., elected Physician to the Metropolitan Dispensary.

LOWNDES, —, Esq., elected one of the Surgeons to the Liverpool Dispensaries.

*THOMPSON, Henry, M.B.Lond., M.R.C.S., appointed (on the 1st June) Surgeon to the St. Marylebone General Dispensary, in the room of Charles Bacon, Esq., resigned.

WILLIAMSON, Joseph, M.D., appointed by the Senatus to be Lecturer on the Practice of Medicine in the Medical School of the University and King's College of Aberdeen.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

CREAM, George, Esq., Surgeon, at Long Melford, Suffolk, aged 70, on June 4.

FOOTE, Alfred, Esq., Surgeon, formerly of Kew, on board the *Columbus*, of rheumatic fever, aged 39, on May 10.

KIRBY, John, LL.D., Surgeon, formerly Professor of the Practice of Physic to the Royal College of Surgeons, Ireland, at Newtown House, Rathfarnham, County Dublin, on May 26.

LUCAS, Henry Carr, Esq., Staff-Assistant Surgeon, late of H.M. 80th Regiment, and formerly of Exeter, at Chatham, on May 27.

PONSFORD, John, Esq., Surgeon, formerly of Moretonhampstead, Devon, at Exeter, on May 30.

SHAND, James, Esq., Surgeon, after a short illness, at his residence, Hallhill, Turriß, Aberdeenshire, on May 29. Mr. Shand was a generous hearted man, and a skilful practitioner.

*STILWELL, Arthur, M.D., at Moorcroft House, Hillingdon, Middlesex, on June 6.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

BELLINGHAM, O'B., M.D. A TREATISE ON DISEASES OF THE HEART. Part I. pp. 252. Dublin: 1853.

COCKS, J., M.D. SEA-WEED COLLECTOR'S GUIDE. 12mo. pp. 120. London: 1853.

*DAVEY, James George, M.D. ON THE NATURE AND PROXIMATE CAUSE OF INSANITY. pp. 76. London: 1853.

GOSSE, Philip Henry, A.L.E. NATURALIST'S RAMBLES ON THE DEVONSHIRE COAST. Plates. pp. 451. London: 1853.

SEATON, Joseph, M.D. THE PRESENT STATE AND PROSPECTS OF PSYCHOLOGICAL MEDICINE. pp. 23. London: 1853.

ERRATUM.

At page 485 of last number, column 2, line 24, the words "becomes lessened" should be "varies"; and the word "direct" should be "inverse". The sentence will then read as follows: "Still more, there is every required proof that the attraction of every molecule of matter for another molecule varies in an inverse ratio to the square of the distance".

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXIV.

LONDON: FRIDAY EVENING, JUNE 17, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. Members receive the Journal free by post.

The ANNUAL MEETING will be held at Swansea on the 10th and 11th of August. Gentlemen who have communications to read to the Meeting are requested to give notice of their intention to the Secretary. Communications will be called for in the order in which the Secretary has received notice from the respective authors. Vide p. 470 of May 27 for various details.

THE LAW OF ENGLAND TAXES AND TORTS MEDICAL MEN WHILE IT PROTECTS MEDICAL PRETENDERS.

On June 3rd, we made a few remarks upon a recent trial at Edinburgh of two quack doctors who had been swindling the public by styling themselves "Botanical Physicians", and pretending to cure all diseases by certain nostrums, sold at some shillings each. It was not contended by the public prosecutor that the practice of the prisoners was positively dangerous, nor that it had in any known case proved fatal; but a conviction was obtained from the jury upon the charge of "falsehood, fraud, and wilful imposition", and the sheriff pronounced upon the impostors sentence of "nine months imprisonment with hard labour". As a contrast to the wholesome jurisprudence of Edinburgh, let us place before our readers some gleanings from the newspapers of the week, analogous to others of frequent occurrence, especially on this southern side of the Tweed.

Our first example is a case of suspected manslaughter by a Coffinite. The following is the newspaper paragraph.

"COFFIN PRACTICE. Thomas Clarke, a pilot, aged 53, died recently at West Hartlepool after treatment for hernia by a practitioner said to be of the Coffin School, who promised 'to make another man of him', and with that view gave him heroic doses of medicine. 'The masterpiece of the complaint', he said, 'was wind': and he administered jalap, Cayenne pepper, and gin—a dram-glassful every morning. Mr. Atkinson of West Hartlepool said, in reply to a question by the coroner, that the medicine could do no good: that it had induced vomiting, purging, and debility, and had in this way caused or hastened the fatal issue. The jury returned a verdict of 'Natural death'."

The chances are, that the jury was, as is usual in the Coroner's Court, a party of idle cronies of the beadle, and that the trial was, as is also very usual in the Coroner's Court, a mere farce. Had the Coffinite quack been a gentleman and a qualified practitioner, he would most probably have been sent to prison on the charge of manslaughter. If a homœopath or a Coffinite kill a patient, he is almost invariably acquitted; but if by accident or through ignorance a legal practitioner, acting conscientiously for the best, lose a case, and a popular excitement be created, he rarely escapes the vengeance of the vulgar.

As regards the death of the poor pilot, we have not much doubt as to its cause; but, even granting that the

medicines did not contribute to the fatal issue, is it honest in the Government of this country to levy fees on the stamps of diplomas, which diplomas, in place of being any protection to their possessors, are positive sources of danger, while the want of them is received as an evidence of ignorance, and therefore as a ground of exculpation from malapraxis? It is undoubtedly safer in England to be without any diploma; and this is well understood by the London venerealists, most of whom advertise as surgeons and doctors under assumed names, and without any legal qualification. This remark brings us to our next example; but as many of our readers may be ignorant what a Coffinite is, we may stop for a few minutes to afford a brief explanation.

Coffinites, Thompsonians, and Botanical Physicians, are synonymous terms designating the members of a sect of quacks, who are as well known and as wide spread in the United States of America, as are homœopaths and venerealists in London. The party is not without its apostles in England, as appears from the report we have just quoted. In London it is less known than in some provincial towns, where it bids fair to be the most successful medical imposture of the day. The text book of the Coffinites is now before us: it is entitled "The Practice of Medicine on Thompsonian Principles, by J. W. Comfort, M.D." The volume is a portly octavo of 582 pages, professing to be a fourth edition, and bearing the imprint of "Lindsay and Blakiston, Philadelphia: 1853." Thompsonian quackery maintains several journals in America, and one in London.

The "psora" of Hahnemann has a counterpart in the "canker" of Thompson; and the great aim of the Botanical Physicians is to get rid of this canker. "Dr. Thompson", we are told at p. liv, "introduced into general use in his system of practice a class of remedies for removing the canker or vitiated secretion that forms on the stomach and bowels to a greater or less extent in all cases of disease, and interrupts the process of digestion, and tends to prostrate all the functions of the stomach, and constitutes a general cause of the continuance of disease." So much for the theory. The practice chiefly consists—ostensibly at least—in administering lobelia. Many quacks, however, (like Curtis and Campbell,) use nostrums of their own, employing the names of Thompsonianism or Botanical Medicine only as popular baits for weak-minded valetudinarians, just as rubbers, hydropaths, Mesmerists, etc., etc., call themselves homœopaths, because homœopathy has been diligently associated in the public mind with cocoa for breakfast, and tasteless globules under curious names. But here, to avoid expansion, we shall at once quote a few lines from Thompson's own account of lobelia. "In giving" he says, "a description of this valuable herb, I shall be more particular, because it is the most important article made use of in my system of practice—without which it would be incomplete, and the medical virtues of which, and the administering of it in cases of disease, I claim as my own discovery." The newspaper report which we quoted above is evidently

imperfect; for the following is the Coffinite or Thompsonian practice in strangulated hernia. "The use of the vapour or warm water bath, and relaxing the system by giving the patient freely of lobelia, and administering it also by injection and retained, constitutes the treatment most likely to overcome the stricture." This extract affords a glimpse at Coffinism, a system which, if practised as it is preached by its apostles, is an atrocious system of wholesale poisoning. Nevertheless, Coffinism enjoys more protection from the law of England than scientific medicine.

It may be said that, if people choose to be poisoned by lobelia, the law ought not to place any hindrance in their way. That proposition we do not concur in; but we have not space or inclination at present to refute it.

We therefore proceed to speak of the advertising veneerists, who by calling themselves doctors and surgeons, and by the use of various other fraudulent practices, entrap shoals of juvenile victims, whose uttermost farthing they extort by threats of exposure, and by frightful pictures of maladies which have often no real existence. Here the law might protect society without infringing the liberty of the subject; for, if Parliament decreed that all legal medical practitioners should be registered, the swindlers to whom we are now referring would at once find that their trade was ruined. It would no longer be possible for the London manly-vigour-scoundrels to advertise as members of the medical profession; and we should not have a coroner at Sheffield saying that it was less a crime in a man whose real name was Davis, and who was not a surgeon, to practise as "Dr. Henry and Co., Surgeons", than for simpletons to employ him, as is stated in the report of the inquest, to be found in a subsequent page. Nor should we have a quack fencing with a Scottish judge as to the meaning of the letters M.B.—whether they mean Medical Officer of the parish of B., or Bachelor of Medicine. The scene to which we refer is described in Dr. Turner's sound and right-hearted appeal, in this week's Letter Box.

We call attention in this place to the fraudulent use of medical titles, because its immediate suppression would protect many inexperienced persons, without diminishing the facilities of the public for employing quacks as quacks. It is indeed a great hardship that this small shred of protection should be withheld from medicine, till harmony be created in what Lord Palmerston calls the "chaos of the medical corporations". In the meantime, pharmacy has obtained the registration boon; for, by the 13th section of the Act of last Session, persons not registered as Pharmaceutical chemists, who call themselves Pharmaceutical chemists, are liable to a penalty of five pounds. Any man may call himself M.D., M.B., or Surgeon, without incurring any risk of punishment, or violating any law!

The consequences of this position of affairs are alarming to contemplate. From various towns and villages throughout the country, we have received information of the general practitioners being likely, ere long, to be supplanted by "pharmaceutical chemists": and we believe that it is strictly true to say that at this moment there is going on a disastrous retrogression towards the state of affairs prior to 1815, when the practitioners of medicine consisted of two utterly distinct classes—the highly educated physicians, a small, select body, who ministered to the wealthy, and a servile herd of ignorant apothecaries, who were considered good enough for the poor, but who were not expected to treat the upper grades of society, except under

the orders of one of the superior grade. The accomplished general practitioners in medicine, surgery, and midwifery were then unknown; and if, as at present, they continue to be insidiously supplanted by the prescribing "pharmaceutical chemists", they are likely in another generation to be entirely rooted out. We have more to say on this subject: but in the meantime we conclude by asking our readers to reflect upon this undeniable truth, that while medical men are taxed for their diploma stamps, persecuted in Courts of Law, and tormented in the performance of their professional avocations by the inroads of quackery and counter-practice, quacks and counter-practitioners are free from impost, and enjoy protection in their unjust callings.

FOUR STRONGHOLDS OF QUACKERY IN THE FOURTH ESTATE.

ONE of the most discouraging features of the times in connexion with quackery is the facility with which portions of the press can be seduced to circulate the manifestoes of charlatans; and another cause of sorrow is the apathy with which our profession regards the dissemination of pseudo-medical periodicals, and tolerates those quasi-professional men who basely purchase the praises of these prints, by clandestine and ignoble compacts.

There are in the Fourth Estate four strongholds of quackery, to which at present we particularly wish to direct attention, viz. :—

- I. NEWSPAPERS, especially those published in the Provinces and in the Colonies;
- II. RELIGIOUS (?) PERIODICALS;
- III. PSEUDO-MEDICAL PAPERS; and
- IV. MEDICAL JOURNALS.

A standing order from half a dozen quacks for the insertion of their long advertisements, and an agency for their medicines, are with nine of every ten provincial and colonial newspapers necessary elements of existence. A paper with a limited local circulation, and a small number of legitimate advertisements, requires assistance from the advertising quacks; and the money which a provincial or a colonial newspaper receives from them is its chief sustaining pabulum, when the richer bribes of contested elections and local feuds cannot be grasped. Piles of provincial and colonial newspapers are now before us, the majority of which are actually choked with the knavish and often indecent advertisements of notorious medical swindlers. Many of these papers have been sent to us accidentally, in consequence of their containing obituary notices and miscellaneous articles of medical intelligence; and in few of them can we trace any symptoms of open war with the regular profession. We have found also, upon careful and extensive inquiry, that these papers, containing the fraudulent declarations of pill-cheats, and the beastly blackguardism of veneerists, circulate freely both at home and abroad, in the family circles of the high and the low, of the rich and the poor. To speak the truth plainly, the literature of the brothel is introduced regularly and systematically into the parlour and the boudoir; and thus with the maiden and the matron, with the virtuous and the vicious, obscene expressions suggestive of impure thoughts are made

"Familiar in their mouths as household words".

Surely, the piety and the gallantry of England might be induced to join with legitimate medicine in a determined

league to dislodge the venerealists, with their body and soul destroying lures, from family newspapers; and if these journals cannot be induced by moral suasion to reject these abominations, let them be starved into submission by all honest men refusing them admission into their homes. Let a brand of infamy be placed upon their readers and subscribers.

Some, we know, affect to believe that the familiar exhibition of vice is a preserver of virtue; just as others of kindred bias assert, that witnessing the nudities of the *ballet* invests the male and female aristocracy of England with a chastity of heart, speech, and behaviour, which can only find a parallel in ancient Lacedæmon, where similar displays were sanctioned.

"Old Sparta, sternly virtuous, made
The pure and spotless maiden
To join the wrestler's ring, by naught
But nature's vesture laden.

"No crimson hues along the cheek
Arose to mar her beauty;
Why feel dishonest shame, if true
To honour and to duty?

"Nor word, nor look, betrays the fire
Which in the bosom gathers
Of Lacedæmon's youths, who sit
Beside their warlike fathers."*

Poets may so write: but medical practitioners know human nature too well to believe that the passions of youth are so controllable. They have penetrated deeply into the recesses of many a broken heart, and learned from many a victim of premature senility, that the first introduction to vice, and to those who pander to it, has been through the pages of the family newspaper. Purity of thought is in both sexes the outpost of chastity; and if we wish our wives and our daughters to take rank with the Portias and Cornelias of society, how can we allow them—nay, compel them almost—to read the advertisements about "manly vigour" and "sexual debility", with which the newspapers are teeming? We ask earnestly, and in the hope of receiving an answer in virtuous and united action,—Why do husbands and fathers purchase these poisonous and indelicate writings, and allow them to taint the purity of the domestic sanctuary?

It is not upon mere professional grounds that the quack ought to be driven from their great stronghold, the provincial and colonial newspapers. Public morality demands this; and public opinion might, we are confident, be easily made to accomplish it. If there is no man in Parliament who will ceaselessly agitate this question till redress be obtained, we must get some one to enter Parliament with this special mission—and such a patriot statesman is much wanted at the present time—a man who understands in all their gigantic and catholic bearings the medico-political and sanitary questions of the day.

The Religious Periodicals constitute another stronghold of quackery. What is popularly designated the "religious" press, is preeminent as the accomplice of the medical quack. All sects seem equally to participate in this iniquity. We can trace no difference in this respect between Protestants and Papists, Churchmen and Dissenters. With a very few honourable exceptions, the publishers of religious periodicals

seem to be so blinded to all decency by their thirst for profit, that the piety and morality of the interior of their publications forms a violent contrast to the impiety, fraud, and filth displayed upon their wrappers. Probably the explanation of the degraded condition of the religious press lies in the fact, that the works complained of are mere trade speculations of mean capitalists, who look upon religious readers, and quack advertisers, equally and only in the light of parties to be conciliated for the sake of their cash.

In the *Edinburgh Christian Magazine* for April last, there is an article entitled "Medical Quacks, with special reference to the Working Classes". In this paper, irregular practitioners are forcibly and unsparingly denounced; as will appear evident to the reader of the following extract.

"To patronize quackery seems nothing less than to deny the wisdom of God's arrangements in the world, and to act on principles which are true only on the supposition that there is no order, no law, no government; but that all is confusion and chance, amidst which a fool may succeed, or pick up truth as well as a wise man."

After perusing with pleasure these and kindred sentiments, we proceeded to examine the wrapper of the magazine, when, behold! there met our eyes in flaming capitals

"HEALTH FOR A SHILLING!"

heading the details of one of the *soi-disant* Professor Holloway's "extraordinary cures". Alas! alas! it is indeed more easy to preach than to perform the obligations of religion and morality. To the speculators of the *Edinburgh Christian Magazine* we would say, "Deeds and not words!" Wash your hands, gentlemen, from the unhallowed gains of quackery, and remember that you yourselves have truly written, that to patronize quackery is to deny the wisdom of God.

Pseudo-medical Papers, as many of our readers may know, are maintained in London by homœopaths, hygeists, chronothermalists, Mesmerists, hydropathists, and Coffinites. Each of these sects has its own organ: and several individual quacks support and disseminate journals for their own trade. Speaking generally, there is a close alliance among all the quack journals, and most of the open charlatans, as well as quasi-medical authors, use all of these papers avowedly or under the rose for keeping their names before the public. It is not only, however, by the advertising columns and notices to imaginary correspondents, that the friendly understanding among the various denominations of medical sharpers is illustrated. The *Homœopathic Times*, for example, espouses multifarious and theoretically opposite forms of quackery. In *Coffin's Botanical Journal* for the 4th of June, in a leading article upon the "Doctors' New Reform Bill", we read the following paragraph. The capitals and italics we may premise are those of the original.

"When we see any danger of this Bill passing, our friends may rest assured we shall soon inform them of it, in order that petitions against it may be sent from every city, town, and village in Great Britain. This will be the time for action and UNION among Homœopaths, Hydropaths, Mesmerists, Medical Botanists, etc., to fight and conquer their common foe allopathy; the supporters of which system have, according to one of their own body, Dr. Frank, 'slaughtered thousands in their quiet sick rooms'."

The pseudo-medical press is a stronghold from which it is not to be supposed that quackery can ever be dislodged; but

* SAVIOLI, as rendered in U. S. Lit. Gaz.—Vide Longfellow, p. 601.

the profession can materially weaken it, by disowning those false brethren who clandestinely accept the meretricious blandishments of its commanders. On a future occasion we may examine with some minuteness the bastard medical journals, with the view of unmasking or testing the reality of certain disgraceful alliances which are commonly believed to exist between them and persons who wish to pass current as respectable authors and practitioners. In the mean time it is important for the profession and the public to be frequently and distinctly told, that there are some six or eight journals published in London, under the medical ensign, which make a piratical display of our colours only that they may the more stealthily pounce upon and plunder their victims.

And now we come to speak of the shortcomings of the Medical Press. Here, the faults are occasional and not systematic—as often, perhaps, the results of inadvertence as of commercial seduction; yet they are of too serious a character to be passed over in silence. Without, then, breaking new ground, we shall briefly recall attention to the dishonest advertisement regarding Pulvermacher's chain.

The exposure which resulted from Dr. M'Intyre's remonstrance with ourselves is, probably, fresh in the recollection of many of our readers. Our article upon the improper use of Dr. Golding Bird's name in Mr. Meinig's advertisement of the chain appeared in our paper of 15th April, to which we refer those who may have forgotten all the circumstances. The principal facts were these—that as the advertisement contained a certificate purporting to “be published with the kind permission” of Dr. G. Bird, but which certificate was actually published in opposition to that physician's remonstrances, and with a gloss upon it which he explicitly repudiated, we refused to allow it again to stain the JOURNAL OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION. We were gratified to find that the *Medical Times* (although a commercial speculation of non-medical capitalists) responded to Dr. M'Intyre's appeal in a spirit similar to our own. That paper contained the following creditable notice upon the 7th of May, at p. 480:—

“The advertisement referred to was inserted in this Journal without any knowledge on our part that Dr. Bird's name had been improperly used. We beg to inform Dr. M'Intyre, that directions have been given to refuse insertion to Mr. Meinig's advertisements of Pulvermacher's Chain for the future.”

We do not know whether Dr. M'Intyre appealed to the *Lancet*; but we find in that Journal for June 4th, the very same advertisement which was justly felt to be a pollution to the advertising pages of the ASSOCIATION JOURNAL and *Medical Times*. To the *Lancet* we repeat what we said to the *Edinburgh Christian Magazine*, “Deeds, not words”! If you denounce quackery in vehement leaders, do not sell it a shelter in your advertising columns!

Upon future occasions, it is our intention to throw strong lights upon the strongholds of quackery in the fourth estate; because we believe that by following such a course we shall be able to drive some detachments of the enemy from their intrenchments, and to seize and punish various parties of renegades and pirates.

DR. BRIGHT AND HOLLOWAY'S OINTMENT.

A COPY of a printed handbill of Holloway which was circulated at Manchester, by his agent in that town, is now before us. It gives a report of “a case abandoned by Guy's, the Metropolitan, King's College, and Charing Cross Hospitals, London.” This report is in the form of “an affidavit sworn to before the Lord Mayor of London”; and contains the following passage. The capitals and the italics are reprinted as they appear in the handbill.

THE DEPONENT, thereupon, called on DR. BRIGHT, chief Physician of Guy's, who, on viewing deponent's condition, kindly and liberally said, “*I am utterly at a loss what to do for you, but here is a half sovereign, go to Mr. Holloway, and try what effect his Pills and Ointment will have, as I have frequently witnessed the wonderful Effects they have in Desperate Cases! You can let me see you again.*”

There can be no mistake as to the Dr. Bright who is meant, as the description applies to none other than the well-known Richard Bright, M.D., F.R.S., Physician Extraordinary to the Queen, and Consulting Physician to Guy's Hospital. We ask the following questions on behalf of some gentlemen residing at Manchester, who feel aggrieved by the wide circulation which the handbill from which we have quoted has had in their town. They very properly state that the handbill is calculated to injure their position and usefulness, because Dr. Bright is well-known as an eminent physician, and as Physician Extraordinary to the Queen, the Royal Lady whose stamp is profaned by being printed “by order of the Government” upon all the pots and pill-boxes of Holloway.

- I. Did Dr. Bright give the advice which is imputed to him in the handbill?
- II. If Dr. Bright did not give that advice, has he ever taken any means of preventing his name from being used to the dishonour of that profession, to which he owes the high reputation which he now deservedly enjoys?
- III. What steps ought to be adopted by medical practitioners, to disconnect the medical profession from participation in the adventures of Holloway and other persons of the same class, whose superb equipages are maintained by “money obtained by false pretences”—by barefaced swindling?

To the first question we venture, without authority, to reply in the negative. The others are not so easily disposed of.

DISCUSSION ON QUARANTINE AT THE EPIDEMIOLOGICAL SOCIETY.

It is not often that we report a more temperate discussion, than that which took place on Monday, the 6th inst., at the Epidemiological Society, on a subject which, of all others, is loaded with the most conflicting opinions.

The paper of Dr. Milroy, and the observations upon it, by the epidemiologists who commended or criticised it, lead us to the painful conclusion, that our ideas as to the spread of great pestilences are as vague in this day, as were the ideas of those who discussed the same subject when Mead, and Pringle, and others long before their time, were the distinguished occupants of the scientific arena.

The Caliph Omar, most uncharitable monster, said of the ladies, that they were great evils, but that the greatest of all evils was that they were necessary. Had the Caliph lived in this day, and supplied the words, "scientific discussions", for the word "ladies", he would have spoken much more worthily as a successor of the prophet, and much more to our taste, and idea of truthfulness. Can anything, for example, be more distasteful and at the same time more necessary than discussions on the value of quarantine? Honest and competent men have for centuries past been inquiring into the origin of pestilences; and yet, out of every six of these men with whom one may commune, three shall be found offering incontestible proofs that pestilential disorders come in on the right hand, and the remaining three offering proofs as incontrovertible that the same disorders come in on the left. The story of the chameleon controversy is forced on the mind as it meets these differences and difficulties, together with the moral of the story, viz., that both parties, perhaps, are right, and both wrong, and that both will continue in the same unsatisfactory predicament, until some leading fact, as yet hidden, comes to the light and explains the causes of difference.

We briefly allude to the subject of quarantine on this occasion, hoping to be able to discuss the matter at greater length at some future day. Meantime we direct the attention of all our readers to the importance of the subject, and repeat a remark made by Dr. Milroy, that "until the question of the value of quarantine has been settled in a satisfactory manner by the medical profession, a great duty which the profession owes to the world, and which it alone can perform, remains unfulfilled."

ORIGINAL COMMUNICATIONS.

CONTRIBUTION TOWARDS A PATHOLOGICAL HISTORY OF UTERINE "VIVACES".

By EBEN WATSON, A.M., M.D., Professor of the Institutes of Medicine, Andersonian University, Glasgow.

M. LEVRET, in the *Mémoires de l'Académie Royale de Chirurgie* for 1777, published an elaborate paper *Sur les Polypes de la Matrice et du Vagin*, in which he makes mention of a kind of polypus under the name of "vivaces".

The following is an abridgement of his description of them. They are, he says, ordinarily unattended by lancinating pains, or by sanious discharges, such as occur in malignant diseases of the uterus; but they cause frequent hæmorrhages, like common polypi. They differ from them, however, in having no enveloping membrane, or, at all events, a very delicate one. They are found in two forms; either like *digital vegetations*, more or less long, thick, and numerous, parts of which break off, and come away from time to time with a hæmorrhage; or they may be found in one mass, somewhat globular in form, and rendering the womb large and painful; and, though the vagina be found full of this mass, the womb is not at all emptied of it—"ainsi, comme il est communément impossible de parvenir à détruire la cause immédiate de ces fongosités, c'est peine perdue de travailler à les retrancher." "Ces excroissances", he writes at another place, "doivent être censées incurables, parceque ces ne sont que trop communément des végétations de quelque ulcère de l'intérieur de la matrice."

M. Herbiniaux, in his *Traité sur divers Accouchements laborieux, et sur les Polypes de la Matrice*, published at Brussels in 1794, gives a more lengthened account of vivaces. He expresses the same opinion with M. Levret, of their origin and incurability. He says that he never found

them single; i. e., more than one tumour always occurred in the same case; and they were sometimes in the vagina as well as in the uterus. The former are easily recognised by the touch, but the latter are more difficult of diagnosis. He accordingly gives the following marks as distinctive of uterine vivaces:—1. The tumour is almost always *within* the womb; because, not being attached by a pedicle, it is not permitted to escape from the viscus, except in a few cases, in which it grows from the neighbourhood of the cervix uteri. 2. The os uteri is more or less open, and the tumour which remains inside is felt by the finger to be soft, and less united than the common polypus. 3. The womb is so voluminous as to form a tumour in the hypogastrium; and, during the whole course of the disease, that external tumour is very painful; while the vivace is insensible when touched through the os uteri. (*Op. cit.*, vol. ii, p. 39).

M. Levret mentions having had several cases; but, strange to say, he does not give the details of any. M. Herbiniaux has given the particulars of two cases. The subject of one was an old lady, aged seventy-four years, in whom the disease had existed for three years, and who had been worn to a shadow by frequent and severe hæmorrhages, one of which, when M. Herbiniaux was called, had lasted for forty-eight hours. He found a tumour presenting in the orifice of the uterus, free from its walls, of the size of an orange, and with a very *short pedicle*; so that he could not move it in the uterus. It was soft, and its surface was irregular.

Considering this tumour a vivace, and that the constitution of the patient was already affected, seeing that the nostrils were filled with polypi, M. Herbiniaux declined operating; but, being urged, he yielded, and applied first one ligature and then another. The state of the patient was almost immediately improved by this measure. The tumour separated on the seventh day after its strangulation, but grew again; and the woman died at the end of six months.

M. Herbiniaux does not mention the age of his other patient, nor the duration of the disease. When he first saw the case, there were two tumours, each of the size of a hen's egg, in the vagina, with almost no necks. The orifice of the uterus was open, and its walls, as far as could be felt with the finger, were healthy; but there was a swelling in the hypogastrium, extremely painful on pressure. This he considered to be the body of the womb, swollen and inflamed. He applied the ligature, and the tumour came away; but others similar to it soon formed; and the woman died in about four months afterwards.

Dr. Gooch relates a case of vivace at p. 300 of his work on the *Diseases of Women*. The subject of it was seventy years of age, and had for only a few weeks been terrified by the occurrence of several profuse hæmorrhages. Dr. Gooch found the os uteri dilated to the size of half a crown, *with thin edges*, and a substance slightly protruding through it. It had a rough cauliflower feel, and bled on being touched. It was round and large. "I could", he says, "pass my finger within the orifice, and some way up between the thin walls of the uterus and this globular body." The tumour never projected enough into the vagina to admit even of its tip end being included in a ligature. About eighteen months afterwards, the patient died dropsical. "Since this case," he adds, "I have seen two similar to it."

Dr. Jas. Hamilton, in his *Practical Observations* (part i, p. 51), mentions a case which fell under his observation. The subject of it was mother of three children, and "*not above thirty-three years of age*." She had been for two years subject to hæmorrhages when Dr. Hamilton first saw her. He "removed the excrescence, and applied various local remedies to the uterus"; but with only temporary benefit. She, however, lingered for two years after the commencement of his attendance, and died in great suffering.

Dr. D. D. Davis also relates a case, which was probably of a similar nature with those just given. (*Principles and Practice of Obstetrics*, vol. ii, p. 610). The tumour in this case grew very rapidly, and filled the whole pelvis before the lady expired. No inspection was made.

Dr. Bullen, of Cork, records two cases under the name of cauliflower polypus; but they appear to have been identical with vivaces, although the symptoms were of a somewhat doubtful kind. In each case, the tumour originated from the inner part of the cervix, and in one case, it implicated part of the margin of the orifice. It might, therefore, have been easily mistaken for the true cauliflower excrescence of the os uteri. (*Dublin Quarterly Journal of Medicine*, vol. xxv, p. 414.)

The following case, which I venture to class along with those already noted, occurred to me some years ago:—

CASE. The patient had never been married, and was about forty-five years of age. She had always enjoyed good health, and had menstruated regularly till three years before I saw her, when the function ceased to be performed.

About Christmas 1848, after leaping from a table, hæmorrhage to considerable extent took place from the womb, and a bloody discharge had continued to flow constantly and profusely, but varying in its colour, sometimes being bright red, at others less so, until I saw her on the 9th of August, 1849. At that time, her chief complaint was of intense pain in the lower part of the abdomen; so intense, indeed, that she could not lie still in bed, but rolled about from side to side. The lower part of the belly was very tender and painful on pressure; but, on examining *per vaginam*, I could discover no abnormality of the uterine neck. The womb was quite moveable, and did not seem to be enlarged; and it had no tendency to expulsive contractions—a fact which seemed to indicate that there was no polypus of any great size within the organ. These circumstances were all confirmed by my father, who examined the patient, at my request, the day after my first visit.

Seeing, then, that the pulse was full and quick, the pain great, and the tenderness of the abdomen excessive, we came to the conclusion that, however the hæmorrhage was to be explained, we had at present to deal with a severe attack of acute metro-peritonitis. Our patient was therefore cupped and blistered over the sacrum; and, as her digestive organs were very much in fault, she took a mild course of mercury with opiates and laxatives. She used the tepid, and ultimately the cold water hip-bath, with vaginal injections of the same fluid. By these means, the pain was completely removed; and I put her on a tonic plan, and recommended change of air.

She accordingly went to reside on the sea-coast, at Helensburgh; and I heard no more of her for nearly three months: she then again consulted me. Her general health was much improved since I had last seen her, and the pain had never returned; but I was astonished to learn that she still had a constant bloody discharge and frequent profuse hæmorrhages. On examining *per vaginam* I now found the uterus distended by a growth within it, so that the neck was rendered thin and tense, with a small hole—the os uteri—in its centre. Through this I could pass my finger, and I felt a soft, granular, roundish body occupying the interior of the womb. I could pass my finger nearly round the growth; for it was unconnected with the anterior wall of the uterus as far as the finger could reach; but I could not reach its back part.

A few days afterwards, I had the advantage of consulting both with Dr. James Wilson and with my father. On that occasion, I used a uterine bougie, which passed freely between the growth and the uterine wall anteriorly, but not posteriorly. The case was so far therefore clear. The patient had a growth of a soft, granular nature, distending the womb, and apparently attached by a broad base to the interior of its posterior wall. My consultants recommended me to dilate the os uteri, in the hope that the tumour would descend into the vagina, so as to admit of the more easy and effectual application of a ligature round its base.

The ordinary methods of dilatation gave my patient great pain; and I had obtained the consent of the experienced gentlemen above named, to slit up the thin and tense cervix uteri, and apply a ligature round the tumour *in situ*, when the patient was attacked by severe diarrhoea, which

soon rendered her condition hopeless. She, however, lived for several weeks, during which the uterine discharge became thick, grumous, and extremely foetid. She died about the middle of January 1850.

On inspection, I found the intestines matted together by the lymph of old inflammatory effusions. The solid viscera were pale and bloodless. The uterus was enlarged to five or six times its usual bulk in the virgin state; its walls were thinned and hardened throughout their whole extent. The cavity, internally, was occupied by a mass of long fungoid vegetations, matted together, but apparently springing individually from a sloughy, rather than an ulcerated, portion of the posterior wall. The whole was so softened and infiltrated with foetid pus, that it was quite unfit for more minute examination.

Perhaps I may now be allowed to generalize some of the chief features of vivaces, as these may be gathered from the preceding isolated observations.

In the first place, then, vivaces generally indicate their presence suddenly and without previous warning. There are no symptoms as yet recorded, from which any physician can infer their presence within the womb, until a discharge of blood occurs; and even then the diagnosis is obscure. The excessive pain in the lower part of the belly, taken along with the profuse hæmorrhages, seems, at this period, to be the only mark fitted to excite a suspicion of the real nature of the case. But we are not kept long in suspense, for the progress of the growth is always very rapid. Within three months, in my case, it had fully distended the womb. The physical signs are then sufficiently marked; viz., the bloody discharge, the stretching of the uterine neck so as to form a tense diaphragm with an aperture in its centre, and the granulated and insensible growth, felt through it, fixed by a broad base to some part of the internal surface of the organ.

The termination of the case has hitherto been invariably fatal, sooner or later: death being caused either by gradual exhaustion, or, more rapidly, by the occurrence of colliquative diarrhoea, which is the common liberator of the victims of inveterate uterine disease.

What, then, is the nature of this growth? Is it composed of vegetations from an ulcerated surface, as supposed by Levret, or, is it identical with the cauliflower excrescence of Dr. Clarke, as has been asserted by Dr. Gooch?

In attempting to answer this question, I would observe that I do not regard the obvious difference of position or site as establishing any essential difference between vivaces and the cauliflower excrescence. At all events, as Dr. Gooch has remarked, they do not, in that respect, differ from each other “more than polypus of the neck and orifice from polypus of the fundus of the uterus”. And Sir B. Brodie’s case, referred to by Dr. Gooch (*op. citat.*, p. 304), would seem to be an instance of the occurrence of the cauliflower excrescence *within the womb*.

But, while I acknowledge that the growth just named may occur, though very rarely, within the uterus, still I believe that certain marked differences exist between it and vivaces. The most important of these is the pre-existence of ulceration of the internal surface of the uterus. This occurrence was very clearly evinced in the case, which I have narrated as having occurred in my practice, by the pain and tenderness on pressure above the pubes. But I must confess that the profuseness of the hæmorrhage, at this stage of the affection, remains unexplained; nor do I know of any circumstance capable of throwing light on the phenomenon. There was no evidence, at that period, of a growth within the womb; and the pain of the fundus uteri was not felt until after several severe hæmorrhages. If we could suppose that some one or more enlarged and atheromatous vessels had been ruptured by the shock of the patient’s fall, and that the wound, thus occasioned, ulcerated instead of healing, we might, perhaps, explain the history of the case: and, although it is a theoretical, it is the only feasible explanation I am able to give. But, however this may be, there can be no doubt of the reality of the case.

matory action which speedily ensued, and which, though actively treated, terminated in vegetations.

On the other hand, the cauliflower excrescence of Dr. Clarke is seldom accompanied by pain; indeed, I may say, never by pain so severe as that which precedes the formation of vivaces. The former is a still more insidious disease than the latter: and hence Dr. Clarke, in his original paper, lately republished by the Sydenham Society,* informs us that he had never found it less in size than a blackbird's egg.

Another remarkable point of distinction seems to flow from the preceding. It regards the nature of the discharge. That from cauliflower excrescence is generally limpid and watery, hardly soiling the linen, and becomes only occasionally bloody, as at the menstrual periods, which are not often disturbed at the first, or after some violent bodily exertion, capable of breaking the delicate structure of the growth. Whereas, in cases of vivaces, the discharge is either bloody or purulent, and ere long it becomes very fetid; evidently proving the much greater amount of vascular action going on in the latter than in the former instance. The watery discharge from the cauliflower excrescence seems to be a mere mechanical transudation of serous fluid mixed with the increased mucous secretion of the irritated vagina, and sometimes, also, with the cast off cells of the growth itself. In all such cases, too, when hæmorrhage occurs, small brainy masses may be found in the discharge, identical in structure with the cauliflower excrescence. Such hæmorrhage, therefore, is likewise mechanical, flowing from ruptured substance of the growth. But it is far otherwise with vivaces. They often die and come away as putrid matter, but never seem to break from delicacy of structure; and the hæmorrhage in these cases must proceed either from the progress of the original ulcer, or from the smaller vegetations from its surface, which still retain their vascular nature. The longer and more bulky growths are to all appearance *evascular*, being white and spongy, and filled with cheesy substance like concrete pus. For, as I remarked above, the ordinary discharge, in cases of vivaces, is always purulent when it is not bloody; this, of course, arises from the progress of the ulceration; which is continually sustained and prevented from healing by the mass of its own unhealthy vegetations.

This leads me to mention, as a fourth distinction between these two kinds of uterine growth, that vivaces do not shrink in bulk after death, as happens in such a remarkable manner with the cauliflower excrescence from the os uteri. But I regret that, for reasons formerly mentioned, I cannot speak with precision on the minute internal structure of vivaces. If, however, I am warranted in concluding from the history of such cases, especially those points in it to which I have just adverted, that vivaces are nothing more than exaggerated vegetations from an ulcer of the womb, matted together by inflammatory effusions, and perpetuating the morbid lesion from which they originated, then nothing can be more different than their internal structure compared with that of true cauliflower excrescence. For, as I have elsewhere more fully explained (*Edinburgh Monthly Journal of Medicine*, for Nov. 1849), the latter growth consists of a congeries of simple and compound cells, some of which are expanded into delicate bags containing blood-corpuscles. These bags exist chiefly on the margin of the excrescence; and when they burst, they leave the fibrils or hair-like processes, which mark the latest period of its history. It seems to be the peculiar property of these cells to withdraw serum from the blood in the uterine vessels, and to permit its exudation through their walls, thus constituting the greater part of the discharge. But of course this ceases at death; and then the cells collapse, or in other words the excrescence shrinks away. But no such function is performed by vivaces, and no such shrinking occurs in them after death; and therefore I do not think the inference unfair, that no such mechanism exists in them as in the cauliflower excrescence.

* Essay on Diseases peculiar to Women.

I have not hitherto introduced the question, whether or not vivaces are malignant in their nature. The opinion of Levret as to their being incurable, and some of the cases recorded by Herbiniaux and others, would seem to indicate that such really was the case. But I am inclined to think that vivaces may or may not be malignant, according to the character of the ulcer from which they spring. This opinion is founded on that which has already been stated and proved, with such data as I possess, regarding the pathological significance of the vivaces themselves: and I think it unnecessary to enlarge upon this point at any greater length. Suffice it to remark, that on this important feature of the case will depend the prognosis and the treatment.

I do not assert that all cases of malignant disease are incurable, when I say that malignant ulcer of the body of the womb belongs to that category. Its advance is generally considerable before it is clearly diagnosed, and even then it is out of the reach of efficient means of eradication. And when the vivaces have sprung from a non-malignant ulceration, it may still be impossible to root out the morbid parts before the patient's condition has become a hopeless one. In some cases, however, it may be attempted by ligaturing the long vegetations—making the cord cut as well as strangulate the growth,—and then cautiously but effectually applying a caustic substance. I should myself prefer the common caustic, because its action, as well as the bleeding, might be conveniently arrested by injections of vinegar and water. As soon as possible thereafter, alteratives and tonics should be given to change and improve the action of the internal surface of the womb. But I feel that I cannot, with propriety, even attempt to frame directions for the treatment of vivaces; and I therefore leave it to others to draw the practical inferences deducible from the preceding pathological data regarding that very rare but most interesting affection of the uterus.

Glasgow, June 1853.

METHODS OF EXPRESSING THE PHENOMENA OF AUSCULTATION.

By W. O. MARKHAM, M.D., Assistant Physician to St. Mary's Hospital.

NOTHING more fully demonstrates, if any demonstration of the fact were needed, the incompetency and faultiness of our present methods of expressing the phenomena of auscultation, than the circumstance, that each successive writer upon the subject finds himself compelled, as he proceeds in his task, either to criticize, or alter, or entirely renovate the existing nomenclature as it falls into his hands. The particular terms of it fail to express, or express but feebly, his idea, or, perhaps pervert it altogether; or they are made to indicate something very different from their essential meaning. The structure is thus, in his sense, weak, and he endeavours, by patching, to brace it up for his occasions. How comes it that he falls in being more successful than his predecessors?

If our view of the case be correct, there is a radical defect at the very bottom of our present system, inherent in it, and of necessity tainting every part; so that each addition and alteration, which is made in the direction of the original idea which presided at its establishment, is but a conversion or an engrafting of one defect into another. When a superstructure bears marks of weakness, is it unreasonable to suppose that its basis must be at fault? In the matter of auscultation, I believe that the truth of this may be readily shown. On this point, however, I do not wish to linger here, as I intend soon to bring the subject somewhat more fully before the profession. I would, however, venture briefly to suggest as a remedy for the manifest evil referred to, the adoption of a nomenclature founded on the rational system of observing auscultatory signs, which has been promulgated by the modern German school.

I need hardly observe, that our present method of no-

menclature is essentially French; and like the French, it is founded on the supposition, that to each auscultatory sign a distinct pathognomic value should be affixed. The modern German method abhors this idea; it asserts, (and I believe it would be hard to prove the negative of the assertion,) that there are very few, if any, auscultatory signs which are pathognomic of any one particular pathological condition of the internal parts, and of that alone. It is contented to record the sign as it presents itself to the ear, in the plainest and simplest terms. It calls fine bubblings such, not unwarrantably premising them to be the crepitating *râles* of pneumonia, and thereby prejudging and forcing the observer's mind towards, it may be, a faulty diagnosis; the real value of those fine bubblings it seeks elsewhere, extrinsically to the sign itself. Auscultatory signs, after this manner of viewing them, become in the physician's mind the resultants of certain physical causes, of reciprocal actions between fluids and solids, and as such to be calculated and measured according to the ordinary laws of sound, not converted into sure and positive exponents of particular morbid states. The German method takes us as far as physical facts warrant us in advancing; the French leads, and has led us, to a pretence of knowledge far beyond what facts justify us in assuming. The one keeps auscultation in its place, using it as a handmaid to diagnosis; the other makes it a master-key, of itself sufficient to unravel the knowledge of disease.

I am far from assuming that the nomenclature which I here present, in accordance with these principles, is not open to many objections; but of this I feel assured, that the adoption of some similar method will alone enable us to find a way to escape from those errors, which in my belief must of necessity attach themselves to our present system.

PROPOSED METHOD OF AUSCULTATORY NOMENCLATURE.

1. *Respiratory Murmur.*

- a. Vesicular. { Feeble, loud, smooth, coarse, distinct, interrupted, etc.
- b. Bronchial. { Feeble, loud, smooth, coarse, distinct, interrupted, etc.
- c. Respiratory murmur, accompanied by metallic echo or amphoric resonance.
- d. Indeterminate respiratory murmur.

2. *Vocal Resonance.*

- a. Indistinct humming.
- b. Thoracic voice. { Weak.
Loud.
- c. Bleating voice.
- d. Voice accompanied by metallic echo and amphoric resonance.

3. *Dry and Moist Sounds heard during the movements of the Respiratory Organs.*

- a. Dry Sounds. { Hissing.
Whistling.
Sonorous.
Crackling.
Clicking.
Friction.
- b. Moist Sounds. { Fine. } Scant; abundant; accompanied by metallic echo and amphoric resonance.
Small.
Large.
Bubbles. {
Gurgling.
- c. Indeterminate dry and moist sounds.

I shall not entrench on the space of the *ASSOCIATION JOURNAL* by entering into a full explanation and defence of the above terms. To a certain extent they speak for themselves. I know very well that such a nomenclature will find no favour with the admirers of "*ampullæ et sesquipedalia verba*"; and that it may be advantageously modified there can be little doubt; but I maintain that the principle on which it is founded is good, and must sooner or later be generally admitted.

The original communication of Dr. Theophilus Thompson,

which lately appeared in the *ASSOCIATION JOURNAL*, is the cause of my making these observations. It is satisfactory to find that the modern German plan of viewing the phenomena of auscultation is already working its way amongst us, though I cannot congratulate Dr. T. Thompson on his having arrived at any successful application of it; for, by his proposition, much leaven of that faultiness, for which it is substituted as a remedy, is still retained. I am, however, pleased to find an authority like Dr. T. Thompson enforcing the necessity of our coming to some clearer comprehension of this matter; and I am gratified that he should have used as his reasonings for the necessity thereof, the ideas collected together by myself in the preface to a translation of Skoda's work on *Auscultation*, etc. I feel rather anxious to place this last remark upon record, as otherwise it might hereafter seem, and especially to the readers of the proposed paper to which I have alluded, that I had copiously borrowed my reasonings from Dr. T. Thompson.

Clarges Street, Piccadilly, June 3rd, 1868.

OBJECTIONS TO THE USE OF CHLOROFORM.

By SAMUEL BEECROFT, Esq.

SINCE the use of chloroform has become so general, and so much is written in our periodicals in its praise, and so little against its use, I hope that I shall escape the charge of presumption in venturing on the following remarks.

I would first state my doubts of its use being beneficial in any case, when we know that its effect in lulling pain is produced at the expense of the blood being poisoned by the introduction of an excess of carbon; under which state there is great disposition to the production of local congestion. I appeal to common sense, if a patient in this condition and undergoing an operation is so likely to do well, as one in whom it has been the care of the surgeon to keep the blood as healthy as possible.

For my part, I feel sure that convalescence cannot be so certain when chloroform is used, as when the blood is free from its poisonous agency. But some will say, that we have evidence to the contrary in the fact of patients constantly making rapid recoveries when this anæsthetic agent has been used, and I cannot deny that such recoveries do take place. But, we know that a great many would recover if they were rendered insensible with alcohol; but we should not like to risk operating under these circumstances; and we find a great analogy in the action of spirituous drinks and chloroform. Death is produced by large and rapidly administered doses of each; and we find in both instances, after death, the same congestion of vital organs.

I have frequently used chloroform, and I confess that I have never seen it the means of accelerating the convalescence, as is stated by some. How can rendering the blood impure cause a rapid recovery? The supposition is absurd. I have, however, often seen headache, sickness, etc., produced by it for some time after its use; and I have the impression that in some cases I have read, where death has occurred a few days after operating, it might in some measure have been owing to the chloroform.

The last two cases in which I used it were, hydrophobia, and dislocation of the humerus into the axilla of seven weeks standing. In the case of hydrophobia, the patient was certainly quieted by it, but he died in less than twenty-four hours after the first active symptoms of the disease set in; and in all the cases I have read, where it has been used, this disease appears to have run its course very rapidly. In the case of dislocation, although we put the patient in great jeopardy, by the chloroform causing convulsions followed by stupor, under which the muscular system was completely powerless, we yet failed in the reduction; and if I were again to fail after bleeding, etc., in reducing a dislocation, I should have no hope of succeeding with chloroform. I give these two examples, as this agent has been so strongly recommended in the treatment of similar cases.

Having attended a good share of midwifery, and having

been frequently called on by my medical friends to operate, I may be allowed to state that I have never seen one case of labour in which I should desire, or think it right to use chloroform; even when instrumental or other aid was required. I would nearly as soon in natural labour see my patients tipping themselves into patience, as produce this condition by repeated small doses of chloroform.

Although, probably, my opinion is not worth much, as to its use in operative surgery, from the small number of capital operations I have had, yet I do not speak altogether without data; for I have occasionally operated and assisted in operating in cases of hernia, amputations (one at the shoulder joint), lithotomy, etc. I am sure it has been far more satisfactory to me to see patients, although suffering, in their senses, than to be annoyed by constant anxiety lest some untoward circumstance should occur from the chloroform. I also think that the recoveries were rendered more certain by not using it.

I observe that, in the last number of the *ASSOCIATION JOURNAL*, Dr. SNOW writes, with his accustomed ability and moderation, "*On the administration of Chloroform during Parturition.*" He does not, however, conclusively prove to my mind, that the supposed ill effects resulting from the use of chloroform, in the cases which he has been candid enough to bring forward, did not arise from its use. I cannot think that any one can be out of danger, although it may not be perceptible to us, who has inhaled two ounces and a half of the vapour of chloroform. Unfortunately, although, in commencing its administration, we may intend to give small doses only, yet, if the desired effect be not produced, we are apt to go on until sufficient has been used to become dangerous.

With respect to the action on the foetus, of chloroform inhaled by the mother, most writers agree that the child is influenced by it. If this opinion be correct, another objection arises against its use; for assuredly we have no right to run the risk of permanently injuring the offspring, that we may relieve the temporary sufferings of the mother.

Hyde, near Manchester, June 6th, 1853.

BIBLIOGRAPHICAL NOTICES.

THE PROGRESS OF IMPROVEMENT IN THE TREATMENT OF CONSUMPTION AND OTHER PULMONARY AND LARYNGEAL DISEASES. By JAMES TURNBULL, M.D., Physician to the Liverpool Royal Infirmary. pp. 74. London: 1853.

THE MEDICATION OF THE LARYNX AND TRACHEA. By S. SCOTT ALISON, M.D. pp. 49. London: 1853.

UPON few subjects in medicine has the opinion of the profession undergone greater change, within a very limited time, than upon the medical treatment of consumption. A few years ago, this disease was regarded as a hopeless—a necessarily fatal one. The steady advance of what may be termed rational medicine, has, however, sufficiently proved that, in phthisical cases not a few, our art is not altogether fruitless; that, in some instances, even a cure is possible; whilst, in many, urgent symptoms may be arrested, and the patient, for a time at least, restored to comparative health. In the treatise before us Dr. TURNBULL seeks to place such a conclusion upon a permanent basis, by recording from his own practice the histories of a number of consumptive cases, which were more or less benefited by remedial agents.

Cod-liver oil, tar-water, creasote, naphtha, and the seeds of *annanthe phellandrium*, were severally used by the author in the treatment of his patients. The oil, however, seems to have been his chief remedy; the rest having proved themselves inoperative upon the primary disease, and capable only of relieving some of its symptoms.

After carefully perusing Dr. Turnbull's cases, we consider that, although illustrating no new principle of treatment, they afford additional proof that much may be effected, even under circumstances apparently most unpropitious, by the

judicious combination of hygiene and medicine. "It is," observes the author, "in the early stage of consumption that most can be done to avert the disease." This opinion is contrary to that of the illustrious Laennec, but it is one upon which all modern authors seem to have agreed.

After a brief advocacy of topical medication of the larynx, and a chapter containing practical suggestions on the "Employment of Inhalations in Consumption and other Pulmonary Diseases", the author concludes his valuable report with some judicious remarks upon the hygienic and dietetic treatment of phthisis. He proposes as an article of diet for the consumptive invalid, a much wasted and hitherto untried substance—sugar of milk.

In the other little work before us, the author commends to the still further use of the profession, the now rapidly increasing practice of applying nitrate of silver to the interior of the vocal organs; and records in an instructive manner his own observations upon a similar use of other substances, such as olive oil, glycerine, cod-liver oil, mucilage, and morphia.

Sir Charles Bell* was the first who ventured to apply the nitrate of silver to the laryngeal mucous membrane. The practice was followed up by the late Mr. Vance and others, but was never extensively adopted, until Dr. Horace Green, of New York, proved to the profession both its practicability and its safety. It has long been employed as an auxiliary to other treatment by some of the physicians of the Consumption Hospital at Brompton; and many practitioners are gradually becoming converts to its employment.

Although we are not disposed to question the possibility of the operation, we cannot help thinking that Dr. SCOTT ALISON has scarcely placed its performance in a proper light. He tells us, "the moment I find the ribs begin to rise in the inspiratory act, that moment I introduce the sponge into the mouth, and, clearing the tongue, at once pass it with the greatest facility through the glottis down into the larynx, and, if need be, into the trachea, and then immediately withdraw it". Without doubting the author's success in this particular, we should quake for the result, were many of his readers to venture thus unceremoniously to treat their patients. The sensibility of the glottis, like that of other organs, varies of course in different persons: in a few, perhaps, the sponge may be at once introduced; but, in others—and these the great majority, we are satisfied, from some experience in the matter, that it cannot. Dr. Horace Green, and, we believe, most of his disciples, advise that the larynx should be *gradually* approached, and thus become accustomed to the presence of the irritant. With this view they recommend the first, or the second, or even sometimes the third application to be limited to the external parts of the laryngeal opening; and that the introduction of the sponge into the larynx itself should be reserved for a future operation. A soft brush liberally supplied with the caustic solution, and rapidly passed around the pharynx, answers this purpose admirably. On one occasion, where some such preparatory treatment had not been adopted, we witnessed extreme and alarming distress on the part of the patient. Not unfrequently there are certain mechanical difficulties attending the operation. The tongue, in many persons, is very thick and large at its base, and so conceals the epiglottis, that the passage of the instrument is uncertain, and in some few cases, perhaps, almost impossible. We have found, as a general rule, that, unless the epiglottis can be fairly brought into view, and drawn a little forwards by depressing the tongue, the passage of the sponge is very difficult to accomplish. For this reason, we think that the practice recommended by Dr. S. Alison, of using no tongue-depressor, but simply of directing the patient to inspire deeply, will never be generally adopted.

We have ventured these few remarks from a sense of duty, lest the success which has attended the author's mode of operating should lead others either into rash practice, or, into complete scepticism, from disappointment at the results.

* Institutes of Surgery.

Hitherto, we believe, no other agent than nitrate of silver has been applied to the larynx. The profession is therefore indebted to Dr. S. Alison for his experiments on the use of other substances. In many instances, much good is effected by the mere presence of the sponge itself, quite independent of any medicinal application. Thick mucus may thus be removed from the glottis, and the respiration of the patient materially facilitated. Yet it is reasonable to suppose that the parts lower down may oftentimes be either stimulated or soothed, with no little advantage, by the judicious use of topical remedies. We hope that the success which has attended Dr. Scott Alison's experiments in this particular may be equalled by that of others, who may be tempted to follow him in his practice.

THE SUBJECT-MATTER OF A COURSE OF SIX LECTURES ON THE NON-METALLIC ELEMENTS. By PROFESSOR FARADAY. Arranged, by permission, from the Lecturer's Notes, lent for the occasion. By J. SCOFFERN, M.B., etc. etc. pp. 293. London: 1853.

We have here a revised reprint of a series of Lectures which appeared in *The Chemical Record* towards the end of its short career; a journal which, at one time, had our best wishes for its success, on account of the extent of its foreign scientific intelligence, and the rapidity with which it was presented to the English reader—qualities which, had they been but persevered in, would, we think, have soon procured for that journal a permanent and gradually increasing body of subscribers.

We gather from the preface, what indeed remains very evident in the body of the treatise, that the notes of Dr. FARADAY have been "expanded" by the editor, serving, in many cases, as texts for him to discourse upon; so that the lecturer's share of the work has been confined to handing over his lecture-notes to the editor, with permission to amplify and otherwise adapt them for publication. Should the great Electrician ever run his eye over the pages before us, he will, we opine, be made more chary of granting such permission for the future.

We have seldom met with a book in which the claims to praise and blame have been more equally balanced. It merits both—and both in no small measure. We may safely assume, although there are no sign-posts of type set up to distinguish the original from the "expanded" matter, that the "General Introduction" is wholly from the pen of Dr. SCOFFERN. Whether this introduction is written for the tyro or for the advanced student, we are unable to determine, it being in many parts so simple and elementary as to be readily comprehended by one previously unacquainted with chemistry, sketching in a pleasant, easy style the progress of the science from its earliest dawn to the present day, whilst the descriptions are conveyed in unstilted and even elegant language; qualities so rare in books of a scientific nature, as to lend a double zest to its perusal. Dr. Scoffern fairly carries his pleased reader along with him, until the two stumble on such a section as that devoted to the Atomic Theory and the doctrine of Atomic Volume. This section, as well as that on Chemical Symbols and Notation, will, we suspect, effectually puzzle students, unless they be already familiar with these subjects; a class of readers for whom we do not gather this book to have been especially intended.

This occasional obscurity of expression arises, it seems to us, from the editor not having thoroughly imbued himself with that special characteristic of Faraday's method of teaching, so constantly displayed whenever he lectures; viz., the habitual and anxious care to thoroughly develop the principles of the subject in hand, and to clear the ground before him; never ascending to recondite science until he has explained, in apt and easily understood language, the elementary laws on which his deductions and discoveries are founded. This advantage—a vast one—the listener to these lectures has enjoyed over him who shall now sit down to a perusal of them; since we are well assured, from our knowledge of this admirable custom of the pro-

fessor, that the former had patiently expounded to him whatever was requisite for him to be acquainted with to enable him to grasp the lecturer's meaning; whilst the reader's knowledge and familiarity with technical terms is far too much taken for granted, in this endeavour to enable him to surmount the difficulties of the somewhat abstruse doctrines of atomic weight and volume—doctrines which, in our experience, so frequently prove the *pons asinorum* of the chemical student.

This difficulty in the book before us is needlessly aggravated by carelessness in correcting the press, "weight" being confused with and used instead of "volume", in page 34. This is not, we regret to say, the sole instance of important errors of this nature, which, unchecked as they are by any table of errata, so far as we have been able to find, must greatly mystify and confuse the student. One more instance of similar carelessness and we are quit of our duty in this matter. In page 57, describing the modes of preparing oxygen gas, the following occurs, to fathom the meaning of which will defy an adept, let alone a student:—"Process II. By exposing to a red-heat binoxide or peroxide of manganese in an iron retort. Theory of the process: *Manganese in acid, to its acid combinations, forms with oxygen three oxides, viz.—*

	Manganese Equivalents.		Parts by Weight.	
	Ma.	Ox.	Ma.	Ox.
Protoxide of Manganese	1	1	28	8
Sesquioxide of Manganese	1	1½	28	12
Binoxide, or Peroxide of Manganese	1	2	28	16

In the binoxide, half an equivalent of oxygen is so loosely combined, that it is evolved on the application of heat, and sesquioxide of manganese remains." The italics are our own. Over leaf, under "Process III", the details given of the decomposition are utterly irreconcilable with the diagram subjoined, which evidently belongs to, and was intended to illustrate, "Process II".

Having discharged our conscience in this matter—for we are free to confess that we could not see errors in print of this nature connected with and in some measure sanctioned by the name of Faraday, without protest—we may revert to a far pleasanter theme—the merits of this book; and these are neither few nor common. The style we have already alluded to; and we can well believe that Dr. Scoffern has, in numerous instances, succeeded in catching the very expressions which fell from the lips of this most winning and instructive of living scientific lecturers; one who combines the rare gifts of power to divine and elucidate the hidden laws of nature, with the ability of expressing both these laws and the phenomena to which they give rise, in language no less felicitous than are the experiments by which they are illustrated.

The first lecture, that on oxygen gas, would require to be quoted entire, to enable our readers to appreciate the mode in which the attention may be riveted by a scientific exposition, without producing any sensation of weariness or difficulty to the student. In our judgment, this book conveys (apart from the blemishes alluded to) a greater amount of information respecting the non-metallic elements, imparted in language so simple and comprehensible as greatly to aid memory in her task and to make this study easy and agreeable, than any treatise we have met with; and could Dr. Scoffern contrive to remedy the carelessness we complain of in the present, or issue another and corrected edition, we do not know a book on the subject we should more heartily recommend than these "Faraday Lectures".

REMARKS ON HYSTERIA, IN CONNEXION WITH HYDROPHOBIA, AND OTHER CONVULSIVE AFFECTIONS. By JOHN DALZIEL, M.D. pp. 32. Edinburgh: 1853.

DR. DALZIEL states, that an outline of his pamphlet was published in the old *Glasgow Medical Journal* upwards of twenty years ago; and that the original is now reproduced to show the coincidence between his views and those of

Dr. Marshall Hall, which he believes to form a strong *a priori* argument in favour of their truth.

The author's views are briefly explained in the following propositions:—

"I. That the globus hystericus, as well as the similar affection of the throat in hydrophobia, occasioned by the idea, etc., of liquids, is a spasmodic stricture of the muscles of the throat (glottis), whereby respiration is obstructed.

"II. That obstructed respiration, whether suspended or impeded, occasions cerebral congestion, as well as that feeling of general uneasiness, designated sensation of suffocation, which attends the paroxysmal exacerbation in both the diseases under consideration; and III. That cerebral congestion, and the sensation of suffocation, separately or conjointly, may, especially in an irritable habit, occasion convulsion.

"Admitting the truth of these propositions, it naturally follows that, as a palliative measure in the treatment of hydrophobia, the operation of bronchotomy might be expected to ward off, or at least abate the violence of the convulsive paroxysm. And there are other consequences (afterwards to be noticed) equally, or still more injurious, which this measure would tend directly to obviate."

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

CHLORIDE OF BARIUM IN CUTANEOUS ERUPTIONS.

VARIOUS abnormal conditions of the system, accompanied by cutaneous eruptions, are treated in France by a nostrum bearing the name of *Lanth's Mixture*; which owes its medicinal properties chiefly to chloride of barium. We are not aware of any special advantages which chloride of barium possesses over arsenious acid in combination with potash or soda. The therapeutical results are very similar, as are also the poisonous effects of overdoses. Both are active poisons, and must therefore be prescribed and administered with great caution. Lanth's mixture is composed of

Chloride of Barium, three and a half grains;
Whyt's Stomachic Tincture, one ounce; and
Distilled Water, three ounces.

Whyt's stomachic tincture is prepared as follows:—Take three ounces of yellow bark; of gentian root and of orange peel each one ounce. Macerate these ingredients in a pint and a half of rectified spirit, with half a pint of cinnamon water.

In the London Pharmacopœia, we have the liquor barii chloridi, which is a solution of one drachm of chloride of barium in one ounce of distilled water. The dose is from five to ten drops, cautiously increased till giddiness or nausea are produced, when the dose must be diminished, or, if the symptoms be severe, the use of the medicine must be discontinued for a few days.

CHLORIDE OF BARIUM FOR THE PRESERVATION OF ANIMAL SUBSTANCES.

In connection with the above paragraph, it is not out of place to refer to a paper by M. BLAUDET, in the *Comptes Rendus*, of which the *Annals of Pharmacy* thus speaks:—

"It is well known that hyposulphate of soda and chloride of zinc have been used for injecting dead bodies. The author has poured blood into concentrated solutions of both these salts. In the course of fourteen days, with hyposulphate of soda, the blood was fluid and black, but decomposed. The chloride of zinc had precipitated the blood. The author then tried chloride of barium, and found that this salt prevented putrefaction, and preserved the blood in a fluid state. He believes that it can be applied for injecting dead bodies when it is desirable to retain their living appearances, because it hinders the putrefaction of the blood."

TRISNITRATE OF BISMUTH ADULTERATED WITH ARSENIC.

This medicine, so valuable in many forms of dyspepsia and diarrhoea, is often so carelessly prepared as to contain a quantity of arsenic more than sufficient to interfere with its therapeutic action, and to produce most unpleasant consequences.

The *Annals of Pharmacy* (January, p. 23) quotes the following remarks of M. Cornut, who has followed up the researches of M. Lassaigne:—"The bismuth commonly employed in the preparation of the trisnitrate of bismuth, contains a notable quantity of arsenic, and, to obtain a pure product, it is indispensable that the metal should be submitted to the process of roasting; and yet the manufacturers frequently neglect to perform this operation. For this reason, he thinks that the pharmacist should never dispense this substance without having first tested it, and especially when it is prescribed in large doses. He gives a process, at once simple and easy, for detecting arsenic. Moisten half a drachm of the trisnitrate of bismuth with a sufficient quantity of pure sulphuric acid, evaporate to dryness in a small porcelain capsule, wash the residue with a little distilled water, filter, and put into a Marsh's apparatus. A very simple one may be constructed, by passing a tube, drawn out to a point at one end, through the cork of a four or five-ounce bottle. Care must be taken to use materials of absolute purity, and not to apply the light too soon, or an explosion may take place."

BALSAM OF TOLU ADULTERATED WITH COMMON RESIN.

To detect this frequent adulteration, ULEX pours sulphuric acid on the balsam, and heats the mixture, when the balsam dissolves to a cherry-red fluid, without evolving sulphurous acid, but with the escape of benzoic or cinnamic acid, if no common resin is present. On the contrary, the balsam foams, blackens, and much sulphurous acid is set free, if it is adulterated with common resin.

CANE SUGAR SYRUP ADULTERATED WITH STARCH SUGAR SYRUP.

SOUBARAN shows, in the *Journal de Pharmacie*, that, by attending to the behaviour of sugar with caustic potash, and of dextrine with iodine and with alcohol, this adulteration can be detected. Cane sugar syrup does not change its colour when boiled with caustic potash: grape sugar syrup is blackened by the same treatment. When the syrup is reddened by adding a few drops of iodide of potassium containing a little free iodine, it contains dextrine. If the syrup becomes milky when shaken with twice its volume of alcohol, and deposits after some time a thick mass, then also the presence of dextrine is indicated.

TANNIC ACID A TEST FOR SULPHATE OF QUININE IN THE URINE.

Seven hours after sulphate of quinine has been administered to a patient, Dr. VIALE (*Journal de Pharmacie*) has been able to detect it in the urine by means of tannic acid. He has also detected it two days after it had been taken. Upon adding the tannic acid to the urine, an insoluble precipitate is formed, white with a greenish tinge. This precipitate ought to be first collected on a filter, and treated with boiling alcohol; then the alcoholic solution has to be filtered, and mixed with chlorine, and afterwards with ammonia: all the reactions characteristic of tannate of quinine can then be obtained.

TANNATE OF QUININE AND TANNATE OF CINCHONINE.

These vegetable alkaloids are at present attracting attention in France. They are described as being less unpleasantly bitter, and as equal or superior in therapeutic power, to the common preparations of quinine and cinchonine. M. BARRESWILL, communicated last year to the Academy of Medicine in Paris the processes by which he obtained these tannates: and Buchner, a German pharmacologist, describes an extremely simple method of manufacturing tannate of quinine, which is given as follows in the *Annals of Pharmacy* for June 1853, p. 160:—

"Cinchona bark, roughly powdered, is to be treated with six times its weight of common or household vinegar. After it has macerated during twenty-four hours, it is boiled, then decanted, and the residue is treated afresh with more vinegar. These several decoctions are to be mixed together, and filtered when perfectly cold; and to them is to be added an infusion of gall-nuts so long as a precipitate is formed. This precipitate is to be collected on a filter, to be then washed, and lastly, to be carefully dried.

"Although the tannate of quinine prepared in this manner is not absolutely pure, and therefore requires to be given in larger doses than the sulphate of quinine; yet Buchner considered this preparation as particularly to be recommended, both on account

of its cheapness in comparison with the more expensive drug, sulphate of quinine, and also from the simplicity of its manufacture, on account of the facility with which it may be prepared in almost all pharmaceutical establishments."

DISULPHATE OF QUININE WITH INFUSION OF ROSES.

The prescriber often orders disulphate of quinine with infusion of roses, and the dispenser knows how unsightly a mixture results from the combination, when he uses an infusion prepared according to the London Pharmacopœia. Mr. W. PLACE makes the following observations on this subject in the *Annals of Pharmacy* for April, p. 123:—

"Four fluid ounces of the infusion (according to the P. L.) on addition of disulph. quine, with about three drachms of tinctures, formed sometimes a slightly cloudy, and at other times a cloudy mixture, which became decomposed in a few days. The same ingredients, with the infusion prepared as below, formed a beautiful mixture, perfectly clear, and continued so, though made up repeatedly, upwards of two months without any decomposition whatever, and *always with the same result*."

"Pour boiling water on the petals, in a vessel previously warmed by being rinsed with hot water: let it macerate one hour, then add the acid, let it stand one or two minutes, stirring once to diffuse the acid, straining and adding the sugar, and use the warm infusion immediately. If the infusion be used cold, it will not be so satisfactory."

RAW MEAT AND RECENT BLOOD AS THERAPEUTIC AGENTS.

In the diarrhoea of young children, connected with anæmia, M. TROUSSEAU prescribes raw meat finely chopped and slightly salted. He attributes the medicinal properties of raw meat to the iron and manganese contained in the fresh blood. The *Presse Médicale Belge* says, that in Belgium it is a common custom, in some diseases, to drink bullock's blood in the morning before breakfast, while still hot, in increasing doses. Persons suffering from hæmoptysis, and exhausted by hæmorrhage, are said to rally rapidly by taking every morning half a pint of blood in the slaughter-house, before it cools. It is said that children take the blood readily; but that adults loathe it.

VESICATING OIL.

The *New York Journal of Pharmacy* (Feb. 1853) states, that the solubility of cantharidin in chloroform, suggested to Professor W. PROCTER the idea of using chloroform in combination with a fixed oil to obtain a convenient vesicating agent. He gives the following formula:—

Cantharides, in powder, one part.

Chloroform and

Castor oil, of each one and a half parts by weight.

Add the powdered cantharides to the mixture of chloroform and oil in a close vessel; after some hours, transfer the ingredients to a glass apparatus and displace in the usual way. The liquid is thus reduced to about two-thirds of its original bulk. A few drops of the vesicating oil so obtained will blister the skin to which it is applied in about eight hours. By placing oiled silk over the part on which the vesicating oil has been applied, the moisture of the skin is retained, and a blister more speedily obtained.

We have found that an ethereal solution of cantharidin acts much more rapidly than Professor Procter's oil; and that in less than one hour a good blister can be got by using it with the oiled silk as above described.

PRESERVATION OF IODIDE OF IRON.

The iodide of iron, as will appear probable from the sequel, is often administered in quantities which are inconstant and much too small to produce the desired effects.

One method, extensively employed, of preserving iodide of iron for use in medicine, is in the form of an aqueous solution in which a coil of iron wire is kept immersed. This method is given by Pereira. Pereira also remarks, that it is important to know, that by keeping a coil of iron wire in a solution of the protiodide, no free iodine or sesquiodide of iron is formed, although the liquid may be fully exposed to air and light; sesquiodide of iron is formed, but if the solution be filtered it is found to contain protiodide only.

In the *New York Journal of Pharmacy*, Mr. H. WURTZ shows that there is a formation of a subiodide of iron, and consequent abstraction of iodine from the solution. Pieces of iron wire

placed in contact with a colourless solution of iodide of iron, caused, in the course of a few hours, the deposition of a precipitate, which had a dark orange colour quite distinct from the dark brown colour of hydrated sesquioxide of iron precipitated from a solution of the protochloride of iron by metallic iron. This precipitate being washed with distilled water until the washings gave no indication of the presence of iron, was still found to contain much iodine. No quantitative analysis of the precipitate, however, was attempted, for it was found that the washings, which no longer contained a trace of iron, still gave, with nitric acid and starch, a strong iodine reaction, thus indicating that the subiodide of iron upon the filter, whatever its composition, was decomposed by the action of water and oxygen as soon as the neutral iodide of iron was washed out. This is probably the reason why previous observers have mistaken this precipitate for pure sesquioxide of iron, having continued washing the precipitate until the washing gave no longer an iodine reaction, instead of an iron reaction as in the plan adopted by me, and consequently, until all the subiodide of iron was decomposed, and nothing but sesquioxide of iron was actually left upon the filter. The washings, however, after the removal of the iodide of iron, gave no iodine reaction with starch until after the addition of nitric acid; iodine, therefore, could only have been present in the form of hydriodic acid.

After the above experiments were made, Mr. Wurtz found that he had merely been confirming an observation of the illustrious Berzelius. *Gmelin's Handbuch*, under the head of "Iodide of Iron", has the following:—"According to Berzelius, the brown powder, which is deposited upon exposure of aqueous protiodide of iron to the air, is not pure sesquioxide of iron, but a basic salt." It appears, therefore, that the method of preserving iodide of iron in solution, in contact with metallic iron, is perfectly fallacious. This remedy, if preserved in solution at all, should be kept in bottles hermetically closed.

DELICATE TEST FOR IODINE: HOW TO DETECT A MILLIONTH OF IODIDE OF POTASSIUM.

Comparative experiments have convinced Dr. A. OVERBECK that the following method for detecting iodine is the most delicate of any yet known:—

Some starch or sugar is poured into a test-tube with concentrated nitric acid, and heated over a spirit lamp very gently until a violent evolution of gas ensues. The spirit lamp is then removed, and the gas, which evolves without a continuation of the heat, is conducted into the fluid to be tested, to which a solution of starch has been added. If the fluid contains only a millionth of iodide of potassium, a blue coloration directly results. By a farther introduction of the gas, the iodide of starch precipitates in flocks, and deposits itself, when at rest, as a compact massy precipitate. In this way iodine was detected in many plants, particularly in the ashes of several ranunculuses.

NEW FORMS OF OLD PURGATIVES.

We advise our readers to use the following new forms of old purgatives:—

1. RESIN OF SCAMMONY. Its purity can be easily tested by its perfect solubility in alcohol. This tasteless medicine is taken very nicely by infants, if well rubbed up with milk. The dose for an infant is one or two grains—for an adult five or six grains.

2. JALAPINE. Dose from one to two grains. It ought not to be given alone.

3. ALOETINE. Dose from one to two grains. In ordinary constipation we find that a pill composed of one grain of jalapine, one grain of aloetine, and one grain of extract of ginger is generally efficacious. This small pill usually acts abundantly, and without griping.

4. CATHARTINE. One or two grains purge well, and seldom gripe. Cathartine is procured from the unripe berries of the *Rhamnus Catharticus*.

LEMON JUICE IN RHEUMATISM.

Dr. OWEN REES restates, in the *Medical Times* for June 11th, his views regarding the use of lemon-juice in rheumatism. He says that it is an antidote to the true rheumatic diathesis; and that the cases in which it fails are those in which there are complications and pathological differences. He states that the favourable action of lemon-juice is interfered with in acute rheumatism by, 1. Syphilitic rheumatism. 2. Gonorrhœal rheumatism. 3. A pseudo-rheumatic affection, occurring in connexion with purulent discharges not necessarily gonorrhœal. The more chronic cases of true rheumatism are less likely to yield to this remedy.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

JUNE 6TH, 1853.

DR. BABINGTON, President, in the Chair.

THE QUARANTINE LAWS. BY GAVIN MILROY, M.D.

DR. GAVIN MILROY read an elaborate paper on the value of quarantine in the British ports since the beginning of the present century. After showing that the subject of quarantine had not been studied or written upon in a careful, extensive, and unbiassed manner, he observed that he discussed the question of quarantine in reference to plague, yellow fever, and cholera. He then gave, at great length, numerous examples in which the strictest quarantine, carried out in insulated places, had failed in checking the progress of those diseases. He remarked that until the question of the value of quarantine has been settled in a satisfactory manner by the medical profession, a great duty which the profession owes to the world, and which it alone can perform, remains unfulfilled.

DR. McWILLIAM said that the mode of introduction of the plague into Malta, in 1813, to which Dr. Milroy had referred, was obscure, but that the after course of the disease was obvious. The woman who waited on the first patient was a schoolmistress. She fell a sufferer, and from the children under her care the disease radiated. He instanced cases where a strict quarantine had kept out plague, and concluded by remarking that an American conference lately held at New York, and a similar conference held at Paris, had each recommended a system of moderate quarantine.

MR. RICHARDSON had understood Dr. Milroy to say, that the plague was propagated in the same way as typhus fever. He would like to ask Dr. Milroy what his opinion might be as to the manner in which typhus fever was propagated? Mr. R. would also inquire if Dr. McWilliam did not think that the American and French conferences had come to the resolution of recommending quarantine, from a feeling that the evidence for and against the measure was most conflicting, and that to recommend the continuance of the measure, was to err on the safer side, rather than from a decided opinion that quarantine was absolutely necessary?

DR. MILROY considered that typhus fever did not spread from direct contact, but from the inhalation of matters given off from the fever patient. In this way he supposed that plague also spread.

DR. McWILLIAM said, that whatever might be the feeling of the French conference, he was sure that the continuance of quarantine was contrary to the genius of the American people, who would not be actuated by any such feeling as that suggested by Mr. Richardson.

DR. JAMES BIRD was of opinion that the question of the origin of the diseases to which Dr. Milroy had called attention, was different from the question of the diffusion of those diseases after they had arisen. This point should always be kept in mind in discussions on quarantine.

MR. LORD believed that quarantine was positively useless. He thought that yellow fever and typhus fever were the same diseases, only modified in character by climate. He instanced several illustrations in which contact had not given rise to plague. Napoleon had once led his army over a plague district, and in order to supply his men with better clothes, had had the bodies of persons who had died with the plague exhumed, and had given the clothes from those bodies to his soldiers, who wore them without being affected. After giving several similar instances, he sat down, remarking that he was glad to see that Dr. Milroy wished for the abolition of quarantine, and hoping that the Society generally would express a similar opinion.

DR. MILROY explained, that he contended for a further investigation into the value of quarantine, and for a modification of it—not for its abolition.

DR. CAMPS would not abolish quarantine, but have a proper value attached to it. He hoped it would not go abroad, that the Society was of opinion that quarantine ought to be abolished.

MR. HUNT was confident that quarantine is not a certain protection against the spread of disease; but thought that more evidence on the subject was necessary before one could assert that the abolition of the system was necessary.

THE PRESIDENT had seen instances in which quarantine had seemed to prevent the spread of plague. A ship containing three patients with plague, had been forbidden entrance into

the harbour of an island in the Levant, on which he was staying. No person on the island took the disease. But the same ship went on to the island of Mitylene, was received into harbour there, and straightway plague commenced in Mitylene, and committed fearful ravages. He also knew of a convent in Cairo which escaped a surrounding plague, from the strict quarantine kept up by the monks. Moreover, nothing could illustrate the spread of the plague by intercourse better than the historical fact, that Mehemet Ali's army carried and diffused the disease through every country into which it passed.

DR. MILROY, in reply, said that he wished in his paper to illustrate the value of quarantine. He himself did not know of one instance in which it had prevented the spread of either plague, yellow fever, or cholera. He hoped that if any member of the Society could bring forward marked instances to the contrary, that that member would do so in a special paper.

ASSOCIATION INTELLIGENCE.

MIDLAND COUNTIES BRANCH.

The Annual Meeting of the Midland Branch of the Provincial Medical and Surgical Association, which now comprehends Leicestershire, Derbyshire, Nottinghamshire, and Lincolnshire, was held at the Town Museum, Leicester, on June 2nd, under the presidency of Thomas Paget, Esq. There were also present, J. Barclay, M.D. (Leicester); T. W. Benfield, Esq. (Leicester); W. Birdsall, Esq. (Northampton); C. Bowmar, Esq. (Leicester); J. Buck, Esq. (Leicester); W. Cantrell, Esq. (Wirksworth); A. Cooper, Esq. (Leicester); J. Crossley, Esq. (Leicester); W. Derington, Esq. (Leicester); B. Eddison, Esq. (Nottingham); S. H. Evans, Esq. (Derby); S. W. Fearn, Esq. (Derby); W. J. Franks, Esq. (Billesdon); F. Fullagar, Esq. (Leicester); William Gill, M.D. (Nottingham); H. Goode, M.D. (Derby); John Hitchman, M.D. (Derby); J. Hollings, Esq. (Leicester); J. Hunt, Esq. (Thornby); S. Hunt, Esq. (Loughborough); E. Ingram, Esq. (Boston); W. C. Irwin, M.D. (Leicester); P. A. Jackson, Esq. (Leicester); John Johnson, M.D. (Derby); J. Jones, Esq. (Derby); J. Kcal, Esq. (Melton); T. Macanlay, Esq. (Leicester); John Marriott, Esq. (Kibworth); J. C. Marsh, Esq. (Nottingham); W. May, Esq. (Leicester); Edwin Morris, M.D. (Spalding); G. B. Norman, Esq. (Ilkeston); E. Paget, Esq. (Leicester); J. Palmer, Esq. (Loughborough); T. Paterson, Esq. (Ibstock); W. H. Ransom, M.D. (Nottingham); J. C. Robinson, Esq. (Syston); G. Shaw, M.D. (Leicester); J. H. Spencer, Esq. (Hallaton); J. H. Stallard, Esq. (Leicester); G. Stanger, Esq. (Nottingham); F. Stevenson, Esq. (Loughborough); E. Welchman, Esq. (Southam); R. Whitchurch, Esq. (Melton); Joseph White, Esq. (Nottingham); J. C. Williams, M.D. (Nottingham, Retiring President); G. W. Wood, Esq. (Woodhouse-Eaves); S. Wright, Esq. (Mountsorrel); T. Wright, Esq. (Nottingham).

GENERAL BUSINESS.

DR. WILLIAMS, of Nottingham, took the chair at two o'clock, and immediately resigned it to his successor, THOS. PAGET, Esq., of Leicester, who begged, before taking it, to be allowed to move a vote of thanks to the retiring President, which was carried by acclamation, and acknowledged by Dr. Williams. The President then read an address, in which he touched on most of the interesting medical topics of the day.

While the routine business of the meeting was being transacted, a large number of the members left to visit the extensive works of Mr. Wicksteed, the engineer, who has undertaken the task of deodorising and rendering useful for agriculture the whole sewage of the town of Leicester. This was to be the subject of a paper by Mr. Buck.

REPORT OF THE COUNCIL.

The Report of the Council was then read, and, on the motion of C. W. Wood, Esq., of Woodhouse-Eaves, seconded by Dr. MORRIS, of Spalding, was adopted by the meeting. It congratulated the members on the success which has hitherto attended their meetings, and on the large accession of members during the past year—twenty-eight from Leicestershire, five from Nottingham, one from Lincolnshire, and one from Derbyshire. The following papers have been read at the various meetings:—

On an Instrument for Extracting Foreign Bodies from the Bronchi. By Mr. FEARN, of Derby.

On a Case of Tumour of the Male Breast. By Mr. SYMPSON, of Lincoln.

On the Medical Topography of Nottingham. By Mr. Jos. WHITE, of Nottingham.

On Intestinal Obstructions. By Mr. BROWN, of Wymeswold. (This paper was published, as an original communication, in the ASSOCIATION JOURNAL for February 11th, 1853.)

On the Comparative Value of several Forms of Galvanic Battery which have been recently used for Medical Purposes. By Dr. RANSOM, of Nottingham.

On a Case of Cystic Oxide Calculus. By Mr. STANGER, of Nottingham.

On two Cases of Cataract, as illustrating the Relative Advantages of the Operations for Extraction and Depression. By Mr. MARSH, of Nottingham.

On Erysipelas as a Local Disease. By Mr. HIGGINBOTTOM, F.R.S., of Nottingham. (This paper was published, as an original communication, in the JOURNAL for April 1st.)

NEW MEMBERS.

The following new members were proposed, and unanimously elected:—Nathaniel Whitchurch, Esq., Melton Mowbray; Thos. Macaulay, Esq., Leicester; and James Snow, Esq., Lincoln.

ELECTION OF OFFICERS.

Dr. MORRIS, of Spalding, moved, and E. INGRAM, Esq., of Boston, seconded,—

"That JAMES SNOW, Esq., of Lincoln, be President Elect for next year; and that the next annual meeting be held at Lincoln."

The resolution was carried unanimously.

The various Secretaries were then re-elected, and a vote of thanks passed to them.

INCREASE OF MEMBERS.

In acknowledging the vote of thanks, Dr. Barclay, the Leicestershire Secretary, said he had written nearly eighty letters to medical men in the neighbourhood, twenty-three of whom had declined, thirty-one had joined the Association, and twenty-eight had strangely not sent any reply. He also stated, that the number of members in Leicestershire last year was fourteen, and that it was now increased to forty-five.

CASES AND COMMUNICATIONS READ.

Dr. MORRIS, of Spalding, then read an interesting case of "Medullary Sarcoma in the Pelvis".

JOHN BUCK, Esq., of Leicester, read a paper on "A New System of Deodorising Town Sewage, at present being carried out on a large scale in Leicester".

Dr. RANSOM, of Nottingham, read a paper on "The Pathological Value of the Occurrence of Sarcina in Vomited Matters".

THE DINNER.

At 5 o'clock, the members dined together at the Bell Hotel, nearly sixty being present. The President was supported on the right by His Grace the Duke of Rutland, who, being in Leicester as colonel of his regiment of Militia, was the guest of the President, along with the Rev. E. T. Vaughan, Vicar of St. Martin's, Lieutenant-Colonel King, J. F. Hollings, Esq., S. Stone, Esq., and F. Wicksteed, Esq. Letters of apology were read from the Most Noble the Marquis of Granby; Sir H. Halford, Bart.; Sir A. Hazlerigg, Bart., etc.

After the usual loyal toasts,—the Rev. E. T. Vaughan replying for the "Bishop and Clergy", and the Duke of Rutland for the "Army and Navy",—the President gave "The Lord-Lieutenant of the County", which was drunk heartily with all the honours, and feelingly responded to by His Grace; who, in reply, proposed "Success to the Provincial Medical and Surgical Association, and the health of Thomas Paget, Esq., President of the Midland Branch". Then followed, "The ex-President—Dr. Williams"; "The President-elect—James Snow, Esq."; "The County Magistracy and Lieutenant-Colonel King"; "The Mayor and Magistrates, and T. Macaulay, Esq."; "The Gentlemen who have read papers, and Mr. Buck"; "F. Wicksteed, Esq."; "The Local Secretaries, and Dr. Barclay"; "The Infirmary, and other Medical Charities"; "Dr. Shaw"; "The Literary and Philosophical Society, and its President—J. H. Stallard, Esq."; "The Mechanics' Institute, and J. F. Hollings, Esq."

Owing to the distance that many members had to travel, the party broke up early, after a most pleasant evening, bringing to a conclusion what every one agreed to have been a most agreeable and successful meeting.

NOTICES OF BRANCH ANNUAL MEETINGS.

BATH AND BRISTOL BRANCH.

The Annual Meeting of the above Branch will be held on Thursday, June 30th, at the Medical Library, Orchard Street, Bristol, at 3 p.m., when George Norman, Esq., President, will resign the chair to Henry Clarke, Esq., President-elect.

The report will be read and the ordinary business transacted. Members having any communications for the meeting are requested to give notice of them to the secretaries.

The attention of the members is called to the mode of voting for the Council, whereby they will vote only for the vacancies in their own district. Members are requested to write their initials, or some mark, opposite the name of those they wish to ballot for; but not to mark more than four of the names in their section, otherwise the nomination paper will be invalid. The leaf with the names so marked is to be torn off and forwarded to the secretaries on or before Monday, June 20th.

The dinner will be at the White Lion Hotel, at half-past 6 o'clock. Dinner tickets, including dinner, wine, coffee and waiters, 14s. each.

JOHN COLTHURST, } Hon. Secs.
JOHN S. BARTRUM, }

METROPOLITAN COUNTIES BRANCH.

The Annual Meeting will be held at Mr. Lovegrove's Brunswick Hotel, Blackwall, on Tuesday, July 19th, at 4 p.m., precisely. The Members will dine together at 6 o'clock. Members who intend to dine are requested to furnish their names to the Secretary as early as possible, and not later than July 10th.

Tickets for the dinner 10s. 6d. each, including ices and dessert.

JOHN FORBES, M.D., President,
T. OGIER WARD, M.D., Hon. Sec.

N.B.—Members of the Association become Members of this Branch by paying an Annual Subscription of 2s. 6d.

LANCASHIRE AND CHESHIRE BRANCH.

The Seventeenth Annual Meeting of this Branch will be held at the Town Hall, King Street, Manchester, on Wednesday, June 29th. The Chair will be taken at Twelve o'clock precisely, by the President for the year, James Black, Esq., M.D., of Bolton.

Dinner will be provided at the Albion Hotel, at Three o'clock, for those Members and friends who signify to the Secretary, on or before the 28th instant, their intention of being present. Tickets, 7s. 6d., including dessert, etc., but exclusive of wine.

JOHN HATTON, Hon. Sec.

N.B.—The Council earnestly request that Members of the Association will become Members of the Branch, by paying the Annual Subscription of 2s. 6d., as they were enabled last year out of the surplus to grant £5 to the Benevolent Fund.

NORTH WALES BRANCH.

The Annual Meeting will be held at Holywell, on Tuesday, the 21st June, 1853, at half-past eleven in the forenoon.

D. KENT JONES, ED. WILLIAMS, Hon. Secs.

SUFFOLK BRANCH.

The Annual Meeting will be held at the Assembly Room, Ipswich, on Friday, the 24th of June.

The chair will be taken at 2 o'clock, by Robert Martin, Esq., of Holbrook.

JOHN KIRKMAN, M.D., Hon. Secretary.

SOUTH EASTERN BRANCH.

The Anniversary Meeting of the South Eastern Branch will be held at the Sussex Hotel, Tunbridge Wells, on Wednesday, 29th June, at 12 o'clock precisely; Isaac Hargraves, Esq., President. Dinner will be provided at half-past 4 o'clock.

PETER MARTIN, Hon. Secretary.

WEST SOMERSET BRANCH.

The Annual Meeting of this Branch will be held at Clarke's Castle Hotel, Taunton, on Wednesday, June 29th. Robert Burridge, M.D., President, will take the chair at 2 p.m., and will be succeeded by W. E. Gillett, Esq., President-elect.

F. HENRY WOODFORD, M.D., Hon. Secretary.

EDITOR'S LETTER BOX.

ASSOCIATION EXTENSION THE BEST HOPE OF THE MEDICAL PROFESSION.

LETTER FROM DR. TURNER TO THE EDITOR.

SIR,—Your article on the "Public Estimate of Medicine", in the ASSOCIATION MEDICAL JOURNAL for March 18th, conveys, I believe, a just representation of the position which our profession occupies with regard to the general community. As individuals, no doubt, each of us can point to a circle, more or less extensive, of attached friends and clients, who unhesitatingly confide to our guardianship their dearest temporal interests, duly appreciating and gratefully acknowledging the value of our services; but yet, in all matters which concern us as a class, and at the hands of our fellow-men in the aggregate, —our very personal friends aforesaid not seldom taking part with the rest of the world,—discouragement, disparagement, and injustice are, and have long been, our portion. There is no "discerning public" for the body medical. In the general eye, the assiduous cultivator of our science and the moon-struck theorist—the honest practitioner of our art and the knavish nostrum-monger—the true medicinal leech and the ugly imitation, whose *habitat* is the ditch by the way-side—hold an equal place.

Now, if this confounding of the real with the delusive—this fusion of the "sublime" with the "ridiculous"—obtained only among the uninformed and uninfluential, we might be encouraged to look hopefully to the growing intelligence of the age for the eventual recognition of our claims to higher public estimation. But, alas! the schoolmaster is not abroad in our cause; he is himself unable, or indisposed, to discriminate between the fine gold of Legitimate Medicine and the brazen counterfeit of Empiricism. Nay, even with some of the otherwise enlightened and the powerful, the base metal passes current when the pure ore is rejected. Homœopathy (mild assassin!) and Mesmerism have their lovers in high places; and indiscriminate Hydropathy has found its eulogist in the distinguished *litterateur*, and could claim as its patron the eminent statesman until he became its victim.

The members of our profession may regard their degrees or diplomas as the sufficient evidence of adequate preparation for the efficient discharge of their important duties; but the roguish advertiser of infallible remedies has a "voice potential", as prevailing in the public ear as the approving judgment of a Senatus or of a Court of Examiners. The possession of our cherished honours may be invaded in open day, without word or sign of disapprobation from the lookers-on. How an attempt at this kind of spoliation was made, and how this attempt was viewed by the judge with favour rather than condemnation, will appear from the subjoined extract, from a report of the proceedings at a Criminal Court, held the other week in a neighbouring county. The interlocutors are the sheriff of the county, the agent or pleader for the panel, and a medical witness for the prosecution.

"Agent. Does the M.B. appended to your signature in your report signify any medical qualification?"

"Witness. No."

"Agent. What is it, then? What does it mean?"

"Witness. It's my mark."

"Agent. What do you mean by it?"

"Witness. Nothing! Many a one has a mark, and that's my mark."

"Agent. Did you, in your precognition at ———, declare yourself to be a Bachelor of Medicine of Marischal College, Aberdeen?"

"Witness. No."

[The secretary to the Senatus of the University above-named was in attendance, ready to disprove the assertion referred to by the agent, had it been repeated.]

"Sheriff. Come, Mr. ——— (addressing the agent), that won't do. If you are to plead the incompetency of the witness, it must be done in another way."

"Agent. I wish to show, my lord, that the witness is not a Bachelor of Medicine, as he represents himself to be. I think it material for my client to show this; and if the witness will retire, I will explain to your lordship the line I mean to pursue in his examination."

[The witness was now directed to retire; and in reply to the agent's explanation that followed, the sheriff gave it as his opinion that "it was of little moment whether the witness was

a qualified practitioner or not." The witness having been recalled, the agent resumed.]

"Are you a Bachelor of Medicine?"

"Witness. No."

"Agent. Why then do you put M.B. after your name?"

"Witness. The letters mean 'Medical Officer of the parish of B——'."

"Sheriff. This person has a right to put anything he pleases after his name, and it may be of consequence to him that it should be known he is Medical Officer of the parish of B——. I really do not see anything to detain us here."

Note or comment on this most edifying colloquy were superfluous, and I offer it as a companion-picture to that with which you have presented us in the JOURNAL for April 29th, culled from the pages of the *Church and State Gazette*, or *Churchman's Family Newspaper*. The judge's patronage of the pirate, and the ecclesiastical journalist's slanderous innuendo, have a common object in view—the public depreciation of the doctor.

In sober earnestness, is not this war of the many, led on by their rulers and instructors, against the profession of medicine, a strange anomaly in our social system? In which of the duties of good citizenship do we come short? It cannot be pretended that we are cumberers of the ground. Few of our detractors are without personal experience of benefits from our calling. Are we slothful in its exercise? Our path of duty is notoriously an arduous one, trodden with toil and anxiety, and environed by dangers at every step. Are we self-seekers? Zealous labourers in our ranks have directed, and continue to direct their energies to the discovery and dissemination of the knowledge of means by which certain diseases may be prevented, and the process of cure in others simplified and abridged, and *pari passu* the necessity for our services diminished. The progress of medical discovery in the present age is, in fact, chiefly in these directions; yet the voice of no Demetrius has been heard amongst us, inciting to resistance of innovations so directly hostile to "the craft by which we have our wealth". How comes it, then, that, to borrow your own words, "medicine is of all professions, trades, and callings, the one most grievously contemned"; that wits, great and small, unceasingly pelt us with their "paper pellets of the brain"; that grave men open their mouths regarding us only to talk us down; that the legislator shrugs his shoulders often before he can be brought to listen to our appeals for the redress of old grievances, but manifests no indisposition to saddle us with new burdens; that hospital boards and other public bodies make us their unpaid drudges and their toad-eaters?

A little self-examination will, I apprehend, go far to enable us to account for our helpless position in society. The natural bond of brotherhood is feeble amongst us; and implacable feuds and unseemly jealousies take its place. Hence it is that wrong and contumely, which would never be offered to a well-organized body, or would fall harmless if offered, unsparingly assail us. Our undisciplined ranks can offer no effectual resistance to the enemy.

The public estimate of medicine, moreover, is unthinkingly and unjustly made up from observation of the discreditable doings of individual members of the profession—doings which, although heartily repudiated by the great bulk of us individually, is allowed to pass without rebuke from us as a profession. Dr. A. offers himself cheap, in order to supplant Dr. B., who rates himself higher; Dr. C. openly assails or backbites Dr. D., hoping to take more by damaging the reputation of his rival than by labouring to build up and sustain one for himself; Dr. E., perceiving that the lying pretensions of the quack have a higher money value than the conscientious efforts of the regular practitioner, disencumbers himself of his first love, and humbugs, after the most approved fashion, for a better livelihood. Others adopt a middle course, and mingle charlatanic tricks with professional practice. The general public witness these unworthy struggles for advancement, and, without reflecting that the offenders against good manners and morals are not the entire body of the profession, or that many of its worthier members are merely disgusted spectators, place, as I have said, the misdeeds of the few to the account of the many. Hence has arisen much of the obloquy which has become the unmerited "badge of all our tribe".

Is our condition hopeless? No! but it is chronic, and cannot be shaken off in a day. One leading indication of cure, however, may be expressed in the single word *UNITE*. Banded and knit closely together by a common tie, we should at no distant period succeed in establishing a higher internal standard of morality, and a larger measure of respect from without. The

most powerful instrument wherewith to accomplish these ends shall be found, I believe, in our ASSOCIATION, if its sphere of action be sufficiently extended. To every British practitioner of medicine not yet a member of this our league, I would say, COME OVER TO US. Let our combined influence spread—let our Branches (affluent and efferent as regards the parent centre) be distributed over the length and breadth of the land, until membership, involving subjection to the control of a suitable code of ethics, shall become an indispensable token and guardian of respectability, sought after by every medical man within these kingdoms. Thus protected from ourselves, and presenting a compact front to the common enemy, our rights would be secure.

I am, etc.,

R. TURNER, M.D.

Kaith, Banffshire, June 1, 1853.

THE RESPECTABILITY OF THE MEDICAL PRESS.

LETTER TO THE EDITOR FROM TYLER SMITH, M.D.

SIR,—In the notice of the annual dinner of the medical officers of the army, on the 21st ult., you refer to the circumstance of the names of Dr. Cormack, Dr. Semple, and myself, having been given with the toast of the Metropolitan Medical Press; and you observe: "Dr. Tyler Smith remarked, that his connexion with journalism belonged more to the past than to the present: and Dr. Semple stated, that he was only an interim editor—that he had no wish to be anything else; for he thought there were other professional occupations less responsible and more respectable."

It has been supposed, from this, that I joined with Dr. Semple in turning my back upon the medical press, and speaking of it in derogatory terms. Nothing could be more repugnant to my feelings; and, to remove any such impression, I beg to forward what I really did say on the occasion in question. I certainly know of no occupation in the profession which is either more "respectable" or more "responsible" than that of the upright medical journalist.

I am, etc.,

W. TYLER SMITH.

7, Upper Grosvenor Street, June 18th, 1853.

"I feel it an honour that my name should have been associated with the toast of 'The Medical Press of London,' by the chairman (Mr. Guthrie), a gentleman not less distinguished in the literature of the profession than in the practice of civil and military surgery. My own connexion with the medical press belongs rather to the past than to the present; but I shall ever remember with pride that many of the best years of my life have been devoted to a field of labour so useful and honourable. Speaking as I do in the presence of the Presidents of the Colleges of Physicians and Surgeons, I feel that I cannot, like those gentlemen, appeal to the antiquity of the institution I represent. The medical press is emphatically a new power; but it has already proved itself not the least of the powers of the profession. Only yesterday, as it were, the medical press was almost entirely occupied in discussing the symptoms of this or that disease, and the doses and effects of this or that medicine. Such is not, in my opinion, the highest vocation of the press. Its nobler objects are the discussion of the condition of the medical body politic, and the formation and expression of public and professional opinion on every topic relating to the rank of medical science, and the welfare of its followers. At the present time, able men connected with the medical press pursue these objects with such zeal and integrity, that no delusion can long pass undetected, no imposture unexposed, and I will add, no wrong unredressed. It is thus that the medical press must become more powerful than Halls or Colleges in uniting the whole profession as one body, and in urging medicine onwards to that rank in the state to which she is justly entitled. Sir De Laey Evans has said that, in his successful effort to obtain the military honours of the Bath for distinguished military and naval surgeons, he acted chiefly as a channel for conveying information between the advocates of this great concession and the government. It is within my knowledge, that the same pens which supplied the gallant general with the data upon which he proceeded, also argued the question continuously in the medical press. The press can never be employed more nobly than in promoting the spirit of union among the entire profession. Only a few years ago, those who followed the military and naval departments of medicine were as widely divided from civil practitioners as though they had belonged to some different calling. It is now far otherwise; and I believe that no injury could be inflicted upon a naval or military surgeon in

any part of the world, without exciting the ready sympathy and support of the civil branches of the profession; and I am sure that, in the prosecution of any just object, naval and military surgeons may count upon the aid of their brethren of all grades. I say it with pride, but I do not think that such a change as this could have been effected without the existence of a medical press."

[Our report (June 3rd, p. 496), so far as it goes, tallies with that now supplied by Dr. Tyler Smith. The medical press is, as a whole, as respectable as the press of any other class or profession. Yet how common is it for medical men anxiously to disavow all connexion with medical journals, from the dread of being associated in the public mind with what is bad, and not with what is good in them. Let us hope that better days are coming. EDITOR.]

THE GOVERNMENT AND THE MEDICAL BILL.

LETTER FROM P. C. DE LA GARDE, ESQ., TO THE EDITOR.

SIR,—A leading article in the ASSOCIATION JOURNAL of the 6th of May, under the head of "The Medical Reform Bill", contains the following paragraph:—"Lord Palmerston, it appears, has hitherto found his hands so fully occupied, that he has not had time to take up the Bill; nor is it probable, considering the overburdened state of the Commons' House of Parliament, that the Bill, if introduced there late in the Session, would pass into law. Under these circumstances, Mr. Hastings (who is in constant communication with the rest of the Committee) has thought it best to make an effort to introduce the Bill into the House of Lords. We believe that arrangements with that object are being made for a deputation to wait on Lord Aberdeen on an early day, probably on Thursday, the 12th."

Accordingly, on that day, and for that purpose, a deputation from the Provincial Medical and Surgical Association waited on Lord Aberdeen, at his official residence. From the report of its JOURNAL, I collect that an address was read to his Lordship by Sir Charles Hastings, containing this passage:—"We earnestly request your Lordship to enable it (the Bill) to pass into law during this Session of Parliament, in order to stop the agitation which will otherwise assuredly continue."

Several speakers then addressed Lord Aberdeen. Amongst them was Mr. Wakley, who said:—"He trusted that Lord Aberdeen would introduce it into the House of Lords, it being a question eminently fitted for their consideration."

Lord Aberdeen is reported to have replied:—"That he should be most happy to afford them every facility in his power; and, unless some unforeseen obstacles should arise, he hoped to be able to carry out their wishes."

This expression, combined with your admission, that there was little or no prospect of Lord Palmerston's introducing the Bill, and the confident tone in which the JOURNAL continued to call for agitation on behalf of a Bill supposed to be in progress, led myself, no less than others, to the inference—as natural as it was general—that the Bill had been transferred from Lord Palmerston's care to that of Lord Aberdeen.

LORD ABERDEEN HAS NOT TAKEN CHARGE OF THE BILL, *supposed to be contemplated by the Government.*

I beg you will publish this letter to correct a *misapprehension*, which might otherwise lead to inconvenience.

I am, etc.,

P. C. DE LA GARDE.

Exeter, June 8th, 1853.

[The JOURNAL has always correctly chronicled the progress of events. In calling for exertion on behalf of principles to which the Association has long been pledged, it simply discharged an obvious duty. EDITOR.]

LORD LYTTTELTON'S VACCINATION BILL.

LETTER FROM EDWARD BARBER, ESQ., TO THE EDITOR.

SIR,—Lord Lyttelton's Vaccination Bill appears to be in many points very objectionable, and calculated rather to increase than allay prejudices against vaccination. By section i, provision is directed to be made for "affording increased facilities for the vaccination of the poor"; and it is further directed that the lymph used shall be taken "from the arm of a healthy child then present". Section ii includes every child born in England and Wales; and insists upon vaccination within three months after birth. Section iv requires that, in every case of vaccination, a child for vaccination, a medical certificate of such nature as to be given every two months until the child is vaccinated, allows no other legal ground for delay.

It seems hardly to come within the province of the legislature to prescribe the mode of performing vaccination. Some prefer recent lymph on points to fluid lymph, thinking it less likely to be washed away by the flow of blood from the puncture. Others prefer fluid lymph. Surely it may be left to each practitioner to pursue his own plan so long as efficient vaccination is secured. As well might an act be passed, to provide that all teeth shall be extracted with forceps, as to make the use of fluid lymph obligatory.

To limit the period for vaccination to three months after birth is not wise. We know that very young children often escape epidemic and contagious diseases, which attack others around them who are rather farther advanced in life; tender age apparently rendering persons less susceptible of the influence of morbid poisons. On this account some practitioners prefer to vaccinate children after rather than before they are six months old, thinking that during the period of comparative insusceptibility (the few earlier months of existence), the vaccine virus may not possibly produce those constitutional effects which are necessary to secure the child from small-pox, so fully and so effectually as at rather a later period. Another objection to this limitation is, that it enforces vaccination at all seasons of the year. It has appeared to me that, in the cold weather of winter, the vaccine pustule does not go through its stages so regularly as in warmer weather; it is generally slower in its progress; and in very hot weather in summer, there is often an excessive inflammation. I do not assert that it is less effective, but I think this and the preceding objection are worth attention. We know that cold weather is prejudicial to very young as well as to old people; in winter, therefore, it is not desirable in any way to disturb the health of an infant, especially of a very young infant. If much fever follow the vaccination, the liability to mischief from cold is of course greater than in milder weather. Moreover, it is not possible in the country to get vaccine at all seasons; and a constant supply cannot be kept up in any but very populous neighbourhoods. To insist, therefore, upon the vaccination of every child within three months of its birth, will render it almost impossible to comply with the requirements of section 1, to use fluid lymph. Fresh supplies of dry lymph must be constantly obtained from London or elsewhere; and it will be rare that a country practitioner will be able to know anything of the child from whom it is taken. Those only who know the prejudices and apprehensions of mothers on this point can know how much inconvenience and dissatisfaction will often result from this. I believe the general custom in country districts to be, that in the early spring, and again towards autumn, a supply of vaccine lymph is obtained, and all children fit for and requiring vaccination are then attended to: the supply being kept up by the several practitioners until there is no more need of it.

The repeated certificates required in cases of unfitness will give rise to much trouble, and, in many instances, to much expense to the public. In the country, and in winter especially, an infant cannot be taken several miles from home; a journey must therefore be made by a practitioner every two months to see the child and report it; and in the case of a small farmer, a village shop-keeper, and a labourer just above parish relief, it seems hardly right to impose upon them such an expense and trouble, without any compensating advantage either to them or to the public. These are practical details, of which members of the legislature are evidently not cognizant; but without some knowledge and recognition of them it is impossible to frame any satisfactory arrangement.

The stringency of Lord Lyttelton's bill is enough to defeat its purpose. It unnecessarily interferes with, and too arbitrarily directs, duties and arrangements which had better be left in some measure to the convenience and discretion of the public and the profession. Its requirements are such that they must of necessity be constantly evaded, especially in rural districts.

But it is not in these details only that the bill is objectionable. His Lordship seems to have started upon a wrong principle; and he does not touch the root of the evil he proposes to remedy. The chief disseminators of small-pox are the tramps, gipsies, and vagrants of all kinds; and of these some are Scotch, a large number Irish, all of whom are excluded from the operation of the proposed law. These are the offenders, the parties upon whom the powers of the legislature should be brought to bear; not the settled inhabitants of the land, against whom alone the proposed bill seems to be directed. It is true that, in the lower classes especially, much apathy exists; and amongst them, we sometimes meet with strong prejudices against vaccination, which, probably, will not be lessened by too intimate a connexion of it with parish relief and boards of guardians. In

legislating upon the subject, great care must be taken lest prejudice be confirmed and extended, and apathy aroused into opposition, by imprudently attempting coercion, and associating legal penalties with that which ought always to be treated as a boon to all to whom it is offered. I am, etc.,

EDWARD BARBER.

Stamford, June 1853.

ADVICE GRATIS BY "RETIRED PHYSICIANS".

LETTER TO THE EDITOR.

SIR,—In common with those who have the interest of our profession at heart, I warmly thank you for your able articles upon gratuitous advice. While I crave your permission to make a few observations upon a phase of the subject which has not hitherto engaged the attention either of yourself or correspondents, permit me to observe that it is chiefly by anonymous communications that great evils are overcome. The power of the press would be greatly weakened were the writer of every article known; and when we have to attack evils in so jealous a body as the medical profession, it behoves us occasionally to adopt the motto of Junius—*Stat nominis umbrâ*.

I have read in your number of the 3rd instant, a letter by "A SENIOR PHYSICIAN", showing the growth of the system of "advice gratis", and my experience fully justifies him in his remarks. He has, however, not touched on a subject which greatly trenches on the fair and legitimate earnings of the whole profession. I allude to the practice adopted by the quasi-retired members of the profession of prescribing gratuitously for their rich neighbours and friends.

Before I settled in practice, I visited the greater number of the English watering places, and at the various libraries I met men of my own profession, advanced in years, who had retired from the active duties of life, but who, forgetting their own struggles in earlier days, were ready and willing to prescribe gratuitously for their chatting acquaintances and sea-side gossips, without any reference to their means. A friend of mine, in practice in a large watering place, told me that this system was carried on to such an extent, that the profession in that town were robbed of at least a thousand a-year by this unnecessary and canting kindness.

Thus, Mr. Galen, a general practitioner, retires from his arduous practice, purchases an Erlangen diploma, and retires to enjoy the *otium cum dignitate* with the elegant society of Breezytown. He calls upon the native doctors, and thus addresses them—"I have been thirty years in practice, my dear sirs; it is time I should retire. I have taken a house in Nobbyton Square, and mean to enjoy myself." Invitations to dinner follow, and the professional gentlemen of the town introduce Dr. Galen to their friends. The house is furnished, the door painted, when lo! a large brazen plate is engrafted bearing the name of "Doctor Galen"—the retired physician.

Thus steps Dr. Galen into society. After his quiet dinner, or rubber, he prescribes for his kind entertainers, purely as a "friend". He soon becomes overwhelmed with invitations, and ladies' ailments; and thus, without benefiting himself one penny, he poaches upon the manors of his neighbours, and daily robs the profession which has showered her choicest gifts upon him!

Sincerely do I long for the registration of the profession, that we, the advancing members, may know our retiring friends. Your correspondent expresses the truth when he says, "it is useless to complain, until we can act together as an undivided body. Class interests warring with each other are the cause of all the many evils which afflict the profession." But how can we check the evil of which I now complain? It has been said that the physician gets no bread until his teeth are too old to eat it. What chance, I ask, has he in the present state of things, if each year brings men of established reputation into his field of exertion, ostensibly to retire, but actually to rob the profession. I very much doubt if medical men ever do retire. When they do, and act in the manner I have now sketched, they do more to lower the professional services of the physician in the estimation of the public, than any other of the evils so justly complained of by yourself and correspondents.

I quote on this head the following passage from *The Moral Aspects of Medical Life*, by my late and much-lamented friend and fellow associate, Dr. Mackness, of Hastings:—"There is one trait in the character of Hallé which, however much we may admire the spirit which prompted it, we cannot approve, and that is his reluctance to receive fees, even from those who could well afford to pay. It is true that his ample fortune might

be sufficient to supply all the wants of his family; and therefore such a line of conduct was attended with no great sacrifice, while to his benevolent mind it doubtless afforded him the purest enjoyment. But did none others suffer from such a line of conduct? Was the medical profession so affluent in his day in Paris that there were no men of energy and talent belonging to it who, without property, without friends, felt their spirits broken, their hearts sickened from want of professional success? Such is too often the case in England, and doubtless the same in France. And if a man of Hallé's talents and acquirements refused to be remunerated for his professional skill, did it not limit the field for their exertions, and this without doing good to himself? Dr. Percival, in his *Medical Ethics*, says most distinctly on this point: "A wealthy physician should not give advice *gratis* to the affluent, because it is an injury to his professional brethren. The office of physician can never be supported but as a lucrative one, and it is defrauding in some degree the common funds for its support, when fees are dispensed with which might justly be claimed."

Let a higher tone of feeling actuate us in every step of our career; let us regard each other as fellow-labourers and fellow-strivers, not only for the world's good opinion, but for mutual respect and esteem; let us put aside class distinctions, class laws, and class interests; and then, when taking to ourselves our legitimate grades, without repudiating the knowledge of our neighbour, let us act together with united will. For depend upon it, so long as the public recognize the distinction of physician and general practitioner, so long will they act fairly to both. It is only when we forget what is due to ourselves, that the public takes advantage of our want of unity.

I am, etc., A JUNIOR PHYSICIAN.

June 5th, 1853.

PHYSICIANS AND GENERAL PRACTITIONERS.

LETTER FROM J. C. BLOXAM, ESQ., TO THE EDITOR.

SIR,—Surely the letter published in the number of the ASSOCIATION MEDICAL JOURNAL, for June 3rd, by a "Senior Physician" is written in a most unreasonable spirit. No doubt the physician has a perfect right to give "advice gratis", if he choose so to do; but it strikes me as at least equally clear, that the general practitioner is under no obligation to find employment for the physician. The Senior Physician seems not only to be of opinion, that the general practitioner is incompetent for the practice of medicine without the assistance of a physician, but he apparently considers it to be incumbent on society at large, and distinctly intimates it to be the "duty" of the general practitioner to view the matter in the same light. This must be a very mistaken notion. No doubt the time was, when the apothecary was *not* competent to the practice of medicine, and it was a mistake perhaps to allow him to practise in that way; but this does not at all warrant the notion that the "highly educated" general practitioner of the present day is not fully as competent to practise as the physician. No doubt many physicians may be found, who are far more competent than are a great number of the general practitioners; but I have no doubt that many general practitioners may also be found, who are more competent than many physicians. I see nothing but prejudice, that should induce society to regard the physician as in practice superior to the general practitioner.

It should be borne in mind by physicians who complain of not being consulted more frequently by the general practitioner, that if a general practitioner calls in another member of the profession of higher rank than himself in consultation, he is clearly in danger of giving encouragement to the idea that the higher rank is accompanied with superior professional qualifications; whilst, if he calls in another of equal, or inferior rank, he is not in the same danger of being understood to acknowledge a superiority which he does not feel.

When a man determines upon practising as a physician rather than as a general practitioner, I apprehend that he does so for the sake of the higher rank and greater dignity that he enjoys thereby. But if a greater number of men offer their services to society in this capacity than society or the highly educated licentiates of the Apothecaries' Company feel it their interest or duty to employ in that capacity, they surely ought not to complain either of society or of the licentiates for not conferring on them the profits as well as the dignity. Looking at the matter in this point of view, I think that the general practitioners are fully as much to blame as the physicians. The general practitioners are the practitioners generally employed; and having got into their hands that business which formerly

belonged to the physicians (I think it can scarcely be said now more legitimately to belong to them), viz., the treatment of disease, they are not content with the profit accruing therefrom, but are dissatisfied with the relative rank and dignity of the two parties. Having deprived their neighbour of the profits, they seem unwilling to allow him to enjoy the rank and dignity of doctor. Now this is wrong in more ways than one; for the physician of this country, as a general rule, has qualities in him beyond those of the general practitioner for obtaining the respect and esteem of society; and this is not to be considered, through the contrast, an injury to the general practitioner. On the contrary, the respect and esteem thus acquired, is acquired for the benefit of the profession at large.

Whilst the general practitioners appear to err in this respect as regards the physicians, they appear to me to err also in other directions. They show a disinclination to practise that branch of their business which especially belongs to them, viz., the dispensing of medicines. Now it is by the dispensing of medicines that they have acquired their present advantages over the physicians; but whilst they feel themselves justified in having done this, they deem it very wrong that the druggist should play the same game. The public, however, will assuredly consult those who will dispense the remedies to be used. In the same proportion as the general practitioners contract their practice of dispensing, will the druggists expand their practice of prescribing; and it seems doubtful if any *locus standi* will hereafter remain for the apothecary between the accomplished physician and the accommodating druggist.

There are several remarks made in the letter under consideration, which admit, perhaps, of somewhat severe criticism; but I will refer to only one passage, which I object to on the score of false reasoning. The writer advances the practice of solicitors, in order to contrast it with that of apothecaries; but there is no analogy between the cases. The barrister does not rival or compete with the solicitor; far from it, he obtains the *whole* of his business from the solicitor. Let the physician renounce all business but such as is brought to him by the apothecary, instead of entering into competition with him, and there will then be some analogy between the two cases. I am, etc.,

JOHN C. BLOXAM.

Newport, Isle of Wight, June 7th, 1853.

PHYSICIANS AND GENERAL PRACTITIONERS.

LETTER TO THE EDITOR.

SIR,—I fear "A Senior Physician" is a disappointed man; and from the *animus* displayed in his letter, I would not select him to heal a breach between the physicians and the general practitioners. I think he ought not to blame the latter because he is not called in as often as he wishes, or as often as the physician was fifty years ago. He forgets that during that period a great change has taken place in medical education, and that the general practitioner of 1853 is equal, if not superior, to the physician of 1803. Therefore he is not called in, simply because he is not wanted. For this he must not blame the general practitioner, but the course of events. I entirely dissent from him, and *never under any circumstances refuse a consultation*; but I always feel myself at liberty to choose the "second opinion", and even if any one be named, I consider myself justified, if I think proper, in proposing another.

Not long since, the friends of a patient I was attending wished for a second opinion, and mentioned Dr. —; I proposed some other physician and a general practitioner; the latter was chosen, and the patient is recovering.

In fact, there are some physicians whom I never call in unless I am obliged, because in more than one instance they have taken away my patient. Other general practitioners make the same complaint. Do you blame me? If all physicians conduct themselves towards the general practitioners as some of those whom I know do, you must not be surprised if an ill feeling exists between them. Whom would you consider as the *heads* of the profession? Generally speaking, you would say, those who hold the appointments to our infirmaries; yet in this *trip*, more than one infirmarian physician will visit patients four times for a guinea, thus placing themselves on a level with the general practitioner; and one of them vaccinates. Here, I think, the general practitioner has just cause of complaint.

So far am I from being jealous of the physician, that I have no place in England offers a better opening for one than this. Indeed, one is wanted; and I believe that a respectable man settling down here, and going hand in hand with the general practitioners, and not setting himself in opposition

them, could not do other than succeed, if he have patience to wait.

I should not have troubled you with this letter, did not I feel that the fault is not all on one side, as "A Senior Physician" would wish you to suppose. I am, etc.,

A MEMBER OF THE ASSOCIATION, AND A
GENERAL PRACTITIONER.

June 7, 1853.

CASE OF CALCULUS REFERRED TO IN THE REPORT OF THE MEETING OF THE YORKSHIRE BRANCH.

LETTER FROM HENRY JACKSON, ESQ., TO THE EDITOR.

SIR,—In the report of the meeting of the Yorkshire Branch, published in the ASSOCIATION JOURNAL of May 20th, there is an error respecting a calculus which I exhibited. The following is the statement of the case which I read at the meeting:—

"The calculus, weighing 9 oz. 3 drs., was extracted after death from a man aged 32, and had existed from childhood. Operation had been proposed several times both to his parents and to himself, but had been refused until within a fortnight before his death, when he was admitted into the Sheffield Infirmary, to be operated upon. He had taken large doses of opium, for the purpose of alleviating his sufferings, which had been most extreme, and in a paroxysm of which he once attempted his own life and that of his sister. The kidneys presented a granular condition; their secreting portion in some parts being entirely removed, and its place supplied with urinous cysts, many of them containing pus. The bladder was much thickened, and its mucous membrane very coarse. The ureter was very much and irregularly dilated. During life, the urine was of the sp. gr. 1010, albuminous, and deposited large quantities of pus. The patient died from epilepsy, induced by suppression of urine. I am, etc.,

HENRY JACKSON.

St. James Row, Sheffield, May 31st, 1853.

NEWS AND TOPICS OF THE DAY.

INQUEST AT SHEFFIELD:—THE MEANING AND VALUE OF MEDICAL TITLES. Alfred Davis, *alias* Dr. Henry and Co., "a practitioner of a certain kind", described by the *Sheffield Times* as "a dashing young man", had a *liaison* with Mrs. Glossop, his landlady, during her husband's absence in Australia. Mrs. Glossop had a miscarriage, and died soon afterwards. Davis was suspected of having hastened her death by causing abortion, but no proof of this appeared, though strong suspicion existed, as he had absconded on the first rumours of his foul play. After examining medical and other witnesses, the coroner summed up as follows:—"The cause of death, according to the medical evidence, was very clear. It did not appear that anything likely to produce death had been given. She had been recently delivered, but whether by natural means, or artificial, there was no means of ascertaining. It did certainly appear somewhat singular that Mr. Davis, who stated that he was not a licentiate, nor a surgeon, nor a graduate of any university, but simply a vendor of patent medicines, should advertise that "Dr. Henry and Co., surgeons, continue to be consulted, daily, at their establishment, etc."

Mr. Fretson: He styles himself "confidential medical adviser". Now that can only have one meaning. It is perfectly plain what his business is.

The Coroner: I differ with you. A medical man is confidentially consulted whatever may be the nature of the disease. If parties choose to deal with such men, it is their own fault, more than the fault of the self-styled surgeon. I think the evidence of the medical men shows that Mrs. Glossop has died of coma, arising from intense congestion of the brain, and effusion of blood on the surface of the brain, in consequence of having been recently delivered of a fetus, but whether naturally or artificially effected, there is no evidence to show. In consequence of Mr. Davis having left the town, and it being reported in the neighbourhood that the deceased had been poisoned, I thought it necessary to have the body exhumed; but there is nothing in the evidence to implicate Mr. Davis.

The room was then cleared, and after the coroner and jury had been alone together about twenty minutes the doors were again thrown open—when the coroner said that he was desired

by the jury to ask Dr. De Bartolomé whether, having heard the result of Mr. Haywood's analysis, he saw reason to alter his previously expressed opinion of the remote cause of death. Dr. De Bartolomé replied in the negative.

The jury then returned the following verdict. "That Hannah Eliza Glossop died of coma, arising from intense congestion of the brain and effusion of blood upon its surface consequent on her having been recently delivered of a fetus, but whether naturally or by artificial means there is not sufficient evidence to prove." The foreman read the following *addendum*:—"We beg to express a very strong opinion as to the impropriety and levity of conduct not only of Mrs. Simpson and her late daughter, but also of Mr. Davis."

ST. MARY'S HOSPITAL. DINNER. The third anniversary of this institution was celebrated on the 28th May, by a public dinner at the London Tavern. The Earl of Carlisle, who presided on the two former occasions, again filled the chair. He stated that the hospital was opened in June 1851, with 50 beds for in-patients; but in the winter of the same year the number was advanced to 100. In June 1852, the beds were increased to 150. From the opening of the hospital on the 13th of June, 1851, to the 30th of April in the present year, there were treated as in-patients, 2021; as out-patients, 5599; as casualties, 3030; and 447 poor married women were attended in their confinements at their own homes; making a total of 11,067 persons to whom the benefits of the hospital were extended in a year and ten months. The estimated cost of maintaining the hospital, with its 150 beds, and of supplying medicine to the daily increasing out-patients, was £5,500 per annum; but the amount of annual subscriptions received for those purposes in 1852 amounted only to the sum of £1710 : 7 : 6, and he was sorry to add that there remained liabilities to the amount of £2,300 to be provided for. The donations announced during the evening amounted to £1,850.

HOSPITAL FOR CONSUMPTION. DINNER. On Wednesday, the 14th anniversary of this hospital was celebrated at Willis's Rooms, the Marquis of Westminster presiding, supported by Lord Feversham, Lord Dynevor, the Rev. Sir H. Foulis, Bart., and eighty other gentlemen. It was stated that in the year, 443 patients were admitted, of whom 292 were discharged relieved, and 61 died. The out-patients numbered 3671. Since the opening of the hospital 2,445 in-patients, and 21,441 out-patients have been treated.

NEW HOSPITAL FOR CHILDREN IN PARIS. The Empress of the French has expressed a wish that a second hospital for sick children should be erected in the Faubourg St. Antoine, a very populous eastern district of Paris. The present hospital for children is situated in the Rue de Sévres, at the south-western extremity of the town, and contains 626 beds. The new institution is to be constructed near the St. Antoine Hospital, and is to start with 200 beds.

TESTIMONIAL TO MR. D. HARTLEY. Some of the members of the Board of Governors of the Cheltenham General Hospital, and their friends, have presented to David Hartley, Esq., the house-surgeon, a chaste and handsome silver salver, with the following inscription:—"To David Hartley, Esq., house-surgeon and honorary secretary to the Cheltenham General Hospital, presented as a slight token of their personal regard, by the members of the Quarterly Board of Governors and their friends, who have for many years had the pleasure of witnessing the ability, kindness, and attention with which he has discharged his important duties, as well towards the poor as for the benefit and general interests of the Hospital. March, 1853."

THE CHOBHAM ENCAMPMENT. A singular omission has taken place at the Camp on Cattenham Hill, where, although there are 200 men under canvass, there was not, up to this week, a single medical man or surgeon, or even one within four miles; and this, although "the Queen's regulations and orders for the army", according to the 40th section, page 273, provides, that wherever a body of men amounting to 200 is encamped, a surgeon or assistant-surgeon belonging to the commanding officer's corps, shall be in attendance. Such an oversight as the one alluded to reflects very little credit on the parties to whom were committed the arrangements of this section of the encampment.

M. CLOQUET. The Emperor of the French has conferred the rank of officer of the Legion of Honour on M. Cloquet, physician to the Shah of Persia, and nephew to the Professor of the Faculty of the same name.

MR. TOYNBEE, F.R.S. At the general meeting of the Society of Arts, held on Friday June 10th, His Royal Highness Prince Albert, president, in the chair, the Society's Medal was awarded to Mr. Toynbee, F.R.S., aural surgeon to St. Mary's Hospital, for his invention of "the artificial membrana tympani in cases of deafness, dependent upon perforation or destruction of the natural organ".

THE ANNUAL INSANITY PRIZE. The prize for the best Essay on the subject of Insanity, offered by the Society for Improving the Condition of the Insane, has this year been awarded to Dr. D. H. Tukey, of York. The subject for competition was "The Progress of the Treatment of the Insane since the time of Pinel; and the Contrivances which have been adopted in lieu of Mechanical Restraint".

THE NEW HOSPITAL AT CALCUTTA is in connexion with the Medical School. It contains five hundred beds; and is divided into twenty-four spacious, cheerful, and well ventilated wards. One wing of the hospital is appropriated to the diseases of women and children.

THE QUEEN AND THE LATE NURSE OF THE ROYAL INFANT. Mrs. Mackintosh, who was appointed wet-nurse to the Royal Infant, has returned to the north. It appears that her milk was too rich for the infant Prince—so much so, that her own child was also nursed by her for some time, in order to reduce the quantity. Mrs. Mackintosh left Osborne amidst the regrets of the whole establishment, expressed in the strongest terms, and accompanied by substantial proofs of the Queen's liberality. Her Majesty presented her with a valuable gold brooch, an ample wardrobe of clothes, and a check for a hundred pounds—all this being exclusive of travelling expenses. The brooch was given by the Queen with her own hand, and will, we have no doubt, be treasured for generations as an heir-loom of inestimable value.—*Inverness Courier*.

JUSTICE TO SCOTLAND. A Scottish periodical, in pleading for "Justice to Scotland", thus contrasts the favours lavished on "turbulent and indolent Ireland" with the opposite treatment which "peaceable and industrious" Scotland receives at the hands of Government. Perhaps, after all, grants from the National Treasury, by removing excitements to exertion, are sources of injury and not of benefit; and had Ireland been less petted, she might have been more prosperous.

"The Church. Ireland has an established religion, and so has Scotland—but except an insignificant trifle to the Episcopal body, no dissenting community in Scotland receives one farthing of public money; whereas, the Roman Catholics, the Presbyterians, and the Unitarians, all receive subsidies in Ireland.

"Education. The national schools in Ireland have been defrayed out of the imperial purse. Scotland has no corresponding national schools. Within the last ten years three colleges have been built and endowed in Ireland. Since the Union, Government has neither built nor endowed a College in Scotland. The State supports Trinity College for the Established Church in Ireland, Maynooth for the Catholics, and the Belfast Academical Institution for the Presbyterians and Unitarians. Scotland receives a pittance for its five universities, but the total amount does not greatly exceed what is given to Maynooth alone.

"Benevolent Institutions of Dublin. We have already stated that in such matters Ireland is entitled to peculiar treatment, and we have no wish to retract our concessions on this point. When famine or any extraordinary crisis occurs, we are willing to extend generous sympathy to the Irish, and to aid in extricating them from their difficulties with no niggard hand; but when we come to put Dublin against Edinburgh, we can perceive no just reason for exceptional allowances. The capital of Ireland is every whit as wealthy, and its trade as flourishing, as that of the capital of Scotland; it has, hitherto, been exempted from income-tax, and enjoyed other immunities to which Edinburgh has been a stranger, and there is nothing to prevent Dublin from putting its hand into its own pockets and supporting its sick and hurt exactly as Edinburgh does. But how stands the fact? Here are the grants to Dublin for one year:—

Foundling Hospital	£ 650
House of Industry	9,883
Westmoreland Lock Hospital	1,750
Female Orphan Hospital	600
Fever Hospital	3,040
Lying-in-Hospital	600
Dr. Steeven's Hospital	1,200
Hospital for Incurables	400

£ 18,123

"There are in Edinburgh a Royal Infirmary, several dispensaries, ragged schools, and fever and lying-in hospitals, not one of which receives contributions from the public purse. But we are sick of these comparisons, and will carry them no farther—to do so were a work of supererogation—they speak for themselves in a language that cannot be misunderstood by enlightened and impartial men."

NAVAL ASSISTANT-SURGEONS. A petition to the House of Commons from the members of the medical profession, complaining of the imperfect compliance of the Admiralty with the order of April 1850, and praying for an inquiry into the condition of the Assistant-Surgeons in Her Majesty's Navy, is in course of signature. It is in the charge of Mr. T. M. Stone, of the Royal College of Surgeons. The petition lies at his residence in Greenwich, and information on the subject will be afforded on application to him either at Greenwich, or at the Library of the College. All legally qualified members of the profession are invited to attach their signatures.

REMEDY FOR THE DISEASE OF GRAPES. Payen recommends four ounces of sulphur with an equal quantity of slaked lime to be boiled for fifteen minutes in three pints of water. When cold, the clear liquid is poured off and diluted with fifty pints of water. When the disease appears, the entire vine is to be sprinkled with this solution.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

*BEGGIE, James, M.D., appointed Physician in Ordinary to the Queen for Scotland, in room of the late Dr. John Scott.
PAYNE, J. G., Esq., appointed Resident Surgeon to the Millbank Penitentiary.
RENDLE, James G., Esq., appointed Medical Officer of the New Female Convict Prison at Brixton.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

WRIGHT, Samuel, M.D., Physician to the Queen's Hospital, Birmingham, of consumption, aged 34, on May 30th. Dr. Wright was the author of an able treatise on the *Physiology and Pathology of the Saliva*, as well as of other works.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

GRIFFITHS, Thomas. CHEMISTRY OF THE FOUR SEASONS. pp. 436. London: 1853.
PAGE, James, F.R.S. LECTURES ON SURGICAL PATHOLOGY, delivered at the Royal College of Surgeons of England. Two volumes. pp. 409 and 637. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ADVERTISEMENT.

Marischal College and University,

ABERDEEN—Besides the ordinary Examination Terms, (in April and October,) there will this year be a third, in the last week of July, to meet the case of Candidates for the Assistant-Surgery H.E.I.C.S. offered by Col. Sykes to the best competitor among the students who have completed their academical course at King's or Marischal College; and for the Assistant-Surgery in Her Majesty's Service, offered for competition to the students of Marischal College, by the Director-General of the Army Medical Department.

CASES IN WHICH MEDICAL PRACTITIONERS MAY BE ADMITTED, WITHOUT RESIDENCE, TO EXAMINATION FOR MEDICAL DEGREES.

Practitioners may be admitted, without residence, to Examination for the Degree of M.B., who have held a Diploma or a Licence in Medicine or in Surgery for at least five years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

Practitioners may be admitted, without residence, to Examination for the Degree of M.D., who have held a Diploma or a Licence in Medicine or in Surgery for at least ten years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

Practitioners who have held for at least three years the Degree of M.B., obtained without residence, may receive the Degree of M.D., upon producing satisfactory evidence of good moral character, and of having been engaged in practice during their possession of the inferior Degree.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXV.

LONDON: FRIDAY EVENING, JUNE 24, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. Members receive the Journal free by post.

The ANNUAL MEETING will be held at Swansea on the 10th and 11th of August. Gentlemen who have communications to read to the Meeting are requested to give notice of their intention to the Secretary. Communications will be called for in the order in which the Secretary has received notice from the respective authors. Vide p. 470 of May 27 for various details.

We must remind correspondents that, although they may wish their letters to appear under special signatures, it is absolutely necessary to communicate in confidence their names and addresses to the Editor.

ASSURANCE OFFICES AND SANITARY REFORM.

THE day, it is to be hoped, has passed away, when it was thought sufficient to treat a patient for fever, without inquiring into the *cause* of that fever; to prescribe medicines, and not to examine the state of the drains, and water-closets, and sculleries, and dust-bins, and cesspools, of the house where the fever exists. He who does not make this inquiry is behind the actual state of medical science. He has neither attended to the facts brought forward by sanitary reformers during the last twenty years, nor has he made any attempt in his own practice to test their value. He is content to grope blindly in the dark, shutting his eyes to causes which have been proved to exist, and the truth of which he can constantly examine, if he will take the trouble. And as he attends more to these causes, he finds that convulsions in children, violent inflammatory attacks of the bowels, diarrhoea, obstinate dyspepsia, inflammation of the conjunctiva, loss of nervous power, and various rheumatic and neuralgic affections, are to be traced to the same cause as fever, or erysipelas, or malignant epidemic diseases. Indeed, it would be difficult to say what disease, depending on an impure state of blood, may not be produced by habitually breathing impure air. This cause of disease has of late years become much more formidable. Water-closets are now introduced into almost all houses; and, unless the drains are perfect, and the traps good, they become more or less sources of impure air.

We make these remarks particularly in relation to life assurance. It is difficult to see in what way the assurance offices can make the purity of dwellings a point of inquiry; but it is one of so much importance to them, that, sooner or later, they will become aware of its value, and will find the way to ensure it. If we admit the impurity of the air to be a fruitful cause of disease, it must be highly important to ascertain if those who seek to insure their lives are not habitually subjected to such a cause of disease and death. A man forfeits his insurance, if he goes to reside abroad, as

he may there be exposed to the poison of malaria; but he may go into a new house, which is not properly drained, and die from its poisonous atmosphere, without any caution from an office, to which his life is of great value, that he is subjecting himself to an undue risk. Attention to these points by assurance offices might be of great value in sanitary reform. They would bring before the attention of the most prudent, far-sighted, and intelligent of the people—those, in fact, who insure their lives—the danger of living over cesspools, of having dead wells beneath their houses, of neglecting the state of their drains and traps, of drinking the purest kind of water which passes through lead pipes, or is kept in leaden cisterns. If it is known to be the interest of practical men of business to guard against the danger of these causes of disease, to which those who insure their lives are exposed, and by which the profits of the company are decreased, they will discover the means of doing it. The medical examiners of the assurance offices should take every opportunity of bringing the subject before the attention of the actuaries, secretaries, or directors; and, in order to do this effectually, they must have their own faith in such causes strengthened by a practical acquaintance with the evidence. They must lose no opportunity of tracing diseases to their causes amongst their own patients. “The knowledge and power of man”, said Bacon, “are coincident; for, whilst ignorant of causes, he can produce no effects.”

The great importance to assurance companies of sanitary measures has been ably stated by Professor CHRISTISON of Edinburgh. At the request of the Directors of the Standard Company, he examined the causes of the deaths of those assured during a period of five years. The total number of deaths was two hundred and ninety-seven, and sixty-seven out of these died of fever, malignant cholera, scarlet fever, and other epidemic diseases; and fifty-five of these were from typhus and cholera alone. “These fifty-five”, said Professor Christison, in addressing the directors, “may be considered in a great measure an extra loss; for, in all probability, proper sanitary measures would have prevented them. This is a very important matter for the consideration of all assurance companies; for, contrary to what has been thought by many, typhus and cholera do not seem in all epidemics to attack chiefly the feeble and unsound, so as merely to cut off a little sooner those who would perish at any rate at no distant period by ordinary diseases at large; at least, I find that a very large proportion of deaths from these diseases in the company’s list—no less than seventeen out of twenty deaths from cholera, and nearly the same proportion among those from fever—have occurred among what would undoubtedly be considered by every one as *select* lives. Another serious consideration is, that most deaths from these causes occur early in life, and consequently, in general, very soon after assurance is effected.”

This evidence, from an authority like that of Professor Christison, cannot be too widely diffused. He proves that

it is of the utmost importance to assurance offices that sanitary measures should be carried out, since, in five years, one company lost fifty-five lives from diseases which might in all probability have been prevented by proper sanitary measures; and, as he admits this, we must demur to his opinion, that "there are diseases which no care on the part of directors or their medical referees can foresee and guard against". We repeat, that it is the duty of the directors to consider whether they cannot guard against such sources of loss; and, although it may be difficult, it cannot be a problem impossible of solution by a large number of the acutest practical intellects in this kingdom. The medical referees of assurance offices, who must feel to a certain degree responsible for the duration of the lives they pronounce sound, may, by inquiry and cautioning the assured on these points, make them aware of a danger infinitely worse to them than to the office; and there is no reason why such hints and cautions should not be printed on the examination-papers, and read to the assured. These details, however, we leave to the care of those who are directly interested: our object is the advancement of that branch of our science which prevents disease; and here the interests of science and of business coincide.

SUNDAY—AT HOME, OR ABROAD?

IN a subsequent page will be found a letter from a member of the ASSOCIATION, (Dr. Stewart of the Middlesex Hospital,) announcing that six hundred and forty London medical practitioners have signed a petition to Parliament against granting to the proprietors of the new Crystal Palace at Sydenham, the power of opening it for profit on Sundays. Upon inquiry, we find that among the six hundred and forty signatures, there are the names of many of the most eminent, of our profession. The step which has thus been taken by so numerous and influential a body of metropolitan physicians, surgeons, and general practitioners, undoubtedly claims the attention of the journalist. We might perhaps avoid the question, by declaring that it is not professional in its character; and that medical men have nothing to do with state politics; but such a course would not only be opposed to our own convictions of duty, but would likewise be a deliberate censure upon our esteemed colleague Dr. Stewart, and his coadjutors in the present movement. We would not willingly incur such a reproach. Most cordially do we say with Dr. Stewart:—"Woe worth the day, when the lips of the medical man shall refuse to utter that noble sentiment—*Homo sum, nihil humani à me alienum puto*." It is nothing short of professional cant and social heresy to abdicate the responsibilities and the prerogatives of the man, when we assume the functions of the medical practitioner. In becoming members of a profession, we cannot guiltlessly ignore the fact, that we still remain members of the commonwealth; and that while our position as medical men imposes upon us certain special duties, it does not release us from any of the obligations which every citizen owes to the state.

There is a depth and a magnitude in the question before us, which is not sufficiently recognised by many of those with whom we are in the habit of associating and conversing. The question is not merely, Shall the Crystal Palace be open or closed on Sundays? It is the broader question, whether Sunday is to be made in this country—what it has long been

in France—a day of increased toil to the minority, that the majority above them in the social scale may seek pleasures at a distance from their homes, or amid scenes more brilliant and more exciting than the domestic circle? This is the real aspect of the question at issue. Were Parliament to grant to the proprietors of the Crystal Palace the privilege of throwing it open on Sundays to the myriads of this huge metropolis, for gain, assuredly the speculators of Vauxhall and Cremorne, and the lessees of the theatres, would clamorously demand, and ere long obtain, a similar concession. Then, again, in accordance with an universal law, the example of London would be imitated in every provincial town in the kingdom. In this way a rapid and a radical change would be induced in the habits of the people—a change for the better, we shall be told by some of our prominent statesmen and popular orators—a change for the worse, we shall be as positively assured by politicians of another stamp. We can fancy that we see before our eyes the familiar speeches of Mr. Joseph Hume and others in behalf of Sunday amusements for the people—"intellectual and elevating recreations, calculated to entice the toil-worn mechanic from his tavern debaucheries": or, sailing back over the ocean of Parliamentary debate, we can stop at a memorable speech delivered during the discussion on the "Public Houses Bill", on the 1st of June, 1842, by an able statesman, at present a cabinet minister of the Queen. Upon the occasion referred to, Sir James Graham said:—

"I see no evil in a hard-working man taking a little refreshment more stimulating than tea, perhaps, in a public house on a Sabbath morning; and I have been told that in the manufacturing districts it was customary for the artisans to take their breakfasts on such occasions in public-houses, that they might enjoy a little more comfort than ordinary."

We believe that both Sir James Graham and Mr. Hume have a higher object in view than the speaking of pleasant things to ten-pound voters—the aristocracy of the working-classes; and that they sincerely desire to improve society by affording facilities for Sunday extradomestic indulgences and amusements. But while we accord to them all praise for honest philanthropy of purpose, we venture to charge them with a great political blunder. All history proclaims their panacea to be worthless. We cannot help stating our deep conviction that it is shallow statesmanship—charlatanic treatment of the body politic. It is palliating symptoms by soothing syrups, and at the same time allowing the diseased condition, whence the pains arise, to remain without remedy and ready on any slight provocation to burst forth with implacable violence.

Amusement is essential to all classes of the community—to those who work with the mind as well as to those who work with the body: and we would go all lengths with Mr. Hume in earnestly striving to obtain for our toil-worn population a weekly holiday. But we would take the ground of the petitioners, and not purchase this boon at the price of weakening home attractions, and of seducing the heads of families from the cultivation of home affections, amid which only can be acquired enduring lessons of virtue, patriotism, and religion. It is because we believe virtuous homes to be the nurseries of patriots, that we wish to maintain Sunday as a domestic day. Times are fast coming, in which much patriotism is certain to be wanted; and it is, therefore, well for us jealously to refrain from weakening the relish for the purifying pleasures of domestic life, whether by such reckless suggestions as those which fell

from the lips of Sir James Graham, or by systematically enticing people to career over the wide world in search of amusement, on the only day in the seven which gives to the majority an opportunity of family converse.

This is not the place for a discussion upon the theological aspects of the Sabbath question; but, nevertheless, we may be allowed to guard ourselves from misapprehension, by declaring that our convictions are opposed to the puritanical austerities of Sabbath observance. We have adverted to the subject, because there appeared to be imposed upon us the duty of adding our voice to the protest of our medical brethren. With them we feel that the introduction of public amusements on Sunday would be a tremendous stride towards national demoralisation; inasmuch as it would be the commencement of a system which would generate anti-domestic influences similar to those which have been produced in France, and which have formed within the Parisian vortex the most dangerous populace in the world—a populace giddy and improvident—governable only by the physical supremacy of an ever present army. If there be any reader who has thoughtlessly admired the glitter and seeming joyousness of a Sunday in Paris, we would ask him to read the bloody chronicles of the guillotine and the barricade; and to ponder well the fact, that one third of the gay crowd by which he had been charmed are destined to die in the hospitals.*

THE IRISH MEDICAL ASSOCIATION.

It is with the highest satisfaction that we announce that an Irish Medical Association was formed at Dublin, on the 7th of this month, upon the model of our own institution.

The Branch System has been adopted. And a representative government has been constituted, the executive Council being chosen by the County Branches. The following is the excellent rule to which we refer:—

"4. *Council.* That the council shall consist of the president, chairman of the council, four vice-presidents, thirty-two provincial, two general secretaries, and treasurer of the Association, along with sixty-four provincial delegates, two being selected by each County Association annually from its members; seven to constitute a quorum for the transaction of business. With the council must rest the responsibility of managing and conducting the affairs of the Association from one annual meeting to another; the place and time of their meetings to be arranged by themselves.

The Irish Medical Association holds out to us the hand of fellowship; and let us grasp it right heartily, and bid the sister Association God speed. We have no doubt that, when our laws are revised, the Irish Medical Association will be recognised in the same friendly spirit in which the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION is mentioned in the subjoined law.

"10. *Ad eundem Members.* In order to form a union with our English medical friends, that the members of the Provincial Medical and Surgical Association of England, and so certified by their president and secretary, may be enrolled without the payment of any subscription or fee, *ad eundem* members of the Irish Medical Association."

It is worthy of notice, that the name originally proposed was the Provincial Medical and Surgical Association of Ireland; but, ultimately, the more catholic and more compact designation, "The Irish Medical Association" has been selected.

* "The Paris Hospitals are the ordinary asylums of the poor when sick. Indeed, one-third of the population of that city die under their roofs."—Dr. HENRY BENNET in *Inflammation of the Uterus*, p. 447. Third Edition, 1853.

ORIGINAL COMMUNICATIONS.

TWO CASES OF SUDDEN DEATH FROM HÆMORRHAGE FROM ULCERATION OF THE AORTA.*

By CHARLES COWDELL, M.D.Lond., Physician to the Dorset County Hospital.

(Read before the Dorset Branch of the Provincial Medical and Surgical Association, on May 31, 1853.)

CASE I. George Cockerell, labourer, aged 37, admitted June 27th, 1852, stated that he had always enjoyed good health until June 1851, when, after a hard day's mowing, he was suddenly seized with rheumatism, from which, however, he thoroughly recovered. He had since been in the hospital at Salisbury, where he was cupped and blistered on his loins, which were then the seat of much pain. On examination when admitted, he was found to be moderately fat, but flabby; and, indeed, in a state of general cachexia. The sound on percussion over the apices of the lungs was good; respiration was tolerably free, with somewhat prolonged expiration; sonorous and sibilant rhonchi were present in both bases posteriorly, and some finer subcrepitant rhonchus in the left base. He complained still of much pain in his loins. He had some cough, with slight expectoration of thick mucus. He had never spat blood. There was slight aortic regurgitation and constriction: no hypertrophy.

The treatment was directed to the bronchitic symptoms. He took with advantage a mixture containing chlorate of potass, compound tincture of camphor, and tincture of squills, with wine of ipecacuanha, and an expectorant pill at bed-time. Under this treatment, his cough and lumbar pains abated; but he was always listless and inactive. In this way he went on for about a month, when he began to expectorate a little blood mixed with the mucous sputa, and it was thought probable that there was latent phthisis, notwithstanding the slight indications of pulmonary disorder. He was accordingly directed to apply leeches to the chest, and to take oleum jecoris aselli. There was no indication of aneurism.

July 27th. When sitting on a bench in the garden this evening, he coughed slightly, was immediately deluged with blood, and died in a few minutes.

EXAMINATION OF THE BODY. The organs in the chest were found tolerably healthy, except the heart and aorta. Slight aortic disease, affecting the sigmoid valves, and diminishing the aortic orifice, was discovered. Patches of incipient atheroma were diffused over the inner surface of the aorta throughout. In the middle of one of these patches of atheroma was an ulcer, extending through the coats of the artery into the right bronchus. There was no dilatation of the artery; but between it and the bronchus there was a very small sac, formed by the outer coat of the vessel.

CASE II. George Whittle, aged 30, married, a labourer, was admitted at the end of August 1852. He had always enjoyed good health (except an attack of scarlet fever, four or five years previously) until eight weeks before admission, when, after getting wet through while ploughing, he was seized with pain in the left leg, which gradually increased. Of the progressive history of his illness he could give no account, having, as he said, been too ill to remember anything about it.

When he was admitted, the face was worn and pale; there was great emaciation of the upper extremities. The right shoulder could not be moved without great suffering; indeed, he could with difficulty be carried to his bed, or turned when in it. The legs were oedematous, especially the left; as were also the walls of the abdomen, which pitted under pressure. The heart's apex beat between the

* Reported by W. G. Bacot, Esq., House-Surgeon. The meeting at which this paper was read was held at Bridport, Dorset; S. S. Cory, Esq., President, in the chair. The paper was illustrated with pathological preparations of the diseased parts.

fourth and fifth ribs, just under the nipple. The sounds at the apex were very indistinct, though a low soft murmur could be caught; at the base, a distinct rubbing to and fro sound was heard. The heart's dulness appeared to extend towards the costo-clavicular articulation. The pulse was 104, and thready.

In the lungs, percussion was decidedly duller under the left clavicle than under the right. There were strong sibilant and sonorous rhonchi on both sides of the chest; mostly on the right side, where, in the clavicular region, the respiration was loud and blowing, and equal in length to the inspiration. On the left side, the expiration was prolonged, but not nearly as much so as on the right.

Over the front of the abdomen, there was a rash of a blueish shade, disappearing under pressure; the patches varying in size from that of a fourpenny piece to a pin's head.

The bowels were open; the appetite was good.

The following treatment was followed. A blister was applied over the heart, and the following mixture prescribed:—

R Potassæ nitratis ʒij.
Vini ipecacuanhæ ʒij.
Spiritus ætheris nitrosi,
Tinct. camphoræ compos., aa ʒss.
Oxymellis scillæ ʒi.
Aque ad ʒxvj. M.

Sumat cochlearia ij ampla 4tâ quâqua horâ.

September 3rd. He was much improved, though the legs, especially the left, were much swollen. The urine was moderate in quantity, and deposited phosphates.

He gradually improved from this time, so as to be able in two or three weeks to leave his bed, and walk about on crutches, and even to go into the garden to smoke his pipe when the sun shone; but he continued weak and cachectic, with a dejected air and expression.

Oct. 4th. Mr. Bacot, the house-surgeon, was called in the evening to see him, and found him sitting on the bed-chair (having just passed a motion), complaining of pain in his bowels. By the administration of stimulants at short intervals, he rallied from a state nearly approaching collapse.

October 5th. He was this morning quite free from pain, but his pulse was excessively small and weak.

At 2.30 p.m., when visited again, he was found in *articulo mortis*, and rapidly sank.

EXAMINATION OF THE BODY. *Chest.* The lungs were covered with recent false membrane, not uniting them to the costal pleura in front, although it did so behind. There was no tubercle. The lungs were crepitant, and buoyant in water. The pericardium contained a little fluid, and some fine adhesions united the roots of the vessels to the pericardium. The heart was of normal size. There was a large white patch on the anterior surface of the right ventricle, the walls of which were a quarter of an inch thick. The tricuspid valves were healthy; the pulmonary valve had fine reticulations on two of its segments. The wall of the left ventricle was half an inch thick. The aortic valve was thickened and opaque, and had some reticulations. The mitral valve also was thickened at the points of insertion of the chordæ tendinæ; and the opposite portion was puckered and greatly diminished in breadth.

Abdomen. This cavity being opened, a dark plum-coloured fluid escaped, and the intestines on the right of the median line were found to be encased in a coagulum of blood an inch thick. On close examination, the liver was found united to the right pillar of the diaphragm. The aorta and vena cava were imbedded in a mass of fibrin, extending from the aortic opening in the diaphragm to just above the iliac arteries. This mass was removed entire, and exposed an aneurismal sac, bounded by the right pillar of the diaphragm, the anterior inferior surface of the liver—the lobulus Spigelii projecting into the sac, and in front by a layer of thick lymph, together with the vena portæ and hepatic artery, which were moreover united by recent lymph to the lower edge of the liver. This cavity

was divided into two of unequal size, that attached to the aorta being as large as a walnut, and separated from the larger one by a thick layer of lymph, perforated with an opening of the size of a goose-quill, and having another opening, by which it communicated with the aorta, as large as a chicken's quill. This last opening was found just above the giving off of the arteries, which usually unite to form the celiac axis, but which in this case arose separately from the aorta. The aorta was roughened by a patch, apparently of atheroma, at this precise spot, without any dilatation, and was elsewhere smooth and healthy. The smaller cavity was rugose, like the lining membrane of the gall-bladder, and contained a tough, tawny coagulum. The larger one—twice the size of the smaller—appeared to be of more recent existence, and to be formed principally by adhesion of the parts and organs whereby it was naturally bounded.

REMARKS. In neither of these cases was the calibre of the aorta at all increased. In both, there was deposit in the inner coat, though very slight, and confined to the immediate neighbourhood of the perforation of the artery in the case of Whittle. In both, the cellular coat appeared to form the aneurismal sac, being dissected away by the infiltration of blood. Both patients were in the state of rheumatic cachexy, contracted under very similar circumstances. But in Whittle there was something more: the valvular heart-affection, and an abscess over the right shoulder-blade (not mentioned in the account of the autopsy).

It appears sufficiently clear that, in the case of Cockerell, the affection of the artery commenced with his rheumatic attack. The inflammation of the serous lining of the heart (endocarditis) was continued to that of the aorta, ending in atheroma of the vessel; the peculiar characteristics of which—fatty globules and crystalline matter—were distinctly visible under the microscope. Rokitsky affirms that this succeeds to hypertrophy of the lining membrane of the vessel in such cases.

In the case of Whittle, the incrustation in the aorta was so small and thin, that it may be doubted if it was of the same nature as that of Cockerell; and when it is remembered that there were two sacs—the inner one only containing a coagulum, and that, besides the coagulated blood, there was found in the abdomen a quantity of thick plum-juice-like fluid—we retain the impression then felt, that an abscess had given way. The outer and larger sac was probably that of an abscess, which had caused arteritis at the point of contact, with ulceration through its coats, and their dissection of its outer one by the effused blood, thus gradually causing the aneurismal sac. This conclusion is, however, somewhat at variance with the appearance which the larger sac presented, of being more recently formed than the smaller one.

The sudden pain in the belly, and the supervention of syncope in the recumbent posture, indicated internal hæmorrhage from the yielding of arterial coats, either by ulceration or aneurismal rupture. Happily, the cause of death was clearly demonstrated by the *post mortem* examination, and as clearly exhibited in the well prepared pathological specimens with which the remarks on the case were illustrated.

Dorchester, June 1855.

SUGAR OF MILK AS AN ARTICLE OF FOOD IN CONSUMPTION AND OTHER PULMONARY DISEASES.

By JAMES TURNBULL, M.D., Physician to the Liverpool Royal Infirmary, and Lecturer on Clinical Medicine to the Medical School.

Those who are familiar with Liebig's works are aware that he established, several years ago, the fact that all the most valuable substances used as food belong to one of two classes—the azotised, or plastic, which form the tissues of the

and replace the worn-out tissues; and the non-azotised, or combustive, which furnish food for the lungs, supporting respiration and animal heat. Now, it is a curious fact, which he also established, that, though the fibrin, albumen, and casein, which constitute the chief of the first or azotised class of alimentary substances, exist in vegetable as well as animal food, animals have not the power of forming in their own bodies any of those azotised alimentary principles. They are primarily derived from the vegetable kingdom; and the digestive organs of animals have no power of producing them, but merely of assimilating what has been already formed by plants, or previously drawn from the vegetable kingdom by some other animal. These views met with considerable opposition when they were first advanced; but their correctness is now generally admitted, and there is no essential difference in the chemical composition of fibrin procured from vegetables and that obtained from the flesh or the blood of an animal, or between vegetable and animal albumen or casein.

Of the other class of alimentary substances—the non-azotised—the chief use of which is to supply food for respiration and the support of animal heat, the principal are starch, sugar, oil or fat, and alcoholic liquors. These unite with the oxygen absorbed at the lungs, and are the chief source of the carbonic acid and watery vapour given off by these organs. They are, in fact, burnt by a process of slow combustion, which is the great source of the high temperature of animals.

It appeared to me that, as this function of the lungs must necessarily be more or less impeded in all pulmonary diseases, and as cod-liver oil had been found so beneficial in that particular disease, consumption, advantage would be gained by selecting from this, the non-azotised or combustive class of alimentary substances, such of them as would have the greatest tendency to unite readily with the oxygen absorbed at the lungs; and thus, in the disabled condition of these organs, to facilitate the performance of their functions.

I was thus led to inquire which of the non-azotised or combustive class of alimentary articles are most readily digested, and have the greatest affinity for oxygen. Sugar of milk is an article belonging to this class of aliments, which possesses these properties in a high degree, and is deserving of more attention than it has yet received as an article of food. I shall therefore state a few facts respecting it, which seem to me sufficiently interesting to be worthy of being brought under the notice of the profession.

There are three principal varieties of sugar—cane sugar, milk sugar, and grape sugar. They are closely allied in composition, though they differ considerably in chemical properties. All kinds of milk contain sugar of milk; but it is worthy of notice that asses' milk, which has always had a greater reputation than any other kind, as an article of food in consumption and other pulmonary diseases, contains the largest proportion, relative to the caseous and oleaginous principles, of any kind of milk. Whey, which consists almost entirely of sugar of milk, has also been found a useful article of diet in consumptive cases.

When we inquire into the chemical properties of milk sugar, we also find that it has so strong an attraction for oxygen, that, when dissolved with an alkali, it has the power of reducing more or less completely some of the metallic oxides. It is readily absorbed into the blood, which, being an alkaline fluid containing oxide of iron, furnishes the necessary conditions for its oxygenation. Besides this, its composition is such, that it must be readily converted into carbonic acid and water. There is only one other point in relation to its fitness to supply material for respiration, which I shall at present notice. It is the fact, originally pointed out by Liebig, and now admitted by physiologists, that one of the great offices of the liver is the preparation of combustive material for the respiratory process. This is a point which has not been sufficiently kept in view by medical men; but it is one of great practical interest, when we consider that the function of the lungs and that of the liver are so intimately connected and mutually

dependent, that derangement of the secreting function of the latter must necessarily interfere with the former, and may not improbably be one of the chief causes of a tubercular state of the blood. The liver prepares the combustive materials for respiration; and of this there are two sources, one being the worn-out tissues of the body, the hydro-carbonaceous part of which forms bile, and, being re-absorbed, is consumed at the lungs; the other is the saccharine and fatty matters of the food, which are consumed in a similar way. It would seem, however, that the liver has not only the power of preparing the latter, but also of forming saccharine at least, if not oleaginous matters, from the blood. A defect in this power may be one of the great causes of tubercular diseases; and if we can, by giving a ready formed oil which is stored up at certain times in the liver of the cod-fish, rectify to a great extent any defect in its action, so far at least as the oleaginous material for respiration is concerned, there is good reason to expect that still more may be gained by giving, in a ready formed state, the other combustive material, the saccharine.

The facts I have brought forward have led me to use sugar of milk in the treatment of consumption; and, as I have seen benefit from its use, I wish to recommend it as an article of food deserving of more attention in the treatment of this disease than it has yet received. I believe also that they embrace an important principle, applicable to the dietetic treatment of other diseases.

Liverpool, June 1st, 1853.

READY MODE OF APPLYING THE DOUCHE, AND OF ADMINISTERING INJECTIONS OF WATER.

By J. INGHAM IKIN, F.R.C.S.Eng.

IN directing the fitting up of a small Hospital for the Diseases of Women and Children, just opened in this town, I have adopted a simple and effectual plan for the application of the douche, and for the administration of water injections, both of which are very useful in the treatment of many disorders of women. As I am not aware that this exact mode of employing water has been recommended or used by the profession, I now call attention to it through the medium of our JOURNAL.

To every floor in the new hospital, hot and cold water is carried; the latter being supplied by the town water-works; the former, by a reservoir placed in the attic, heated by pipes connected with the kitchen fire. To the pipes and taps in the lavatory and bath-room, I have had additional screw taps attached at the side, to which is appended a length (about two yards) of gutta-percha tubing, of somewhat smaller diameter than that now commonly used for cleansing carriages, etc. There is, at the end of the elastic tube, a brass screw, to which terminal pipes of different kinds can be attached; for example, an ordinary straight one, with a single aperture; a vaginal one, with a number of orifices, as in a female syringe, etc. As the pressure on the water in the pipes (which communicate with the mains) is always considerable, it is expelled with great force, which can be regulated by the screw tap, at the will of the patient or nurse, according to circumstances and the effect produced. It is a simple and effectual mode of applying the douche, and of giving water injections.

The proper and judicious application of water, in the treatment of many diseases, either local or general, we should not overlook, nor allow quacks, hydropathists, and others, to obtain credit for modes of treatment which, in judicious hands, can be skilfully and discriminately used, though they will not be abused, or used merely as a means of *pumping* the pockets of the patient, and gulling the public.

As a shower bath, especially for children, I may add that I find the pneumatic apparatus (an old invention, I believe, recently come again into fashion) to be very convenient, especially when a severe shock is objectionable.

The cold sitz-bath is certainly a most convenient and useful form of bath, especially to females subject to leucorrhœa and relaxation of the muscular system.

The proper distinction now made between vaginal or epithelial leucorrhœa, and uterine, cervical, or mucous leucorrhœa, is eminently useful, and has been very accurately described by Dr. Tyler Smith. My own researches entirely confirm his views; and I feel indebted to him for his able investigations, which I hope to be able still further to support at a future time by the publication of some microscopic examinations and cases of my own.

This leads me to remark that, in the use of the glass speculum, without the covering—that is, a transparent one—some risk is run of its breaking, but only when it is improperly made, or too violently introduced. I would, however, caution against using it without the plug, as the edges may lacerate the vagina. A plug of firm sponge answers very well, and can be readily withdrawn. The bivalve metallic speculum, I agree with Dr. Bennet, is, on the whole, by far the most useful instrument.

In concluding this desultory notice, I may repeat what has been so often proved by higher authorities, that, with regard to the use and application of water in the treatment of disease—that the claims of the hydropathists, or those of the founder of that sect, are very inferior to those of Currie and many other regular scientific practitioners. I may be allowed to add that, nearly twenty years since, I wrote a series of papers on the German Mineral Springs, for the *Lancet*, in which the use of cold water, the douche and the bath in all their forms, were pointed out as eminently useful in many diseases, both in man and the lower animals. The practice of intelligent physicians at the different spas, both at home and abroad, had proved this fact long before hydropathy was known.

Two great lessons the profession have, or should have, derived, from the temporary success amongst certain classes of hydropathy and homœopathy: these are, first, never carelessly to overlook the remedial efficiency of water, and its various forms of application; and second, to attend more to the diet and habits, and general hygiene of patients, and to discard the system of *overdosing* (I only say *overdosing*), and ringing the changes on purgatives, diuretics, alteratives, tonics, etc., etc., when such agents are not *absolutely* required; or pressing attendance beyond reasonable limits. The charge for attendance and advice will, in the majority of cases, be much more willingly paid, than a bill of the old school for mixtures, pills, and potions.

Leeds, June 13th, 1858.

BIBLIOGRAPHICAL NOTICES.

PRACTICAL TREATISE ON DISEASES OF THE SKIN. By J. MOORE NELIGAN, M.D., M.R.I.A., Hon. Fellow of the Society of Physicians of Sweden, Physician to Jervis Street Hospital, and Lecturer on Medicine at the Dublin Hospital School. pp. 429. Dublin: 1852.

THIS book opens with a chapter on the classification of skin-diseases, and several interesting general observations are made. The following remarks, on the effect of skin-diseases on the system generally, will interest some of our readers:

"An important view in which diseases of the skin must be regarded, and one that adds much to their interest, is the effect they produce upon the system generally. We sometimes find that, in persons who have laboured even for a long time under these affections, but little constitutional derangement is, in many cases, caused by them; so little indeed, that it has been doubted whether the existence of an affection of the skin, in a chronic form, tends to shorten life, or should be taken into account in coming to a conclusion as to eligibility, in a medical examination, for assurance. For my own part, I believe that, as long as the individual remains unaffected with any acute or inflammatory affection, the existence of a skin-disease will not in any respect diminish the average chances of longevity."

These views, coming as they do from so practical an observer as Dr. NELIGAN, are highly valuable.

After sketching the various classifications of skin-diseases that have been made by writers, and after showing how difficult a thing it is to make an artificial classification that shall be at once truthful and simple, Dr. Neligan proposes "to divide cutaneous diseases into ten groups or orders, as follow:—1. Exanthemata; 2. Vesiculæ; 3. Pustulæ; 4. Papulæ; 5. Squamæ; 6. Hypertrophies; 7. Hæmorrhagiæ; 8. Maculæ; 9. Cancrodes; 10. Dermaphytæ; adding two supplementary groups, Syphilides, and Diseases of the Appendages of the Skin."

We congratulate the profession on being possessed of so simple an arrangement of what are called cutaneous diseases; but we should congratulate it much more, if we could have seen the author before us dispensing with classification altogether.

How long, we wonder, how long, will the system of making disorders, and of transforming the symptoms of disease into diseases themselves, continue? Dr. Neligan says, that the past plans of arranging skin-diseases into classes have been either too artificial or too complicated. This is true. Dr. Neligan might have gone further, and said what we have every reason to believe he thinks, that it is monstrously absurd to speak of any appearance on the skin, except as of a sign indicating a derangement of one or other of the leading functions of the body. Let us give an illustration of what we mean. If the skin be covered with a white scurf, or be cracked and fissured here and there, it is looked at with a most piercing glance, and is said to be suffering from some extraordinary disease with a still more extraordinary name: but let the tongue, which is but a continuation of the surface of the skin, be the seat of these appearances, and straightway they lose their importance altogether; the tongue is said to be foul, or dry, or fissured, and to indicate the condition of the system; but the tongue is not said to be suffering from any special disease: and the man who might say that it was, would be rightly considered as something little short of what the Scotch call "an innocent". Look at the matter reversed. Let the skin be universally pale, and sweating at every pore, and it is never described as suffering from any disorder, but is said to be in a state that expresses in some way the nature of another disease, say consumption. Let it be unusually dry, shrivelled, and dingy, and again it shall not be diseased, but in a condition indicating some such disorder as diabetes. Or again, let it be yellow and dry, and it shall only point out that the liver is undergoing abnormal change. But let the skin be red and dry, or red and rough, or spotted in half a dozen places, and at once it is petted like a drawing-room fop, is considered as in a very bad state, is treated peculiarly, and is described as suffering from a vesicular, an exanthematous, or a pustular disease. Surely such classification of diseases is not merely artificial, but is also *exceedingly* superficial.

However, we ought not to find fault with Dr. Neligan. Reforms must proceed slowly to proceed surely; and, until the professional mind is fully prepared to receive the doctrine, that disease is an unity with a variety of phenomena, it is better not to put the doctrine fully into practice, but to lead the mind toward it by simplifying old classifications, as Dr. Neligan has now done.

We have not much space for following our author through his thirteen chapters on the symptoms and treatment of the diseases included in those classes which he has proposed, and we have copied. He does not admit measles or scarlet fever into his list of exanthematous diseases; but he treats largely on erysipelas. Here is a passage which refers to the local treatment of erysipelas:

"When erysipelas is spreading rapidly, although superficially, over the cutaneous surface, the inflammation still persisting in the parts where it first appeared, inunction with mercurial ointment has in my experience more effect than any other local application in checking its progress. The mercurial ointment, to every ounce of which a drachm of glycerine has been added, should be smeared thickly

inflamed surface, and on the sound skin for a considerable distance beyond ; it need be applied only once in the twenty-four hours, and, if any symptoms of salivation be produced, its employment should be at once stopped."

It would be interesting to know whether salivations ever would be produced by rubbing mercurial ointment over an erysipelatous surface ; and if Dr Neligan has at any time seen such an effect, he is blameable for not stating the fact. We notice that he believes strongly in the contagious nature of erysipelas.

Our readers who are accustomed to meet with affections of the skin, and are expected to cure them, will sympathise with us when we say that we turned with considerable eagerness to that part of our author's work which refers to the treatment of "chronic eczema". With the exception, however, of finding that the lead cerate was rendered a more useful local application by having eight or ten minims of chloroform, and two drachms of glycerine, added to every ounce, we cannot confess to have been at all enlightened on the treatment of that troublesome disease.

Passing over many pages, we rest for a minute on those which contain Dr. Neligan's views as to the treatment of psoriasis. These views have nothing that can be considered original. We had hoped that they might have said something for or against the practice introduced by Dr. Golding Bird, and so ably explained by Dr. Easton, of Glasgow, of treating psoriasis with full doses of acetate of potash ; a practice which has once succeeded admirably in a case under our own care. Dr. Neligan is, however, silent on this matter. The fresh water tepid bath is, with him, the best local application. At page 233, the following passage occurs :—

"In strong, healthy, plethoric young persons of either sex, when the eruption is of the guttated form, or affects only a small portion of the skin, its progress will generally be stopped, and a cure effected by the use of tolerably active saline cathartics every second and third day, preceded by a general blood-letting, and the daily use of a *fresh* water bath, at the temperature of 90°."

In old persons, he employs stimulating diaphoretics ; in scrofulous children, cod-liver oil ; and in aggravated cases, arsenic combined with a preparation of iodine.

The leading novelty in Dr. Neligan's book is his mode of treatment in cases of purpura. On this subject, he thus observes :—

"Some years ago I published an essay on the treatment of purpura by large doses of turpentine, and illustrated the efficacy of this remedy when thus administered, by a report of several cases in which it proved successful. Since then I have continued to employ it both in the simple and hæmorrhagic forms of the disease ; and my additional experience is fully confirmatory of the views then propounded. It must be given in doses sufficiently large to act as a purgative, from one to two ounces, according to the age and strength of the patient for adults, and in a proportionate dose for children."

Further on, he says :—

"The beneficial action of the turpentine in this disease is two-fold. First, it is a diffusible stimulant and styptic, which, when conveyed into the circulation through the digestive organs, is exhaled from the system by means chiefly of the mucous surfaces, as is manifested by the odour of the breath, and of the various secretions and excretions. It is thus consequently brought directly into contact with the capillary circulation, from which, in this disease, the hæmorrhage takes place. And second, the free employment of purgatives in the treatment of purpura having been long since proved to be attended with most successful results, the administration of oil of turpentine to fulfil this indication is especially serviceable, in consequence of its not being a debilitant." (pp. 306, 307.)

On this practice and theory, we have no remarks to offer. Our own treatment of purpura always consists in the employment of the citrate of quinine and iron, with occasional gentle purges, and we have found this treatment most successful in several cases.

Dr. Neligan's last chapter is on the therapeutics of diseases of the skin, and has reference to the value of warm baths, gelatine baths, alkaline baths, iodine baths, sulphur

baths, mercurial baths, cataplasms, caustics, lotions, cerates, powders, soaps, and bandages, and to several medicines for internal administration. The chapter is interesting and useful, but is greatly disfigured, as indeed is much of the book, with the introduction of numerous dogmatical formulæ. If an author has seen a remedy do service in any disorder, let him say so by all means ; he is culpable if he does not ; but let him state the simple fact, and not tattoo his pages with endless recipes and execrable Latin. No professional man, we hope, is in so low a state of ignorance, and so devoid of the knowledge of the method of prescribing, as to be obliged to copy formulæ from books. An indolent student may, perchance, transcribe a formula, and reproduce it ; but to the student the proceeding would be highly injurious, inasmuch as it would encourage him in indolence, and take from him that degree of self-reliance and familiarity with the implements of his art, which every medical practitioner ought to feel and cultivate. We are not, in these remarks, criticising Dr. Neligan especially, but a vicious practice which ought to be abated, and which we regret to see is patronized by an author deservedly esteemed in pharmacy and therapeutics.

Though we have ventured to speak freely upon some points in which we differ from Dr. Neligan, we must say that his work, as a whole, is one which inculcates practical precepts.

DES SOURDS-MUETS. INTRODUCTION A L'ÉTUDE MÉDICALE ET PHILOSOPHIQUE DE LA SURDI-MUTITÉ. PAR M. E. HUBERT-VALLEROUX, Docteur en Médecine de la Faculté de Paris. Svo. pp. 121. Paris : 1853.

[THE DEAF AND DUMB. AN INTRODUCTION TO THE MEDICAL AND PHILOSOPHICAL STUDY OF DEAF-DUMBNESS. By Dr. E. HUBERT-VALLEROUX. Paris : 1853.]

THE object of this work, as stated by Dr. HUBERT-VALLEROUX, is to classify the diseases from which deaf-dumbness is derived, to examine its causes, to point out its characters and nature, and to trace them in their different phases, in order to deduce therefrom rules for rational treatment.

The work is divided into eight chapters.

Chapter I contains Introductory Observations, referring to the object of the work, to the number, intellect, moral condition, and character of the deaf and dumb, to the disastrous results of deaf-dumbness, and to the importance of treatment.

The number of deaf and dumb persons in Europe is calculated by Dr. Hubert-Valleroux to be three hundred thousand.

The author, in commenting on their intellectual condition, observes that when, after years of labour, the deaf and dumb have gained some power of acquiring and communicating ideas, they are ten or fifteen years behind other persons. They have been remarked to readily become acquainted with the visible characters of objects ; but the great majority are precluded from passing from the region of physics to that of metaphysics. When perfectly uneducated, their condition is often analogous to that of some savage tribes.

The deprivation of hearing and speech

"Reacts also on the moral and effective feelings, creates certain habits, and influences the character. Under this double infirmity, the general constitution and the temperament of its subjects undergo even remarkable modifications. . . . Two paths, which have been described by poets of all ages, and of all nations, are presented to man on his entrance into social life. The one is the wide and easy road, into which enter those who obey their instincts, who follow the law called *natural*, or of the flesh, common to man and animals. The other is the narrow road, the rugged path into which penetrate those only who possess faith, and who, sustained by the hope of another life, voluntarily tread under foot the enjoyments of the former. If man remains free to the impulses of nature, if he knows not the road which he should take, he blindly follows the law of instinct, like the brute ; abandoned to himself, he obeys the laws of gravitation. And when men are found in society who

practise devotion even to suffering and death, they are those who possess religious or social faith—the faith which animates martyrs. This faith always involves the supposition of instruction of the highest order, since it rests on purely spiritual objects. It coincides, moreover, with the existence of a civilised society and a complete language; for the ideas of devotion and of charity, as well as the words which express them, are unknown in rudimentary states of society. . . .

"Benevolence, mildness, equanimity, are not mere virtues arising from temperament, as some assert them to be; they are real virtues, the fruits of the moral sentiment combined with the will. How otherwise can we explain those unexpected and sudden transformations from intemperance to sobriety, from anger to mildness of temper, etc., in men who have undergone no organic change, who have felt no pain, but who have only acted under the influence of a new conviction or belief? Why should not the same results be produced in the deaf and dumb, if they could receive an instruction as extensive and as complete as that of those who can speak?

"Before receiving the special education which is indispensable to enable him to know and to practise social duties, the deaf and dumb person is choleric, revengeful, idle, jealous, and gluttonous: he is, in a word, what each of us would be if we followed our instincts, and lived under the much vaunted empire of natural laws. In the absence of virtues, the decencies of society protect us from these failings and vices, while the perception of these decencies is one of the last fruits which the deaf and dumb person derives from his education. As the education advances, the disorder diminishes, but it is with great difficulty that it totally disappears." (pp. 7-10.)

The author gives some quotations from the works of the Abbé Sicard and of M. Itard, which coincide with those which we have transcribed.

Chapter II contains Historical Considerations on Otology, in which the author points out that our knowledge of this subject is very recent. Itard was the first who, in 1821, published a connected series of observations on deaf-dumbness.

Chapter III treats of the Causes of Deaf-Dumbness. In it Dr. Hubert-Valleroux gives some interesting statistics. He says:

"Considered in its totality, the deaf and dumb population is very unequally distributed over different parts of the globe. It alternates in a general manner with that of the blind, so that one increases while the other diminishes, and *vice versa*. As we approach the equator, we find blindness predominating, as in India, Egypt, and Ethiopia. It predominates, also, towards the poles, among the Laplanders, the Samoiedes, and the Esquimaux. Deafness, however, is most prevalent in temperate countries, and especially in mountainous regions, as Switzerland. In that country we find a canton—Berne, for example—which has not less than one deaf and dumb person in 205 inhabitants; the district of Schwarzenburg, which has one in 103; and the *commune* of Weyach, which contains one in 44!

"In the space of a few miles, in the basin of the Aar, Switzerland presents a remarkable example of the contrast which I have just pointed out. The low and damp western part, as well as the eastern part, which is connected with the Alps, both contain a large number of deaf and dumb, and few blind persons. The southern part, a lower part of Mount Jura, contains, on the other hand, very few deaf and dumb, while the blind abound." (pp. 10-20.)

The causes of this antagonism are mainly to be sought for in the influence or deprivation of light. In Egypt, and in the Polar regions, the blind are found; in the former country, the direct and reflected rays of the sun are the cause; in the latter, the constant presence of snow, and the frequency of the aurora borealis. Deaf-dumbness, on the other hand, is found in the regions where there is a deprivation of light. Connected with this condition is commonly found that of constant coldness and humidity; and to this the author attaches much importance.

As causes of deaf-dumbness, are also to be reckoned the vices of social and economic institutions, the peculiar condition of certain families, and especially the defective education of children, as among the poor.

Hereditary tendency, not only in a direct line, but also collateral; intermarriage of relatives, to which the author would attribute the frequency of deaf-dumbness in the

aristocratic families of Spain; passions, emotions, fright occurring to women during pregnancy, are all referred to as causes of congenital deaf-dumbness.

Those families in whom deaf and dumb children are found present singular anomalies. In one, all the children of one sex will be deaf and dumb, while the others can speak. In another, there will be an alternation of the deaf and dumb with the perfect child; the series being sometimes of one, sometimes of two or three.

As causes of deafness leading to dumbness in children, may be mentioned the exanthemata, small-pox, measles, scarlet fever, etc. In the Leipzig Institution, out of twenty-five cases, fourteen arose from scarlet fever, six from measles, and only five from other diseases. In Italy, Germany, England, the United States, and France, however, the number arising from exanthemata, although considerable, is not so great.

In concluding this chapter, the author observes that he "would have to notice almost all the severe diseases of infancy, if he desired to enumerate all the causes of deaf-dumbness which are presented in practice."

In chapter IV, Dr. Hubert-Valleroux treats of the Characters of Deaf-Dumbness. He describes the conduct of the deaf and dumb, contrasting that of the educated with that of the uneducated state. He also refers to the lymphatic temperament, and to a tendency to catarrhal affections of the mucous membranes, as being very frequent. The deaf and dumb, also, present a low degree of "organic sympathy", so that disease may proceed to a great extent before there is any manifestation of pain.

According to Dr. Hubert-Valleroux, deaf-dumbness is more frequently acquired than is generally supposed. Itard at first believed it to be mostly congenital; but he subsequently modified this opinion. The author says:

"To become convinced of the frequency of acquired deaf-dumbness, we can make the children in any institution pronounce the few words which they almost all know. We soon recognise from the accent, which cannot be mistaken by a practised ear, that a large number of those who are entered as deaf and dumb from birth, have spoken at some time. In some schools, as those of Bordeaux and Nancy, where the previous history of each child is carefully collected, we read that most have heard up to the age of eight or ten months, a year, or more; and the information furnished by the families will allow the infirmity to be referred to convulsions, scarlet fever, etc. Hence we infallibly arrive at the conclusion, that congenital deafness is as rare as acquired deaf-dumbness is common." (pp. 41-2.)

The author discusses and refutes the proposition advanced by Itard, that deaf-dumbness depends on paralysis of the acoustic nerves. He shows an analogy, with regard to the circumstances under which they are produced, between deaf-dumbness and ophthalmia neonatorum; and concludes the chapter in the following words:—

"Itard was right when, forgetting what he had said about paralysis of the auditory nerve, he added these words: 'The causes of deaf-dumbness may be all those which weaken or destroy hearing in the adult.' In fact, injuries, morbid adhesions, the presence of foreign bodies in the ears, caries, necrosis, catarrhal, nervous, or rheumatic affections, etc.,—all these lesions which, in the adult, produce simple deafness, are recognised as organic causes of deaf-dumbness. This statement is confirmed by the fact, that the remedies which are found beneficial in adults, are also those which, in the analogous affections, have been successfully used in the treatment of the deaf and dumb." (p. 52.)

Chapter V treats of the Prognosis of Deaf-Dumbness. The curability of the affection in all cases has been most absurdly insisted on by some persons; and Mesmerism, animal magnetism, and electricity, have been vaunted as infallible remedies. On the other hand, some physicians have affirmed the absolute incurability of all deaf and dumb persons: "an assertion", ironically says Dr. Hubert-Valleroux, "full of modesty on the part of these learned gentlemen, who thus declare that they possess not only a complete knowledge of the past and the present of otology, but also an insight into its future progress."

The author shows that the medium between these opinions

is the correct one. Deaf-dumbness is susceptible of cure, in some cases spontaneously; in others, in consequence of some accidental disease; and in others, by judicious treatment: and he supports this view by the recital of cases. The following are the circumstances to be attended to in forming a prognosis.

"The deaf and dumb individual who offers the best chance of recovery under treatment is he whose deafness is *accidental*, and has supervened at an age when children have already begun to hear and to speak, and who still preserves some remains of hearing and speech. If the organic lesion, the first cause of the infirmity, has its seat external to the nervous centres; if the child is intelligent, and has no brothers or sisters in the same state as himself; if he is the offspring of healthy parents, not related by blood; and if he has yet undergone no treatment, the chances of recovery will be numerous; and they will almost amount to certainty, if all the above conditions are found combined. On the other hand, they will lose their value in proportion as one or more of these conditions are wanting; and recovery can scarcely be hoped for when they are all absent. It is possible to ameliorate certain cases of congenital deafness, and those which supervene in the early months of life on eruptive or catarrhal fevers: I have seen more than one instance. But I have not yet seen recovery, or even relief, in persons attacked with deafness after fevers or cerebral lesions.

"Far be it from me, however, to pretend to assert a definite prognosis, especially an unfavourable one, in deaf-dumbness. I have too often experienced how great and how unknown are the resources of the *vis medicatrix nature*; and I too well know the extent of our ignorance of otology, to throw off, with regard to this subject, the most prudent reserve." (pp. 83-4.)

In chapter vi, the Treatment of Deaf-Dumbness is described.

In 1786, M. Felix Merle treated the affection by the introduction into the ear, night and morning during a month, of a stimulant application, composed of an infusion of asarabacca and other herbs. In this way he treated twenty-seven individuals in Bordeaux, without regard to the nature of their affection, to their temperament, or to their idiosyncrasies. The result produced was a painful inflammation, which aggravated the disease in most of the patients, but produced improvement in one, and cured another.

About the commencement of the present century, M. Varroine believed that the cause of the affection under consideration was paralysis of the nerves of hearing and of the tongue; and in a patient under his treatment, he referred the dumbness to enlargement of the latter organ. He therefore applied moxas, one at the nape of the neck, and the other under the chin. These produced much swelling, inflammation, and suppuration. This patient recovered; but Dr. Hubert-Valleroux remarks, "that this treatment was as likely to kill the patient as to cure the disease". This method obtained so much notoriety, that, according to Itard, many of the deaf and dumb admitted at that time into the institution at Paris bore numerous cicatrices of moxas.

Itard himself tried the remedies recommended by Merle and Varroine, with little or no advantage. And not only was this empirical treatment useless, but it also gave rise to accidents of more than one kind, often very severe.

Dr. Hubert-Valleroux next proceeds to describe the treatment which he employs; but he first makes some very just observations, which we transcribe.

"It is with heroic remedies as with surgical operations: recourse should not be had to them until milder means have failed, or must necessarily fail. We are not justified in inflicting severe pain on patients, except to remove greater pain or inevitable danger. Except under these conditions, the administration of heroic remedies, and the performance of surgical mutilations, ought to be severely interdicted. For these reasons, I dare to blame the conduct of Varroine, of Merle, and even of Itard, our honoured master. Although deaf-dumbness is, without dispute, the most severe of human afflictions, it nevertheless leaves perfect the principles of life; and no one has a right to rashly interfere with that sacred deposit. Our knowledge of diseases of the ear is at present too limited to authorise the employment of heroic means. It is no doubt painful to remain disarmed in the presence of so great misery; but here patience

is by no means culpable, while unseasonable activity may become so. The rigorous observation of these precepts has perhaps prevented me from obtaining all the success which has seemed possible; but it has safely preserved me from dangers which I knew to be inevitable under an opposite line of conduct." (pp. 90-1.)

The following is the author's description of the treatment which he employs:—

"Partial excision of enlarged tonsils is the most painful operation which I have performed in the treatment of deafness; and to this I have rarely had recourse. I have extensively practised catheterism of the Eustachian tubes, and injections of medicated vapours into the cavity of the tympanum. The substances which I have most frequently used for this purpose have been the resins and gum-resins, and the essential oils of thyme, lavender, rosemary, balm, etc.; and experience has taught me to vary these according to circumstances, in order to render the treatment efficacious. I have also used, but very rarely, the vapour of ether, either pure, or more frequently combined with ammonia. I have sometimes touched the throat with a stick of nitrate of silver, or with a brush dipped in a solution of that salt; and I daily employ for that purpose a saturated solution of tannin. The most energetic cutaneous revulsive which I have as yet found it necessary to use, is a mixture of three parts of almond oil with one of croton oil; this I apply to the skin near the angle of the lower jaw, in order to produce a redness which continues during from two to five days. I have been able to confirm the advantages of a practice recommended by Itard, consisting in acting on the scalp by frictions and lotions. This method often succeeds when deafness is produced by the disappearance of parotitis, or by the sudden repression of an exanthem. I commence by having the hair cut, and I order, in the evening, friction for ten minutes over the whole of the head; the applications used being soft soap, alkaline solutions of different degrees of strength, or a rubefacient liniment, according to the effect desired to be produced. The head is then wiped, and covered with a flannel cap, over which is placed a covering of waxed taffetas. Moisture is soon produced, and is succeeded by perspiration, which continues during the night. In the morning, the head is wiped with flannel, and is kept well covered during the day. I prescribe also lotions of water, lukewarm at first, then quite cold, to the shoulders, the chest, and even over the whole body in persons who easily take cold. I know of no more efficacious means of preventing the catarrhal and rheumatic affections which so often compromise the most happy cures of deafness.

"As internal remedies, in certain cases of congestion of the pharynx and larynx, I prescribe emetics, laxatives, purgatives, alteratives, tonics, etc. These medicines, however, have no other object than that of fulfilling general indications of treatment." (pp. 91-3.)

Dr. Hubert-Valleroux believes that great benefit would be derived from an institution analogous to the cretin asylum of Dr. Guggenbühl. He says:—

"If, among the true friends of humanity (more numerous, thank God, than is generally supposed), there are a physician, and an instructor, still young, rich, and sufficiently devoted to dedicate their lives and fortune to a simply useful work, which will bring them neither distinctions nor social dignities, this is the advice which I would give them. In one of those beautiful situations so common on the Alps and Pyrenees, they should build, half way up the mountain, equally removed from the region of snow and from the heavy atmosphere of the valley, an institution intended for the medical and pedagogic treatment of the deaf and dumb: it should be exposed to the east and south, and protected from the frosts and the north wind by the mountain, and by well distributed plantations. The soil should be perfectly permeable and dry; and well arranged declivities should afford an easy and complete escape to the rain-water.

"In the interior of the building, all should be simple and in good taste: no sacrifice should be made to luxury, but, on the other hand, nothing should be refused to hygiene. The apartments should be large, dry, and well ventilated; the means of communication easy: there should be order and economy every where, and profusion and neglect nowhere. Pure water should be distributed in abundance through all parts of the establishment, for the different usages of life, and for the maintenance of cleanliness. The dormitories should be rather numerous than large; the beds should be well distributed; and a soft bed should be proscribed as pernicious.

"The food should be simple, but of the best quality."

tonic rather than light. The quantity of wine should be greater than is usually allowed to children; for the deaf and dumb are of a lymphatic temperament, and require strengthening measures. On the outside of the institution, there should be, in a large lawn, apparatus for sports, especially for gymnastics; and a covered gallery should be provided for the same objects in rainy weather.

"The inmates should be chosen from among the deaf and dumb who afford the best chances of cure. The neighbouring valleys would furnish more than enough.

"The mere fact of removal from the damp and unhealthy habitations where they have contracted their disease, to a healthy establishment, would produce a happy change in the condition of the patients; and no less advantage would be gained in clothing, food, and exercise. Cleanliness, plenty, and careful attendance, in place of misery, privation, and neglect, would thus form the first step in diminishing the distance which separates them from those who have the power of speech.

"Medicine and instruction would naturally be called on to complete the work. The duty of the physician would be easy, because he would only have to treat selected subjects, whose previous history was known to him; and he would not have to fear that his prescriptions would be neglected, because he would himself superintend their administration. The instructor would be powerfully aided by those half-deaf individuals, to render whom entirely dumb so much trouble is taken in our special schools. Still more than those who speak, the little deaf and dumb are proud of their knowledge, and happy to exhibit it. They would thus be eager to stimulate their less advanced companions, to teach them what they knew, and to acquire for themselves new ideas. In this mutual and constant system of instruction, in this emulation, kept within limits where it does not become a fault, would be found united the best conditions of education. Certainly, if analogy and induction have the same value in medicine and instruction as in other sciences, we may securely predict that the success obtained in such an establishment would not be inferior to that which Dr. Guggenbühl has realized in the treatment of cretinism." (pp. 96-9.)

Chapter VII treats of the Instruction of the Deaf and Dumb; and its main object is to show that time and practice are required for the perfect restoration of speech. Sounds may be heard; but their combination is not at once perceived; nor, when perceived, can it at once be reproduced by the organs of speech.

Chapter VIII contains Philosophical Considerations on Language. In this chapter, the author discusses the question, whether speech is innate or acquired; and produces several arguments against the former opinion. He shows that the difficulty is much greater in teaching an adult to speak than a child.

This interesting work, we learn from some incidental observations, is preliminary to a larger one on the same subject, which Dr. Hubert-Valleroux is about to publish. Judging from what he has already done, we can truly say, that we believe him to be admirably qualified for the task.

VACCINATION CONSIDERED IN RELATION TO THE PUBLIC HEALTH: WITH INQUIRIES AND SUGGESTIONS THEREON. A Letter addressed to the Right Honourable the Lord Viscount Morpeth. By JOHN MARSHALL. Pamphlet. pp. 34. London: 1847.

MR. MARSHALL addressed this letter to Lord Morpeth (now Earl of Carlisle) six years ago; but its practical bearing on the now agitated subject of the extension of vaccination convinces us that an outline of the views which it contains will be interesting to our readers.

The author first shews that, though the Vaccination Extension Act of 1840 has been productive of much advantage, it has still failed in diminishing small-pox to a desirable or possible extent. In the course of his observations under this head, he gives the following explanation of the fluctuations observed in the mortality from small-pox in different years.

"The returns for the several years, from 1840 to 1846 inclusive, are, 1235, 1053; 360, 438; 1804, 909; and 257; so that they exhibit alternate periods of high and low mortality, consisting of two years each. Now, the victims of any particular

epidemic visitation of small-pox are, as is well known, principally, nay, almost entirely, drawn from that portion of the population in which vaccination has never been performed. Each fatal case of this kind must be understood (according to the computed rate of mortality amongst the *unvaccinated*, viz., one in four) to represent at least three other cases of small-pox, occurring also in the unvaccinated class, but terminating favourably. For every 1000 deaths (of unvaccinated persons) in such an epidemic, about 4000 in all must, therefore, have suffered from the disease; and as the survivors are henceforth as effectually protected from the further invasion of small-pox as if they had been originally vaccinated, it is clear that the 1000 supposed deaths are an index of an actual diminution of the hitherto unprotected part of the population, to the amount of 4000 persons."

He then shows that "vaccination is not now universally employed": that it "is not regularly and evenly applied": and that it "has not, under existing arrangements, a promise of being a permanent habit among the whole people".

Mr. Marshall next proceeds to point out measures for remedying these defects. He is opposed to a compulsory system. "Among the military, and some other classes, this has been allowed; but, as a general measure, it is opposed to our strong though often prejudiced love of individual freedom. State medicine might advise, but state policy would not sanction, the universal adoption of compulsion in these matters."

The following are the measures which he proposes for the extension of vaccination:—

"I. To make it a condition (by an Order of the Committee of the Privy Council on Education or otherwise), on the part of *all schools which do or shall hereafter receive a grant from the Government education funds*, that a regulation be immediately adopted and enforced by them, to the following effect—viz., that no child shall be received into or continue at such school, unless it shall previously have been vaccinated or have had small-pox; or unless it be submitted to vaccination within one month from the date of its admission into the school.

"II. To require and empower the officers of health to be appointed under the Towns Improvement Clauses Act, or the Health of Towns Act (by the introduction of words or of a special clause to that effect), to visit and inspect, on due notice given, *all schools and seminaries whatsoever*, for the purpose of examining the children, and of ascertaining and reporting on their condition, in reference to vaccination and previous illness from small-pox."

The results to be anticipated from the carrying out these measures are thus stated.

"It has been estimated that one-fourth of the population of this country are between the ages of 3 and 15,—extremes which may be said to embrace the school-educational career. There are upwards of four millions of such children in England and Wales; but of these, owing to illness, occupation, want of means, or other causes, all are not at school at one time.

"Too many never reach a school at all; but it is *sincerely* to be hoped, when such strenuous efforts are being made in the cause of education, and when schools are open even for the poor, the friendless, and the ragged, that the time is approaching rapidly when all who are not educated privately, will at some time or another be found at school.

"Schools may be regarded, indeed, as social *toll-gates*, through which, along the highway of life, almost the whole of the youthful population must defile. Here, it is proposed that the passport of vaccination shall be demanded of them; and since this condition would be required at the *outset* of their educational course,—which, among the poor especially, begins at a very early age, with attendance at an Infant school,—it follows that the means so taken to ensure the fact of vaccination would operate, not only on the school-population, but on the *infant* population of the kingdom. So much the greater benefit would accrue to themselves and to the community.

"At its commencement, the inspection would, of course, embrace a class of children much older than it would subsequently supervise.

"The unavoidable necessity for vaccination, as a condition of a child's being hereafter admitted into a school, would have a retrospective effect in removing the prejudices and quickening the assent of the parent to the early performance of that operation.

"By those direct inspections which I have ventured to advo-

cate, the relatively protected or unprotected state of the school-population in each locality would at once be revealed, with all its individual details. The very persons who were still unprotected by vaccination or by small-pox would be singled out and rendered accessible: none could escape:—the finger of preservation could be laid upon them:—the evil would be exposed at its root; and society would thus be enabled to attain and perpetuate a state of security, which, under existing arrangements, it is utterly impossible to reach.

"But, independent of this direct good, the collateral benefits of inspection would be great. The periodical visits of the officers of health being heard of everywhere, and spoken of by everybody, would maintain a continual and wholesome interest on the subject of vaccination, which, at present, is only excited by the temporary alarm created by wayward visitations of small-pox. The stimulus of contact with the officer of health would be more direct, more special, and perhaps also less likely to produce casual opposition in the public mind, than any which can be applied by the poor-law authorities. The two sets of functionaries, however, would cooperate, not interfere, with each other; the one, by arousing the activity of the public vaccinators, the other, by influencing the public themselves.

"It is, perhaps, unnecessary to advert to another advantage incidental to these visits of an officer of health. Under circumstances of danger, and in seasons of affliction from epidemic or contagious disease, domiciliary visits on his part are much needed for the preservation of individual and public health; and, in this particular instance of vaccination, the motive and reasonableness of his inquiry would be so evident, as at once to establish a favourable impression concerning the utility and benevolence of the duties to be performed by him."

Mr. Marshall made a laborious inquiry into the state of poor children in forty-three schools—twenty-three in the country and twenty in the metropolis—containing in all 4191 children.

"Of the total number of children examined, viz. 4191, 3408 had been vaccinated; but 783 had never experienced the benefit of that practice, or about eighteen and a-half per cent. Of the 3408 vaccinated, 148 had had small-pox since, and 3260 had escaped, the proportion of sufferers being only four and one-third per cent.; whereas of the 783 unvaccinated, no less than 400 had had small-pox, or fifty-one per cent. Lastly, the residue of unprotected is 383 children, or nine and one-tenth per cent."

He next points out the relative extent of vaccination in the metropolitan, country, and Jews' schools. The latter are given separately, as they present some remarkable features, very creditable to that people.

"The proportion of unvaccinated amongst all the children both of town and country (the Jews being specially excluded) is twenty-one per cent. !

"The ratio of unvaccinated in the metropolis is fourteen per cent., and in the country schools, twenty-four per cent.; so that vaccination is more carefully attended to in the former.

"Among the Jewish children, vaccination is performed with a completeness far surpassing the country or metropolitan schools taken generally, the proportion unvaccinated among them being only five and a-half per cent. The peculiar care which, it seems, even the humblest of that ancient people bestow upon the practice of vaccination, is a highly interesting fact. The well-known tendency of the Mosaic legislation to the preservation of individual and public health, has, in this instance, wisely been allowed to prevail over the presumed disposition of the Jews to restrict themselves to the letter of its injunctions.

"The fact is in itself an illustration of the possibility of a more complete observance of vaccination by all classes of the people; and it was satisfactory to find, as if in support of the proposed enforcement of a condition as to vaccination in the case of certain schools, that such a regulation is actually contained in the printed rules of the Jews' Infant school.

"It appears that, whilst in the metropolis there is a comparative decrease in the proportion of unvaccinated since the passing of the Vaccination Act, this is not so in the country schools. In this respect, too, it will also be observed, that a greater improvement has been effected amongst the Jews than in the Christian schools. The unvaccinated children amongst their very poorest (!) population, born since 1840, being only one and three-quarters per cent. ! Why should not all the kingdom be equally well protected?"

The per centage of small-pox cases is stated to be as follows:—

1. In country schools; among the vaccinated, 6·2; among the unvaccinated, 44.

2. In metropolitan schools; among the vaccinated, 3·2; among the unvaccinated, 60.

3. In Jews' schools; among the vaccinated, 1·1; among the unvaccinated, 89.

The proportion of unprotected children in the schools is next given.

1. In country schools; children from three to fourteen years, 13·4 per cent.

2. In metropolitan schools; 5·2 per cent.

3. In Jews' schools; 6 per cent., or 1 in 166.

Finally, with regard to the computed sickness and mortality from small-pox, Mr. Marshall believes that

"For every 4191 children living between the ages of three and fourteen, belonging to the lower classes of society in London and the country together, 886 cases of sickness from small-pox and 138 deaths must at some time or other have occurred, the per centage of sickness being fifteen and three-quarters, and of deaths three and one-fifth in the whole number of children increased by adding the deaths.

"The Jews of Houndsditch and the Gentiles of Tothill-fields form a correct and instructive case for comparison. They alike reside in crowded houses and apartments, and alike belong to the lowest ranks of their respective denominations. The former, however, have only five and a-half per cent. of their children unvaccinated, whilst the latter have as many as thirty per cent. The proportionate risk in the case of the two is, therefore, as one to five,—and it will be found that the Jewish children of the East have suffered by sickness and mortality from small-pox, as compared with their less carefully protected brethren of the West, exactly in the same proportion of one to five."

Mr. Marshall's letter contains statistics founded on careful inquiry and laborious personal investigation. For this reason, and because of the valuable suggestions contained in his pamphlet, we recommend it to the consideration of all who are interested in the promotion of effectual legislative measures for the extension of vaccination.

THE CLIMATE OF SIDMOUTH. By W. H. CULLEN, M.D.
Sidmouth: 1852.

As the science of meteorology, assisted by statistics, advances, the importance of a native climate, in the relief of pulmonary consumption and other cachectic maladies, will become more and more investigated. This can only be properly performed by a series of long continued observations, made by various observers; so that, while we are bound to praise all such efforts to make the profession more acquainted with the peculiar characteristics of particular localities, we are equally compelled to remove them from the category of mere book-making treatises. The investigation of foreign climates, to which alone, a few years since, all the benefit presumed to be derived in pulmonary cases was attributed, has revealed to us that many of the more lauded situations present unfavourable results when compared with many native regions. Dr. Turnbull, of Liverpool, in his recently issued work *On the Progress of Improvement in the Treatment of Consumption and other Pulmonary and Laryngeal Diseases*, makes the following apposite remarks on this subject:—

"It has been ascertained that consumption is a very common disease among the resident inhabitants of many of those places, to which invalids from this country resort. The selection of a suitable climate is a subject which could not be briefly touched upon with advantage; I shall only, therefore, observe, that the change to more distant places is adapted chiefly to those in whom tubercular disease is in an early stage, or very perfectly arrested; and that most of the advantages of change may be more safely attained by more delicate invalids by removal from one part of this country to another."

How important, then, is it, that we should endeavour to discover the means of cure presented by various localities in the British islands, and that the experience of observers like Sir James Clark, Dr. Forbes, Dr. Shapter, Dr. Granville, and others, should be brought to bear upon the con-

firmation of the concluding paragraph of Dr. Burgess' work on the *Climate of Italy* noticed in this Journal for Jan. 21.

"From the preceding summary of the characters manifested by the different Italian climates, it will be seen that, however useful they may prove in other complaints, one more likely to act beneficially in pulmonary consumption might easily be found within the United Kingdom."

The sheltered situation of the little town of Sidmouth, opening to the sea, protected from all obnoxious winds by the hills which, as it were, hem it in, enjoying the warm air of the south of Devon, has very naturally caused it to become one of the favourite localities for consumptive invalids. Dr. CULLEN, whose only fault is brevity—a great recommendation to a local work—has given us the result of the observations of a number of years, to prove that Sidmouth really deserves all that has been related of it. His comparative tables render his work extremely useful; and, as far as statistical deductions warrant the assumption, he proves that Sidmouth, if not the best, is at least one of those places to which a consumptive patient, under the circumstances mentioned by Dr. Turnbull, may be sent, with every prospect of benefit being derived.

We welcome Dr. Cullen into this field of investigation, and express the hope that he will ere long favour the profession with the result of his treatment of pulmonic cases, aided by the hygienic advantages of the climate of Sidmouth.

A NATURALIST'S RAMBLES ON THE DEVONSHIRE COAST.
By PHILIP HENRY GOSSE, A.L.S. pp. 448. London: 1853.

MR. GOSSE is well known to the student of nature by his *Ocean* and by his *Naturalist's Sojourn in Jamaica*. The present volume is a worthy companion to its predecessors. There is a great amount of information conveyed in an elegant and pleasing style; and the perspicuity of the descriptions is increased by a profusion of splendid illustrations. As a specimen of the book we quote a description of a capture made in the Barricane Pools.

"Among the animals was a creature of exquisite beauty, which I now saw for the first time. It was the CRESTED ANTIOPA, one of the naked gilled Mollusca, closely allied to the *Eolides*, some of which formed the subjects of observation in an earlier part of this volume. The breathing organs are very numerous; they consist of oval bags, delicately pellucid, arranged all round the sides and front of the animal, and have an extremely elegant appearance. Each one has a brown line running through its transparent substance, and is tipped with silver-white. The general colour of the animal is pellucid-grey, with spots and lines of opaque white; they have the lustre of silver. It is about an inch in length.

"This beautiful little animal I brought carefully home and placed in one of my large glass vases of sea-water, kept in a state fit for the support of animal life by growing sea-weeds. It immediately became at home in its new residence, and remained in good health for a considerable period. In about a week it laid on the side of the glass, just beneath the surface of the water, a beautiful coil of spawn, which looked like a necklace of white beads, arranged in successive furlongs, or figures of 8, in a spiral form, making just a coil and a half. A closer inspection showed that these folds were enclosed in a band of clear transparent jelly. A most beautiful object it was even when cursorily looked at; but when examined with a lens, each of the beads, which at first I had supposed to be the ova, was really a nidus of many; a perfect sphere of clear jelly contained about sixty embryos, arranged in crescent form in the globule, filling more than half its volume.

"Five days after the deposition I saw that the embryos were in rapid motion within their spherules. I therefore detached two from the gelatinous band, and placed them in a cell beneath the microscope. The little nautilus-like embryos were now seen each in his tiny shell of one spire, vibrating his cilia with energy, and all swimming rapidly among each other within their sphere seeking an outlet. The soft walls yielded and protruded here and there as one and another pressed forcibly against them, and at length burst, and the embryos came out as they discovered the breach.

"Taking sixty to be the average number of embryos in each spherule, I endeavoured to estimate the total number in this

coil of spawn. I found about twenty-five spherules in each figure 8, which gives 750 embryos: then there were about thirty convolutions in the whole coil, which gives the total 45,000 embryos. Yet this coil was not all the spawn perfected by this animal in the season, for a large contorted roll is yet visible in the ovary, through the pellucid body of the *Antiopa*: and these creatures are well known to lay their spawn at short intervals all through the season." (pp. 325-327.)

Lovers of natural history will find Mr. Gosse's pages full of curious and entertaining knowledge. "They contain," says the author in his preface, "a faithful record of what actually has fallen under an individual's observation in a single season, and may therefore be assumed to present a fair average of what may be expected again."

OBSERVATIONS ON THE NATURE AND THE TREATMENT OF ASIATIC CHOLERA. By WM. STEVENS, M.D., D.C.L. Oxon. pp. 499. London: 1853.

THE object of this work is to defend the saline treatment of cholera. We regret that we have not space at our command to critically examine its contents. We cannot, however, do less than say that it is the production of an able, truth-seeking mind, and calculated to instruct even those who deny, as well as those who adopt the theory and treatment which it so earnestly advocates.

PATHOLOGICAL AND PRACTICAL TREATISE ON EPIDEMIC CHOLERA, its History, Causes, Various Forms, and Treatment. pp. 184. London: 1853.

THIS is a very sensible little work: but like everything which has been written on cholera, it is as well calculated to raise disputed questions, as to settle the pathology and treatment of the disease.

PERISCOPIC REVIEW.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

STRINGFELLOW'S GALVANIC BATTERY.

WE received, some weeks ago, one of these machines from the inventor, and have now much pleasure in reporting upon it. STRINGFELLOW'S arrangement is the most perfect for physiological purposes which has ever been contrived. In size it does not exceed a lady's card-case. Its principle is the same as Pulvermacher's chain; but it is more effective and energetic, on account of

FIRST. The very small obstruction offered to the passage of the current, from the perfect connexion of the metallic elements, instead of their being hung on loops;

SECOND. The large extent of the generating or electro-positive element, and its very close proximity to the conducting or electro-negative element; thus reducing to a minimum the opposition offered to the current flowing through the exciting fluid;

THIRD. The extreme compactness of the apparatus; twenty-two compound elements entering, after being excited, into a common card-case, and evolving a current capable of decomposing water, and giving smart shocks for nearly half an hour; evaporation being prevented by the ingenious plan of inclosing the battery in a card-case.

The remarkable fact connected with this battery, of four elements, moistened with water only, being capable of decomposing distilled water, is worth attention, and can only be explained by the almost complete absence of all opposing causes interfering with the passage of the current; hence, all the electricity excited is thrown into current, and none lost; whereas, in some pieces of apparatus of this kind, a great quantity is lost.

THE PRESERVATION OF LEECHES.

As a general rule, leeches should not be kept in the shop or laboratory, because these places are frequently pervaded with the vapours of ether, acids, and ammonia. It is advisable to place them in a cellar where no drugs or chemicals are kept. I recommend leeches to be kept in large stoneware pots, supplied

with pure spring water. When cleanliness is observed, they can be preserved without any particular loss, and never require turf, calamus root, or charcoal.

I employ the following simple method of treatment:—I always keep one or more leech-pots than I require for use; these duplicates serve for changing. If in one pot a particular mortality is exhibited, the colony of leeches is removed into a clean pot, after having been well washed. The unhealthy pot is purified; with a brush and sand all the slime is rubbed and washed from its walls; then some chlorine water is poured in, and allowed to remain in the covered vessel several hours. The chlorine water is removed, the pot filled several times with fresh water, allowed to stand, and poured off. The vessel is now dried in the air, and if possible in the sun. In this manner all infectious matters are removed or destroyed, and the healthiness of the jar again restored. However, there are cases where nothing avails, as the leeches are sick when received.

Wooden vessels often remain long healthy, but when they once become foul, it is almost impossible to cleanse them. The pots should be covered with thick linen. Sometimes, nevertheless, leeches get through and disappear. As they run over woollen cloth reluctantly, it is advisable to bind a strip of cloth round the outside of the pot. Some pharmacists keep leeches in open jars, the mouths of which are surrounded with cloth, as they never escape under these circumstances. (Dr. MORRIS in *Pharmaceut. Technik. Zweite Auflage*, as quoted in *Annals of Pharmacy*.)

PRACTICE OF MEDICINE AND PATHOLOGY.

PLEURO-PNEUMONIA IN CATTLE: INOCULATION.

Dr. WILLEMS, of Belgium, recently announced, that he had discovered the means of greatly reducing the mortality from pleuro-pneumonia, if not of entirely arresting its progress, by inoculating healthy animals with matter from the lungs of one that had died of the disease; and very extensive experiments have been made to test the reality of the remedy. Professor Simonds, of the Veterinary College, having been deputed by the Royal Agricultural Society to investigate the supposed discovery, and having visited Belgium, and made extensive inquiries on the subject, has made his report, from which it appears that the prevention of pleuro-pneumonia by inoculation is, to say the least, doubtful. In 1850, Dr. Willems having failed to arrest the disease by medical treatment, tried inoculation as an experiment, and has convinced himself of its success. The practice, too, is becoming general throughout the kingdom. A Dr. de Salve also has been extensively engaged in inoculating cattle in Rhenish Prussia, but with such ill success that the Government has ordered inoculation to be discontinued. The Belgian Government, however, takes a lively interest in the subject, and has instituted a series of experiments, which probably ere long will decide the question as to the value of the practice of inoculation. The disease produced by inoculation is said to be local only, and not to affect the lungs, the seat of the natural distemper. "About two per cent.," says Mr. Simonds, "of the inoculated animals die, while a far greater proportion suffer from ulcerative and gangrenous inflammation of their tails; notwithstanding which, their lungs, the local seat of the natural disease, we are assured, never suffer. If experience proves this to be true, it must be regarded as a new fact in medicine." And he mentions that, in 1757, Dr. Layard, a celebrated physician of that day, wrote an essay, recommending the inoculation of cattle to prevent deaths from a destructive malady which then prevailed in this country. Some distillers in Hasselt, who objected to inoculation, had their cattle-sheds quite free from the disease; and, while inoculated animals placed among a diseased herd are stated to have escaped, there have also been others, non-inoculated cattle, in the same situation, which have been equally exempt. Dr. Willems does not admit a single failure of inoculation; but, from other persons, Mr. Simonds received very contradictory accounts. To himself, none of the operations he witnessed appeared to be satisfactory. With the aid of several members of the Royal Agricultural Society, Mr. Simonds is about to undertake experiments in this country, in order to test the value of inoculation as a preventive of pleuro-pneumonia.

TREATMENT OF TYPHOID FEVER BY THE INTERNAL USE OF TINCTURE OF IODINE.

The *Bulletin de Thérapeutique* for March 30th states that M. ARAN has successfully treated several patients labouring under typhoid fever, in the hospital of La Pitié, with five-drop

doses of tincture of iodine, administered from three to six times in twenty-four hours. At the commencement of the attacks of fever in this epidemic, constipation occurred, and lasted several days; it was then followed by obstinate diarrhoea, which continued often some time after the patient had become apparently convalescent.

The effect produced by the tincture of iodine was on the tongue and abdominal organs, but especially on the diarrhoea. The tongue, from being dry and even rough, became moist; the abdomen became soft and painless; and the number of stools diminished from ten or twelve to two or three in twenty-four hours; in some cases, they entirely ceased.

Eight patients in different stages of fever were treated in this way. Only one died, after having been in an adynamic state for three or four days. The other seven rapidly became convalescent; and in one the medicine appeared to have stopped vomiting, which had harassed him from the commencement of his illness. All these patients had previously been treated by moderate blood-letting, emetics, purgatives, cold baths, or cold affusions.

The tincture of iodine is given on a piece of sugar, or in a little syrup. In most patients, it produces neither disgust, nausea, nor vomiting, nor any symptom indicative of an injurious action on the digestive organs.

EMPIRICAL TREATMENT OF CHOLERA IN CANADA.

"Do you know his famous remedy?" "Do I not? Did he not cure me when I was at the last gasp? Why, he makes no secret of it. It is all drawn from the maple-tree. First, he rubs the patient all over with an ointment, made of hog's lard, and maple-sugar, and ashes from the maple-tree, and he gives him a hot draught of maple-sugar and ley, which throws him into a violent perspiration. In about an hour the cramps subside; he falls into a quiet sleep, and when he awakes he is perfectly restored to health." Such were our first tidings of STEPHEN AYRES, the cholera doctor (1832), who is universally believed to have effected some wonderful cures. He obtained a wide celebrity throughout the colony. (*Moodie's Roughing it in the Bush*.)

CROTON-OIL IN DROPSY.

In the *Gazette des Hôpitaux* for May 14th, it is stated that M. NONAT, of the Hôpital de la Pitié, in Paris, gives croton-oil in dropsies arising from affections of the organs of circulation and respiration; or even when, without dropsy, there is an affection of the heart producing dyspnoea, cyanosis, and more or less severe general disturbance. The quantity administered is two drops, which are taken in the morning in two pills, with the interval of an hour between them.

Under this treatment, M. Nonat has seen ascites, extensive anasarca, palpitations with cyanosis, and severe dyspnoea, disappear in from a fortnight to a month. This treatment seems to him more efficacious than that by diuretics, digitalis, etc. He finds it advantageous to produce from ten to twenty serous stools, and to withhold drink from the patients, so that they lose much fluid while they take in little. The purgation is repeated every two or three days, according to the strength of the patient.

M. Nonat says that croton-oil must not be administered in dropsy dependent on structural disease of the kidneys or abdominal organs.

TREATMENT OF TENIA BY PUMPKIN-SEEDS.

The following is the substance of an article in the *Revue Médicale*.

Among the remedies which may be advantageously substituted for kouso in the treatment of tenia, the seeds of the pumpkin have perfectly succeeded in the hands of MM. BRUNET DELAMOTHE and MARTIGNY. The patient is ordered to take in the morning, fasting, ninety grammes (3ij) of a paste made with fresh pumpkins; and, an hour after, two ounces of honey, which is twice repeated at similar intervals. It is said that under this treatment, the tenia has always been expelled in the course of six or seven hours.

[The point to be ascertained with regard to the many vaunted remedies for tenia, is not so much whether they cause the expulsion of large portions of the worm, as whether they entirely dislodge it.]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 10TH, 1853.

JAMES COPLAND, M.D., F.R.S., President, in the Chair.

FURTHER RESEARCHES ON THE PATHOLOGY OF PHEGMASTIA DOLENS. BY ROBERT LEE, M.D., F.R.S.

UNTIL the publication of the memoirs of M. Bouillard, M. Velpeau, and the late Dr. Davis, various hypotheses had been advanced respecting the cause of the swelling in the lower extremities of puerperal women; but the cases and dissections of the authors just enumerated demonstrated that the true nature of the disease consisted in an inflammation of the trunks and principal branches of the veins of the lower extremities. In papers by Dr. LEE, published in the fifteenth volume of the *Medico-Chirurgical Transactions*, the actual condition of the iliac and femoral veins was ascertained; and he had been led to infer that inflammation of these veins gave rise to the phenomena of phlegmasia dolens, and that it commenced in the uterine branches of the hypogastric veins, and extended from them into the iliac and femoral trunks. Other cases had been recorded in the *Transactions*, of crural phlebitis following ulceration of the mucous membrane of the intestines. Experiments performed by Pirigoff in 1839, and by Reumert in 1840, on dogs, showed that the action of chemical and mechanical irritants was limited to the vein on which the experiment was made, and the extension of the inflammation in the veins was not common; and Stannius, who had collated and tested all the facts bearing on the subject, doubted whether inflammation of venous trunks admitted of being excited by constitutional causes, independently of local irritation. A series of experiments on the veins of the lower animals had recently been made, and a paper on phlegmasia dolens had been read to the Society during the present session, not founded on actual observation of the disease as it occurs in the human subject, but upon experiments on the veins of the lower animals, in which phlegmasia dolens had never been observed.* The object of the present communication was to submit to the Society the observations which the author had made during the last twenty-four years, on inflammation of the crural veins. The paper contained the record of forty-three cases of phlegmasia dolens. The first nine cases were accompanied by *post mortem* descriptions, and preparations illustrating the disease; and the author was led to the conclusions, "that inflammation of the iliac and femoral veins gave rise to all the phenomena of phlegmasia dolens, and that the inflammation commenced in the uterine branches of the hypogastric veins, and from them extended to the iliac and femoral trunks of the affected side." The next series comprised the history of twenty cases, which, the author thought, furnished additional evidence in favour of this conclusion, though, in consequence of the recovery of the greater number of the patients, an opportunity was not afforded of determining by dissection the actual condition of the crural veins. Nine cases followed, which, Dr. Lee thought, demonstrated that phlegmasia dolens might occur wholly unconnected with pregnancy and parturition, and that in such cases the inflammation likewise commenced in the uterine branches of the hypogastric veins, and followed a course similar to what occurred in puerperal cases. In some of these, the inflammation of the uterine veins was produced by cancerous disease of the os and cervix uteri; in others, there was no organic disease of any kind previously existing. The concluding cases were five, in which crural phlebitis had followed inflammation of the saphena veins, and of the deep veins of the lower extremities, from fracture of the tibia and fibula, and the pressure of encephaloid tumours on the thoracic viscera. The author thought that these cases and dissections, as well as those of the authors whom he had quoted, proved that inflammation of the iliac and femoral veins was the proximate cause of phlegmasia dolens; and that in puerperal women this inflammation commenced in the uterine branches of the hypogastric veins. It had likewise been demonstrated that phlegmasia dolens might take place in women who had never been pregnant, and even in the male sex; and that, under all circumstances, the proximate cause was the same.

Mr. MAYO wished to know whether Dr. Lee had ever observed any symptoms that might be regarded as antecedents in the

cases of phlegmasia dolens, which he had witnessed, such as general plethora, a loaded state of bowels, etc.

Mr. STREETER inquired whether Dr. Lee was provided with any statistical accounts respecting the frequency of phlegmasia dolens, whether following parturition or not connected therewith.

Dr. JOHN CLARKE believed that the concurrent testimony of numerous authors proved that phlegmasia dolens was a disease rarely fatal. Now, it was well known, that crural phlebitis was a very dangerous affection, not infrequently followed by death; and he was, therefore, disposed to believe that, if phlegmasia dolens did in reality always commence with inflammation of the iliac and femoral veins, it would be a much more dangerous malady than they had hitherto been accustomed to regard it.

Dr. MACKENZIE said that it was important to distinguish between alleged facts and the conclusions drawn from them. In the present case, the facts alleged were, that certain lesions of the crural veins were developed in the progress of phlegmasia dolens: the conclusions were, that such lesions constituted the essence or proximate cause of the disease. He assented entirely to the first of these propositions, while he dissented as entirely from the latter. The disease known as *phlegmasia dolens* was a very complex malady. It was characterised, not only by a morbid condition of the veins, but also by a morbid condition of the sensory, the motor, the lymphatic, and the secretory organs of the affected extremity; and, accordingly, in all well-marked cases, there was exquisite sensibility of the limb, especially in the track of particular nerves, loss of motor power, amounting sometimes to perfect immobility of the extremity, inflammation and obstruction of the lymphatic vessels and glands, and a general hot, tense, and elastic swelling of the limb, possessing rather the character of active exudation than of passive effusion. Could all these lesions be deduced from mere inflammation and obstruction of the principal vein of the extremity? Were they ordinarily observed in cases of simple, uncomplicated phlebitis? Or was there anything in the anatomical or physiological characters of the veins to justify our deducing them *a priori* from it? And have those who adopt this theory reproduced the lesion of the veins in a simple uncomplicated form, and observed such consequences to follow? To these questions we must reply in the negative: and the whole matter rested purely on assumption. It had been assumed, that because the crural veins were found obviously diseased in fatal cases of phlegmasia dolens, such lesions constituted the proximate cause of the disease; but this had not been made a matter of demonstration. Further, the clinical history of the disease and the progress of symptoms did not support this theory. It was quite true, that in some cases the irritations commenced in the region of the femoral vessels; but in some they commenced in the back, in others in the hip, sometimes in the calf of the leg, and more frequently in the popliteal region. Again, one leg might be affected alone, or both lower extremities concurrently; or the disease, after having attacked one, might pass on to the other, or a superior extremity might be affected; and Dr. Mackenzie had lately met with a case in which, after symptoms of the disease had successively declared themselves in the left lower and upper extremities, the malady ultimately established itself in the right arm, the whole right upper extremity being hot, swollen, and tense, the surface exquisitely painful, with loss of motor power, and a tense, corded condition of the basilic vein. These facts pointed to some more general and diffusive cause, in regard to which it was probable that phlebitis itself was but a secondary affection. The diversity of opinion which still existed, both in this country and on the continent, as to the nature of phlegmasia dolens, even since the promulgation of the phlebotic theory of the disease, afforded a powerful argument against this theory; because it tended to show that we could not thereby account rationally for all the known phenomena of the disease. Then, in the sequelæ of the disease, circumstances were met with which are inconsistent with this theory. After an attack of the disease, the crural veins are generally left impervious, and yet successive attacks may occur in the same extremity. So also it happened after an attack of the disease, that the limb would be left for many years, or even for the remainder of life, in a weak, sensitive, and irritable condition, being easily affected by atmospheric and constitutional influences. It was easy to reconcile these facts with the notion, that the nerves had been injured or damaged, but not with the idea that the veins alone had been affected. On all these grounds, then, it appeared to him (Dr. Mackenzie) that the phlebotic theory of the disease was either defective or erroneous. But, assuming for a moment that it was correct, it left much

* Vide ASSOCIATION MEDICAL JOURNAL, March 25th, 1853.

which was still to be explained. We had yet to learn the nature of that peculiar inflammation of the veins met with in this disease, which was so different from ordinary phlebitis. Did it depend upon some peculiar disposition on the part of the venous coats to take on diffusive inflammation, or did it depend primarily upon the blood? If we adopted the first of these theories, we were bound to state the nature of the peculiarity, and the laws of its development. If, on the other hand, we regarded the venous inflammation as dependent upon some morbid condition of the blood, then we might reasonably account, not only for the peculiarities it presented, but for the lesions of other organs, and the structural changes, with which it was associated. Upon this view, also, we might reconcile the conflicting opinions which had been held by different pathologists, and the variations which the disease manifested in its symptoms and progress in different cases. In accepting this view, we must forego the theory that phlebitis was the proximate cause of the disease, and regard it, as it really was, as a phenomenon related to the other lesions of the extremity, not so much in the order of cause and effect, as in being, like them, a parallel effect of some more general and diffusive morbid agent.

Dr. LEE, in reply, gave an historical account of phlegmasia dolens, from the time it was first pointed out by Mauriceau up to the present day.

TUESDAY, MAY 24TH, 1853.

JAMES COPLAND, M.D., F.R.S., President, in the Chair.

ON THE USE OF TWO NEEDLES AT ONCE IN CERTAIN OPERATIONS ON THE EYE, ESPECIALLY IN THOSE FOR CAPSULAR CATARACT AND ARTIFICIAL PUPIL. BY WILLIAM BOWMAN, ESQ.

The operation consists in the simultaneous employment of two needles introduced at different points through the outer coat, and made to act in concert upon false membranes, opaque capsule, or iris, or even on the lens itself under certain circumstances. Several advantages attend this mode of operating. Opaque portions of capsule are often very tough, and, being attached to the suspensory ligament of the lens, or to the pupillary borders of the iris, these extensile structures readily allow the opaque membrane to recede before the needle, rather than be torn or cut through; and the surgeon vainly sweeps the membrane before the instrument from side to side, at the risk of serious injury, and consecutive inflammation of the ciliary processes or iris. Two needles, brought to bear upon the opaque capsule from different sides of the cornea or sclerótica, furnish each other with a point of resistance, and the capsule may be torn open or cut at pleasure. If it be reticulated, it is possible to twist one of the needles round and round the band, so as to get a hold upon it in case it should prove very tough. The needles usually act perfectly if passed through any convenient opposite points of the margin of the cornea, the pupil being always, where possible, dilated by atropine. It is but seldom desirable that one of the needles should be passed through the sclerótica. The lids must be held open, either by an assistant or by the wire speculum. The second needle may be in cases where the first, or single needle, has failed to cut through the capsule. The instruments are the ordinary cataract needle, the stem cylindrical, and of a size to easily occupy the corneal puncture, the point either straight and cutting, or slightly curved, according to circumstances. In no case is it necessary to enter the instrument beyond half an inch in depth; the stem may therefore be made thicker from this distance. This plan of operating enables the surgeon to cut through a softened iris, without dragging it from its attachment, and otherwise injuring the interior of the globe. Mr. Bowman has used it successfully in the formation of artificial pupil.

ANALYSIS OF THE CASES OF INJURIES OF THE HEAD EXAMINED AFTER DEATH IN ST. GEORGE'S HOSPITAL, FROM JANUARY 1841, TO JANUARY 1851; WITH PATHOLOGICAL AND SURGICAL OBSERVATIONS. BY PRESCOTT HEWETT, ESQ.

In this analysis the author included only fatal cases where the exact nature of the injury had been clearly made out.

I. SCALP WOUNDS WITHOUT FRACTURE OF THE BONES. In this decennium, thirty-three cases of scalp wounds without fracture of the bones were examined. In ten of these cases death was produced by some other cause. In the remaining twenty-three cases mischief of a serious nature soon followed the injury, and ultimately proved fatal. Diffuse cellular inflammation occurred in seventeen cases; and in twelve this was accompanied with erysipelas. In four cases there was diffuse in-

flammation of the neck, which spread down to the mediastina in two, and caused oedema of the larynx in two cases. Hemorrhage in two cases followed sloughing caused by inflammation. In nine out of twelve cases, where both brain and its membranes were healthy, death ensued from purulent infection. In ten cases, inflammation had existed about the membranes or the brain. In eight, suppuration was found between the bone and the dura mater. The trephine had been applied in three cases. Most of the patients were persons of intemperate habits. Several had insisted upon leaving the hospital, but were readmitted with swelling of the scalp and other signs of inflammation. Simple puncture, as recommended by Sir Benjamin Brodie, relieves the oedematous swelling not uncommonly following scalp wounds; but free incisions are required when suppuration ensues. Sloughing of the scalp is thus usually prevented. Separation of the dura mater from the bone may occur either as a primary or as a secondary effect. In the first case, the small vessels connecting the dura mater to the bone are ruptured by the blow; in the second, the osseous tissue inflames and suppurates. Generally speaking, the suppuration between the bone and dura mater is circumscribed, and the extent of the mischief on the inner side of the bone is exactly traced by that on the outer side; but suppuration in the parietal region may be much more diffuse. In this decennium there had been no single instance of the secondary puffy tumour of the scalp described by Pott. It had never fallen to the author's lot to witness a case in which the application of the trephine for the evacuation of pus within the cranium, as described by Pott, had a successful issue. He had never known the trephine applied at St. George's Hospital, to evacuate matter situated either under the dura mater or in the brain. Matter may flow, upon the application of the trephine, from the cancellous diploe of the cranium. Purulent infection was observed in fourteen out of twenty-three fatal cases of scalp wound. This disease is found especially in injuries involving the osseous system, and M. Chassaignac believes that the removal by the trephine of the contused bone, before suppuration has taken place in its diploe, destroys the source whence the secondary mischief is for the most part derived; but such an explanation cannot be received as valid.

II. FRACTURES OF THE BONES AND SEPARATION OF THE SUTURES. In this decennium, seventy-eight cases of fractures of the skull were admitted, eighteen of which had received other severe injuries, of a nature likely to cause death; fifty-six were simple fractures; twenty-two were compound. Of the simple fractures, nineteen were accompanied by wounds of the scalp not exposing the bone; extensive separation of the sutures coexisted in fourteen cases. In forty-seven cases the injuries had been produced by the patients having fallen from various heights; in ten the blow had been inflicted by some heavy instrument. In the fifty-six cases of simple fracture, there was only one instance in which the injury was confined to the spot upon which the blow had been struck. Fractures of the base of the skull seldom exist alone; in a large majority of cases the injury co-exists with fractures radiating from the point where the blow was struck. In sixty-eight cases of fracture of the base, six only were confined to this region: and only in two cases no trace of fracture could be detected at the seat of the blow. In six cases of simple fracture, the injury was accompanied by depression, which was in all very slight. In ten cases of compound fracture there was also depression of the fragments, considerable in nine. Fractures of the skull, with depression of the inner table alone occur but rarely. The author divided the skull into three zones, to each of which injuries are often confined, fractures of the middle zone being the most common. Fractures involving the orbital plates of the frontal bone are often accompanied with effusion of blood into the orbit. Bleeding from the ear is not infrequent in severe injuries to the head, indicating fracture through the petrous portion of the temporal bone. But of the signs indicative of fracture of the petrous bone, one of the surest is the copious discharge of a watery fluid, which may or may not be preceded by bleeding. The author believed the fluid to come from the sub-arachnoid space. That such is sometimes the case had been established by M. Robert, in a valuable paper in the *Mémoires de la Société de Chirurgie de Paris*, vol. i. The discharge occurred in old as well as in young subjects. M. Chassaignac had endeavoured to prove that this fluid owes its origin to the filtering of the colourless part of the blood, and other surgeons had held that it comes from the cavity of the arachnoid. Such cases, however, if they do occur, must be rare. The author did not believe that the source of the watery fluid in all cases is the sub-arachnoid space, but that it was in most cases, and especially in those where it is clear and abundant from the commencement. Extensive separation of the sutures

co-existed with the fractures in fourteen cases; separation of the coronal suture occurred in seven cases, and of the lambdoidal in three cases; of the sagittal suture in four cases. In one case only, there was separation of a suture, without a fracture, in the posterior part of the squamo-parietal suture.

Dr. COPLAND was surprised that, amongst so many cases, there had been so few in which the effects of injury to the head had been developed at a longer period after the receipt of the mischief. He alluded to the occurrence of abscess of the brain a year or so after the first effects of the injury had gone off.

Mr. HAWKINS said that very few instances could occur at the present day, in which the trephine should be applied to the vault of the skull for blood effused at the base, or for the removal of pus situated at a distance from the point at which the skull was perforated. Pus, or blood effused within the substance, would be less likely to be mistaken for pus, or blood effused exterior to the cerebral substance. All the cases related had been fatal; but it was possible for the head to suffer, without a fatal result, severe injuries, the nature of which might be diagnosed with considerable accuracy. He would mention two examples. A man was brought under his notice, whose head had been caught between the buffers of two railway carriages, and severely injured. He had profuse bleeding from the ear, and disorder of motion and sensibility in all the parts supplied by the nerves emanating from the base of the skull. In fact, there were unequivocal symptoms of fracture of the base of the skull. The man, however, slowly recovered, although it was some time before he was able to walk, and even now he was unable to see correctly with one eye. In the second instance, a woman suffered a severe fracture of the skull, extending, as the symptoms unmistakeably showed, to the base, consequent on her having been tossed by a bull. The patient was restored to health. The discharge of watery fluid would, he thought, now become an important symptom, in consequence of its indicating, as Mr. Hewett had shown, the line of direction which the fracture pursued.

Mr. CURLING thought that the interest of Mr. Hewett's paper would have been increased, had the author included cases of recovery. He had himself witnessed several instances of recovery, and it would be interesting to know in what proportion recovery occurred, as this circumstance might throw light on the views entertained of the origin of the discharge from the ear. He could confirm the observations of Mr. Hewett in respect to the existence of suppuration within the dura mater. In all the cases in which he (Mr. Curling) had seen the trephine used, pus was found within the dura mater as well as outside the membrane. The author had omitted reference to cases of *contre-coup*. He did not mean instances in which the fracture was opposite to the seat of violence, for they were very rare; but the more common cases of laceration of the brain, and extravasation of blood, occurring opposite to the part at which the marks of external violence were found. He considered the number of deaths from scalp wounds and diffuse inflammation as large, and he had remarked that in certain constitutions where injuries of the head were treated actively by bleeding and mercury, the results were less favourable than when more moderate measures were adopted.

Mr. PRESCOTT HEWETT had purposely left out of his paper all the cases which had recovered, because it was only when the patient died that we could determine positively the state of the fracture, its exact situation, etc. His observations with reference to the sub-arachnoid fluid had been the result of dissection. He had alluded to cases of *contrecoup*, though not to the particular class of this injury mentioned by Mr. Curling. The mortality of scalp-wounds might seem large, but he did not think it was so, recollecting the great number of cases of purulent infection which had occurred, and in which recovery would not have taken place under any treatment.

BIRMINGHAM PATHOLOGICAL SOCIETY.

MAY 12TH, 1853.

T. BELL FLETCHER, M.D., in the Chair.

DURATION OF HUMAN LIFE VIEWED IN RELATION TO MORAL CAUSES. BY H. L. SMITH, ESQ.

Mr. SMITH's object was to show, that from the first ages to the present time, there has been a striking correspondence between the prevalence of mortality and moral depravity; and that this is too remarkable to be explained otherwise than by regarding it as the result of direct divine ordination. In illustrating his views, he employed two original charts; the one chronological, showing the periods of the ætymological plagues and pestilences;

and the other historical, in which was shown the periodicity with which, from the time of Adam to that of the Jewish Commonwealth, death advanced and life decayed.

Thus, the primal sin *disobedience* rendered Adam mortal; and he and his descendants, down to Noah, were restricted to an average life just within *one thousand years*. Violence then coming to prevail, the period was halved to five hundred years. This continued till the incoming of *pride* led to the erection of the Tower of Babel, and the further reduction of life to two hundred and forty years. Presently, *idolatry* and *lust* prevailed; and the duration of life was correspondingly lessened to an average of a hundred and twenty years. During the time the children of Israel were in the wilderness, a period of *hardness of heart* and *unbelief*, there were but two living, to pass over the river Jordan, of the six hundred thousand men who forty years before had passed over the Red Sea.

Thus, from Adam to Moses, life was shortened exclusively from moral causes. From these data, Mr. Smith drew the conclusion, that in proportion to the wrong doing of men and nations, will be the brevity of their lives; and that not so much in consequence of their sin, but as the result of a special divine arrangement. And he drew attention to the fact of the increased duration of life in the present day (as shown by insurance office tables), in connexion with the existence of a more elevated standard of morality. Having thus asserted the predominance of moral over physical causes in lengthening human life, he concluded by urging the claims of the subject on the attention of the medical profession, and of all those who are interested in studying the dynamics of life.

ASSOCIATION INTELLIGENCE.

TWENTY-FIRST ANNIVERSARY MEETING.

The Anniversary Meeting of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION will be held at Swansea, on Wednesday, the 10th, and Thursday, the 11th of August. The particulars were published in the JOURNAL for May 27th, p. 470; and it is intended to reprint them, with additions, in the numbers for July 8th, and August 5th.

ANNIVERSARY BRANCH MEETINGS ALREADY ANNOUNCED.

The following is a summary of official notices contained in our last number, to which we refer for details.

BRANCH.	DAY AND HOUR.	PLACE.
Lancashire and Cheshire.	June 29th, at 12 o'clock.	Town Hall, Manchester.
South Eastern.	Same day and hour.	Sussex Hotel, Tunbridge Wells.
West Somerset.	Same day, 2 P.M.	Castle Hotel, Taunton.
Bath and Bristol.	June 30th, 3 P.M.	Medical Library, Bristol.
Metropolitan Counties.	July 10th, 4 P.M.	Brunswick Hotel, Blackwall.

MONMOUTHSHIRE AND SOUTH WALES BRANCH: NOTICE OF ANNUAL MEETING.

The second Annual Meeting of this Branch will be held at Chepstow, on Wednesday, the 6th day of July, 1853; Trevor Morris, Esq., M.D., President.

The Council will meet at 12 o'clock, in the Public Rooms, Bank Buildings. At 2 P.M., the Anniversary Meeting will be held at the above Rooms, when the President will deliver an address. The officers for the next year will be elected. The Medical Reform and Vaccination Bills will be considered, and cases and communications read. At 5 P.M., the members and their friends will dine together at the Assembly Room, Beaufort Arms. Tickets £1:1:0 each.

Members arriving at Chepstow are requested to call on Mr. Morris, Welsh Street, who will be happy to afford them local information.

W. H. MORRIS, M.D., President.

THE CONSTITUTION, LAWS, AND FINANCES OF THE ASSOCIATION:—COMMITTEE OF INQUIRY TO BE PROPOSED AT SWANSEA.

LETTER FROM DR. CORMACK TO SIR CHARLES HASTINGS, M.D.,
PRESIDENT OF THE COUNCIL OF THE PROVINCIAL
MEDICAL AND SURGICAL ASSOCIATION.

Patney, June 16th, 1853.

MY DEAR SIR CHARLES,—It is important that my intention of moving the following resolutions at the Swansea meeting should be known to all the members of the Association; and as the most proper method of accomplishing this object, I address to you this note, that it may obtain circulation as an official document.

The following are the resolutions which I intend to propose.

I. That a Committee be appointed to report to the Anniversary Meeting in 1854, upon the Constitution, Laws, and Finances of the Association.

II. That the following constitute the Committee:—

The President of the Association.

The President-Elect.

The President of the Council.

The General Secretary of the Association.

The Presidents of all the Branches now in office.

The Secretaries of all the Branches now in office.

With power to add twelve to their number.

III. That the Treasurer be authorized to pay to this Committee £30 for its necessary expenses.

IV. That the first meeting of the Committee be held [*to-day or to-morrow, as may be agreed, at o'clock.*]

If the Committee were appointed on the first day of our meeting, it might on that or the following day assemble for the purpose of electing the twelve additional members, in accordance with the suggestions of our colleagues. It is important that all who accept office in this Committee be prepared to devote themselves with earnestness and assiduity to the difficult questions which must come before them.

In proposing the resolutions, I shall endeavour to give a short but comprehensive outline of the principal subjects which are likely to engage the attention of the proposed Committee. At present, I am anxious to state that the three main questions seem to me to be—

FIRST. An improved constitution in the Executive Council, so as to make it, to a large extent, a representative body, composed of members annually elected by the Branches.

SECOND. An expansion of the Branch system.

THIRD. The formation of some financial laws for the safe regulation of current expenditure; and for the establishment of a reserve fund to prevent the Association being at any time crippled by such fluctuations in income, as are inseparable from the career of such an institution as ours.

I am, my dear Sir Charles, yours with sincere esteem,

JOHN ROSE CORMACK.

EDITOR'S LETTER BOX.

SUNDAY AT THE CRYSTAL PALACE.

LETTER FROM DR. A. P. STEWART TO THE EDITOR.

SIR,—As a petition, signed by not fewer than six hundred and forty of the medical men of this metropolis, is about to be presented to the Houses of Parliament, I think you will agree with me that some account of its origin and object is due to the world. Its promoters have been charged, both publicly and in many private circles, with going beyond their province, with making an unwarrantable jumble of medicine and theology, and with insisting on a religious dogma, to the prejudice alike of physiological truth and the health of the working classes. We meet these charges with a general and unhesitating contradiction. We have not transgressed our province; but if we had, we were challenged to do so by our accusers; and, though resting our appeal for the maintenance of the existing law mainly on the sanitary requirements of the working classes, we felt bound at the same time to declare without reserve our convictions of what is due to religious truth and public morality.

Let me state, in few words, the history of the petition, which I hope you will be able to insert entire.

Those who are interested in the opening of the Crystal Palace at Sydenham on Sundays, considering that their other arguments would be strengthened if they could enlist the support of the medical profession, sent petitions to all or most of the hospitals and dispensaries in London, (and one, I understand, was stealthily laid on the table of the Royal Medical and Chirurgical Society,) requesting signatures in favour of the proposed measure. In some quarters, this application was more or less favourably received; in others, it was rejected with unqualified and unanimous reprobation. Several signatures having been attached to the petition at the Middlesex Hospital, those who decidedly disapproved of it felt bound to accept the challenge thus addressed to them *from without*, and fully as well as fearlessly to express their opinions on a subject of so great importance. Had they declined it, they would have laid themselves open to the just imputation of time-serving, and (let me add) cowardly unfaithfulness to their most sacred convictions of duty. Finding that many of their friends most heartily concurred in their views, and desired an opportunity of expressing them to Parliament, they resolved that the petition should embrace the whole of London, so far as it could be reached by them; and also that, as the movement had spontaneously originated within the pale of the medical profession, it should be, as it has been, carried on and completed solely by its members. It was not at first expected that it would receive more than fifty or a hundred signatures, but six hundred and forty-one have appended their names, among which are many of very high professional and scientific celebrity. Many others are at one with them on the question at issue, but object to signing petitions not strictly professional. Woe worth the day, when the lips of the medical man shall refuse to utter that noble sentiment, "*Homo sum, nihil humani à me alienum puto*".

The innovators demand the repeal of the existing law, which forbids the opening of places of amusement on Sunday for gain. The connexion between the health of the people and the pecuniary gains of a powerful trading company is by no means self-evident; yet, but for the tempting profits, we should have heard but little of the public health. The petitioners, on the other hand, plead for the maintenance of the existing law, on the ground that a seventh day of rest is essential to the well-being of ALL men in every condition of life. They condemn the system, yearly gaining ground, which, in the name of a portion of society, denies to many what God in his sovereignty and mercy designed for ALL—a seventh day of spiritual improvement and bodily repose. They see with alarm the statement, that the demands of cupidity, amusement, and vice—of the newspaper press, the canal, the steamer, the railroad, the public carriage, the tavern, the bakehouse, and the tobacco-shop, have already engulfed in the ever widening vortex of Sunday traffic nearly a million of the working men of Britain! If these human machines were beasts of burden, we might have some hope of bettering their condition under the act for the prevention of cruelty to animals; but as they are only men, gifted with reason and with deathless souls, they are to be sacrificed for the good of society—used up with appalling rapidity—compelled, for the sake of their fellows, to do harder work on the day of rest than on any other day of their toilsome week—doomed, as an omnibus-driver once said to a friend of mine, to look for rest only in their graves. Is this, we ask, in accordance with sound physiology, with ordinary humanity, above all, with Christian morality? Yet this is the system to which it is proposed, by the opening of the Crystal Palace on Sundays, to give a development hitherto unknown in England. We earnestly protest against it, not only on moral and economical, but "on sanitary and medical grounds", as "pregnant with disastrous results to the labouring classes", because we consider the sabbath rest essential to the health of ALL, and believe that, under the proposed relaxation of the law, the million of men now doomed to incessant toil would be quickly doubled. Then, if not before, the mass of the working classes would find, when too late, that, under a delusive expectation of increased facilities for healthful recreation, they had been sacrificed, in the first place, to "the claims of capital", and next, to the aristocracy of their own order and the middle classes, who can take their holiday when they please, without encroaching on the liberty of their more needy and helpless neighbours. We venture to think that the concluding paragraph of the petition, which pleads for a weekly half holiday to the labouring population, suggests "a more excellent way".

I am, etc.,

A. P. STEWART.

74, Grosvenor Street, June 20th, 1853.

The following is the Petition referred to by Dr. Stewart:—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled: the Petition of the undersigned Physicians, Surgeons, and General Practitioners, resident in London,

HUMBLY SHEWETH,—

That your petitioners, from their acquaintance with the labouring classes, and with the laws which regulate the human economy, are convinced that a Seventh Day of rest, instituted by God, and coeval with the existence of man, is essential to the bodily health and mental vigour of men, in every station of life.

That the system which provides for the gain of some, and the recreation, the amusement, and the vices of others, at the expense of their fellows, who require and are entitled to a day of rest as much as they, and thus consigns a large and yearly-growing proportion of the community to a life of unbroken toil, besides being at variance with that law of charity which enjoins us to do to others as we would they should do to us, has a direct tendency to undermine the health, exhaust the strength, and shorten the lives of those who are its victims.

That the proposal to open for profit the Crystal Palace, now in course of erection at Sydenham, and to create in connexion with it an enormous amount of railway traffic during a portion of the Lord's Day, lying manifestly open to these objections, and confessedly implying a still further extension of this hurtful system, appears to your petitioners pregnant with disastrous results to the labouring classes, because directly tending to defraud them of that boon, which the Sabbath-law of a beneficent Creator provides for the whole family of man.

That while they are more especially called to minister to the physical sufferings of their fellow creatures, your Petitioners cannot overlook the close relationship subsisting between moral and physical disease, or entertain the hope that any plans, which do not make full provision for their spiritual as well as for their physical necessities, will effect any great or permanent improvement in the health and the habits of the labouring population; and that, even if your Petitioners could altogether shut their eyes to the moral aspects of the above-mentioned proposal, in favour of which their opinion has been expressly invoked by its promoters, it would, according to their experience of the wants and slender resources of the labouring poor, be a mere mockery to offer the much needed blessings of health, fresh air, and recreation, at an expense far beyond the means of the vast majority, and sure to entail serious subsequent privation even on the few who might venture to incur it at distant intervals.

That your Petitioners, deeply sympathizing with the hard and cheerless lot of multitudes of their fellow-countymen, of whose health they may be considered in some sense the guardians, feel bound to protest against any encroachments, from whatever quarter they may come, on that day of rest which is the birth-right of the poor, and to claim for them far greater opportunities of healthful and innocent recreation than they now enjoy. Convinced that the present protracted hours of labour are not only hurtful but needless, and anxious to lighten instead of adding to the pressure of toil that now weighs so heavily on the working classes, your Petitioners desire to express their belief that the requirements of the Divine law, and the interests both of employers and artisans, may be harmonized by the concession, as in Manchester, and (to some extent) in Glasgow, of a portion of one of the working days as a weekly half holiday; and the provision, free of cost, in all the large towns of the United Kingdom, of Parks and Gardens, and of public Museums of Art and Science, fitted to elevate the habits and refine the tastes of the labouring population.

May it therefore please your Honourable House to refuse your assent to any measure calculated, in any way, to set aside the law actually in force and to legalize the opening of the Crystal Palace and its Grounds for gain on any portion of the Lord's Day.

And your petitioners, as in duty bound, will ever pray.

CHLOROFORM IN PARTURITION.

LETTER TO THE EDITOR.

SIR,—It is indeed true that we live in startling times; and it would seem that some members of the medical profession are determined we shall not be behind the rest of the world in a "go-ahead" progress. Your announcement, a few weeks ago, of the Queen's accouchement under chloroform, and that, under no other than ordinary circumstances, the royal child-birth had been treated by anaesthesia, doubtless gave rise to considerable

emotion and excitement both in the professional and the female world. I entertain too much sense of delicacy and respect for royal station, either to make unnecessary allusion to, or elicit a discussion upon the circumstances which induced the eminent medical attendants to administer chloroform; but it is a remarkable circumstance that, in the bulletins issued, not the slightest allusion to any untoward or unfavourable symptom in the royal patient is made. For some time, however, before this, it was well known that, in certain districts, the married—especially the young married—women, even of respectable society, had been in much agitation respecting the recent discussions upon chloroform, and had become so solicitous for its administration in their own cases, as to have sought for the attendance of such practitioners as had not entertained scruples as to its employment, but had found in this way a very ready and popular—though it may be questioned whether a very legitimate—introduction to obstetrical practice.

The effect of such a proceeding may be seen in a case which I will here relate.

I recently attended a lady, for the seventh or eighth time, in labour. The parturient process in this instance, as in every other in her case, was admirably illustrative of the accurate physiological and mechanical relations between the mother and child requisite for the production of natural offspring. The dilating and expulsive powers of the uterus were regular and effective. These actions, however, could not be had without pain; and in the midst of them she most importunately begged, and even insisted, to have chloroform given to her. To this request I declined acceding; and the mother and child were happily relieved in half an hour after the request was made, and within two hours from the commencement of labour.

This patient urged her wish to me, by telling "that Mrs. — and Mrs. — had taken it, and why should not she?" I apprehend that such a state of things in the practice of midwifery ought not to exist. I would ask, then, upon what new principles can this meddling or interference with natural labour be defended? Is it proper, in the normal condition of the female, to administer chloroform? Is it justifiable? I apprehend that every agent legitimately used in medicine is only for the alleviation or cure of disease, functional or organic. Will it be attempted to place parturition under the head of disease? No one, I conceive, will be so bold as to make that attempt.

Whence, then, comes the justification for this modern proceeding? I presume, from that inherent weakness in human nature, of shrinking from pain, and an eager desire to avoid all suffering, however legitimately enforced. To meet this desire, certain medical men have decided to lend their skill. But how does the question really stand? If labour be undeniably a physiological process for the birth of human offspring, and if anatomy and physiology have proved that this process cannot be obtained without fulfilling the Divine enunciation, "that in sorrow and pain woman should bring forth"; the whole of this being, notwithstanding, perfectly consistent with the health of mother and child,—what doctrine can be an excuse for mischievous meddling with such a miracle of contrivance? This, however, must be the obvious result—that, whilst the pains and perils of child-birth have always had a salutary moral influence on the female character, the interference proposed must have the opposite effect, viz., of seriously damaging the moral courage of parturient women, besides placing practitioners who object to such a procedure in embarrassment and difficulty.

In your own approval, by editorial remarks, of the regular use of chloroform, as well as in the result of Dr. Snow's experience in its administration and freedom from danger, as given in the number of the JOURNAL for June 10th, I do not observe a single ground of justification for interfering with perfectly natural labour; and it is easy to perceive, from the detail entered into by Dr. Snow in this matter, that, even under any circumstances, chloroform, like other agents on the living body, is irregular, and consequently may be very mischievous in its operation. Dr. Snow is not disposed to believe that the deaths which he relates—one in Dr. Ramsbotham's, and the other in Dr. Murphy's practice—were attributable to anaesthesia induced; but the question is, Could he say that death would have occurred had that not been practised? Those who have had a large amount of professional experience can testify to the very varied physical condition and temperament of parturient women, in whom there is not unfrequently a tendency to an abnormal condition of the heart and lungs. The indiscriminate use of chloroform in such cases must not only be mischievous, but often fatal. Besides, we can easily see the constant liability to danger from the regular use of chloroform in the lying-in chamber, especially in the enormous quantities stated by Dr.

Snow to be occasionally used—I presume in natural labour: and is it not likely to be a ready and quick means of self-destruction, eagerly seized upon by the unhappy woman, whose child-birth is only attended by shame and perhaps destitution?

What, then, is the course which ought to be pursued in this dilemma? The profession, as a commonwealth, is confessedly without any landmarks of polity or ethics by which to govern it; yet surely there is at this juncture an amount of character sufficient to defend the soundness of its position, and prevent it being "disturbed from its decent proprieties", although a flickering meteor may have moved over its horizon. From the example now given to the country by the medical attendants on royalty, every parturient woman in the realm will expect to be treated in labour by chloroform; and by the example thus set, great violence has been done to the judgment, the feelings, and the position of, I believe, many, if not the majority, of the best accoucheurs in the country. Is it not, therefore, incumbent on the teachers and examiners of midwifery in every school, especially in London, immediately to investigate the question in all its bearings, and to promulgate *ex cathedra* their opinions, both physiological and moral, on the subject, in order that as little time as possible may be lost in settling, by an amount of indisputable testimony, the scruples, the hesitations, and the doubts of the professional and the public mind. I am, etc.,

A MEMBER OF THE ASSOCIATION.

Lancashire, June 13th, 1853.

LORD LYTTTELTON'S VACCINATION BILL.

SECOND LETTER FROM EDWARD BARBER, ESQ., TO THE EDITOR.

SIR,—I do not question the good intentions of Lord Lyttelton in proposing his Vaccination Bill, but I doubt whether any of us are yet in a position to legislate for the suppression of small-pox. That its occurrence, subsequent to vaccination, is much more frequent now than it was twenty or thirty years ago, will, I think, be admitted by all who are of that standing in the profession; and my own observation leads me to the conclusion that within a much shorter period the protective influence of the vaccine virus has from some cause or other decidedly diminished. The subject is one in which hasty and crude legislation may do much mischief, and which presents many points necessary to be well considered before penal statutes are admissible. Amongst these are the points—whether vaccine virus taken directly from the cow is more effective than that which has been taken from a succession of human subjects; and if so, how long it may be used without reverting to the primary source, or rather, through how many of such subjects it may pass without materially impairing its protective influence; whether a scrofulous or other morbid diathesis diminishes the power of the virus; whether (as suggested in a former letter) infants of very tender age are less susceptible of the vaccine disease; and whether in them the constitutional effects are fully and perfectly produced, and the virus taken from them is as effective as that taken from children some months older; and if it be thought not to be so, what is the earliest age at which infants should be vaccinated to secure its full and effectual influence upon their own constitutions, and the transmission of a perfect and unimpaired virus to others? It should, if possible, be ascertained in what proportion of cases vaccination, duly and carefully performed, procures complete immunity from small-pox for life, and for how long a period it may on the average be relied upon in other cases. For, if its protective influence be only temporary (as it is believed in many cases to be), every measure must be defective which does not provide for general revaccination at stated periods.

For some years past it has appeared to me that small-pox, subsequent to vaccination, has been of more frequent occurrence than primary small-pox. It is the great difficulty we have now to contend with, and it is necessary, therefore, to consider whether time and circumstances may not have produced a modified form of the disease, for which the vaccine virus is not so effective an antidote as it has heretofore proved to be for the genuine small-pox, and if there be reason to think so, whether any and what protection can be given to the public against it. These are a few only of the points requiring careful investigation before the legislature can treat the subject of vaccination satisfactorily. In the meantime, perhaps, the utmost that can be done in the way of legislation is to impose restrictions and disqualifications upon the unvaccinated; for instance, exclusion of them and their families from charitable and public institutions of all kinds, from schools and public offices and employments etc., and from parochial relief: to enforce vaccination, and, if necessary, revaccination upon all tramps and vagrants, prisoners of

all kinds, and all who are brought into close contact with others whether in gaol or elsewhere, and to encourage it amongst the lower classes by rendering it as accessible as possible, and taking care not to identify it with parish relief. It seems vain to hope for any real improvement in the sanitary condition of the country, until such questions as the present, and indeed all questions affecting the public health, are submitted to the consideration and control of men whose attainments and pursuits give them the knowledge necessary to a proper handling of such subjects.

I am, etc.,

EDWARD BARBER.

Stamford, June 20th, 1853.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY *versus* HER MAJESTY'S NAVY.

LETTER FROM HENRY BENCRAFT, ESQ., TO THE EDITOR.

SIR,—I entirely agree with you as to the importance of the Medical Department of the Navy; and I think that it is greatly to be deplored that the Board of Admiralty is so blind, as not to see that it is as much its duty, as it is necessary to the interests of the naval service, to endeavour to make the assistant-surgeon's position as agreeable as possible. In order to show you that this can be done at no very great sacrifice of money or convenience, I would beg to direct your attention for a few minutes to the manner in which our great steam navigation companies administer to the wants of their medical officers, and, indeed, do all in their power to make them feel that they are gentlemen, and that the office which they hold is one of great importance and responsibility. I am now speaking of the Peninsular and Oriental Steam Navigation Company, in whose service I spent two years prior to engaging in a country practice. My salary was one hundred pounds per annum, with living. I had a most excellent cabin—one of the best in the ship, with a roomy dispensary; the company finding all requisites and a servant to wait upon me. From the class of passengers carried by this great and liberal company, it is scarcely necessary for me to tell you, that in a sea-going ship the style of living could not be surpassed.

Now we all know that, with these trading companies, every foot of room is of considerable value; and yet the directors rate the surgeon's services so high that they liberally, without regard to the sacrifice of either space or expense, do all in their power to make him comfortable.

I would ask you, sir, is it not perfectly astonishing that the Board of Admiralty does not consider the lives of those brave fellows, who man "the wooden walls of Old England", of sufficient consequence to be cared for and protected, at least as efficiently as the Board of Directors of a carrying company care for and protect their passengers and servants?

I hope, sir, that ere long the voice of public opinion will cause this most foul blot to be removed from the national escutcheon.

I am, etc.,

HENRY BENCRAFT.

Swimbridge, near Barnstaple, Devon, June 14th, 1853.

NEWS AND TOPICS OF THE DAY.

THE AQUATIC VIVARIUM, REGENT'S PARK. On the borders of the flower-bed in the Zoological Gardens, Regent's Park, has been constructed, of glass and iron, a building sixty by twenty feet in area containing fourteen six-feet tanks of plate glass. Of these, six are ready for exhibition. They enclose masses of sand, rock, gravel, corallines, sea-weed, and sea-water; and are abundantly stocked with crustacea, star-fish, sea-eggs, actinias, ascidians, shelled, and shell-less molluscs, and fish of the genera *gasterosteus*, *labrus*, *crenilabrus*, *biennius*, *gobius*, and *cottus*. The algae, which serve at once as ornaments and shelter for the animals, and as purifiers of the water, appear to bear their new situation as well as the lively zoophytes, and no difficulty has presented itself, so far, to the conservation of both. The collection is altogether from the British seas, but the building is so constructed as to be capable of being enlarged, and the Society does not despair of exhibiting some of the more striking tropical and intertropical forms of invertebrate animals. The most complete portion of the collection are the *Actinias*, among which the specimens of *A. dianthus*, *parasitica*, *crassicornis*, are truly magnificent. The rare *Adamia palliata*, *Actinea nivea*,

and *A. miniata*, are also objects which merit more than passing attention. The shelled molluscs are at present indicated rather than represented; but the vivacity displayed by the *pectens* and *littorine* are a sufficient guarantee for what may be done with them hereafter. The star-fish appear to be rather more difficult in treatment, but among those displayed in the tank appropriated to them are two fine specimens of *palmipes membranaceus*. *Echini* are not unfrequent, and gorgeously coloured *ophiocomas* and *solasters* brighten up the dark stones and shaded recesses of the *algæ* with an effulgence which is irresistibly charming. A few *holothurians* complete the series of this division of the British *radiata*, which the work of Professor Edward Forbes has rendered more popularly known than any other. The *crustacea*, too, which occupy the adjoining tank, are as numerous in species as they are lively in action. The tanks, visible on both sides, afford 390 square feet of view, and contain seven tons of sea-water. Of the marine fish, of which the blennies and *cotti* are almost always at the bottom, it may be said that their habits are being now, for the first time, investigated with success. This exhibition of living fish and invertebrates, besides exciting much curiosity, will be of most impressive usefulness to the student, to whom they have been only known hitherto by books and dried remains.

KING'S COLLEGE HOSPITAL. The Governors have every reasonable expectation that the new wing now being erected will be ready for the reception of inmates next February. The other wing, which will cost £18,254, cannot be commenced until the whole or greater part of the amount is subscribed.

SINGULAR BEQUEST. Earl Beauchamp bequeathed £60,000 for the building of almshouses at Newland, Worcestershire, on condition that within twelve months some person gives a site for their erection. That failing, the legacy goes to St. George's Hospital, London.

ROYAL COLLEGE OF SURGEONS. The following circular has been sent to the Fellows:—"Royal College of Surgeons of England, June 1, 1853.—**SIR**,—I am directed to acquaint you that a meeting of the Fellows of this College will be held at the Hall of the College, in Lincoln's-inn-fields, on Thursday, the 7th day of July next, at one o'clock in the afternoon precisely, for the election of three Fellows into the Council of the College, in the room of three members going out in rotation. I enclose, for your information, extracts from the charter and bye-laws relating to the election of members of council.—I am, **SIR**, your most obedient servant, EDMUND BELFOUR, Secretary." The retiring members of the council are Mr. Luke, of the London Hospital, and Messrs. Wormald and Skey, of St. Bartholomew's Hospital. These gentlemen, with Mr. John Hilton, of Guy's Hospital, offer themselves for the seats in the Council.—The Fellows' Dinner will take place at the Freemasons' Tavern, in the evening of the same day, and will be presided over by Mr. Wilson, the Senior Surgeon of the Royal Infirmary, Manchester. Mr. William Adams is the honorary secretary.

JOSEPH FRANCIS OLLIFFE, M.D., Physician to Her Majesty's Embassy at Paris, was presented by Viscount Palmerston, at the late Court and Privy Council, and had the honour of Knighthood conferred upon him by the Queen.

THE CRIMINAL ABORTION CASE, which we made the subject of remark (May 13, p. 410), has been postponed till next session, when the prisoners Cunningham, Currie, and Thomas, will be tried for "the felonious use of certain instruments with the intent to produce abortion".

ROYAL COLLEGE OF SURGEONS:—PASS LIST. MEMBERS admitted at the meeting of the Court of Examiners on the 6th June:—Joshua Edward Adkins, East Stonehouse, Devon; James Beatty, Oldbury, Worcestershire; Charles Hooper, Buntingford, Herts; Philip Giffard Martel, Guernsey; John Natten Radcliffe, Leeds; Alfred Whittle, Liverpool.

June 10th:—Henry William Alexander Coleman, Elstree, Herts; Robert Death, New Broad Street; Henry Jones, Soho Square; Bransby Roberts, North Building, Finsbury Circus; John Charles Robertson, Waterloo, Portsmouth; Edward Sidebottom, Mottram, Cheshire; Donald Patrick Stewart, Blair Athol, Perthshire; and Henry Webster, Dulwich.

LICENTIATES IN MIDWIFERY admitted at the meeting of the Board of Examiners on the 8th instant:—John Hutchinson Baylis, Lower Kennington Lane, diploma of membership dated May 20th, 1830; John Maule Sutton, Greenwich, January 1st, 1851; Major Greenwood, St. Pancras, December 10th, 1852; George Henry Hope, Seaforth, near Liverpool, May 27th, 1853; William Leshley, Gloucester Street, Portman Square, July 31st,

1843; Maurice Griffith Evans, Blaenafu, April 8th, 1853; Robert Dempster, Brighton, April 8th, 1853; Samuel Cardozo, Redruth, May 27th, 1853; Robert Charles Croft, Wimbledon, May 30th, 1853; Nicholas Hardcastle, Newcastle-on-Tyne, June 3rd, 1853.

APOTHECARIES' HALL:—PASS LIST. Thursday, June 9th, 1853:—William Dale, Kirby-moorside, Yorkshire; Andrew Harvey; William Hewitt, Liverpool; James Fielden Howard, Shaw, Lancashire; William Randall Mackley, Bradford, Yorkshire; John Charles Robertson, Waterloo Villa, Portsmouth; James Rhodes, Glossop; and Edward Hemmings Snaod, Ashford, Kent.

APPOINTMENTS.

[* An asterisk is prefixed to the names of Members of the Association.]

CARTER, H. V., Esq., of St. George's Hospital, was appointed Student in Human and Comparative Anatomy of the Royal College of Surgeons, at a meeting of the Council, on Wednesday, June 15th, 1853.

OBITUARY.

[* An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

BAILEY, J. Gordon, M.D., Lecturer on Midwifery in the Hunterian School of Medicine, at Penton Street, Pentonville, from suicide by prussic acid, aged 29, on June 8.

BRIEN, Robert, M.D., at 26, St. Mary's Road, Islington, aged 65, on June 8.

COWARD, William B., Esq., Surgeon, at his residence, near Tiverton, Devon, on June 3.

GIBSON, John, Esq., Surgeon, at Dalston, of consumption, aged 28, on June 18.

GOODGER, William Frederick, Esq., Surgeon, at Ladbroke Place, Notting Hill, on May 29.

GRIFFITH, Samuel M., Esq., Surgeon H.E.I.C.S., at Madras, aged 52, on November 5, 1852.

LAWSON, William Syme, M.D., H.E.I.C.S., at Burmah, of Cholera, on March 29.

LINDOE, R. F., M.D., Physician to the Bath General Hospital, at Stratford, near Salisbury, on June 7.

MACLISE, Alexander, Esq., of 14, Russell Place, Fitzroy Square, at Kingstown, near Dublin, aged 75, on June 8.

McKECHNIE, Robert, M.D., at Smith-hills, Paisley, Renfrewshire, on June 9.

STEAD, Henry C. M., Esq., Surgeon, at Harrogate, Yorkshire, aged 34, on June 13.

WESTCOTT, Charles Stephen, Esq., Surgeon, late of Ringwood, at Ensbury, near Longham, Dorset, on May 28.

* **WING, Richard, Esq.**, Surgeon, at Burrough-on-the-Hill, Leicestershire, on June 16.

BOOKS RECEIVED.

[* An asterisk is prefixed to the names of Members of the Association.]

HALL, A., M.D. AN APOLOGY FOR BRITISH AND COLONIAL MEDICAL DEGREES.

LAWRANCE. ON THE APPLICATION AND EFFECT OF ELECTRICITY AND GALVANISM, in the Treatment of Cancerous, Nervous, and other Affections. pp. 101. London: 1853.

PEARCE, WILLIAM. EVERY MOTHER'S BOOK. Plain Advice on the Management and Diet of Infants. pp. 46. London: 1853.

PIERCE, C. H. EXAMINATION OF DRUGS, MEDICINES, CHEMICALS, etc., as to their Purity and Adulteration. pp. 264. Philadelphia: 1853.

TOMES, John, and DE MORGAN, C. OBSERVATIONS ON STRUCTURE AND DEVELOPMENT OF BONE. From Philosophical Transactions. London: 1853.

TO CORRESPONDENTS.

MUTUA MISERICORDIA. If the writer of a letter bearing this signature, addressed to A.B. Surditas, M.D., will send or write to our office, a communication will be forwarded to any address given.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the Editor of the Journal. Letters requiring immediate attention, and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXVI.

LONDON: FRIDAY EVENING, JULY 1, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. Members receive the Journal free by post.

The ANNUAL MEETING will be held at Swansea on the 10th and 11th of August. Gentlemen who have communications to read to the Meeting are requested to give notice of their intention to the Secretary. Communications will be called for in the order in which the Secretary has received notice from the respective authors. Vide p. 470 of May 27 for various details.

We must remind correspondents that, although they may wish their letters to appear under special signatures, it is absolutely necessary to communicate in confidence their names and addresses to the Editor.

SUNDAY SIGHTS AND SUNDAY SLAVERY.

It is always unpleasant to discover that we differ from those whom we esteem, especially when the subject about which the diversity of opinion exists is mutually regarded as one of the highest importance. It is, therefore, with sorrow that we find that the sentiments, which we expressed last week upon the Sunday question, are in opposition to views set forth in a subsequent page of this day's JOURNAL, by one whose writings and actions—public as well as private—have earned for him the respect of the profession, and have closely associated him in the minds of all who know him, with the united charms of a clear intellect and a genial heart. We regret, then, exceedingly that Dr. Forbes should stand forth in strong antagonism to the six hundred and forty physicians, surgeons, and general practitioners, who have subscribed a petition to Parliament against such an alteration of the statute law of England, as would enable the proprietors of the new Crystal Palace at Sydenham to open it for gain on Sundays. Nevertheless, we do not feel that we can abate one word which we formerly advanced in approval of the general objects of the petitioners. To us belongs not only the liberty, but the high and responsible duty of commenting, from week to week, upon the professional topics of the day, before a large and enlightened society of medical practitioners, among whom must necessarily exist considerable diversities of opinion upon many of the subjects which claim our attention. We, therefore, feel that in discussing this and every other question which arises, the right course to pursue is—without wearying and wasting ourselves in a vain attempt to discover and conform to a creed which we fancy to be of universal acceptability—to throw ourselves upon the generosity of our constituents, and give utterance to our own sentiments with the same unshackled candour which is rightfully exercised by Dr. Forbes, and by other associates who hold and wish to propagate opinions contrary to those advocated in the editorial articles. In this way only can the problem be solved of any large combination of educated and thinking men, maintaining a fair press, and a free editor. The con-

viction that the ASSOCIATION is zealously determined to maintain both in conjunction is our constant support, and our presiding star of duty. This conviction it is which now emboldens us to urge, as a practical objection to the doctrines of Dr. Forbes, that Sunday sights necessitate Sunday slavery.

Upon physical, moral, and religious grounds, Dr. Forbes demands abundant opportunities of extradomestic Sunday recreation for the public. He claims, as a boon to the working-classes, the existence of means for "relaxation in the open air of the country, whether carried thither by omnibus, boat, or rail". As we said last week, we are not the advocates of puritanical Sunday observance: and so far from having any objection "to relaxation in the open air", we believe that, while it imparts health to the body, it is also one of the best means of preparing the mind for such special duties of the day as religious service, domestic fellowship, and self-examination. With the poet we would wish to say—

"Hail, Sabbath! thee I hail, the poor man's day.
The pale mechanic now has leave to breathe
The morning air, pure from the city's smoke;
While, wandering slowly up the river side,
He meditates on Him, whose power he marks
In each green tree that proudly spreads the bough,
As in the tiny dew-bent flowers that bloom
Around its roots; and while he thus surveys,
With elevated joy each rural charm,
He hopes, yet fears presumption in the hope,
That heaven may be one Sabbath without end."

In recommending, however, to the poor man, "relaxation in the open air" on Sunday, we would not advise him to take it in company with a mob of excursionists, and to complete the pleasures of the day, according to the programme of Sir James Graham, by seeking comforts in the public-house which he cannot command at home.

"On other days the man of toil is doomed
To eat his joyless bread, lonely;"

and on the only day on which he can become acquainted with his children, take counsel together with the partner of his life, and consider his own destiny as an immortal being, we feel assured that it is better for him by far, that he should be—

"Embosom'd in his home,
And share the frugal meal with those he loves."

But, after all, it is not by the "men of toil" that the Crystal Palace would be chiefly frequented on Sunday, if we may draw a conclusion from the fact that it is not by them that the omnibus, boat, and rail, are most patronized on that day. It is well known that those, who chiefly fill the coffers of the speculators in cheap Sunday trips by land and water, belong to the middle class of society, with a sprinkling of the richer artisans. To increase public amusements on Sunday is, so far as the poor and the toil-worn are concerned, to increase Sunday labour. The blockades of omnibuses, cabs, and country vans, which we were in the habit of witnessing in Piccadilly, Knightsbridge, and

Kensington, during the Great Exhibition of 1851, would be repeated every Sunday from Temple Bar to London Bridge, were the proprietors of the new Crystal Palace to obtain the alteration of the law which they desire. Thousands of men, already severely worked during six days of the week, would be forced to perform extra service on the seventh; and thus Sunday labour, already a gigantic incubus upon the needy, would be increased, and we should have at once a palpable extension of that slavery, worse than Egyptian bondage, which grasping capitalists are enabled, through the selfishness of the majority, to impose upon the minority. Sunday slavery, upon a large scale, is an inseparable companion of Sunday sights. This is a fact which admits of endless illustration and of the amplest corroboration. We are prepared to prove that "pleasuring" and unnecessary travelling on Sunday doom a large percentage of the adult community to cheerless slavery, from Sunday morning to Saturday night. And if it be so, can any words be too hard, whereby to designate this cruel tyranny of the many over the few? Is this "the noble philanthropy and that tender humanity which form the very essence of our profession"? No! it is treating man less tenderly than it is lawful to treat the beasts that perish. And if there be an eternity, for which the short span of time is the season of preparation, surely the addition of Sunday slavery to the ceaseless toil of the other six days is not a small crime. If man really be born to immortality, the establishment of so strict a quarantine between the creature and the Creator is a crime of magnitude too enormous for words to compass.

The manner in which each individual observes Sunday is a matter between himself and his own conscience; but when greedy capitalists combine with one section of the public to exact Sunday labour in addition to ceaseless work-day toil from another section, albeit a minority, the question emerges from its mere individuality, and assumes a national character. In this latter light we have chiefly considered it, both now and formerly; but we trust that, while we have advocated the recognition of a weekly Sabbath chiefly as a fundamental principle in sound social economics, we have not done it in so exclusive a way as to cloud the perception of that direct personal interest, which every one has in the right understanding and practical application of the question.

We have disclaimed the Sunday rituals of the Puritans and of the Parisians; but we do not place them on the same level of error. We are satisfied that the evils incidental to the one system are inconsiderable, in comparison with the evils inseparably connected with the other.

On this point, our views do not materially differ from those so well expressed in the following reflections upon "Sundays", transcribed from that delightful little volume, *Evening Thoughts by a Physician*. The passage is peculiarly applicable to the whole question now before us.

"SUNDAYS. How is it that many popular writers, who sympathise with the poorer classes, who seem to have their good at heart, and consider that good to depend very much on intellectual progress, wish to undermine the strict and even Judaical observance of Sunday? What framer of a Utopia could dream of more, than, in a state of things requiring the hard toil of the many as a condition of existence, yet still a devotion of one whole day in seven to the sole culture of mental philosophy, from a text-book which contains the purest and loftiest principles of ethics, set forth imaginatively, metaphysically, practically, affectionately—in poetry, maxims, philosophical reasoning—illus-

trated in parables, anecdotes, biographies—in the history of the oldest nation—and, finally, in the example of a pure and perfect life? and besides all this, that the Word itself, rightly used under certain conditions which all may fulfil, should be the means of giving the power of acting up to this knowledge, and thus producing a nation of working-men with pure, unselfish, unsensual hearts and refined minds, bent on approaching a glorious ideal standard? For this is the Idea of the Sunday by which it should be judged.

"There is another argument, which is, to my own mind, very conclusive. Have I, or has any one, when looking back at life, ever regretted that any number of Sundays had been kept even with puritanical strictness? Though such observance was attended by self-denial, and even by the irksome restraint of others, was it not, when viewed soberly from a distance, just like all self-denial and discipline, acknowledged by the self-examiner to have been of more use to the character, than if the day had been one of amusement? 'To scorn delight and live laborious days', is the very characteristic of the *man* we respect; and yet we would train a nation of *men* by another rule, expecting to rear masculine intellects on the soft diet of a disguised Epicureanism." (pp. 84-86.)

Should we have occasion to return to the subjects mooted in the communications of Dr. Stewart and Dr. Forbes, we shall present the sanitary and medical aspects of the Sunday question, to which, as yet, we have not adverted. In the meantime, we aver that it can be proved from medical statistics, and from physiology, that the ordinance of a stated weekly *day of rest at home* is a signal token of Divine Benevolence to all men, but especially to the poor.

"Yes, child of suffering, thou may'st well be sure
He who ordained the Sabbath loves the poor."

THE SYDENHAM SOCIETY AND ITS EXECUTIVE.

AN advertisement in our last number has recalled our attention to the Sydenham Society. Apart from the claims which such a society may be supposed to have on our attention as journalists, we frequently receive communications having reference to its proceedings and management. Though we have not hitherto been able specifically to reply to our correspondents, we have not been unmindful of their letters, but we have taken pains to inform ourselves on the various points to which they have directed our attention.

The very existence, in this country, of a society founded to promote the study of sound medical literature is a highly gratifying fact; whilst the support which it has received, and the age which it has attained, constitute good *prima facie* evidence that it is largely accomplishing the objects for which it was instituted. At the same time, we can quite understand that many members may have been disappointed by not finding their individual expectations answered. But no one, we think, can glance at the row of handsome volumes on his shelf, or peruse the list which appeared in our last number, without acknowledging that the original intentions of the Society have been well and truly fulfilled. We would not be supposed to justify, in every instance, the selections made. But, looking to the varied requirements of so large a body of subscribers, and the differences of opinion that must exist among those to whom the selection of works is deputed, we must honestly confess that the duties of the council have, in this respect, been performed in a way creditable to their judgment and literary character. The duties of a member of the council of the Sydenham Society are far from being nominal; and we do not think that suffi-

cient gratitude has been evinced by the profession, for the time and labour generously and disinterestedly afforded by the many distinguished men, who originated and have conducted the affairs of this society.

The distribution of patronage, always a very delicate matter, rarely fails to elicit charges of jobbing and favoritism, however conscientious and careful the patrons may be. It was not, therefore, to be expected that the managers of the Sydenham Society should escape scatheless of such insinuations; but these insinuations were groundless. In more than one instance, we know that the Council have experienced considerable difficulty in obtaining the services of competent editors; but we have never heard it so much as hinted that, in any case, exception could be taken to the fitness of those that have been entrusted with editorial duties.

After all, the main question is, How far does the Society merit the support of the profession? Does it elevate the literary character of its members, encourage a taste for sound literature, and diffuse valuable works? If so, it is deserving of all encouragement. British medical literature boasts of some very distinguished names; and the writings of Sydenham, Harvey, and Hewson, are of world-wide reputation. But we much doubt whether this reputation has been more than traditional with the large mass of our profession. Yet, it would be difficult to point out any works better calculated to train and improve the minds of medical men. We think, therefore, that a great boon has been conferred on the profession by the new editions of these works, which have appeared and have been distributed under the auspices of the Sydenham Society.

The works of Paulus Ægineta and of Hippocrates, edited by Dr. Adams, constitute important additions to our medical literature. The very valuable work of Rokitsansky, in all probability, would never have been available to the majority of professional students, but for the Sydenham Society. Nor is the list wanting in works of a direct practical character.

We trust that for many years to come this Society will continue to enrich our literature, and elevate the character of our profession by the issue of works of lasting value. We shall be glad if any of our readers, whose attention has not hitherto been called to this Society, should by these remarks be induced to join its ranks.

ORIGINAL COMMUNICATIONS.

ON THE ACTIVE PROPERTIES OF HEMLOCK.

By CHARLES COGSWELL, M.D.

THE perusal of Dr. Osborne's paper *On the State Poison of the Athenians, used in the case of Socrates*, of which a copious abstract is given in the ASSOCIATION JOURNAL of the 10th of June, has reminded me of a passage in Valerius Maximus, which, so far as I am aware, has not yet been introduced into the discussion; although, in my estimation, it affords a more complete vindication of the truth of the account of the symptoms given by Plato, than any other I have seen quoted from the ancient writings. The subject is not merely one of historical interest, but particularly addresses itself to the attention of the members of the medical profession, who are practically concerned to know the real properties of a powerful drug which is recognised by the Pharmacopœias, and which occurs not unfrequently in their prescriptions; otherwise, there might be reason to apologize for so soon again bringing it prominently forward.

The practice of keeping a state poison, as is well known, was not confined to the Athenians. The Roman author whom I have mentioned speaks of it as existing among the Massilienses (the ancient people of Marseilles) and in the island of Ceos. The Massilienses were a colony of Ionians, who fled to Gaul to avoid the tyranny of the Persians; so that in all probability the institution had been borrowed from their countrymen in Asia Minor. According to Valerius Maximus, they had a poison prepared from hemlock (*venenum cicuta temperatum*) which was presented to any one who could

show sufficient reasons before the council of Six Hundred for wishing to die.

"This custom of the Massilienses" (he continues), "I conceive not to have had its origin in Gaul, but to have been imported from Greece, having met with it in the island of Ceos, at the time of my visit to Iulis, in company with Sextus Pompeius. For it then happened that a lady of the highest rank, but far advanced in years, having explained to the citizens her wish to terminate her existence, thought the event would be rendered more illustrious by being honoured with the presence of Pompey. And he, so highly distinguished, not less for his humanity than for the possession of every other virtue, was unable to refuse her entreaties. He went to see her, and endeavoured, by arguments which flowed from his lips in the richest stream of eloquence, to divert her from her design, but without success. Reclining on her couch, which seemed to have been arranged with more than usual care, the lady, now past ninety years of age, and graced with the utmost purity both of mind and person, raised herself on her elbow and thus addressed him: 'To thee, O Sextus Pompeius, may the gods render thanks; not the gods I am seeking, but those I am leaving; because thou hast neither disdained to desire me to live, nor to be the spectator of my death. But having always seen the face of future decked in smiles, I cannot bear to incur the risk of witnessing her frowns by prolonging my existence; I therefore exchange the short remainder of my days for a happy end, leaving on earth two daughters and a flock of seven grandchildren.' Then, after exhorting her relatives to dwell in harmony together, and distributing her patrimony among them, assigning the domestic instruments of sacrifice to her eldest daughter, she seized the cup in which the poison had been prepared (in quo venenum temperatum erat) with a steady right hand. Pouring out a libation to Mercury, and invoking his offices to conduct her to the happier abode in the infernal regions, she eagerly drank the fatal potion. And signifying in words what parts of her body were successively (subinde) being seized with rigor; when it was now approaching the viscera and the heart, she requested her daughter to perform the last duty of closing her eyes. Our eyes, on the contrary, though confounded at the unwonted spectacle, were sent away suffused in tears." (*Ex. Mem.*, lib. II, cap. VI.)

Here we are clearly given to understand that the writer was an actual eye-witness of the scene which he describes. Being a soldier, and not a physician, he is not very particular in giving the medical details; but we are able to gather with a sufficient degree of confidence from the narrative, that the leading symptom was paralysis, commencing at the lower extremities, and gradually encroaching on the trunk until it reached the thoracic organs, which was the signal of death. At this stage, the parting injunction to close the eyes indicates that the lady still retained the possession of her mental faculties; while the fact of her expecting the eyes to remain open, denotes that this was an ordinary sequel of death from the poison. There are obvious grounds also for the inference that catharsis was not anticipated. On the whole, the case, so far as we are furnished with the particulars, bears a strong resemblance to that of the Athenian philosopher; and not only this, but the absence of any note of surprise on the part of the narrator, supports the presumption that the symptoms were of a kind with which the public in those days were familiarly acquainted. Still, unfortunately, the real nature of the poison, that is, whether it consisted of hemlock alone or was compounded with some other ingredient, such as opium, is left in doubt by the peculiar form of the expression "*venenum cicuta temperatum*".

Allian informs us that the old men of Ceos, who could not feel satisfied in their consciences that they were able to be of any further use to the state, were required to present themselves at a festive board, or at some solemn sacrifice, crowned with garlands, and drink a cup of *akveior*. One of his commentators, referring elsewhere to the *akveior*, says it was so called because it grew in a place called Acone, near Heracles, in Pontus; and he directs us for his authority

to the third book of Athenæus. There is some confusion here, however, almost as a matter of course. Athenæus has been mentioning, *apropos* of antidotes, that Clearchus, the tyrant of Heraclea, was wont to amuse himself by putting his subjects to death. Some he would despatch by honest butchery, others by giving them *κένευον*; but as soon as the second mode of gratifying the royal taste was noised abroad, everybody took the precaution before leaving home to fortify himself with a dose of rue (*ῥήγανον*), in consequence of no evil effects resulted to those "*πυθόνας τὸν κένευον*" — to those who drank the *aconite*. (*Deipnos*, ed. 1857, p. 85.) It is evident that he uses the word *κένευον* in the general sense of a 'poison'.

Dr. Osborne endeavours to prove that Dr. Christison is wrong in considering the symptoms attributed to hemlock in the account of the death of Socrates, as irreconcilable with the effects of any poison now known. But that opinion was expressed in 1836, and must have been founded on the data which existed up to that time. It will be seen, on consulting a later publication, that for some years past he has adopted the same view as that now so ably maintained in the *Dublin Journal*; and this change of opinion appears to have taken place subsequently to the occurrence, in 1845, of Dr. Hughes Bennett's remarkable case of poisoning with the fresh leaves of the *Conium maculatum*, in which the symptoms bore a near resemblance to those said to have been produced by the ancient *κένευον* or *cicuta*. Thus, in the edition of the *Edinburgh Dispensatory*, published in 1842, Dr. Christison observes, under the head of *Conium*, "the accounts given by Nicander and Plato of its action as a poison, do not tally well with what is now known of its effects;" but in the next edition, or that of 1848, he says, "the action of this plant as a poison corresponds closely with the description given by Nicander and Plato of the *κένευον*, or state poison of the Greeks." We may, therefore, now consider so much of the difficulty connected with the properties of hemlock as finally disposed of, seeing that two such authorities have arrived at the same conviction as to the identity of the ancient and modern poison, independently of one another.

Since the reintroduction of hemlock into practice in the last century by Baron Störck, a variety of accidental circumstances have conspired to create perplexity with regard to its physiological and medicinal properties; such as the uncertain identification of the plant in some of the recorded cases of poisoning; the changes in the composition of the juice wrought by difference of season; the discordant and often faulty processes employed in making its official preparations; and the fact of the strength of the extract being impaired more or less rapidly by age and exposure to the air. The encomiums bestowed upon it by Störck have also been deemed too extravagant; and the consequence is, that according to the usual course of reaction, the remedy has fallen comparatively into, perhaps, unmerited neglect. Making a fair allowance, however, for the sources of discrepancy just mentioned, and supposing it probable that he was mistaken in his diagnosis when he states that hemlock is a cure for cancer, I am not sure that his results fail to harmonize substantially with those of more recent inquiries. He gives a formula for preparing the extract, very similar to those now directed by the College, as follows:—

R. *Herbæ recentis cicutæ* q. s.

"*Exprimatur succus, isque recens lentissimo igne in vase terreo (sæpius agitando ne amburatur) coquatur ad spissam extracti consistentiam; hoc extractum s. q. pulveris foliorum cicutæ in massam pilularum subigatur; ex qua fiant pilulæ granorum duorum.*" (*Libellus de cicuta. Editio altera, 1761.*)

His practice was to commence with one of the pills night and morning; on the third or fourth day he added another pill; on the eighth day he administered two pills thrice a day; and so he went on gradually increasing the quantity until it reached a drachm or a drachm and a half daily. All this time the case was carefully watched, and the remedy stopped in the event of any adverse indications making their appearance. Fomentations of the leaves were

also applied externally in suitable cases. In reply to his critics, he said he made no pretence of meeting with invariable success; he was satisfied, if, out of a hundred cases given over by other practitioners, he could succeed in relieving or curing one; but, nevertheless, his proportion of favourable results was much greater than this. (*Libellus secundus.*)

Owing to the conflicting statements of authors, doubts at present exist as to whether or not hemlock is possessed of deobstruent properties. Störck alleges, aphoristically, in two of his corollaries, that it has no such property; that it disturbs none of the functions, secretions, or excretions; that it acts insensibly, and neither excites purging nor vomiting; diuresis nor perspiration. In like manner, we are also told by Dr. Christison, that "the deobstruent virtues of hemlock are now almost universally discredited;" and "its diuretic virtues are too unimportant to be available in practice." The rule, therefore, seems to be that the extract of hemlock has no tendency to relax the bowels. And yet even the experience of Störck himself may be cited, to prove that the rule is not without an occasional exception. Thus, in the seventh case of his first monograph, which was that of a lady taking three of the pills night and morning, he mentions that the medicine induced daily two or three liquid evacuations beyond what was customary. Judging from my own opportunities of observation, I should feel inclined to adopt both the rule and the exception; for although in general there has been no action on the bowels, still, in a few instances, where they were usually regular, and even rather sensitive, the patients have found that the extract had a laxative effect upon them. Again, Dr. Osborne states in unqualified terms that the fresh juice is cathartic; so that the following is probably the correct conclusion to be drawn from the whole of the evidence. The natural juice of hemlock is cathartic; but during the progress of inspissation to form the extract, it undergoes some undefined change of composition which deprives it of any marked possession of that property, although, in some constitutions, it still retains the power of increasing the action of the bowels. Armed with the knowledge of this difference in the effects of the fresh juice, and the extract which Dr. Osborne himself admits, we may return to assail the still remaining objection to the perfect identity of the Greek poison with the *conium maculatum*; viz., that the former does not appear to be cathartic, by suggesting that it was probably preserved in the concentrated state, and diluted as occasion required. This not very unreasonable supposition removes the necessity of imagining that just so much opium was used as merely to confine the bowels; while it would argue a refinement of science as well as cruelty to have managed deliberately to adjust the amount of opium so as not to affect the brain, and leave a criminal conscious of the horrors of his situation under the characteristic influence of hemlock. But the question might be discussed hypothetically to any length, without being brought to a satisfactory conclusion; and can only be settled, if at all, by a further appeal to facts.

There is another highly interesting subject connected with the physiological action of hemlock, to which I shall now proceed. Dr. Christison has inferred, from his experiments with conia on some of the mammalia, that it exhausts the energy of the spinal cord and voluntary muscles, but leaves the heart's action unimpaired. He states, moreover, that when applied locally, it acts as an irritant; agreeably to which I have also found, as recorded elsewhere (*Lancet*, 1852), that it excites the contraction of the voluntary muscles and the bowels. In one of Dr. Christison's experiments, when two grains of conia, neutralised with thirty drops of weak hydrochloric acid, were injected into the femoral vein of a young dog, "the animal died before there was time to note the interval." But Mr. Blake, who opposes the doctrine of the sympathetic action of poisons, denies the accuracy of this observation, and insists that a sufficient time always elapses between the application of a poison and its effects, to allow of its completing the round of the circulation.

Some experiments which I performed in 1850, with Dr. Glover, may assist in clearing up this difficulty. Conia given to frogs by the mouth, or inserted beneath the skin of the leg, produced (besides speedy local paralysis in the latter instance) general flaccidity and prostration, terminating in the total abolition of consciousness in from twenty minutes to an hour. The heart, however, continued to beat for three or four hours afterwards. A little of the poison was next applied to the outer surface of the ventricle. Immediately the heart began to contract and extend itself longitudinally with more vigour than before; but, in the course of a minute, the ventricle grew paler, exhibited furrows and prominences on its surface, and beat very slowly. In other experiments, an aperture was made at the apex of the ventricle (an operation which does not much interfere with the heart's action in these animals), and a small quantity of conia was thrown into the cavity through a glass tube. The ventricle instantly contracted to its utmost limit, and refused any longer to receive the blood from the auricles, which continued to beat as before. Usually, it stopped altogether, but once it renewed its pulsations in a quarter of an hour, and continued them for several minutes. And it is worthy of particular mention, that the same phenomena occurred, whether the organ remained *in situ*, or was separated from its attachments, and laid on the table—a remark which also applies to the bowels, which contract under the stimulus of conia and other irritants, whether in or out of the body.

With these facts before us, I think there can be no difficulty in admitting the perfect accuracy of the above observation with respect to the rapidity of death in the dog—an animal to which an interruption of the heart's action would be immediately fatal. The poison acted neither directly nor indirectly through the medium of the nerves; but, in its character as a local stimulant, roused the independent irritability of the muscular structure of the heart, producing an abnormal state of contraction, and preventing it from carrying on the circulation. Such appears to be the true explanation of a fact which, with more of the like nature, has occasioned no slight perplexity to physiologists engaged in investigating the theory of the action of medicines. How far it is calculated to answer the purpose of the *experimentum crucis* which the author of the *Treatise on Poisons* considers necessary to decide between the doctrines of sympathy and absorption, this is not the proper place to inquire; but I may be permitted to observe, that, as their respective advocates derive their conclusions from a variety of unconnected sources, it is not easy to imagine any single experiment which is capable of meeting the whole of the arguments on either side.

Having begun with a quotation, I may appropriately finish with another: "Nil tamen quod temerarium foret audebo; sed omnia et in brutis et in me experiri, antequam ea homini aegrotanti præbuero."—(*Störck*.)

Barnard Street, Russell Square, June 1853.

PATHOLOGY AND TREATMENT OF CHRONIC INDURATION OF THE MAMMA.

By JOHN BIRKETT, F.R.C.S. Eng., and Assistant-Surgeon to Guy's Hospital.

[Read before the Harveian Society of London.]

THE morbid condition of the mammary gland, to which I am about to direct the attention of the Harveian Society this evening, has been almost entirely overlooked by writers upon the pathology of the breast. The nearest approach to anything of the kind is at the termination of a paper by M. J. A. Giraudeau, entitled "*Quelques Considérations sur l'Anatomie Chirurgicale de la Région Mammaire*". (*Mém. de la Soc. de Chir. de Paris*, tome ii., pp. 205 to 207). Professor Syme also gives a short notice of the disease in his "*Principles of Surgery*".

Anatomy of a Healthy Mamma. If the healthy mam-

mary gland of a woman, who has not recently suckled, be examined, it exhibits to the unassisted eye a remarkably opaque white homogenous surface where cut. With very attentive examination, and by allowing the light to fall upon a section at certain angles, the surface appears undulating, and minute irregularities are perceptible. To the touch, it is unyielding and tough; and, occasionally, small irregularities are recognizable. In such a gland, which may be regarded as the type of the normal condition of the organ when in a *passive* condition, the terminal cæci, the secreting portion of the gland, are with very great difficulty detected by microscopic investigation. The object, however prepared, exhibits nothing but a fibre tissue; the fibres being chiefly of the filamentous and double outlined varieties.

Still there is a peculiar aspect about the tissues which at once strikes a practised observer, and which offers a remarkable contrast with the ordinary uniting or areolar tissue of other parts. There appear to be spaces or lacunæ between the fibres, in which a few scattered epithelium cells may be here and there discovered. After the examination of a very large number of mammary glands, at all periods of life and at very different intervals during pregnancy and lactation, as well as after the cessation of this function, I have no hesitation in stating that this organ, when in a *perfectly quiescent and unexcited condition*, exhibits in the slightest degree that is possible the essentials of a secreting organ. The only permanent structures appear to be the excretory ducts. The secreting portion undergoes a remarkable state of atrophy.

Anatomy of a Diseased Mamma. Under morbid action, however, and probably as the result of that remarkable sympathy existing between the several portions of the generative organs and their functions, great changes take place.

It is to the consideration of these phenomena that the following observations will be devoted.

The subject may be divided into;

I. GENERAL INDURATION OF THE MAMMARY GLAND.

II. LOBULAR INDURATION.

The morbid condition of the tissues composing the gland is identical in both these varieties, the only difference being that in the first form *all* the lobes constituting the breast are affected, whilst, in the second, one, two, three or more lobes are alone involved in the morbid action.

A breast thus diseased, when cut, exhibits to the unassisted eye a pinkish tint, its texture is close, but it does not appear of the same homogenous surface throughout. The section is sometimes smooth, but, in many cases, it is almost granular. To the touch, it is hard, quite incompressible, and with difficulty torn. Very often minute vesicular bodies are dispersed throughout the gland, or even small cysts may be discovered in several parts of it. These contain a serous fluid in one instance; and in another, a little mucoid, greasy material.

When examined with the assistance of the microscope, the fibre-element of the organ does not exhibit any appreciable change. I mean to imply by "fibre-element" the areolar or uniting tissue. The secreting portion of the gland-tissue, on the contrary, offers most striking deviations from a healthy condition. The acini, which are remarkably distinct and rigid, clearly exhibit, when torn up, the cæcal terminations of the ducts, closely packed together and opaque. Dilute acetic acid, being added to the preparation, often renders the observation of the object more satisfactory. These cæcal terminations of the ducts are crowded with epithelial cells, and they appear to be filled almost, if we may so say, to bursting point. Such, then, may be the morbid state of the gland-tissue of the entire breast, or of one or more of its lobes. The abnormal condition seems to depend upon an excited action in the terminal cæci, inducing an excessive production of epithelium which does not escape by the ducts. I have never been able to satisfy myself, from ocular demonstration, of the existence of any disease in the areolar tissue, but I think that further observation may prove that there is.

i. When the entire gland is involved, two very distinct conditions are exhibited by the mamma, regarded, that is, *en masse*. In one case the gland is small, the entire organ is closely fixed against the chest, the nipple looks more like a wart and the areola glands are very distinct. When grasped between the fingers from side to side it feels like a disc of condensed, rigid tissue, and it can be drawn forwards from the chest and the fingers placed behind its borders.

In the other case, the breast is remarkably large and pendulous; attached to the thorax by a rather narrow neck, it is of a flask-like or pear shape. When supported on the hand it is extremely heavy; and, when grasped, the lobes are distinctly perceptible, and the entire mass is very hard. The nipple is usually large, dark, and prominent, unless congenitally defective. The areola is expanded, of a dark brown tint, and the glands therein are generally well developed.

ii. If lobular indurations exist, the affected breast is perhaps rather larger than the healthy one. In one, two, or more quarters of the breast, lumps or knots, or, as these indurations are often termed, "tumours", are easily felt, and, perhaps, even the entire organ is more firm than when in a healthy condition. But it is to the existence of one or more indurated lobes that I would especially direct attention, in order that this complaint may be duly recognized, and not mixed up, as it undoubtedly too often is, with real tumours of one kind or the other.

It should be carefully borne in mind that the disease which we are now describing is a morbid state of a part of the gland, not a new structure, or new growth, and consequently not a tumour in the modern and more correct acceptance of the term. It is, in truth, a disease of and not merely in the gland tissue. The importance of this consideration becomes at once apparent, when such cases as these come before us and demand surgical treatment.

Age at which Induration occurs. This morbid condition of the gland tissue occurs in females between twenty-five and forty years of age. It is much more frequently met with in single than in married women, and in the sterile, rather than in those who are prolific and have suckled their children.

General Health, and especially the Catamenia. The general health is in most cases disturbed, but the functions of the generative organs manifest the greatest amount of derangement. The catamenia appear irregularly, sometimes they are scanty, in other cases too abundant. A total cessation of the menstrual discharge occasionally exists, and, if it should show itself, it is attended with intense pain and great constitutional disturbance. I have seen this disease in the right breast and not in the left, during the early months of pregnancy. The case occurred in a woman who married about thirty, and who, before this, had been always subject to considerable derangement of the catamenia, and sympathetic constitutional disturbance.

External appearance of the Breast. The local signs, as manifested by the aspect of the organ, are not very prominently marked. There is usually a somewhat tense, full appearance of the skin, with a rather conical outline in the region of the nipple and areola, when the whole organ is affected; and if one or more lobes only are diseased, slight irregularities or elevations may indicate their site. There is never any inflammatory redness present.

Manipular Indications. The chief manifestation from touch is extreme firmness of the substance of the breast, rather than hardness, together with its disc-like figure beneath the skin, to which it feels loosely attached, and the capability that exists of drawing it forwards *en masse* from its posterior connexions. Single lobes feel remarkably hard, which perhaps arises from a comparison of the softer parts of the breast; and, doubtless, by the sense of touch alone, they are scarcely distinguishable from genuine "tumours". But the remarkable and characteristic isolation observable in most cases of glandular mammary tumours is absent, for the induration in the cases under consideration blends with the surrounding gland tissue. From circles of carcinoma, the induration differs in being for

ever confined to the tissue of the gland itself; never, should the lump increase, does it involve or become adherent to the skin, nor does it influence the form and outline of the nipple during any period of its existence.

One or both Breasts affected. Both the mammae are sometimes affected with general or lobular induration, and at the same time. In the majority of cases, however, it is much more common to find that one alone has the priority; or that, as the one first affected resumes its normal state, the other assumes a morbid condition.

Sensations of the Patient. Women, the subject of this disease, are often compelled to endure great local suffering; and from this cause it has been no doubt generally regarded as a variety of the neuralgic affections of the breast. In some particulars, doubtless, these affections are closely allied; but as, in a practical point of view, the recognition of these indurations is so highly important, I do not consider that mere pain alone is sufficient to characterise the complaint. The pain is very often most intense; in some instances constant, in others intermittent; and it is usually most severe before the catamenial period. Pressure with the point of the finger over the intercostal foramina, through which issue the anterior cutaneous filaments of the intercostal nerves, causes great pain; and in lobular induration this is a very important point in establishing a correct diagnosis. The pain is not always confined to the mamma, but extends along the skin to the back, and along the inside of the arm.

Diagnosis. The facts before stated are sufficiently marked and peculiar to enable the surgeon to distinguish between this disease of the glandular tissue, and those tumours with which it is most likely to be confused; such as, for example, the "mammary glandular", the so-called "fibrous tumours", or "fibro-plastic", and "scirrhous". The first are not generally very painful, and if they should be, they are, at the same time, remarkably moveable and but loosely attached to the breast. The second but rarely occur in the mamma, and in the cases which I have seen they were painless. The last, in its early stage, is singularly free from pain, so much so, indeed, that this peculiarity is one of its most distinguishing features.

Prognosis. With sufficient evidence to determine that the disease under consideration is of no greater importance than would attach to induration of the gland tissue, a favourable prognosis may be unhesitatingly pronounced.

Treatment. This disease is amenable to local, combined with general constitutional treatment; and this circumstance has, doubtless, afforded opportunities to boast of the successful removal or dispersion of tumours, termed "scirrhous", by local applications, the first of which is pressure. M. Récamier (*Recherches sur le Traitement du Cancer, par la Compression Méthodique, simple ou combinée*, 2 vols., 8vo. Paris, 1829), in a work of considerable size, is perhaps the warmest advocate for this mode of treating cancerous tumours; but it is very remarkable that almost the only cases stated to have been cured, bear internal evidence in the detail of having belonged to the class of diseases to which this section is devoted. Who, for example, in the present day, will believe that a tumour—or, to quote the very words of the author, "un engorgement jugé cancéreux par M. le prof. Dubois" (*op. cit. t. i, Intro. p. xvi*)—was cured by the application of methodical compression in twelve days? or, that the first case (*op. cit. t. i, p. 19*) related, was one of cancer, as well as the fifteenth and sixteenth? They were undoubtedly all cases of chronic induration, and as such were curable. M. Maisonneuve also (*Leçons Cliniques sur les Affections Cancéreuses*. Paris, 1852; pp. 27, 28), speaking of "tumeurs fibro-plastiques", writes "nous ne savons aucun moyen de reconnaître d'une manière précise la nature des tumeurs fibro-plastiques avant leur extirpation"; yet, on the next page, we find, "c'est ainsi que, sans l'influence de saignées locales ou générales fréquemment répétées, par l'emploi méthodique d'une compression régulière, nous avons vu disparaître quelquefois des tumeurs de cette nature développées dans la région mammaire."

The treatment here described, namely, leeches locally and frequently applied, and methodical compression, are of eminent service in restoring to a healthy condition the mammary gland-tissue when in a state of induration; and I must here confess, that after repeated and long continued trials, I have never yet succeeded in producing absorption of any tumour which exhibited to me unequivocal indications of being a new growth.

The constitutional treatment consists in the administration of such medicines as improve the general health, and by this means restore the generative organs to a healthy performance of their functions. Aperients, tonics, wholesome food, change of air, and bodily exercise, perhaps the use of the shower-bath, or sea-bathing, and the withdrawal from all circumstances tending to excitement of the nervous system, will be found of service. Liquor potassæ given internally is, sometimes, also useful.

The local treatment must be regulated by the condition of the individual. Occasionally, a few leeches afford almost immediate, although temporary, relief from the pain. The application of the extract of belladonna and soap-cerate in equal parts spread upon lint, and supporting the gland with strips of plaister and a bandage, is also very useful. I have likewise known the placing a piece of thin gutta percha over the induration to lead to its absorption, as well as the application of the ceratum hydrargyri compositum spread upon lint. In some cases, the pain and sufferings are so intense, and they resist so obstinately all attempts to assuage them, that the patient is induced to submit to the removal of the breast. The operation has been performed under my observation in three or four instances, and success attended it.

I propose in a future communication to illustrate the preceding remarks by the detail of some cases.

Wellington Street, Southwark, June 1853.

CASES IN PRIVATE MIDWIFERY PRACTICE; WITH REMARKS.

By EDWARD L. FALLOON, Esq.

REPORTS of private midwifery practice are rarely submitted to the public. I have been induced to present the following tabular statement, after perusing an interesting paper on this subject from the pen of Dr. G. Hamilton, of Falkirk, in the *ASSOCIATION JOURNAL* for May 27th, p. 467. Up to this time, our statistical results have mainly rested on hospital experience; but, in order to establish a just comparison between public and private midwifery practice, authentic reports of the latter require to be greatly increased.

The following 310 cases are reported exactly as they occurred in uninterrupted succession. I regret to say that I have only been in the habit of keeping notes of my midwifery cases during the last few years, although previously, during dispensary practice in Ireland, as also during some voyages to Australia, in charge of large numbers of emigrants, under the auspices of the Colonial Land and Emigration Commissioners, I had much experience in this department, often under most trying circumstances. The only record that remains—and it is thankfully impressed upon my mind—is this, that I never yet have had a single death in my midwifery practice.

In the published details of hospital and private midwifery practice, I am sorry to find that the old proverb of "doctors differing" comes true. Take the use of the forceps, for instance. Dr. Hamilton, of Falkirk, used them 41 times in 300 cases, occurring, too, "among a generally robust and healthy population", or less than 1 in 7; according to my table, 1 in 53; in Mr. Crosse's practice (of Norwich), 1 in 16; Dr. Merriman, 1 in 98; Dr. J. Clarke, 1 in 295; Ramsbotham, 1 in 729; Collins, 1 in 684: so that Dr. Hamilton enjoys an unenviable notoriety in this respect. Notwithstanding, his mortality-table is not high,

being 1 in 20 among mothers delivered by the forceps, while the children thus delivered were all living. Still, so far as my own experience goes, I think such frequent use of the forceps cannot be defended; nor, on the other hand, can I understand how some men pass a life-time in midwifery practice without ever using them at all. The last case of this kind I had was a woman aged 42. It was her first confinement. The mother and the child are living, and in health.

There are notes in my case-book, appended to some of the cases, which, though conveying nothing novel to men of my own standing, are yet eminently practical to the generation of surgeons arising around us. Medical men in general practice, like myself, are seldom able or inclined to write for publication; and perhaps they do not sufficiently estimate the value of their every-day experience to young beginners. A tersely told practical fact, read in a weekly journal, makes, I am convinced, far more impression than if it had been perused in an elementary work.

CASE I. INCISION OF RIGID OS UTERI. A primipara, aged 33. This was a most tedious labour, occasioned by uterine rigidity, which defied all efforts to overcome it. I remained with the patient for two days and two nights, and administered chloroform freely during most of the time. I resorted to venesection, injections, fomentations, manual dilatation, and nauseating remedies, without obtaining any progress, although the pains were strong throughout this treatment. It occurred to me that, as a breach of continuity was inevitable, it would make very little difference whether it was produced by the natural efforts or by mechanical means. Acting on this view of the case, and without any authority, I took a probe-pointed bistoury, and made it like a hernia knife; and with this I incised the uterus. In an hour, all was safely over.

I was not aware till lately that the practice which I adopted has been recommended by high authority. Two cases are reported, and the practice discussed, by Mr. Houghton, in the *Dublin Quarterly Journal*. Among its advocates are to be found the eminent names of Murphy, Lever, T. Smith, and E. Kennedy. I have since attended the same woman, when her labour was as remarkable for its rapidity as the former was for its tediousness. In a similar difficulty, I should have no hesitation in adopting a similar course.

CASE II. TWINS: NINTH PREGNANCY. The placenta was detached at the commencement of labour. Copious flooding occurred whilst the uterus was dilating. I ruptured the membranes, when the head of the first child descended with the face towards the pubis; it was born dead, and with great difficulty. The membranes of the second descended soon afterwards, in consequence of a dose of ergot previously administered, in anticipation of flooding. Both hands presented. I succeeded in replacing one hand, and bringing the head over the brim of the pelvis (as the uterus was acting too violently to turn). It descended with one arm, face presenting; and, as the fœtus was dead, I evacuated the cranium, and brought it down with the crotchet, without much force. The placenta of the last followed immediately, and the other came away soon after, without inordinate flooding. This woman is again pregnant.

CASE III. TWINS: PLACENTA PRÆVIA: TWELFTH PREGNANCY. This case was somewhat similar to the above; but the practice was different. My notes only state, that the placenta presented, that I turned both children, and that there was hæmorrhage, both before and after delivery, to an alarming extent. This woman is again pregnant.

CASE IV. INTERNAL HÆMORRHAGE. This case answers in all respects to that published by Mr. George King, of Bath, in the *ASSOCIATION JOURNAL* for January 14th, p. 38. Everything is of value that throws light on these most fearful cases. I do not know anything more perplexing than to see a woman fainting and yawning, shivering and sinking, at the commencement of her labour, when you cannot detect any external cause. In this case, there had not been any hæmorrhage previously. She was supported with cordials, and pains encouraged, till the child was born

dead, but evidently only a short time dead; and, after the placenta, came a great clot, as large as itself. The faintness continued some time.

As this case presented some features of interest, I may be allowed to reprint its history, with the remarks which I made upon it, from the *Medical Times* of January 18, 1851.

"I was called, Nov. 20th, at 1 o'clock A.M., to attend Mrs. A., aged 26, with her second child. She had been complaining since 11 P.M.; pains increased; head presenting, and pressing much on the linea of the os pubis, where she referred all her pain. At 2 o'clock, sudden fainting came on, with deadly pallor and cold extremities. On her rallying from this, by brandy, open windows, etc., the pains bristled up, and the uterus kept dilating, but was interrupted frequently by the faintness, which kept recurring without any external hæmorrhage till 3 o'clock, when she had a fearful rigor. She rallied again, and became less faint, but complained loudly, and begged for chloroform, which I was ultimately obliged to give her, with great benefit, till her child was born at 5 o'clock A.M., without any unusual detention in the vulva, but dead. Immediately on its exit, the placenta followed, accompanied by an enormous clot, as large as, if not larger than, the placenta; the subsequent hæmorrhage was not excessive, but the faintness was extreme; nevertheless, the uterus contracted well. The shock of her child's death, added to her exhaustion, made her case very critical for some time (she had lost her first child from erysipelas); she looked blanched and anæmic to a high degree, but gradually improved. On the third day, I was not a little alarmed and surprised to find her covered by a scarlatinoid rash, and the more so on being assured by her mother, then present, that she had had both scarlatina and measles. I had not met with this symptom before, and it was the more unaccountable from being unaccompanied by any appreciable fever; pulse 96. I ordered a mild alterative and cooling aperient, and left very uneasy. On returning to my study, I happened to take up the *London Journal of Medicine* for October 1850, and read that highly interesting and scientific article by Dr. Cormack, on 'The Entrance of Air into the Uterine Veins', wherein he alludes to some cases occurring in the practice of Dr. Simpson, in which the same rash appeared three days after delivery, but all followed by death; this made the matter more anxious for me by many degrees. Visiting early next morning, I found the patient improved; the rash still out, but *paler*; no febrile symptoms. I ordered a more generous diet, and it continued to disappear daily; and she ultimately did well, and is now able to appear at her dinner-table, little more than a month since her confinement.

"It is evident this was a case of hæmorrhage in utero, prior to the rupture of the membranes, owing to detachment of the placenta, and the rigor I suppose the evidence of the child's death; but I am not in possession of any facts that throw light on the cause of this detachment, except that she had felt debilitated of late from a continuous attack of influenza.

"I am induced to published this case by a remark I find in the ingenious article by Dr. Cormack, above alluded to, where he says, 'he notices his cases, in the hope that others will, when opportunities occur, make and record their observations.' I also refer to this phenomenon (the scarlatinoid rash), more with a view of adding a case to those already on record, than of proposing any theory regarding it. While I say this, I am not disposed to accept any of the theories at present propounded as at all satisfactorily accounting for this appearance; nor do I acknowledge any analogy, so far as I am able to judge, between the 'reddish tinge' of Dr. Warren and the 'scarlatinoid rash' of Dr. Simpson; the former appearing immediately after the evident entrance of air into the circulation, while the latter did not appear until two or three days after the shock of parturition, without any allusion to air having entered the uterine orifices. In my case, I think it is clear that no air entered the fainting commenced long before the mem-

branes were ruptured, and faintness only remained after the birth of child and placenta; besides, I had recourse to such mechanical support as made its entrance almost impossible. Nor do I see any analogy between a continuous, general, and gradually disappearing rash, as above stated, and the 'fitful suffusion of the face with a delicate blush, superseded quickly by extreme pallor.' To this latter, I think Dr. Cormack's theory of 'capillary relaxation' admirably applies; but, with all deference to such high authority, it does not satisfactorily account to my own mind for the former red hue. If I might venture a theory on the subject myself, I would remark, that I believe it to be connected with such a state of body as exists in low adynamic fever, or pure typhus, where there is a general lack of vital tone, depressed organic nervous system, and deteriorated circulating medium; all which were evident in Mrs. A.'s case. The rash disappeared on adopting a generous diet and mildly tonic plan; in a word, it appeared analogous to petechiæ or purpura."

The object of the subjoined tabular statement is to exhibit at a glance my mode of practice, and its success.

RESULTS OF LABOUR IN 310 CASES.

Character of Labour.

Natural	173
Tedious	51
Hard	52
Quick	34
	<hr/>
	310

Complication.

Twin cases (all males)	5
Monsters . { 1 acephalous	2
{ 1 valgus with six toes	
Turning	4
Instrumental { Forceps	6
{ Embryotomy	2
{ Blunt hook	3
	<hr/>
	11

Presentations.

Head	290	Footling	4
Face	2	Placenta prævia	1
Breast	6	Funis with head	3
Arm	2	Hand with head	2

Chloroform used beneficially 41

Hæmorrhage.

Post-partum	30
Ante-partum	8
Internal	2—30

Mortality among mothers 0

" among children:	
Ordinary labour	13
Twins	5
Forceps	1
Monster	1
Breech presentation	1
Embryotomy (one a twin)	2
Premature	2
Decomposed at birth	1
Turning	1
Ante-partum hæmorrhage	1
Funis presenting with head	1—29

Sex. Male 176
Female 130—315
(Five cases of twins.)

Retained placenta 19

Funis round neck of child:

Thrice	4
Twice	2
Once	21—27

Hand in utero 1

The mortality amongst children from all causes would be 1 in 10; but deducting the 16 accounted for above, it would be 1 in 75.

The proportion of twins is 1 in 62, rather below the

average, which, according to the hospital returns for England and Ireland, is 1 in 65. All occurred amongst the lower classes. I find the average among the higher classes yields 1 in 120, showing the influence the luxuries and refinements of highly civilized life possess in restraining fecundity.

I trust that my meagre report may soon be followed by others on a larger scale, so that ampler data may be obtained. It is quite evident, from the few published reports of private practice extant, that obstetricians differ widely in their method of practice. Let me give some examples of the differences to which I refer. Dr. Copeman, of Norwich, has used the rectis 108 times in his practice; I never employed it once in my life. Again, in reference to anæsthesia by chloroform, now that it has received the Royal assent, it would be interesting to know the experience of men in large midwifery practice regarding its use. Some, we see, consider it the greatest boon to suffering humanity, and a *sine quâ non* in midwifery; others, again, look upon it as a dangerous innovation, calculated to do infinite physical and moral damage. The ASSOCIATION JOURNAL of June 17th (p. 524) contains a paper by Mr. Beecroft, of Hyde, stating his doubts as to its being beneficial in any case. He commences his communication by the startling acknowledgement and strange fact, that the journals teem with the praises of anæsthesia in midwifery, and contain nothing against it. An exception is said to be needful to form a rule; so Mr. Beecroft wishes to supply one. My experience of this practice is very limited; but, so far as my experience goes, it is in its favour. I never knew it do any harm: I seldom refuse it; and I never press it. How any practitioner can dispute its value, its necessity, in instrumental cases, when wisely administered, I cannot understand. On the other hand, I am no advocate for producing that state of total insensibility which some think necessary, but which appears to me to be an unsafe and uncalled for experiment. If judiciously given, and its effects watched, it is possible to attain insensibility to pain, without the loss of consciousness. This plan I am in the habit of adopting. The first time I became aware that such a state was possible was when attending a lady in the country, some years ago, with her seventh child. The pains were vigorous and effective, and with each she inhaled chloroform; and, when the head was pressing on the perinæum, she joked me about her pains, as being insufficient for the work. Soon after she had made the remark, the child was born, and the mother would hardly believe that she was delivered. I believe that the advantages as well as the dangers of chloroform consist in its purity, and in the mode of its administration.

Shaw Street, Liverpool, June 22nd, 1853.

BIBLIOGRAPHICAL NOTICES.

THE TREATMENT OF OBSTINATE ULCERS AND CUTANEOUS ERUPTIONS ON THE LEG, WITHOUT CONFINEMENT. By HENRY T. CHAPMAN, F.R.C.S., late Surgeon to the St. George's and St. James's Dispensary. Second edition, pp. 156. London: 1853.

Any information which enables us to treat with increased success a very troublesome and unsatisfactory class of cases, is at all times acceptable; and, on opening Mr. CHAPMAN's book, we are led to expect some real help in the treatment of ulcers of the leg, from the following remarks at p. 4:—

“Notwithstanding my conviction of the general superiority of those modes of cure which are founded on the principle of support, it is very far from my intention to advocate an *exclusive* reliance upon them. In obstinate cases of this troublesome complaint, I am too well aware that we require all the artificial aid which can be brought to bear against it. I have accordingly endeavoured to show that, if we would avoid frequent disap-

pointment, instead of attempting to apply any one plan of treatment to all its varieties, our remedial measures must be selected, combined, and adapted, from the varied and ample resources of past and present experience, to meet the special exigencies of each individual case.”

The author first examines the Sources of the Intractability of Ulcers on the Leg. These sources of intractability are local and constitutional; these are rarely in operation singly, but are most frequently combined, especially in nearly every case of chronic ulcer; the local causes, if not always preponderating over the constitutional, commonly outlasting them.

“The *peculiar* intractability of ulcers on the leg is clearly traceable to the dependent position of the lower extremity, which, by impeding the free return of blood in the veins, places the capillaries of the ulcer, and of its immediate neighbourhood, in an unfavourable condition for originating and carrying on the reparative process. If the case is left to nature, . . . to the atonic character naturally impressed upon an ulcer by its locality will be superadded inflammatory, irritable, or callous features; which, being regarded as characteristic of distinct varieties of the complaint, have been laid hold of as grounds of classification.” (p. 11.)

The distinctions which Mr. Chapman recognises are those of *Indolence*, *Irritability*, and *Callousness*. He regards, however, the first of these alone as a constant and essential character of ulcers of the leg; the others being merely engrafted on it.

The most simple characteristic, then—but a very troublesome one to the surgeon—is that of indolence, or simple want of activity in the reparative process. The capillaries of an ulcer in a depending part are acted on by the *vis ætergo* of the heart and arteries on one side, and by more or less pressure from the blood in the veins on the other side: hence the circulation through them is impeded; they become dilated; and the balance between vascularity and reparative deposition is disturbed. This condition of redundant vascularity is readily detectible by the naked eye, in the loose semitransparent granulations of indolent ulcers.

There is, however, as Mr. Chapman rightly points out, another cause which influences, though negatively, the formation of indolent ulcers.

“Sufficient importance does not appear to have been accorded, by any writer on this subject, to the circumstances in which the capillaries of a granulating ulcer in a depending part are placed by the loss of an elastic envelope like the skin. The acceleration of the blood's motion during rapidly repeated muscular efforts, when an alternate action and reaction between the muscles and the skin are kept up, speedily emptying the superficial veins, is sufficient to prove that the skin, by its resilience, must afford an essential aid to the circulation in the veins. And since, as long as it remains entire, it thus exercises a constant and uniform control over forces tending from within outwards, it is obvious that the vessels of a granulating surface, deprived of the support of this elastic integument by a breach in its continuity, will have nothing but the feeble resistance of their own walls to oppose to the delicate pressure from within.

“If the distension thus produced be not artificially counteracted, the nearly stagnant blood being quite unfit for any healthy operation, exudation of plastic lymph ceases, the new vessels themselves are gradually absorbed, and the sore at length acquires an indolent or atonic habit.” (pp. 17-18.)

Irritability in ulcers is next treated of, and is referred to over-distension of the nerves, which are “not merely incapacitated for the healthy discharge of their share in the reparative function, but are kept by it in a greater or less degree of morbid sensibility”. Dr. Billing supposes that morbid sensibility may sometimes be caused by inflammation of nerves; and this, Mr. Chapman says, appears to be a very probable explanation of persistent irritability, as is shown in the tense and fiery look of the surrounding skin, where the pain is mostly felt. But this “tense and fiery look” points to a general inflammatory process in which the nerves are involved along with other tissues, rather than to any special morbid action on their part. In this way we would explain the morbid sensibility of ulcers to arise, in a very great measure, from the passive participation by the nerves in the lesion of nutrition, whether

that be characterised by deficient action—indolence, or by unequal and perverted action—inflammation. Some observations of the author confirm us in this view. He says: "There are no invariable external indications of morbid sensibility; it is manifested by ulcers of a great variety of aspect; and, as long as it continues, proves an almost certain obstacle to healthy secretion and granulation." The substitution, in the latter clause, of the words "indicates a deficiency in", for "proves an almost certain obstacle to", would be an improvement.

Callousness is next examined. The deposit of coagulable lymph, in which the majority of ulcers on the leg are imbedded, is regarded by Mr. Chapman as

"A barrier to check a too free egress of blood from the sub-jacent vessels, and to secure the yet fragile walls of the new capillaries from plethora or rupture. It may thus be looked upon as a special provision of nature, to guard against the mischief to which the vessels, engaged in an attempt to repair a breach of surface in a depending part, would otherwise be constantly exposed. In ulcers prone to hemorrhage, I have almost invariably noticed that this deposit is absent; and, when its absorption has been effected by art, nearly all sores bleed as soon as the bandage is taken off, if the foot be allowed to hang down." (pp. 21.)

It is when callousness proceeds beyond the protective point, that it becomes mischievous, by impeding the necessary supply of blood. This condition and that of irritability are often combined.

Varicose ulcers next form the subject of some very sensible remarks. The author would reject this term as applied to a class *per se*; observing that the impediment to the circulation in cases of varix is merely a higher degree of that which retards the cure of indolent ulcers in general, and indicates nothing more than an increased disposition to atony. As to the question whether ulcers are caused by varix, Mr. Chapman writes, in a foot-note at p. 25:—

"In upwards of one hundred cases, I carefully inquired into the mode in which the ulcer commenced; and not more than five broke out by pimples, vesicles, or scabs, generated by varix. Several originated in the rupture of a varicose vein, and a few were ascribed to cutaneous eruptions of various kinds, upon both trunk and limbs. The remainder, amounting to full eight-tenths, were the result of external injury; varix being present and absent in about equal proportions."

A little further on, we find the following remarks:—

"Although the extension of inflammatory action from the veins to the subcutaneous and cutaneous tissues may sometimes give rise to ulceration, and stamp it with a very distinct aspect, I think we are scarcely warranted in assuming that any source of intractability exists, in ulcers directly caused by varicose veins, different or distinct from that which predominates in the indolent species. At any rate, we shall gain nothing, in a practical point of view, by retaining the distinction between sores caused by varix and those which are merely complicated by its presence; since, precisely the same means which cure the latter will prove equally successful with sores of the peculiar character above described.

"But I am disposed to go farther still, and contend that we ought to discard the term *varicose ulcer* from our classifications altogether. If it be restricted to ulcers caused by varix, a large proportion of cases, the cure of which is rendered more difficult by this complication, will not be included under the term. If, on the other hand, it is applied to every sore accompanied by a varicose state of the veins, it will necessarily comprehend all other classes of ulcer in turn. All this confusion will be avoided, and the nature of one of these cases will, I conceive, be defined much more simply and accurately, if, instead of employing a designation so vague and general, we substitute for it the phrase, indolent, irritable, or callous ulcer, complicated by the presence of varix."

TREATMENT. If any notions have been formed by the perusal of the foregoing pages, of the sufficiency of local treatment alone, they must be entirely dissipated by the first section of that department of Mr. Chapman's book which is devoted to treatment, and which occupies much the largest portion of the work.

The author very opportunely places in the foremost rank

some remarks on Ulcers of the Leg, the Intractability of which is traceable to Constitutional Causes. In atonic ulcers, the indications are to remove sources of irritation arising from deficient excretion, and improper diet, and then to administer tonics. In prostration arising from addiction to ardent spirits, or in the cachexy induced by insufficient food and confinement to unwholesome dwellings, large doses of quinine surpass all other remedies. The diet should be nutritious rather than spare.

In obstinate chronic cases, various remedies have been empirically employed, as mercurials, sarsaparilla, etc. In 1837, Mr. Skey brought forward opium as an almost specific remedy in the "chronic or callous ulcer affecting the legs of old persons." Mr. Chapman has not met with so much success as Mr. Skey in treating by opium alone the class of cases to which the latter gentleman refers: but he has found opium far more serviceable "in sloughing ulcers, the result of debility". The dose given by Mr. Skey seems to have been sometimes eight drops of the tincture twice a-day; but more frequently half a grain of the extract night and morning, which dose may be gradually increased to two grains.

Irregularities in the menstrual function, and the question of the effect on the health of the cure of habitual ulcers, are next examined. In opposition to the commonly received view, Cowper, B. Bell, Boyer, Underwood, Whately, Baynton, and Sir E. Home, all express their conviction that chronic ulcers in aged persons may be healed with safety. Mr. Chapman is more cautious.

"Since in many cases a manifest influence is exerted upon other maladies by these sores, I make it a rule to inquire into the state of health previous to their outbreak; and if it should distinctly appear that the patient has enjoyed a respite from more serious disorders coincidently with the existence of the ulcer, I should feel some hesitation in attempting its cure.

"If, on the other hand, the health has suffered materially in consequence of the local disease, no scruples need be entertained on that score. And where doubt exists, in order to guard against any possible mischief from healing them, it is advisable to continue to pay very close attention to the preservation of the general health; and whenever a tendency to plethora, or any determination of blood to the head, exists, the establishment of an issue in the arm would be but a measure of prudence. Some few instances have come to my knowledge in which, this precaution having been neglected, death has followed within a short period of the cure of the ulcer, under circumstances which have been sufficient to raise a well-grounded suspicion that the *post hoc* may not, in all such cases, have been mistaken for the *propter hoc*." (pp. 43-44).

In the next section, we find the Treatment of Ulcers on the Leg which are rendered Intractable by Local Causes.

John Bell, in his *Principles of Surgery*, vol. i, p. 97, humorously wrote as follows:—

"It is impossible to be serious when we enumerate the thousand remedies which have been applied to ulcers. . . . Ulcers have been dressed with precipitate, calomel, alum, vitriol, zinc, verdigris, pulvis sahijna, and other devilish drugs; they have been powdered with sugar, chalk, charcoal, asafetida, and other innocent drugs; they have been plastered with turpentine, balsams, mel mercuriale, decoctions of walnut-leaves in sugar, (which Belloyte protests to be a medicine so powerful that no ulcer can resist it). . . . They have been squeezed into good humour by compresses and firm bandaging, strong sticking-plasters, plates of lead upon the shins, sponges, cakes of Paris-plaster, etc., or bladders have been fixed about ulcers full of fixed air, carbonic air, vital air: What is there, indeed, which has not been tried?" (pp. 46-7).

Mr. Chapman very properly points out that the depreciated estimation of the value of the remedies recommended in the treatment of ulcers arises, not from their inefficiency, but from their universal and indiscriminate employment. He would rather accept all means of cure that may be offered, rating them at what they are worth when brought to the test of experience.

The non-permanency of the cure of indolent ulcers ascribed by Dr. Underwood—and with him Mr. Chapman closely agrees—to the confinement of the patient in a horizontal position. Dr. Underwood remarks "how

prejudicial it must be to general health for a person accustomed to labour and exercise to be confined for a length of time in an inactive state, and the greatest part of it in an almost horizontal position"; and he further says: "The frequency—I had almost said the constancy, with which large and old ulcers on the legs are found to return, is greatly owing to their having been healed in the horizontal position." Not only do we agree with Dr. Underwood that confinement acts injuriously through the general health, but we believe that nutrition and reparation are locally impeded by the withdrawal of the stimulus afforded by the moderate exercise of the part. It is not exercise, but exhaustive over-exercise, that does harm.

The author examines the merits of the plans of treatment recommended by Baynton, Underwood, Whately, and Scott; and believes that the plan of plaster-strapping has been abused. He acknowledges that it has some merit; but points out some serious drawbacks from its utility.

"1. It is totally inadmissible in those extreme cases of irritable ulcer where the morbid sensibility is so acute that no degree of pressure can be borne, until by suitable measures it has been removed, or, at any rate considerably mitigated. 2nd. There are other varieties of chronic ulcer,—rare, certainly, and giving no indications of their refractory nature beforehand,—in which, by no skill or care, can the sore be brought to heal under the operation of the strapping. And, 3rd, in ulcers furnishing a very copious discharge, and *à fortiori*, when that discharge is of an acrid character, the plaster-strapping, whatever may be its composition, being impermeable, diffuses it over the sound skin in the neighbourhood of the sore, thus frequently giving rise to very troublesome erythematous inflammation and excoriation, retarding its cure if it does not actually increase the dimensions of the ulcer. Under similar circumstances, unctuous dressings are likewise very apt to produce the same vexatious consequences.

"Instances are not unfrequent of severe mischief ensuing from the partial or careless application of plaster-strapping; and the danger is, of course, enhanced in proportion to the degree of tightness with which it is applied." (pp. 61-62).

Mr. Chapman discards ointments in the local treatment of ulcers. He employs water dressing as the basis, and, when necessary, uses solutions of sulphate of copper, sulphate of zinc, etc., according to the requirements of the case.

We now come to the author's description of his own plan of bandaging.

"The sore being dressed with a piece of lint cut to its shape and dimensions, and dipped in cold water, or in one of the lotions just specified, the limb is to be strapped with wet bands of linen or calico, precisely in the same manner as Messrs. Baynton and Scott applied adhesive plaster. The bands for this purpose should be from two to three inches in width, and from twelve to sixteen or eighteen in length; stout enough to prevent them tearing easily, but not too thick. Strips of coarse Mull muslin, indeed, are preferable in many cases to either linen or calico. Following Mr. Scott's practice, the middle of one of the shorter and narrower of these bands, previously soaked in water, is adjusted a little above the heel, whence the two ends are brought forward over the ankles, drawn rather tightly, and crossed upon the instep. The middle of another is placed beneath the sole of the foot, its extremities brought up firmly over the instep, and laid down smoothly one upon the other. A third is applied, like the first, from behind forwards, but a little higher; and thus, ascending the leg, the process is repeated with the rest of the bands, each one in succession overlapping the upper half of that below it, until the limb is firmly and evenly cased to the knee, or, at any rate, to a point several inches above the seat of the ulcer.

"Unless, however, much tendency to oedema be present, the ulcer be complicated by varix, or a higher degree of compression than that requisite for giving support be thought expedient, it is unnecessary to strap the limb to such an extent. In ordinary cases, three or four straps, according to Baynton's original plan, are all that will be required. Over them a calico roller is applied, the greatest attention being paid to its equable adjustment; so that the pressure be distributed evenly over the entire surface. At the small of the leg, and round the ankle, in oedematous limbs, the straps and roller are apt to fall into plaits, which furrow and gall the skin. To guard against this inconvenience, the hollows round the malleoli should be filled up by compresses of wet lint.

"That part of the bandage over the ulcer should be moistened from time to time with cold water containing glycerine, or with Goulard's lotion. The frequency with which the cold affusion is practised, must be regulated by the temperature of the part, and the state of the patient's feelings; heat, uneasiness, and irritability, being at once relieved by it. The age and temperament of the patient, as well as the season of the year, ought also to be taken into consideration; some caution being necessary to avoid the application of too low a temperature—not alone to prevent the extreme consequences which may ensue, the extinction of all vitality in the newly formed structure, but to guard against the vitality being reduced to a degree incompatible with vigorous reparative action. Evaporation should, therefore, in many cases, be controlled, by enveloping the part of the limb affected in a sheet of oiled silk. In proportion as the ulcer advances towards cicatrization, the affusion is required much less frequently, and in the last stage of the cure, (excepting as a prelude to the removal of the dressings,) it may often be altogether dispensed with.

"If the ulcer secretes abundantly, the dressing must be repeated daily, although the wet lint will absorb much of the discharge. Very shortly, however, under the action of cold and other astringents, loose, shining, semitransparent granulations become compact and red; and a thin and copious secretion diminishes in quantity and improves in quality, rendering a daily renewal of the dressings quite unnecessary; and, after a time, this necessity becomes still more rare. In several of the cases hereafter recorded, an interval of three, four, or even five days, sometimes elapsed between each dressing, not only without any interruption to the onward progress of the ulcer, but to its manifest acceleration." (pp. 78-80).

Under this plan, Mr. Chapman says, the cure proceeds favourably and expeditiously; but he is ready to admit that when a sore has been reduced so far that plaster-strapping can effectively approximate its opposite margins, recourse to Baynton's proceeding will often considerably expedite the cure.

In very obstinate cases, the author recommends the employment of counter-irritation, by means of a small blister at the upper part of the leg, dressed daily with a piece of Brown's or Albespeyre's cantharidine paper, of about the size of a shilling.

In the treatment of inflammatory ulcers, Mr. Chapman would apply leeches—not to the surrounding parts, but to the ulcer itself; and, as a preparation for all other local treatment, he would have the skin for some distance all round the sore carefully cleansed with mild soap and warm water.

The treatment of irritable and of callous ulcers is described by Mr. Chapman; but we must pass over this portion of the book, recommending it as likely to afford instruction.

We extract the following from the remarks on Prognosis.

"Under the section relating to the treatment of constitutional sources of intractability, the propriety of healing ulcers on the leg, under certain circumstances, was reviewed, and the conditions in which it might prove dangerous pointed out. There are some few ulcers, again, the permanent cure of which may almost be regarded as an impossibility; and in forming our prognosis neither of these contingencies should be lost sight of. The circumstances which may render it impossible to heal a chronic ulcer may be either constitutional or local; but impediments of the former class can scarcely enter into our estimate of the prospects of effecting a cure, as we can only infer their insurmountable nature after the failure of repeated attempts to remove them. There are, on the other hand, some peculiar local conditions, recognisable at a glance, which, when present in an extreme degree, deprive us of all hope of accomplishing a sound and lasting cicatrization.

"One of these conditions is an extensive destruction of the fascia, sheathing the muscles and tendons of the leg; which accident exerts an injurious influence over the healing process in the following manner. As the granulations shoot up from the surface of the exposed muscles or tendons, the base of the cicatrix necessarily becomes firmly adherent to them, and is consequently liable to be dragged upwards or downwards by their slightest movement. Cicatrization, nevertheless, will proceed until a tense ring of new skin has been formed, and at this stage the process is suspended altogether, every muscular effort being attended by severe pain. Perfect repose in the recumbent

position, and blistering the circumference, may, perhaps, succeed in overcoming the difficulty, after Baynton's plan or my proceeding have utterly failed; but, whenever the patient begins again to use the limb, the drag upon the newly formed structure is so incessant, that the cicatrix rapidly gives way, and the ulcer breaks out afresh. From the nature of the case no kind of bandage can guard against a relapse; but much of the pain will be removed by the operation of the blistering liquid.

"Measured by the same standard, the cure is completed by means of wet strapping in less than Mr. Whately's average period, although, perhaps, not so speedily as by Baynton's method. An ulcer of a few months standing and of moderate dimensions, unattended by aggravating circumstances, may generally be healed in two or three weeks. Where unfavourable conditions are present, it may require as many months. But time becomes a matter of less importance, when the patient is placed, almost from the commencement of the treatment, in a position comparatively free from pain and inconvenience; the limb being so effectively supported that, with ordinary care, he is enabled to pursue his usual avocations, without interrupting the progress of the cure. A degree of facility, moreover, in the application of the wet straps, may soon be acquired, which will qualify him, in a great measure, for undertaking the management of his own case.

"The most perfect cicatrization can never be deemed quite secure, unless the bandage be worn for some time afterwards to maintain the cure; an object which will be much advanced by soaking the straps in a solution of chloride of lime.

"Extreme cases of the disease, which have obstinately resisted all other treatment, may yet give way to a combination of the bandage with the recumbent position; but in chronic ulcers healed under rest, I have not found that commencing the use of a bandage, when the patient begins once more to exercise the limb, affords any great security against a relapse." (pp. 134-39).

UTILITY OF THE BANDAGE IN THE TREATMENT OF CUTANEOUS ERUPTIONS ON THE LEG. *Eczema rubrum* on the legs may or may not arise from varix.

"As long as the part affected is dependent, the capillaries of the inflamed integument are in a state of congestion but little inferior to those of an ulcer in the same region. This is easily demonstrable, either by the aid of the microscope, or by the simple experiment to which I appealed at p. 10. A patient labouring under eczema on the leg has but to assume the erect posture, and from every pore of an excoriated surface, comparatively dry while the limb is laid up, a gush of serum will take place, to such an excess as amply to justify the popular name for this variety of the complaint—'weeping leg'.

"The first step, accordingly, in the treatment of eczema of the lower extremity, which is enjoined upon the patient, is confinement to the bed or sofa; and in the acutely inflammatory stage this is always advisable, often indispensable. Many local remedies, moreover, of established repute, can scarcely otherwise be properly applied. But we have the same difficulty to encounter in carrying such an injunction fully into effect, as in the case of ulcer on the leg. Some few may submit partially to the discipline; for the many, absolute rest is impracticable. Even when it can be fairly put in force, the capillaries of the inflamed integument will derive very considerable additional benefit from support; and no kind of bandage is so well suited to afford it as the wet strapping. At the same time it answers most commodiously both as a protective and as a medicated dressing. For patients whose position in life constrains them to be more or less on foot, there is no alternative. Acute eczema, under such circumstances, almost invariably runs on into the chronic form, when, as Dr. Neligan truly observes, 'it is most rebellious to treatment, years sometimes elapsing before it can be subdued'.

"As, in its acute stage, eczema is a highly inflammatory disease, antiphlogistic remedies must necessarily constitute the basis of the treatment. In the average run of cases, early abstraction of blood, by leeches, will suffice to check its violence and shorten its active career. Should an ulcer exist simultaneously with the cutaneous eruption, three or more may be applied at once to its surface; and as a considerable amount of blood will flow from this source, if the leg be immersed in warm water, the practice will seldom fail in arresting inflammatory action. I have heard patients make the remark, that they have watched the red excoriated area gradually becoming paler under the loss of blood occasioned by a single leech. If there is no breach of surface, I apply them without hesitation to the skin; feeling little apprehension of the leech-bites ulcerating, as long as the limb is properly supported by the bandage.

"The part affected should then be bathed for some time with thin gruel, and afterwards enveloped smoothly, from the foot upwards, with bands of linen, or patent lint, dipped in Goulard or glycerine lotion, warm, and a roller applied with moderate firmness; the whole bandage being subjected to warm affusion long and repeatedly. Weak alkaline solutions are the topical applications generally recommended, but are not, I think, superior to the lotions just mentioned, or even to warm water. When tested, the profuse discharge will, like healthy serum, still be found alkaline; and simple dilution appears to diminish its acrid quality, while the moistened lint, by absorbing it as it is poured forth, prevents its mischievous diffusion. A weak lotion of nitrate of silver (gr. ij. ad ʒi), brushed lightly over the inflamed skin, will sometimes prove highly useful, but is not adapted to all cases.

"The bandage need not be renewed more frequently than once in twenty-four hours; and, at each dressing, the scales should be cleared away as thoroughly as possible without irritating the sensitive cutis. If a single application of leeches should not cut short the inflammation, they must be repeated until that end is fully attained. In one very aggravated case, the subject of it being a robust man of sanguine temperament, I bled from the internal saphena vein at the knee, to the amount of ʒviii., with the best effect.

"Although saline aperients and diaphoretics are most essentially subservient to the local antiphlogistic remedies, no class of medicines seems to exert a more decisive influence over acute eczema than diuretics. A combination of acetate of potash, nitre, and vinum colchici, is one which I have largely prescribed with marked benefit.

"In the chronic stage, emollients and antiphlogistics must give place to astringent dressings, such as creasote lotion, lotio rubra, or solutions of chloride of lime of graduated strength; preparations which I prefer to ointments, having frequently seen the latter disagree. Mild tonics, and a more generous diet, are now permissible.

"As the skin regains its healthy character, the bandage will not require renewal oftener than every second or third day, but still ought to be moistened occasionally with some astringent lotion. Finally, it should not be abandoned prematurely, more especially when the veins of the limb are varicose." (pp. 144-148).

In a foot-note at the last page, Mr. Chapman states that Mr. Startin, in 1846, recommended the application of a bandage in what he termed "*Eczema inveteratum crustatum*"; a variety of the disease very common on the lower extremities.

Mr. Chapman has not disappointed us in the hope we had formed, of meeting with some sensible observations on the treatment of ulcers. He is evidently not one of those who first write a book on a certain disease or class of diseases, in order that they may gain experience therein; but he has written out of the fullness of his experience. While bringing forward strong proof of the correctness of his own views, and of the efficacy of the plan which he recommends, he does not fall into the error of indiscriminately depreciating the opinions or treatment of his predecessors: but allows to each remedy its due amount of merit.

We can conscientiously recommend all surgeons who are annoyed with having to treat obstinate ulcers of the leg—and who are not?—to peruse Mr. Chapman's work, and to make trial of the plan of treatment which he describes.

NATURE AND TREATMENT OF DEFORMITIES OF THE HUMAN FRAME: Being a Course of Lectures delivered at the Royal Orthopaedic Hospital in 1843, with numerous Notes and Additions to the present time. By W. J. LITTLE, M.D., Physician to the London Hospital, &c. pp. 412. London: 1853.

Dr. Little has brought together from all sources the existing knowledge of the profession regarding the Nature and Treatment of Deformities; and he has also contributed not

* After the cure of chronic eczema, it is often quite as necessary to adopt the precaution of keeping up counter-irritation, for some length of time, in old cases of ulcer.

a little information from the stores of his own abundant and enlightened experience. The book is illustrated by one hundred and sixty pictorial sketches and diagrams, and is accompanied by an excellent Index.

MORAL-SANITARY ECONOMY. By HENRY M'CORMAC, M.D., Consulting Physician to the Belfast General Hospital. 12mo., pp. 150. London: 1853.

THE subjects discussed by the author are Female Degradation; Employment; Education; Household Culture; Criminal Management; Physical Training; Clothing; Food; Drink; Air; Drainage; and the Prevention of Disease. The spirit of Christian philanthropy, which pervades this volume, commands the highest admiration; and the performance, as a whole, is calculated not only to enlighten the public upon some most important and pressing questions of social economics, but likewise to excite to the adoption of means for accomplishing reforms. The price of the work is only one shilling; so that its possession is placed within the power of the working clergy, and many other benevolent and useful members of the community who have not facilities for giving liberal orders to their booksellers.

The plague spot and the gnawing canker of the moral and physical health of society—female degradation—is truthfully depicted, with the view of suggesting the method by which it may most readily be moderated or cured.

"FEMALE DEGRADATION.

"Marriage is God's ordinance, true preserver of woman's dignity, and equaliser of the sexes. Its violation has induced no small amount of moral degradation and physical wretchedness. The purest relations should subsist between the sexes. Multitudes live in unnatural isolation or open profligacy. Individuals whom no child is destined to call parent, swarm around. When vice is rampant, social progress must needs be stayed. The spectacles presented in great towns, with the scenes in hospitals, nay, the very youth of courtesans, are unspeakably distressing. Tait, Talbot, Ryan, Duchâtelet, relate particulars that vie in infamy. There are even whole districts, where parentage is said to precede marriage (*Local Sanitary Reports*, p. 393.) Everywhere the terrible deficiency in house accommodation, without adequate separation of the sexes, convenience, or privacy, aggravates these distressing evils.

"Numbers, as a writer in the *Westminster Review*, July 1850, p. 393, has remarked, are lost from sheer unknowingness, yet women cannot too soon learn to respect themselves, too promptly to repel insidious advances. It is impossible, declares a memorable writer, to describe the good engendered by self-control. 'Mistress of my imagination,' she observes, 'I remained true to principle, and, despite of temptation, contracted aversion for every solitary animal gratification.' Roland, *Appel à l'Impartiale Posterité*, Paris, 1792, p. 99.) Destitution, exclaims Duchâtelet, is the principal source of female prostitution. Of 5,183 courtesans in Paris, 2,000 had been cast off by relatives, 80 resorted to vice to procure sustenance, 280 impelled by shame had forsaken their homes, while 2,118, abandoned by their seducers, had nothing else to turn to (*De la Prostitution dans la ville de Paris*, i. 92.) 'Want, absolute want,' avers Mr. Helpe, 'is the main cause of this sin on the woman's part' (*Companions of my Solitude*, p. 92.) One of Mr. Mayhew's cases was that of a young seamstress whom utter penury had driven to pollution! There were trowers' sewers whose story was the same. Three shillings weekly were the miserable earnings of one who, with scalding tears, swore by her Maker, that she was pure up to the death of her surety! A poor creature declared on her soul, that the low price of labour, after infinite anguish, had alone constrained her to outrage modesty in order to procure food for her infant and herself. Nay, Duchâtelet states that there were women who had subjected themselves to this greatest of indignities in order to obtain subsistence for their else perishing parents and children!

"Negro slavery is very bad, but is it so bad as this? Yet this, and if it be possible worse than this, was borne testimony to by a number of suffering creatures who had obeyed Mr. Mayhew's invitation to recount their distresses. The chill winds in which the light garments of the midnight wanderers flutter, are hardly so chill as the cold world which plunges them in misery, then leaves them to perish in it!

"To thousands often nurtured with care, the only resource

is prostitution!' (*Morning Chronicle*, November 16th, 1849.) Women, in truth, are too much excluded from remunerative pursuits, from intellectual, nay moral, culture. Yet who can doubt, were undue impediments removed, that they would greatly excel? How emphatically do such omissions bespeak the low material status of our time? Not only should women be shielded from toil, but from the very possibility of want-induced degradation. Every path of literature, science, art, should lie open to them. Agnesi and Somerville in mathematics, Dacier and Carter in classics, with the bright galaxy of literary female celebrities, sufficiently proclaim their attainments and their powers.

"Everywhere throughout Prussia and Austria, women and girls may be seen drudging beyond their strength and the delicacy of their sex, clearing ditches, bearing huge baskets of fruit and vegetables, while men and lads, abstracted from the ranks of industry, lounge about in uniform, devouring the produce which their mothers and sisters, reduced to the condition of slaves, have realised.' (*Times*, Nov. 1, 1850.) Women abound in the French rural districts, haggard, attenuated, overwrought; while men, in hundreds of thousands, in the flower of their age, are kept up doing nothing, in the *casernes* of the Republic! We arrogate, in many respects justly, a superiority over pagan times; but did women then perform the labour of animals, as Bonstetten has told us they do in Italian Switzerland? Did they displace pack-horses as in Irish bogs, or break stones as Lord Byron saw them do in Greece, and as I myself have seen them do in Ireland, to this day? Or did they toil, filthy and wretched, doomed, as Clarke informs us, 'to the labour of men', up the long shaft, as in Swedish iron-mines, or drag loaded waggons, as until recently, in English and Scottish coal-pits? In America, every white woman is by courtesy a lady, but every black woman, in certain States, an animal and a slave! The grand distinction between savage and civilised life, I take it, resides in the tender consideration and gentler usage of women; yet veriest savages hardly treat women as I have described. Whatever be the hardships of the wilderness, they do not at any rate include the misery of prostitution!

"So long as this sad calling shall subsist, it should not be obtruded on the public gaze. By rendering it less facile, we at least diminish the crime. Women, youths even, may not safely pursue their lawful callings after dark. It is then that crapula, intoxication, vice, range without control. Streets are serried with police, yet modesty can hardly pass without a blush. Ryan, in his work, *Prostitution in the City of London*, relates particulars incredible to all who have not sounded the dark depths of human folly and debasement. Wretches, for whose iniquity no epithet is too vile, prowl, it seems, over the continent, to entrap victims for the London bagnios. A procurer is a monster by many degrees worse than the ghouls of the East, or the fabled vampires of Hungary. These, it was alleged, devoured the bodies, sucked the blood of their victims; whereas the procurer preys on the souls of hers! It is monstrous that females, often under age, should be lured with impunity to their doom, as that women, to secure a morsel of bread, should be consigned to the basest of all indignities. Of 1,200 seamstresses at Mr. Mayhew's second meeting, but four, it was stated, had under-garments, fifty-eight only had blankets, 151 had no beds, while the rest were in states of varying wretchedness! Honour, then, to those who withstand an ordeal so dire; and succouring compassion to those who yield.

"None of the asylums, none of the societies, for the protection, so termed, of young women, afford adequate sustenance and relief. Right eloquently has the dreary contrast between the daughter of luxury and the starveling needle-woman, been portrayed in the plate styled '*Pin and Needle Money*', in *Punch*. Hood's '*Song of a Shirt*' will perpetuate his name, long after the evils which his gentle spirit would redress have ceased. Why do not women themselves come forward in the angel mission of rescuing their kind? 'Something', Margaret Fuller affirms, 'might be done, if they would but try, fearing none save One whose eyes are purer than to behold iniquity.' (*Women in the Nineteenth Century*, p. 103.) What, then, if women were to enter into a solemn league to stay the degradation which so sorely besets their kind? Were there but a single Elizabeth Fry, Sarah Martin, or Mrs. Chisholm, in each several parish, this great good work would soon be in process of accomplishment.

"But vast as are these evils, they are not the only ones. Hideous disorders attend the unlawful commerce of the sexes, blighting the infant unborn, inducing inevitable ruin and decay. The skin, throat, bones even, do not escape. The so beautiful structure of the eye is doubly implicated, first in syphilitic iritis,

then in gonorrhoeal ophthalmia, that wretched malady which, as I conceive, has housed itself in Egypt, and infests our race. These disorders are at once acute and chronic, nor does one attack yield exemption from another. The evil is urgent, the very remedy is dire. Medical writings are rife with details only to be surpassed by the yet more horrible reality. Very children even are found in the lock hospitals of great cities; while millions, it may be affirmed, are lavished on the wages of debauchery. No lady, Tait asserts, dare venture abroad after dark in the streets of Edinburgh! But is Edinburgh the only city? He counts at one-fourth, the annual mortality among the female victims to prostitution, this so brutish vice, and utter violation of the loftier destinies of our kind! (*On Magdalenism*, 2nd edition, p. 220.) Brothels and low lodging-houses, if possible worse, subsist by hundreds in all our large towns; and there, prostitution and syphilis, the sin and the soil, go hand in hand together. The native population of the beautiful isles of the Southern Seas are undergoing rapid extinction, owing to the ravages of a dreadful malady!

"In London, huge city, abode of so much wealth, such unaffected goodness and untiring energies, there are houses where boys and girls, already thieves and prostitutes, abide together promiscuously—abodes where chastity is bought and sold for a night's lodging, and where uncleanness, brutality, and crime, riot without check and without delay! There, too, unhappy women eat the bread of infamy, clamouring night and day for victims, sacrifices to the anguish and slavery which they feel, and pain would inflict in turn. As night closes in, sights abound too plainly indicative of the social ruin that ravens around, sounds which more forcefully than any words declare the dreary fall and sad prostration of the utterers. Forty thousand illegitimate children, according to the Registrar, are yearly born in England, besides those who perish, sometimes mother and child together, through the execrable arts of hired aborters! In London alone, two thousand women, it is said, annually replace those who die amid their sin and misery.

"Prostitution, male and female, is the plague-spot of our time! 'Every trace of human dignity and moral grandeur must needs be swept away by this gross perversion of the sex from its divine ends.' (*Winslow's Journal*, Jan. 1851.) If there be a truth more certain than another, it is that chastity, 'fountain of inward nourishment, keystone of the moral arch, parent of correct taste, the blessed principle of which religion and a high moral tone are the lovely fruits,' should be the rule and measure of our lives. It is vain to palter! The few short hours of this brief existence are by thousands handed over to dissoluteness and vice. Surely every means should be resorted to, at once to stay the vice of prostitution, with the thrice-cursed evils that spring from it. 'Were there more love in the world, these things could not be. The man who has once loved any woman, would, one would think, have more tenderness for all; for love implies an infinite respect, shows for a moment the possibilities of our race.' (*Companions of my Solitude*, p. 119.) Assuredly, we are bound to furnish a crust to our suffering sisters, the perishing daughters of our race. 'L'homme,' exclaims Comte, in a chapter of singular beauty and power, 'doit nourrir la femme.' (*Politique Positive*, p. 248.) But man does not nourish woman as he ought; hence unhappy creatures defile themselves for bread. But the body is given for God's uses, and not to be defiled. We need, in truth, an education superior to the present, as virtue and peaceful industry are superior to vice and idle profligacy, a lofty spiritual, adequate industrial training. We cannot well bestow too much attention on the culture of the young, to surrounding them with a moral atmosphere, which shall negative all corrupt, realise all sweet and precious influences—

'Flowers that never can in other climate blow!'

"Would only that the great realities of this life, and of the life to come, could be fitly instilled among the poor. Heedless of risk, the physician, on whom this merciful ministry seems mainly to have devolved, sits by the pallet of the sick and sorrowing, wipes away the sweats of death, and utters, as the physician may fitly utter, words of consolation and peace to the wistful, anxious sufferer, resigned to die, yet fearful of the mighty change. There is not, in truth, a den of veriest infamy where there is not scope for charitable offices, souls to be rescued, creatures brought over to some enduring perception of their temporal and eternal destinies. How precious are the effluences of the great hierarchy of letters, which, could they only be brought home to all, would go far to redeem the material tendencies of our time. Would that, freed from spiritual error and misconception, there were yet other Wesleys, Whitfields,

Fletchers, Kirwans, Oberlins, Benezets, Neffs, Vincent de Paul, and Fenelons—men who descended like angels of light into the arena of the world, and struggled with the principles of evil for the immortal souls of perishing men. Were there only adequate spiritual culture, there would be fewer drunkards, robbers, thieves, prostitutes, and vastly less disease. Industry and economy would take heart, and drive vice and profligacy from the field. Intemperance and prostitution are eating into the vitals, consuming the virtues of the poor. The daily press abounds with details of inconceivable ignorance and moral turpitude. Oh, if man have greater power than woman, it is not given him to cast her into the bottomless pit of social perdition and loathsome decay! Her capacities, however different their expression, when duly cultivated, are on a level with those of the opposite sex. She even excels, it may be, in the loftier emotions and angelic affections of our nature. But let man act as he may, woman is bound to be her own special guardian and protectrix. Virtue does not reside in brawn and muscle! A woman, as such, is not weaker in all that constitutes the real excellence of humanity. There is not a reason, save want of adequate culture, why all women should not be chaste as was Lucretia, spotless as are the virgins of Raphael. But then, their education should be such as befits wives and mothers, and not merely the sorry drudges of worthless men.

"In all desirable lofty respects, the education of women should be the counterpart of that of men—the freest scope in literature, science, art, with everything relating to household and personal requirements. All the hard work in the world is for men's stalwart arms to accomplish. Women can be very much better employed in offices of charity, training the young, filling all hearts, and adorning all homes. Let us enfranchise them indeed, from brutal servitude, ignorance, and sin. Any other enfranchisement is neither possible nor desirable. Every effort should be made to prevent, were it a single one, from lapsing into vice, folly, wretchedness. Each several woman has a claim to tenderness, respect, and sustenance, from the whole race of man. Truly, as has been said, chastity is a plant of delicate, precarious growth. It is a virtue whose absence in one sex unavoidably deteriorates and degrades both. It concerns every woman, every man, then, that there should be no female vice. But man himself must submit to the restraint. 'Vertu imposée aux femmes,' exclaims a writer of note, herself a woman, 'tu ne serais jamais qu'un nom, tant que l'homme ne prendra point la moitié de la tâche!' But each well-principled, well-constituted man and woman, must feel alike interested in averting stain, were it from the lowliest, humblest of the sex. Then, by a mother's surpassing tenderness, a wife's unselfish devotion, a daughter's untiring fondness, a sister's deep affection, let each manly heart and striving intellect contribute their best influences towards reinstating the sex in their honoured lofty place, and so avert the horrors, the anguish, and the pollution, from which all alike should essay to shield them." (pp. 1-8.)

The following passage touches on a more pleasant subject; and it contains hints on a variety of topics which may be usefully considered in hundreds of households to which this Journal is a weekly visitor. How widely spread, and yet how extreme, is the error of supposing that the affluent can alone possess the means of efficiently educating their children. Cheap schools are, we believe, always bad schools; but home is the best soil for commencing the successful culture of the mind; and let those whose restricted means prevent them from being able to delegate the nurture of their children at a tender age to the stipendiary pedagogue, be consoled by the reflection that home is the normal shelter of the young, and that in no other soil can the affections be cultivated, and in no other soil can a healthful expansion and an ennobling culture of the intellect be so well secured. Again, how common is it to suppose that a frugal board is synonymous with semi-starvation; whereas cheap cookery is the best cookery. In fact, it is contentment and cheerful industry, and not wealth, which sweeten life.

"HOUSEHOLD CULTURE."

"In England, yet more in Highland Scotland, Celtic Ireland, the people appear to have mainly lost the art of the wholesome, agreeable preparation of food. In England itself, the amount of fleshmeat has been much reduced, though Fortescue, Lord Chief Justice in the reign of the Sixth Henry, dilates on the peasants' opulence, their ales, meats, and warm, abundant coverings. (*Thornton's Plea for Peasant Proprietors*, p. 75.)

Nor is this the only record of the rough sufficiency of the times, ere the peasant was reduced to his present low estate. Numerous food ingredients are neglected by working men, careless or ignorant as to their preparation. No dish, however, should be prepared, were it for the humblest, of which the most fastidious would object to partake. The curry of the East Indies, pepper-pot of the West Indies, Irish stew, French 'pot-au-feu', New-England chowder or fish stew, Spanish 'olla' or 'puchero', with fish, flesh, fowl, fruits, vegetables, bread, ales, wine, are significant of comforts which too little abound, where so greatly needed, on the tables of the poor! A treatise, at once practical, brief, perspicuous, for that large class to whom comfort, health, economy, are objects, is what is wanted. Cookery for the Million should dilate on meats, drinks, revising national usages, selecting the best. Negroes, for example, cook their rice just thirty minutes in boiling water, 'croquant', indeed. Kid, pork, lamb, oysters, turtle, fowl, venison, they prepare admirably well; while their meat and vegetable soups are of peculiar excellence. Turks and Moorsmen have 'pilafs' of rice and mutton, 'kouscous', or the sun-dried granules of watered flour, steamed over meats—messes really worth gold. (*White's Constantinople, Letters from Barbary.*) There are valuable suggestions in the maze of French cookery, more especially as relates to the 'pot-au-feu', 'premier bouillon', or stock, the 'roux', both white and brown, for enhancing the flavour of meats; the judicious introduction of onions, and even wines, for the same and other purposes; the mode of boiling larded and other meats, as mutton, fowl, with a very little water, and as much stock; the perfect economy of fuel, of scraps, and, in short, complete avoidance of waste. (*French Domestic Cookery*, London, 1825.) So long, indeed, as food can be rendered wholesome and agreeable, or the very reverse, the art of preparing it must remain essential to human health and well-being. Unvaried, flavourless fare, does not satisfy the palate, or, in fact, meet the desirable requirements of healthy organic life.

"The convertibility of aliments is a question of moment in the economy of food. If a hundred-weight, more or less, we shall suppose, of roots or greens, realise but a pound of increase in a stall-fed ox, and yield twenty pounds of milk, half as nourishing, perhaps, as meat, when given to the cow, it would seem to suggest how much more profitable were a larger consumption of milk, than the slaughtering of animals merely for their flesh. The judicious admixture of animal fibre, however, imparts substance and flavour to a vegetable mass. Here, I conceive, lies the secret of the cheap, effective sustenance of the people, removed alike from carnivorous excess, as from meagre insufficiency.

"Rumford, in his *Essays*, Liebig, in his *Chemistry of Food*, show how a moderate degree of warmth, sufficiently prolonged, serves better than hot haste, to prepare meats for wholesome, agreeable participation. The best cookery, indeed, is also the cheapest. Ten, or, as Rumford has it, seventeen times as much fuel is wasted in open fires, the fuel consuming itself to waste, as would suffice in receptacles closed so as to obviate radiation. Vessels of silver, tin, porcelain, glazed or enamelled ware, fitted into other vessels heated by hot water, steam, or gas, would render cooking processes cleanly and effective, as they are too often the reverse. To the inventive genius of Appert we owe, it seems, the notable discovery that fish, flesh, fowl, fruit, vegetables, milk, in vessels hermetically sealed, immersed in a solution of the chloride of lime, or simply salt and water, raised to the boiling point, will keep illimitably. Fruit, meats, roots, vegetables, may be dried according to Masson or Murdoch's processes, in stoves, at a low temperature, then subjected to pressure. Soaked in water, before being cooked, they are found to retain all their original flavour. Yolk of egg, or the chopped fibre of animal or vegetable substances, might be incorporated with flour, and, after being baked, consigned to close vessels. Biscuit of this description, really meat-biscuits, would, I conceive, prove more consonant with the wants of the animal economy, than the meat-biscuits, so termed, of Liebig, in which the juices, and not the meat fibre, are included. The loss of substance in boiled meats, soups or stews excepted, should almost exclude them from economic cookery. Paste envelopes, boiled or baked, preserve the juices and the flavour of meats, fish, flesh, and fowl, to admiration. Buckwheat pastry, as also puddings, of which a sort of salmon and buckwheat are the ingredients, is much used in Russia. Fish forms an excellent soup or stew, and is thus used in many places. On the banks of Newfoundland, the hard-working fishermen live for months on cod-fish fried with pork. Polenta or ground maize, also macaroni, the food of Neapolitan Lazzi, yields admirable nutriment. Lentils, the 'ervalents' of advertisers, though avail-

able in stew and otherwise, do not merit all the eulogiums which have been lavished on them.

"We must begin at the beginning, reform the defective training of the young from the very first. A school for cooking is among the excellent suggestions in *Cook's Journal*. But schools for household and industrial culture should subside everywhere. A writer in the *Mechanics' Magazine* comments on the total absence, in school and governess advertisements, of any indication of domestic knowledge! After urging the adoption of schools for pastry, clear-starching, plain needlework, patching, darning, millinery, dress-making, cookery, nursing, he adds: 'Let it not be conceived that knowledge in homely concerns either destroys beauty, renders a woman less able to shine in society, or to obtain distinction in the higher branches of literature. Very numerous are the examples which might be adduced of the combination of beauty and talents with the knowledge and practice of domestic concerns.' (No. 1513, p. 119.) Wilson's sewing-machines, now constructed in thousands at Watertown, Connecticut, will indeed effect a sort of domestic revolution, and prove a mighty boon to thrifty housewives.

"Her Majesty has set the good example at Windsor. In the Finchley School, the girls wash, dry, and iron clothes, which they bring home, with a neatly written account. They also prepare a dinner weekly, for their own use. At Belfast, the girls make, mend, sew, wash, without pretermittting general culture. There are industrial schools in nineteen different localities in Ireland, as well as others in England and Scotland. Many of these are under the direction of ladies of rank and station, who, if they thus everywhere exercised their gentle, genial influence, would confer an unspeakable boon on the suffering, destitute creatures of the sex, 'nam frequens imitatio transit in mores'; and giver and receiver are doubly blessed!

"Industrially and intellectually, in truth, women are everywhere under-educated. From the Registrar's returns, half the women of England, it appears, are unable to write their names at marriage. Thus, the mothers and first instructors of mankind are themselves uninstructed. All women Dr. Winalow would have learn some useful employment or art, whereby, as wives and mothers, they might add to their own and their husbands' means. The two millions unmarried Englishwomen, half a million in excess of the other sex, he would not leave 'dependent on friends and relatives, jostled out of the ranks by men competing for effeminate employments.' (*Psychological Journal*, January 1850.) A lofty, general culture, extended to both sexes, would best enhance their usefulness, and augment the resources of all. If man be uneducated, he drags down woman, his inseparable companion and dependent: and if woman be so, she but helps to reduce her associate to the same low level!

"In 1806, the States of the Duchy of Nassau, convinced of the evils of neglect, decreed that twice a week the female children of each several commune should assemble under a competent salaried matron, for instruction in sewing, knitting, darning, washing, housekeeping, in short, order, economy, neatness, cleanliness, first elements of all civilization and refinement. 'It leaves a melancholy impression', observes a friend, writing from this same Nassau, 'to find so much more comfort, enjoyment, and apparent social superiority, on a soil so far inferior to our own. Nowhere have I seen the ragged, squalid misery, of our own poor!' Dean Dawes informs us, that the Rev. Mr. Fanshawe, of Southampton, proposed to fit up a house under an experienced matron, where girls should be provided with industrial occupation, and enabled to become happy, self-supporting members of society. The state, however, should enforce universal industrial, secular culture, nor leave it to the issues of casual benevolence. The sculptors of old were said to disclose the ideal man beneath the marble covering; but no marble ever equalled the angelic ideal that niches in man's soul, and which needs but culture to develop into glorious reality! Theotoki unites with the author of *Home Education* in urging early culture, female culture in particular, in the country. He would not keep girls in towns, where a foolish, pedantic training, destroys their delicate youthful beauty, and even impairs their happiest tendencies. In the country, nature puts forth her strength, and shows what she is able to accomplish in favour of this precious portion of humanity. 'Dans la campagne la nature étale ses forces, et montre tout ce qu'elle peut en faveur de cette portion précieuse de l'humanité.' If in the country, however, it should be under genial auspices, and not as in France, where, as Aimé Martin has said, crushed by excessive effort, women wither ere their time, 'écrasées sous les travaux des hommes elles vieillissent avant l'âge.' 'I know not how', exclaims Taylor,

speaking of female education, 'to avoid affirming the peculiar suitability of a country residence, the insulated country house, with its frugal elegance and interior comforts, its garden of sweet, gay, perennial enjoyment, and ample spaces for all purposes of homestead exercise and recreation. For there, and there only, can children be kept in high mental activity, without too frequent recourse to books, where copious acquaintance can be made with nature, along with robust health, a late development, and the invaluable habit of day by day looking to the mind's own elasticity for enjoyment.'

"Miss Mitford, in charming language, instils almost every feminine excellence. Miss Edgeworth, Miss Sedgwick, severally, are replete with practical instruction. Would that their chastening influence, and that of other admirable female writers, were extended to every, the humblest member of their sex. As Mrs. Somerville, in her *Physical Geography*, has expressed it, it would realise a culture that should stamp itself on the features, and prove perennial with the race! Margaret Fuller insists on the better culture of women, as 'temples of the immortal intellect'. Very earnest, and very admirable too, are the appeals of Mary W. Godwin, in her *Education of Daughters*. The better influences of Christianity, which have gone far to exalt the proletariat and the slave, would also, if enforced, elevate the condition of woman. For all women should be virtuous, accomplished, capable; else how are they to secure their material, spiritual interests, or those of their offspring? Rousseau, Aimé Martin, Pemberton, everywhere, indeed, proclaim the great celestial truth, that the wise and loving mother is, and must be, the source of every good to her child!" (pp. 34-39.)

INFLAMMATION OF THE BREAST, AND MILK-ABSCESSES. By THOMAS WILLIAM NUNN, Surgeon to the Western Dispensary. pp. 52. London: 1853.

THIS little work is arranged in three sections, which treat respectively of the symptoms, causes, and treatment of Inflammation of the Breast. There is no striking originality in the book; but we can recommend it as containing a very readable abstract of what is at present known concerning the above-mentioned diseases. We shall hope to see, at some future time, an enlarged edition of Mr. NUNN's essay, containing the fruits of his further experience and reflection.

REPORTS OF SOCIETIES.

EAST KENT AND CANTERBURY MEDICAL SOCIETY.

SESSION 1852.

[The following Report is intended to present a concise abstract of the most interesting cases and papers communicated to this Society during the session of 1852: similar cases being grouped together as much as possible.—J. R.]

PULSATING TUMOUR IN THE UPPER THIRD OF THE THIGH; LIGATURE OF THE EXTERNAL ILIAC SUCCESSFUL. BY H. DENNE, ESQ.

CASE. George H. Percy, aged 30, a sailor, of middle stature, rather thin, and having a sallow complexion, was admitted into the Kent and Canterbury Hospital, on April 20th, 1847, with a pulsating tumour in the upper and anterior part of the left thigh. Some time before his admission, whilst using great exertion on board ship, he felt something give way in the thigh; and about a month before he came to the hospital he perceived a small swelling in the situation where he had felt the pain, but took no particular notice of it. The swelling, however, became larger and more painful, so as to cause him to apply to a surgeon in the Isle of Thanet, who immediately sent him to the hospital.

On examining the thigh, a tumour, of undefined limits, but apparently as large as a man's fist, was found in the upper and front part of the left thigh. Its form was rather conical, the point being directed inwards; a strong *expansive* pulsation was felt in it in every direction, and a bruit was heard on applying a stethoscope to it. Pressure on the femoral artery completely stopped the pulsation. The man complained of cold in the part, and was greatly comforted by the application of a hot poultice. During the few weeks he was in the hospital, prior

to the operation, the swelling slowly increased; but on visiting him on the afternoon of May 9th, Mr. Denne found that a sudden change had taken place since his last visit. The thigh in the neighbourhood of the tumour had become considerably enlarged, and was discoloured, the limits of the tumour being lost in the general swelling. A consultation of the medical staff was summoned the same night; and in consequence of the swelling approaching close to Poupard's ligament, it was deemed expedient that the external iliac artery should be immediately tied.

Mr. Denne cut down upon the artery in the usual manner, and experienced no difficulty in putting a ligature round the vessel. The pulsations in the tumour ceased immediately after the operation. The limb was enveloped in spongio-piline, and its temperature was never much below that of the other. The patient's recovery was uninterrupted. The ligature separated on the twenty-ninth day (June 7th), and on the fortieth (June 18th), pulsation was felt in the anterior and posterior tibial arteries. The general and increased tumefaction noticed on the 9th of May, subsided soon after the operation; but the tumour did not continue to decrease in the proportion usually observed in aneurism, after ligature of the artery that is involved: so that, when he was discharged from the hospital, September 3rd, there remained a tolerably firm tumour, about two-thirds of the size of the swelling that existed when he was admitted, and retaining the same form.

POPLITEAL ANEURISM SUCCESSFULLY TREATED BY COMPRESSION. BY H. DENNE, ESQ.

CASE. G. P., aged 36, a tall, and rather stout healthy-looking man, a gate-keeper on the South Eastern Railway, was admitted into the Kent and Canterbury Hospital with a popliteal aneurism, in March 1852. About seven years previously, the right leg was removed below the knee in consequence of a severe injury about the foot, from a railway truck passing over it; he recovered well, and had since used a wooden leg. In October 1851, he visited the Great Exhibition, when he was obliged to walk much and very fast, about four miles in an hour. About a week or ten days after his return home, he felt great pain in the under part of the knee, and considered it was from a sprain; but upon examination he found a swelling, of the size of his finger; since then the swelling had gradually increased. He first felt pulsation in the swelling about Christmas; but it has never been so painful as to oblige him to rest the limb.

A tolerably firm elastic swelling occupied the ham projecting posteriorly, extending over the inner side of the lower part of the femur, and encroaching upon the calf of the leg, so as very much to limit the power of flexing the leg. A very forcible and *expansive* pulsation was perceptible in the entire extent of the tumour, but more especially on the inner side. A loud bruit was detected by the stethoscope; and upon interrupting the circulation by pressure upon the femoral artery at the groin, the swelling diminished considerably. The patient complained of pain extending down the calf of the leg to the ankle. During the unavoidable delay that occurred, in obtaining the required apparatus from London, the tumour increased in its upper and inner portion; and the bruit, which had been more distinct on the inner side, became more audible in the centre of the posterior part. The pain which he had experienced upon admission diminished very much under the rest and quiet to which he was subjected. The apparatus used was that known as Dr. Carte's pelvic apparatus for compression of the artery at the groin, with the ring-tourniquet for effecting pressure upon the artery below.

The instruments were applied on April 18th, at twelve o'clock. The pulse was then ninety-four, and rather weak. The pressure on the artery in the thigh was so fixed, as to stop the pulsation completely. The pulse very soon rose to 108, and became fuller, it however fell to ninety by the evening, and varied during the subsequent treatment between eighty and ninety-six. The pain from the pressure had become so severe by 2 P.M., that it was necessary to relax the tourniquet on the thigh and to apply the pressure upon the groin. It was found that the integument was discoloured, where the wooden pad of the instrument had pressed; and shortly after, slight vesication formed on the surface of the bruised skin. After this, pads of lint were introduced between the integument and the compresses of the tourniquets with good effect. The man was cheerful and intelligent, and interested himself so much in the plan of treatment, that, during the latter part of it, he was entrusted with the adjustment of the pressure, and permitted to relax the screw of one instrument, and to readjust that of the other, whenever the pressure became too painful. He bore the pressure of both instruments for a

period varying from four to six hours. Although, each time the compresses were screwed down, the pulsation was completely checked, yet, shortly afterwards, a feeble thrill, and sometimes a fair pulsation could be discerned in the swelling. This was more particularly the case when the compress on the groin only was in operation. In addition to the occasional pain from the instruments, the man experienced pain, and sometimes numbness, in the foot and ankle.

On the 19th he was thirsty and rather feverish, partly from a sleepless night and constipated bowels. He was relieved from these symptoms in the course of the day, by a free action of the bowels. During the night of the 19th he slept comfortably, at intervals, for three and four hours at a time; and for seven hours the pressure was maintained by the ring tourniquet.

Between 4 and 5 P.M., of the 21st, about *seventy-six hours* from the commencement of the treatment, the patient suddenly felt a severe thrilling pain about the upper and inner sides of the knee-joint, which lasted nearly half-an-hour, and extended down the leg to the toes; a sensation of throbbing about the part was also experienced. Shortly after this pain had subsided, the screws were relaxed, and the swelling was found to be quite free from pulsation, which never returned. During the three days of treatment, the tumour was perceived to become more consolidated, slight pressure was continued four days longer, and then the apparatus was removed and a bandage applied.

He was made an out-patient on May 18th; a firm swelling the size of a fist still remaining in the ham. During the three months that he continued an out-patient, the tumour slowly diminished.

TRAUMATIC ANEURISM OF THE ULNAR ARTERY: TREATMENT BY GENERAL COMPRESSION: RECOVERY. BY J. REID, ESQ.

CASE. S. W., aged 37, married, was admitted into the Kent and Canterbury Hospital, November 18th, 1851. She was of a spare habit, and of a nervous and anxious temperament. Two months before she was admitted, when correcting her son at dinner-time, she directed a blow with her hand at his head. At the same moment, the boy raised his hand with a knife in it, in order to protect himself; her arm came in contact with its point, and a deep wound, about an inch and a half above the wrist-joint, on the ulnar side, was made in her right forearm. Blood immediately issued in a jet, and spirted about the room; but by the aid of her neighbours the bleeding was stopped. About an hour and a half afterwards she showed the wound to a surgeon, who, finding there was no hæmorrhage, brought the edges of the wound together. The arm became painful and swollen at the seat of the injury, and about three days afterwards, the whole arm, from the fingers to the elbow, became very much swollen and tender. This condition lasted for a week, during the whole of which time the pain was very severe. Antiphlogistic measures were adopted, and the arm was poulticed; and at last the patient was bled from a vein in the affected arm and experienced great relief. The general tumefaction subsided, leaving a circumscribed swelling, which was presumed to be an abscess, and which it was proposed to puncture, but the patient objected. It was subsequently discovered to be an aneurism.

When she was admitted, there was a swelling immediately above the wrist, about as large as a goose's egg, without very distinctly marked limits. It pulsed strongly in all parts, the beating being perceptible even to the patient. A loud bruit was also communicated to the ear. The tumour appeared to extend under the superficial muscles of the arm. The cicatrix of the wound was situated on the inner side of the swelling and, for some distance around it, the surface presented a dull slate colour, the integument feeling much thinner here than elsewhere. The movements of the hand and fingers were crippled; and there was no sensation in the ring and middle fingers. A thick compress of lint was placed over the swelling; the fingers were bandaged, and a roller was firmly applied to the forearm, as far as the elbow. The pressure could not be borne longer than for four hours, and then it was slackened. At the end of four days, though the tumour seemed a little smaller, the pulsation remained as strong as before. The fingers were now more firmly bandaged by strips of adhesive plaister, two pieces of sheet lead folded in lint were fitted to and placed over the tumour, and a solid narrow cylindrical pad was placed as nearly as possible in the course of the ulnar artery, along the upper part of the forearm, and firm pressure with a bandage was applied over the whole. The pressure was borne for six hours, when it was necessary to relax it by cutting some of the turns of the bandage. When the bandage was removed, at the end of forty-eight hours after its application, the pulsation had ceased in the swelling. The bandage and compresses were reapplied, and at the

end of three days were removed. The tumour was then found to have decreased; but upon close examination it was thought that there was a feeble pulsation, such as the recurrent circulation might produce. An additional pad was placed between the aneurism and the wrist, over the ulnar artery. No pulsation could be subsequently felt, and the swelling contracted. The compresses were gradually removed, and the bandage only was retained. When the swelling had diminished to the size of a small walnut, it remained stationary for some weeks; but in the last week in December, the fore-arm became painful and slightly swollen. By rest, cold lotions, and aperient medicines, this subsided, and the remains of the aneurismal sac became soft and fluctuating, so that it was expected that suppuration had occurred in it. The swelling, however, slowly decreased, and ultimately entirely disappeared, the only trace that remained of the injury, being a cicatrix with some induration in the surrounding parts. The hand continued in a crippled state when she was discharged.

Mr. REID thought that much of the successful issue of the case was due to the pressure produced upon the ulnar artery by the cylindrical pad above the aneurism, and regarded the case as one confirming in some degree the treatment of aneurism by compression of the artery between the aneurism and the heart. Had this mode of treatment failed, it was intended to have employed pressure upon the brachial artery by a ring tourniquet.

The patient was again in the hospital in 1852, for dyspepsia and neuralgic pains in the face and head. Although the movements of the arm had improved, those of the hand remained in much the same state. A slight increase of power in the movements of the fingers, but more especially in the wrist, took place whilst she was in the hospital, and there seemed a prospect, when she left it, that in course of time the hand would again become useful.

[To be continued.]

ASSOCIATION INTELLIGENCE.

TWENTY-FIRST ANNIVERSARY MEETING.

The Anniversary Meeting of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION will be held at Swansea, on Wednesday, the 10th, and Thursday, the 11th of August. The particulars were published in the JOURNAL for May 27th, p. 470; and it is intended to reprint them, with additions, in the numbers for July 8th, and August 5th.

ANNIVERSARY BRANCH MEETINGS ALREADY ANNOUNCED.

The following is a summary of official notices contained in the numbers for June 17th and 24th, to which we refer for details.

BRANCH.	DAY AND HOUR.	PLACE.
Monmouthshire and South Wales.	July 6th, at 12 o'clock.	Public Rooms, Bank Buildings, Chepstow.
Metropolitan Counties.	July 19th, 4 P.M.	Brunswick Hotel, Blackwall.

NORTH WALES BRANCH.

The Report of the Annual Meeting did not arrive in time for publication this week. It shall appear in next number.

EDITOR'S LETTER BOX.

THE MEDICAL PROFESSION AND THE CRYSTAL PALACE.

LETTER FROM JOHN FORBES, M.D., D.C.L., F.R.S., TO THE EDITOR.

SIR,—The astounding announcement made in your last JOURNAL to the effect "that six hundred and forty London medical practitioners, among whom there are many of the most eminent men of our profession", have signed a petition to be

presented to Parliament against the opening of the new Crystal Palace at Sydenham, on Sundays, has induced me to request the favour of your inserting the subjoined extract from a work recently published by me.* The remarks were originally addressed to the clergy, but it appears that they may be now applied to 640 medical men! Alas, that it should be so! Alas, that men of science, and above all physiologists, actually conversant with the causes of disease and the habits and sufferings of the labouring classes, should have so far forgotten that noble philanthropy and that tender humanity which form the very essence of our profession!

After perusing the strange and most illogical petition printed in your pages, I can hardly feel that any apology is necessary for the very hard words contained in the extract, even now when they are directed to a quarter where, but for the evidence supplied by you, I could never have dreamed of their applicability.

I am, etc,

JOHN FORBES, M.D.

"Without claiming for the labouring-classes in England indulgences of this kind+ on the Sunday—which are, indeed, foreign to their habits and inclinations—surely we may claim for those of them, at least, who reside in large towns, the privilege of seeking for relaxation in the open air of the country, whether carried thither by land or by water, by omnibus, boat, or rail. It is truly at once humiliating and melancholy to observe—in these later years, when we might reasonably expect a more philosophical consideration of such subjects—that there is a growing disposition among the clergy and the upper classes generally in England, and still more in Scotland, to curtail such simple and natural enjoyments of the poor on their only holiday, Sunday. To say nothing of the necessity of such relaxation on the score of mere bodily health, the advocates of this system seem entirely to overlook that principle of man's nature, which renders the occasional remission of activity necessary for the perfect exercise of all voluntary functions, and, most of all, the functions of the brain.

"Everybody who has had anything to do with the instruction of others, or who has ever attempted the acquisition of knowledge in his own person, is fully aware of the great benefit derived from occasional interruptions in the course of study, and knows that progress is positively retarded by over-long persistence in mental exertion. Religious exercises and study form no exception to this general rule; overdone they are ill-done. The brain is just as apt to be exhausted, and the thoughts to become weakened and confused, in religious pursuits, as in any other mode of mental occupation; and the results will be just as inadequate and unsatisfactory in the special category referred to, as in any form of secular study. A jaded and muddled mind can no more do justice to religion than it can to any profane subject.

"The same parties also persist in ignoring the fact known to all others—that the great majority of the working classes of large towns will not attend church more than once, if so much, even if constrained to remain, during the whole Sunday, within the circle of their weekly labours; so that the cause of religion would be no gainer under the restrictive law contended for; while the subjects for whom it is proposed to enact it, would be deprived of the most precious opportunities of improving their bodily and mental health, and so adding to their happiness, through the indispensable medium of air, exercise, and relaxation. On the contrary, both religion and morals, and, consequently, society at large, would be positively great losers thereby, inasmuch as both reason and experience assure us, that the temptations to sottish indulgence of every kind, leading to vice in all its forms, would be infinitely greater in the state of constrained idleness and listlessness into which the poor must necessarily be thrown, in the case supposed, than they can be amid the inspiring, active, and healthy excitements which, to a smoke-dried citizen, are the spontaneous and necessary results of a rural excursion.

"Few schemes, I venture to affirm, have ever been broached more false in principle, or calculated to be more injurious in practice—nay, I should think, less in harmony with the profoundly tender and merciful views of human nature, promulgated by the great author of Christianity himself—than that which would forge additional chains, over and above those necessarily incidental to their lot, to keep in perpetuity the children of labour within the walls of their great civic prisons. It is to be hoped that no British legislature will ever be found

so indifferent to the claims of humanity, as to sanction any measure that could lead to so disastrous a result.

"It is indeed difficult for a man only moderately versed in the knowledge of human nature, in all its parts, to conceive how doctrines issuing in such monstrous practical absurdities as these, could be entertained by men of education. The explanation can only be this, that though men of education, they are not duly instructed in a knowledge of much that appertains to man's physical and moral nature, and that, in their unenlightened zeal to promote mere technical religion, they overlook the very foundations of morality and virtue. They are like the charlatans in physic, to whom I have so often referred for illustration; they rely on the mystic action of a nostrum of imaginary power, instead of employing means that embrace the whole disease and heal it radically."

THE MEDICAL PROFESSION IN RELATION TO MEDICAL POLICE.

LETTER FROM H. L. SMITH, Esq., TO THE EDITOR.

SIR,—I am anxious to submit to the profession another outline of an "Act of Parliament", to reform the franchise, advance morality, and bring the members of the medical profession into the sanitary regulations of the country, with power and influence.

I am, etc.,

H. L. SMITH.

Southam, June 1853.

I. Whereas, it appears from reason, experience, and vital statistics, that SIN on the one hand, and MORALITY on the other, have both their first principles, which work effects downwards to death, or upwards to life, with as much regularity and certainty as the first principles of mechanics, chemistry, optics, or any other science. And that the first principles of sin are, disobedience to the Maker's will, violence, cruelty, pride, idolatry, covetousness, lust, hardness of heart, and unbelief; all of which are deeply grounded in the heart of the liar, thief, and apostate, who believes that he possesses anything of his own.

II. Whereas, the first principles of morals are, belief in God, purity, chastity, faithfulness, humility, kindness to one another, and obedience to the natural laws and revealed will of their Maker, all practically carried out by those true, honest, and faithful Christians, who know that every possession, gift, or talent, is not their own, but is from God; and intrusted to them to be made holy, by being consecrated to the good of man for the glory of God!

III. And, whereas, it appears to have been of old time designed by God, that the pious, zealous, and self-denying Christians of this kingdom, should, in the latter days, be His working servants and chief agents in bringing all the other nations of the earth to the knowledge of Him, so that they may be subjected to His will, and the personal government of His Son.

It is for this purpose we now enjoy the blessing of the increase, till every village overflows, and every port is filled with our people, for the occupancy of the waste places of the earth, demanding a supply far beyond that derived from the older nations, who have had the same blessing and lost it, by neglecting to attend to the things that are to be found in the "tents of peace and righteousness", which are annexed conditions and stipulations for holding the blessing permanently. Witness Greece, Rome, the Northern Hive, Portugal, Spain, and France, who have possessed, and have been deprived, in geographical order from east to west, of this blessing which we enjoy, but which we shall certainly lose, unless we take warning by their punishment. Therefore, it is necessary that we supplant as quickly and as unostentatiously as we can, the selfish and sensual, who return our representatives, by giving the orderly and the moral a share in the elective franchise for this purpose.

It is therefore enacted, that every father shall, for every child born in wedlock, have one vote for a representative in Parliament, provided he has adopted the following prospective measures of "providing for his own household", one of the first principles of Christian duty.

1. That he has secured medical care for himself and family, by having been admitted as a member of a "self-supporting provident or Victoria dispensary".

2. That he has also provided an income, in sickness, by subscription to a "sick club", equal to two-thirds of his average earnings when in health.

It is further enacted, that he shall have two votes when he

* Memorandums, made in Ireland, in the autumn of 1852.

+ Dancing, etc., customary with the Irish, as with other Catholics.

child that he has educated, until it is fifteen years of age, provided he has also secured an income, by assurance, for his own old age, and a legacy to his wife of £50 on his death.

Now, Mr. Editor, let us consider what would be the effects of this simple but comprehensive law:—

1. By giving the man, as father, the right of voting in right of his successors, he would look to principles and ultimate ends, rather than to temporary expedients, as electors now do.
2. It would encourage the holy state of matrimony, honourable in all men, but necessary in the children of God, to fill up the dreadful vacancies made by the discontented, by wars, famines, plagues, and apostasies, by which they are working out their own exit here, and final punishment hereafter.
3. It should lead to the general establishment of "self-supporting dispensaries", improved "sick clubs", and a vast increase of "insurance business" of all kinds.
4. It would destroy medical quackery, and the imputation of extortion amongst the qualified.
5. It would insure increase of peace and righteousness, of loyalty and patriotism, in the densest populations.
6. Medical men would be paid for time and skill, instead of drugs.
7. Vaccination would be generally adopted.
8. It would place the Elective Franchise on a moral basis, which would grow downwards in society, and bear fruit upwards in its government.
9. Lastly, and which must be my apology for this preliminary exposition, it would introduce medical men into the Home Office with power, because through Parliament; and when we recollect that there is no person, substance, animal, vegetable, or mineral, and that there is no change, condition, or accident, no causes, terrestrial or astral, but are brought under the notice of medical men, we may expect, that even more than any others, they would be able to look forward and provide for the invisible and exalted, the good, the right and truly peaceful, from their long practical habit of viewing the visible and the tangible, and their knowledge of God, and their love to mankind would grow up together, and would not be divorced by the gilded devices of palaces.

VARIETIES OF THE PUFF-BALL.

LETTER FROM B. W. RICHARDSON, Esq., TO THE EDITOR.

SIR,—A reviewer, in the last number of the *Gardener's Chronicle*, criticises me smartly, but very justly, for having neglected, in my paper "On the Anæsthetic Properties of the *Lycoperdon Proteus*", to indicate clearly the plant the properties of which I have described.

It ought to have been stated in my paper, that the term "*lycoperdon proteus*" has been used to describe several kinds of puff-ball, and that the puff-ball which has been used in all my experiments is the *lycoperdon giganteum*.

You will oblige me greatly by allowing this necessary correction to appear in an early number of your Journal.

I am, etc.,

BENJAMIN W. RICHARDSON.

Mortlake, June 27th, 1858.

CHLOROFORM IN LABOUR.

LETTER FROM EDGAR SHEPPARD, Esq., TO THE EDITOR.

SIR,—The question of the exhibition of chloroform in labour seems to me to lie in a very narrow compass. Equally narrow shall be the space of our Journal which, with your permission, I will occupy.

An answer to the following plain query, from the advocates of the production of anæsthesia, seems very essential: "Is it, or is it not desirable, to complicate a natural process?" Some one will reply: "You do not complicate—you simplify." I deny it. Such a position is altogether untenable. Is a man who is dead-drunk, "simplified" or "complicated" by his potations? And what advantage physically (if not morally) has a chloroformed over an intoxicated individual? Truly, I am unable to perceive any. No female for whom I have any regard shall ever, with my consent, inhale chloroform. I look upon its exhibition as a pandering to the weakness of humanity, especially of the softer sex. How much of this the annals of the last few years reveal! Electro-biology, Bloomerism, Cochinchina fowls (query, foolery?), Beecher-Stowe idolatry (there being plenty of room for sympathy with English slavery in the very

next street, my friend), table-turning, spirit-rapping, *cum multis aliis*, what are ye but records of English folly and gullibility? And shall we—we, the members of a noble profession—swell this catalogue of crazy weaknesses, by encouraging the use of an agent which has already slain many, and which renders every suffering man a *senseless* man? I am, etc.,

EDGAR SHEPPARD, M.R.C.S., L.S.A.

Enfield, June 24th.

[An answer to this and similar letters, will be found in an original article, from the pen of Dr. Simpson, to appear in our next number. EDITOR.]

NEWS AND TOPICS OF THE DAY.

CREDULITY AHEAD OF CHRISTIANITY. In 1845, one million and a half of the people of the continent visited in pilgrimage the "Holy Coat of Treves".

In 1850, the President of the "School of Pure Homœopathy" at Rio de Janeiro thus expressed himself, in commenting on the death of the Prince Alphonso of Brazil:—

"Science had a tendency to become Christian. But this moral revolution was incomplete, so long as medicine, that great necessity of man obnoxious to pain, remained given up to Hippocratic and Græco-Roman tradition—so long as historical conception continued, in a word, Pagan and material. It was then that appeared Hahnemann, the most astonishing, the most inspired of discoverers. Through him, Christian science became universal; and redemption descended from the dominion of sentiment to that of the ideas and of intelligence. . . . In order that the human race should renounce the worship of false gods, nothing less would serve than a *Deicide*. By a *Regicide*, allopathy was herself to indicate her last hour, and to show to all Brazil the monstrous consequences of their mischievous endeavours. Nothing could prevail against the efforts of the Most High. The Prince Alphonso was destined to perish, and we to bear witness to his death, in order that it might prove more useful to the world than has been the life of the greatest monarch." (*Doctrine de l'Ecole de Rio Janeiro et Pathogénésie Brésilienne*.)

In 1851, the Rev. T. R. Everest, Rector of Wickwar, preached, under sanction of the Bishop of London, a sermon in the Church of St. Augustine, Cheapside. In this sermon, he broadly stated, that "the Gospel could never have free course until the physical leprosy of man was cleansed, and his chronic tendencies cured"; and that this could be effected only by an application of the "medicine of love"—by preparing man for heaven by a course of globulistic treatment, commenced from infancy.

In 1853—a fortnight ago—the Archbishop of Dublin (Dr. Whately), long the patron of homœopathy and other systems of delusion and quackery, accepted the office of President of Dr. Elliotson's "Mesmeric Infirmary", vacant by the death of the Earl Ducie.

Thus are the wild speculations of charlatanic mysticism blasphemously proclaimed to be coequal with revealed religion, as necessary instruments for the temporal and eternal well-being of man. Thus is religion dishonoured through her ministers teaching "profane and old wives' fables", and forming in their own persons a loathsome alliance between Christian truth and the unbridled excesses of credulity.

HOSPITAL FOR WOMEN AND CHILDREN, AT LEEDS. In October 1852, a project for establishing a hospital for the diseases of women and children, at Leeds, the capital of the West Riding of Yorkshire, was brought forward by Mr. J. I. Ikin, of that town. The proposal met cordial support: and the institution has commenced operations. It is not intended as a lying-in charity; nor are cases of disease resulting from prostitution admissible.

We trust that those who have the management of the Leeds Hospital for women and children will take care that its benefits are confined to really deserving objects: and that while they refuse all females who, either from fault or from misfortune, have forfeited the title of "respectable", they will prevent the hospital from being made a refuge for the wives and children of comfortable tradesmen and well-paid servants.

* "When the old system" (of medicine) "shall have quite vanished from the earth, and the new one shall be established, then, for the first time, will the Gospel of the kingdom of grace be preached as Jesus ordered it to be preached, and received as God intended it to be received." (Extract from Mr. Everest's Sermon.)

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXVII.

LONDON: FRIDAY EVENING, JULY 8, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. The Subscription runs from January to January; and members now joining will receive the Numbers of the JOURNAL from the commencement of the year. Members receive the JOURNAL free by post.

We have received at least fifty letters on the "Sunday question" within the last week. We propose to print some of them in next number.

TABLE-MOVING AND HOMŒOPATHY: VALUE OF EVIDENCE IN SCIENCE.

DR. FARADAY has written to the *Times* explaining his views on table-moving, and describing a very simple instrument, which shews that the motion is produced by a force exerted in the direction of the table moved, and that if no such action is exerted no motion follows. The inference is that it is produced by muscular action.

He concludes his letter by these very pertinent and thoughtful observations:

"I have been greatly startled by the revelation which this purely physical subject has made of the condition of the public mind. No doubt there are many persons who have formed a right judgment, or used a cautious reserve; for I know several such, and public communications have shown it to be so; but their number is almost as nothing to the great body who have believed and borne testimony, as I think, in the cause of error. I do not here refer to the distinction of those who agree with me, and those who differ. By the great body, I mean such as reject all consideration of the equality of cause and effect, who refer the results to electricity and magnetism, yet know nothing of the laws of these forces; or to attraction, yet show no phenomena of pure attractive power; or to the rotation of the earth, as if the earth revolved round the leg of a table; or to some unrecognised physical force, without inquiring whether the known forces are not sufficient; or who even refer them to diabolical or spiritual agency, rather than suspend their judgment, or acknowledge to themselves that they are not learned enough in these matters to decide on the nature of the action. I think the system of education that could leave the mental condition of the public body in the state in which this subject has found it, must have been greatly deficient in some very important principle."

These wise reflections are worthy of thoughtful perusal. We, however, as medical men, are not startled by this sudden display in a purely physical subject of the ignorance of the cultivated public to estimate the value of physical evidence, or of their conceit in pronouncing dogmatically on a question of forces whose laws they do not in the least understand. Faraday with philosophic coolness expresses no irritation at the deluge of pseudo-scientific impertinence with which he was overwhelmed; but M. Léon Faucault, the discoverer

of the rotation of the pendulum, in a recent article in one of the Paris journals, has given very full force to the feelings of irritability which were excited in a Frenchman of scientific repute, on appeals made to him on all sides by those who began by believing and wished him to confirm their views. Escape from Paris was his only remedy. We, however, are too familiar with these delusions: we have, unfortunately, too much experience in the same classes of deceptions to feel any great surprise or even much annoyance. When a large number of highly civilised people believe that infinitesimal doses of medicines, so small as to be incapable of detection by any tests, can produce a long catalogue of morbid sensations and actions in a healthy person, and can create a new disease, like, though stronger than the one to be cured—when multitudes believe this nonsense, which is not worthy of the consideration of any scientific mind for more than sufficient time to see its absurdity, and to dismiss it contemptuously out of his thoughts for ever—we can feel no surprise when we see the same inability to judge of the equality of cause and effect in this table-moving experiment.

And when we see the medical experience in the treatment of diseases of all past ages rejected for this new absurdity, we detect the same form of conceit which rejects a known cause, that of muscular action, for an unknown one, because it seems more wonderful and mysterious. In both cases the public will judge dogmatically and conceitedly of subjects which they do not in the least understand. That so coarse an experiment as table-moving, and one so open in all its stages to fallacies, should have been thought to be sufficient to prove the existence of a new force, only shews that the public are entirely unaware of the kind of evidence on which real discoveries in science rest; and with regard to the effect of medicines, the sources of fallacy are much greater, inasmuch as the interior of the human body is more complicated than a table with half a dozen hands upon it.

Those who are at all inclined to believe that truth in science is proved at all by the number of those who are convinced of it, may have a useful lesson now. The belief of a Faraday, a Thomas Bell, or a Grove, would be more weighty than the conviction of the myriads of drawing-room experimentizers who, "like Catafelto, with his hair on end, wonders at his own wonders". An affirmative in science cannot be made out of numerous negatives. No correct inference can be drawn from the largest amount of incorrect data: no law of nature can be discovered by any multitude of crude experiments.

In making these observations, we do not wish to be understood as thinking these table-turning experiments are valueless, and to be dismissed without consideration. They belong to the joint domain of physiology and physics, and deserve the investigation of severe science. What is wrong is the ignorance and conceit of those who would pronounce on matters of which they are incapable of judging, instead of reserving their judgment until they

are instructed by those few who are really capable of unravelling such scientific difficulties. And we cannot but agree with Faraday, especially as we have so much more evidence of the same fact, that a system of education, which leaves the public in such a state, must be deficient in some important principle—an observation which seems to apply even more forcibly to the United States than to civilized Europe.

CHARACTER IS PROFESSIONAL CAPITAL.

CHARACTER is to the medical man what cash and credit are to the merchant. The capital with which the medical man earns his bread, or makes his fortune, is his reputation; and when this is damaged in public estimation, the pecuniary loss which follows is certain, speedy, and severe. From the random and often groundless accusations which are constantly floating about in society against members of our profession, we cannot avoid believing that society is not sufficiently aware of the injury which they often inflict upon the most upright and the most skilful of our body, by listening to and repeating damaging statements, which, if investigated, turn out to have no foundation to rest on except groundless gossip. A professional man occupying a conspicuous position can, by integrity and blameless conduct, live down calumny, but with the private country practitioner this is impossible. Ruin, or a change of scene, are often the only alternatives of the unjustly calumniated provincial practitioner. Illustrations in abundance must occur to every one. To-day, our columns contain two cases more or less in point.

Mr. Fennell, a respected and successful practitioner at Wimbledon, in Surrey, in an evil hour, placed himself under the professional surveillance of a committee of ladies, and became medical officer to their Maternal Charity, upon terms of inadequate remuneration. Absurd stories of neglect were set afloat; and at last Mr. Fennell brought the clergyman of the parish into court, to account in damages for certain slanderous words alleged to have been spoken by his wife, who was one of the managers of the Maternal Charity. The jury considered that the ladies had a right to criticise and condemn Mr. Fennell, and that, from the position in which he had placed himself as their officer, their statements must be looked on as "privileged communications". At the same time, they exonerated Mr. Fennell from the charges imputed to him. This case is very painful to contemplate. We have on the one side a respected brother practitioner, and on the other a faithful parish clergyman, a man universally esteemed for his works of Christian philanthropy. Let us hope that the whole affair may soon be forgotten and mutually forgiven. As Lord Campbell said, there was no malice, and no quarrel in the case. The occurrence of this trial, however, teaches an important lesson to members of our profession, viz., that they ought not to place themselves in such a position as to entitle their professional practice to be made the subject of privileged debate by the ladies of the neighbourhood. It ought, likewise, to point out the necessity of letting the

public be well informed upon the great injury which may be done, through inadvertence, to the prospects of deserving medical men.

The history of Mr. Duncan's persecution and removal from his field of practice is well told, at p. 601, in Mr. Lloyd's letter. The ignominious and unanimous expulsion from the meeting of the representative of the unjust newspaper is a fact which strongly points out the advantages which medical men gain by enlisting under the union flag of our Association. The strong, decided, and unanimous step taken by the North Wales Branch in this matter forms a defence of Mr. Lloyd and Mr. Duncan; and, with the profession, it commands immediate and universal sympathy. Mr. Duncan may in the end be no loser; but in the meantime, by means of a foul conspiracy, he has been swindled out of his professional capital, and forced to recommence professional life in some other place. We trust that, wherever he goes, he may obtain public support and professional good will. His case is a very cruel one, and one which is, in all its aspects, as disgraceful to the *North Wales Chronicle* as it is honourable to the North Wales Branch of our Association. The motto on the front of the newspaper concludes with these words: "*We despise, abhor, and would control the liberty of the press, when that liberty degenerates into licentiousness.*" Does not the editor's conduct in the case before us clearly point out that *licentiousness* is in his vocabulary sometimes synonymous with *honesty*?

LAYING THE FOUNDATION STONE OF THE MEDICAL BENEVOLENT COLLEGE.

In a subsequent page will be found an account of the laying of the foundation stone of this institution by the Right Hon. the Earl Manvers, in the absence, from an attack of measles, of His Royal Highness Prince Albert. The commencement of building operations may well be a subject of gratification to Mr. Probert, the philanthropic projector, and to the friends generally of this great and national institution. We believe that the new contributions were at least £2000 upon this occasion.

PROGRESS OF MEDICAL REFORM.

MEDICAL Reform has been considered at all the recent Branch meetings in a way calculated to promote the cause. Better still, Lord Palmerston has intimated his intention of bringing in a bill during this session. Let us hope that he may meet with the hearty and enlightened support of the profession. We hope before next week to obtain a copy of the Bill.

THE VACCINATION BILL.

We give at p. 590 a copious abstract of the very valuable Report on Vaccination by the Epidemiological Society. It reflects the highest credit upon Dr. SMITH and his coadjutors. We may add, that it is a document which the public and the profession ought to be allowed to read, before any legislative measure be sanctioned by Parliament.

ORIGINAL COMMUNICATIONS.

OPERATION AND RESULTS OF QUARANTINE
IN BRITISH PORTS SINCE THE BEGINNING
OF THE PRESENT CENTURY.

By GAVIN MILROY, M.D.

(Read before the Epidemiological Society, June 6th, 1853.)

THE subject which I have the honour to bring this evening under your notice is one which seems to me to belong, in an especial manner, to a society whose declared aim is to investigate the natural history of epidemic diseases, with the view, of course, to the discovery of the most effectual means to control their development, arrest their spread, and mitigate their fatal malignity. Its importance will be recognised by all, when it is considered that quarantine professes to be a precautionary plan or process, whereby pestilences may be altogether kept at bay, and countries be thus preserved from the invasion of their destructive agency. No theme, therefore, in state medicine, more deserves our attention; and just in proportion to the importance of its bearings, is it necessary that our opinions be based upon reason and truth,—in other words, upon sound conclusions drawn from a sufficient number of well observed and faithfully recorded facts. Nor let it be forgotten that, independently of the immediate practical consequences involved in its right solution, this is one of the principal questions about which medical men are necessarily brought into direct contact and conference with the higher departments of public life; and on which the value of their advice is not confined within the circle of mere professional criticism, but will be subjected to the scrutiny of all who are interested in the freedom of international intercourse, from the statesman and the legislator down to the merchant and the traveller.

And yet, strange to say, there is not a topic in medical literature which has been so imperfectly handled, or on which there is less reliable evidence on the one hand, and a greater amount of extravagant and absurd assertion on the other. Unfortunately, too, there is not a single work in existence, as far as I know, to which any one seeking for detailed and trustworthy information upon the subject of quarantine can be referred. It is not so much as even named in the *Cyclopædia of Medicine*, published in 1835; while Dr. Copland, in his elaborate *Dictionary*, has, under the head of Protection from Pestilences, treated it with so little precision and clearness, and under the manifest influence of so strong a bias to particular one-sided views, that the reader finds himself both perplexed and unsatisfied. Nor has the subject fared better in the standard encyclopædias of general information. In the last edition of the *Encyclopædia Britannica*, published so recently as 1842, there is the most meagre mention possible—not exceeding a couple of dozen lines;—although the commercial bearings of quarantine are so important, that it has been estimated that a loss of little short of a million sterling is thereby annually inflicted on our shipping; and even this brief notice is not free from palpable error. Occasionally, at distant intervals, an article in a literary review has drawn public attention to the general question, or to some particular details; but never with the scope of a systematic or comprehensive inquiry.

You thus see how imperfectly the subject has hitherto been investigated; and you will probably all agree with me that it is high time, alike for the credit of our profession, which claims to guide public opinion upon such matters, as well as for the general interests of the community, that an attempt be made to ascertain the real state of our knowledge as derived from past experience, with the ulterior view of finding out, if possible, a clue to guide us to the truth through the meshwork of discordant and contradictory statements and opinions in which it is involved. This entanglement is necessarily not a little increased by the

circumstance, that it is not to one disease alone, but to several—and these varying too from each other in many features of character,—that the relations of quarantine have to be considered. Hitherto, it has been almost exclusively in reference to the oriental plague (against which quarantine was originally instituted) that the subject has been discussed. All the parliamentary evidence that has at any time been published in this country, is, as far as I know, limited to this one topic; and, indeed, so little have the bearings of quarantine to other diseases been generally thought of, that the writer in the *Encyclopædia Britannica*, a distinguished professor too of medical jurisprudence, does not so much as even name any other besides the plague. The plague, however, constitutes but one item in the inquiry; and even supposing that we had arrived at anything like decided conclusions respecting this form of pestilence, we should then have settled but a single point. How stands the question of quarantine with yellow fever?—with Asiatic cholera?—not to mention typhus fever, and the whole tribe of the exanthemata. Probably, most of my hearers are aware, that in very many places where quarantine restrictions exist, they are enforced, not against one only, but against each and all of the diseases now enumerated.

Upon this, however, as indeed upon every other head, the most ridiculous and contradictory practice is followed in different countries, and often too in different parts of the same country. Without descending to particulars, it cannot but be obvious that, to do anything like justice to the subject, a very wide and most varied field of examination is necessary; for, while each disease requires to be considered in reference to its own ascertained laws of propagation and diffusion, it is of the utmost importance to compare these laws together, to ascertain wherein they differ, and wherein they agree; with the view of determining how far the diseases are controllable by quarantine restrictions. The work is a large, and perhaps not a very easy one; but until it be fairly done, in a spirit of calm and conscientious inquiry, the medical profession fails, I think, to perform a duty which it owes to the public service. On the present occasion, I must impose upon myself much narrower limits, and shall confine my remarks to three only of the diseases alluded to; viz., the plague, yellow fever, and the Asiatic cholera. And here let me say, that it is not my intention to lead you into the troubled waters of controversy, respecting any single point in the purely medical history of these diseases. The object of this paper is not to discuss any theory, or to balance any dispute, but simply to narrate with thorough truthfulness facts and occurrences, as they have been recorded by trustworthy writers, leaving it to each gentleman to form such conclusions as the data may seem to warrant. Let me but offer one suggestion; viz., that in seeking to arrive at the truth in such an inquiry, we should,—while keeping our minds free from all preconceived opinions, and unperplexed by any other debateable questions save the one immediately under consideration,—apply the same laws of evidence, and follow the same mode of reasoning to discover the truth in respect of the origin of an epidemic disease, as we recognise to be necessary in the investigation of the causes of other natural phenomena, or in forming a judgment from circumstantial evidence in a case of criminal prosecution. Let facts and occurrences be looked at in their own light, and not through the coloured spectacles of a preadopted creed; let us avoid placing reliance on hearsay unsifted testimony,—let us be on our guard against eking out imperfect and unsatisfactory information by mere conjectures,—and let us cease to have recourse to that too common phrase, “it is highly probable”, in our endeavours to trace a connexion between antecedent and subsequent phenomena. It would be well, I have often thought, if the Scottish form of verdict, “not proven”, were more steadily before the minds and more frequently on the lips of medical juries, on a variety of occasions.

Quarantine is defined, very vaguely it must be acknowledged, in the *Encyclopædia Britannica*, to be “a trial which ships must undergo when suspected of pestilential infection”. If the trial alluded to were confined to the ships alone,

it would be a simple and comparatively a very inoffensive procedure. But this is a very minor part of the quarantine system. It is not the ship alone, but all and everything on board, animate and inanimate, that is subjected to the said trial; which trial consists in an enforced detention and seclusion for a period of from two or three to forty days (the word *quarantine* indicates the latter number), followed in many instances by the fumigation of persons and things, before they are set at liberty. Bear in mind too, that it is not necessary that any disease should actually exist on board at the time of the vessel's arrival, or even that any case whatever of illness should have occurred at any time during the voyage. It suffices, if she has come within a specified time from a place where disease is reported to be. This circumstance alone is generally regarded as an adequate reason for the imposition of quarantine restrictions, on the ground, either that disease may be present in an incubative form in the system of some person or another among the crew or passengers, or that its material cause—the *materies morbi*—may be adhering to some article or another on board.

Quarantine therefore is not (as is sometimes alleged by those who seek to make light of its grievances) the mere detention of the sick and infected, with the view of preventing their being landed at once and being taken wherever they or their friends may choose, without restraint or any regard to sanitary precautions. It applies equally to the well and healthy; nor is any distinction ever made between different individuals in point of susceptibility or liability to become attacked. All are treated alike; although, in the case of yellow fever, some may have had the disease and others have not; or, in the case of small-pox, some may have been vaccinated, while others are wholly unprotected. Quarantine bears to simple sanitary prophylaxis the same relation as a lazaret does to an ordinary clean and airy hospital.

The term is sometimes applied to the precautionary measure of isolating the sick on shore, or of establishing a cordon around a district, in the hope of confining a pestilence and arresting its progress. At other times, it is used to designate voluntary seclusion by individuals in health within their own dwellings, during the prevalence of sickness. But it would be much better if the word were confined to its original acceptation, viz., that of a detentive coast-guard against the importation of disease by shipping. It is in this restricted sense that it is employed in the following observations; my aim being to ascertain how far the system, as hitherto practised, has succeeded in the object for which it was established. Small islands present, of course, the most favourable opportunities for inquiry.

As to the various measures which have been adopted for the arrest of diseases, when they have found their way into a country, and as to the results of these measures, this topic does not come within the scope of the present paper.

I now proceed to my statement of facts; and, first, respecting the plague. As my narrative is purposely confined to the present century, I have no instance to mention until we come down to the memorable outbreak in Malta, in 1813. Two or three prefatory remarks, however, may not be misplaced. It is a fact worthy of notice that in Egypt, Syria, and Turkey—the countries which are always regarded as the parent lands of plague—there was a remarkable lull, all but a complete cessation, of epidemic plague between 1803-4 and 1812. We shall afterwards see that other epidemic diseases seem to have been similarly affected in remote countries during this interval. In 1812, one of the most formidable outbreaks of the pestilence that was ever known occurred in Constantinople; nearly 150,000 persons perished. Egypt also suffered rather severely in that year; and Smyrna on the west coast of Asia Minor, and Odessa on the Black Sea, not to mention other places, are also known to have been attacked. In the following year, 1813, the pestilence appears to have become more widely diffused; for we find that it prevailed more or less extensively in Wallachia, Roumelia, Albania, and Greece, all provinces

then of Turkey in Europe. There was also, at the same time, an unusual prevalence of malignant fever over the greater portion of Europe; and we shall afterwards see that, in this year, a fresh outbreak of yellow fever took place in different parts of Spain. At Malta, the spring season was remarked to be a very sickly one; sudden deaths were more frequent than usual; but the most noticeable feature of the prevailing medical constitution was, the remarkable tendency that existed to furuncular and other forms of unhealthy outward inflammation. "Every whitlow festered, and every scratch became an ugly sore. A tight shoe was sufficient to produce a livid boil with symptomatic bubo. The military hospitals were crowded with such cases."

I will now detail the ascertained facts connected with the development of the pestilence in the island, which it may be remarked, was believed to have been exempt from the plague for one hundred and twenty years. Nowhere perhaps is a quarantine establishment more complete in all its details and appliances than at Malta. The quarantine harbour is quite distinct and separate from the general harbour; there is an extensive lazaretto for the reception of the sick or suspected; and there is a regular staff of health officers. In consequence of the island being jealously watched by the Neapolitan and other Mediterranean States, which are ever ready to put her in quarantine upon the slightest pretext, the vigilance of all concerned is ever on the alert.

On the 28th of March, a vessel arrived from Alexandria, having a foul bill of health in consequence of the plague existing in that city. Two fatal cases of plague had occurred on board during the voyage. Her cargo consisted of flax. Immediately upon arrival, her crew were sent on shore to the lazaret, and the vessel was placed under the strict charge of health guardians, to prevent all communication either with the shore or with other vessels. The captain and one of the crew sickened in the lazaret on the 1st of April; both died on the 7th. In consequence of this, it was at first proposed that the vessel with her cargo should either be burnt, or taken out to sea and sunk; a mode of procedure that had been more than once resorted to at Malta for the public security.* A less summary plan to get her out of the way was however agreed to, viz., to send her back forthwith to Egypt, with her cargo untouched. Accordingly a fresh crew were put on board, and she was dispatched on the 10th of April. It is an interesting fact, that not a single case of sickness occurred, either on board during the ten days' voyage back to Alexandria, where she arrived in safety, or among the people engaged in unloading her in that port.

On the 16th of April, a young girl, the child of a shoemaker, living in one of the low unhealthy parts of Valetta, at a distance from the harbour, sickened with fever; she died in the course of a few days. The pestilential nature of her case was not suspected at the time. The mother was next attacked; in her case, the fever was accompanied with swelling of the inguinal glands. Suspicions now began to be excited, and rumours to be circulated, that the plague had made its appearance in the town. As it does not belong to the object of this paper to follow the subsequent course of the disorder, I shall say no more than that it is admitted by all who have written upon the subject, that, ere the Committee of Public Health had quite decided as to the real nature of the visitation, "the insidious disease was insinuating itself in every angle of the city, in places remote from the scene of its first appearance". The question for us to consider is, how did it find its way in, presuming

* The same decisive measure has been occasionally had recourse to on our own coasts. At the beginning of the present century, three vessels from Mogadore were sent round to the Nore, and there, by order of the government, upon the advice of the then quarantine authorities, sunk in deep water, along with their cargoes, consisting chiefly of goat-skins. The country had to pay upwards of £20,000 to the owners for this act of sanitary precaution! Something of the same sort was done at Stangate Creek in 1814. A cargo of skins, being deemed incapable of effectual expurgation from the possible retention of plague miasmata, without great risk to the men employed, was ordered to be sent on shore and burnt. In 1819, an infected vessel was submerged for a time in Malta harbour. No later than 1844, a work on Plague and Quarantine was published in London by a military medical officer. It had been in Corfu during the prevalence of the pestilence there; and it is gravely recommended that, "generally speaking, it will be best, perhaps the cheapest way in the end, to destroy the ship and cargo as soon as

that it was imported by the infected vessel, notwithstanding all the rigorous precautions which had been taken?—and, moreover, how came it to appear first, not among the health officers who had been put aboard of her, or even among the servants of the lazaretto where the captain and one of the crew had sickened and died, nor yet in the immediate neighbourhood of the *parlatorio* or landing-place, where the only communication between vessels in quarantine and the town is permitted, and that too through a grating, and under the eye of officers, but in a locality at a considerable distance, and among people wholly unconnected with the shipping? A rumour indeed got afloat, long after the event, that the father of the girl who was first attacked was in the habit of eking out his small gains as a shoemaker by acting as a smuggler, and that he had managed, somehow or other, to get a package of new linen from the vessel. It would occupy too much time to narrate the odd gossiping sort of evidence, on which this rumour was based. Suffice it to say, that it was never shown that the suspected package had ever been traced to the poor man at all (he died at an early period of the pestilence); nor indeed that any such package or anything else had ever been abstracted from the vessel. All that Sir A. B. Faulkner, the principal medical officer of the forces in Malta at the time, and who had made it his business to inquire into the circumstances upon the spot, ventured to say, was, that he thought "it an event not improbable that some of the family might have got goods from the vessel". The story was, however, believed by the quarantine authorities, and has been more than once repeated in print. It should, however, be known, that Dr. Calvert, physician of the forces, who was then in Malta, and who subsequently communicated a detailed account of the pestilence to the Medico-Chirurgical Society, regarded it as wholly groundless. "It is next to an impossibility", says he, "that it could have been brought in by clandestine intercourse. The crew of the infected ship was securely locked up in the lazaret; guards were placed upon the ship itself as long as it continued in the harbour; while every suspected person was seized and carried to the lazaret. But all was to no purpose: the disease seemed to laugh at their exertions, while it jumped from house to house, and from street to street. Those who had no communication together, as well as those who had, fell alike victims to its fury. Nothing could bring to light the way in which the infection was brought. Surely, if any evidence had been forthcoming, it would not have been kept back, when a free pardon was offered to the delinquents, besides a reward of a thousand scudis; or, if this was not sufficient, the dreadful anathemas that issued from the church could not have failed to produce confession."* The late Dr. Hennen, too, when medical inspector at Malta, after having examined with the utmost care all the official documents on the subject in the archives of the island, and collected the evidence of surviving residents who could give any information, came to the conclusion that the story about the smuggled linen was not to be credited; and Dr. John Davy, who subsequently occupied the same post, and whose attention was specially called to the results of the quarantine establishment, states, in his interesting work on Malta and the Ionian Islands, that the mode in which the pestilence was introduced "is still unexplained in a satisfactory manner".

I must now request you to accompany me to the little island of Gozo, distant about one mile from Malta. It had remained quite healthy throughout the dreadful visitation of the latter, in consequence, it was believed at the time, of all intercommunication having been subjected to the most vigilant and rigorous quarantine. Great, therefore, was the surprise, when a man died suddenly in Gozo, with suspicious symptoms, in the last week of February 1814. His daughter sickened a few days afterwards; she also died; and, within a few days, several inhabitants of the village where they resided were attacked. The following explanation of the mode in which the disease was thought to have

been introduced has been given. The man first attacked had shortly before come from Malta, bringing with him a box of new wearing apparel, which, it was alleged, he had concealed from the knowledge of the expurgators, by having buried it some months previously, when the plague existed in his neighbourhood. It had thus escaped proper purification. Sir T. Maitland, the Governor of Malta, in his official dispatch to the Colonial Minister on the subject, after recapitulating all the circumstances connected with the appearance of the disease in Gozo, expresses his opinion thus: "Although I should not be able to prove it in law, yet I have a perfect moral conviction that it was carried into the island of Gozo in the following manner"—viz., that as now described. Sir A. B. Faulkner appears to have had some doubts upon the subject, for he says: "Whether the above account of the box be strictly authentic or not, it is certain that the plague broke out immediately in the family after the arrival of their relative" from Malta. Dr. Calvert says: "A man indeed did go from this neighbourhood (near Casal Curmi) to Gozo, and was the first in that island who fell a sacrifice to the disease; but, as to his digging up a box, this was an idle report, and could not be substantiated, as I was confidently assured from the best authority."

Fortunately, the disease did not spread much, and soon ceased, after carrying off about sixty or seventy persons.

From Malta and Gozo, I now pass to the Ionian Islands, where the pestilence made its appearance at the end of the following year, 1815. Throughout the whole of that year, it had continued from the previous one in different parts of Albania, on the coast of Dalmatia, and along the shores of the Gulf of Lepanto. Ample warning had thus been given, that the dreaded foe was not far distant; and, indeed, Mr. Tully, one of the quarantine medical officers in Corfu, had been sent by the British government to Greece, with the view of gaining the most exact information. Moreover, the experience of the recent disastrous visitation of Malta had served to increase the vigilance of all the health authorities. As Mr. Tully has written a minute history of the disease in the Ionian Islands, we are enabled to follow it step by step. The place first attacked was the malarious district of Leftimo, in Corfu. Mr. Tully was at once dispatched thither, to organize measures for arresting the disease. But with these we have not at present to do. As to the origin or mode of introduction of the disease, this was then, and for a long time afterwards, quite inscrutable. The residents attributed it to the agency of an evil spirit; in other words, to endemic or indigenous causes; and Mr. Tully himself, in one passage of his work, states that he shared the opinion of those who believed that it was generated on the spot. It would seem, however, from the rest of his narrative, that, to use his own words, it "was ultimately ascertained, by the most undoubted proofs, to have been introduced through the medium of infected goods, which, by a strange combination, had remained on the island, under lock and key, for a considerable time." The goods alluded to consisted of a box, containing an opera hat, shirts, and a quantity of new silk handkerchiefs, with several copper kitchen utensils, which a smuggler was said to have left in Leftimo a year and a half before the appearance of the plague there, but was only opened shortly before the first cases occurred. Such is the alleged mode in which the disease managed to evade the quarantine at Corfu. It continued in the island until the May or June of 1816, when Cephalonia, another of the Ionian group, began to be infected. Mr. Tully was of opinion that it was introduced there by some men who had come from the Albanian coast, where the pestilence had now existed for eighteen months and upwards. They had been detained in quarantine for seven days, and had remained quite well all the time. But it was afterwards alleged that one of the party had brought with him some clothes, which he had stolen from two Turks, who had died. The story is, at best, a very lame one; nor was Mr. Tully himself quite satisfied about it. A more important fact is, that, while the plague existed in one part of the island, a most deadly form of endemic fever, with very similar symp-

* Trans. Med. Chir. Soc., vol. vi, p. 56.

toms, prevailed among the troops recently arrived from England, in another.

It does not appear that any other of the Ionian islands, save Corfu and Cephalonia, were visited by the pestilence. The immunity of Santa Maura is the more remarkable, as it lies between Cephalonia and that part of the Albanian coast whence the disease was supposed to have been derived.*

Since 1816, the plague has not appeared, as far as I am aware, in any of the British possessions in the Mediterranean, except a few imported isolated cases in the lazaret at Malta. To these I would now invite your attention for a few moments. Fortunately, the records of the quarantine establishment there, since the island came into the possession of Britain at the beginning of the present century, enable us to ascertain the truth. It appears that no vessel having plague on board arrived in Malta harbour, and that no case of the disease occurred in the lazaret, from that period down to 1813. Since the cessation of the pestilence in that year, to 1845, twelve vessels either actually infected or suspected have arrived, and about fifty cases of what has been regarded as plague—although in many of them the characteristic symptoms of the disease were absent, and they would have been recorded as cases of petechial typhus, had they not occurred in individuals from plague countries—have been treated in the lazaret. Now, it is an extremely interesting fact that of all the persons engaged in attending upon these sick, or who had been put on board the infected vessels as health guardians (and the number of these persons must have considerably exceeded a hundred) only four were attacked with any illness, and but one died. Two of the four men had been put on board a foul ship from Alexandria in 1821; they soon recovered. The other two cases occurred in men who had volunteered their services to be confined in the lazaret with a crowd of poor filthy Moors, on their way from Egypt to the Barbary coast.† It was one of these cases which proved fatal. The complete immunity of all the regular officers connected with the lazaret thus seems to show that there is little or nothing to be dreaded from the infection of plague, when patients are kept in clean, airy apartments. How different are the results, when the sick are compelled to remain in confined crowded places, as on board of a foul ship, for example! A vessel arrived at Zante, in June 1819, from Tunis, where the plague existed at the time of her sailing. There was no actual sickness on board when she arrived; but, as there was not a suitable lazaret ashore, she, with her crew of eight persons, was placed in strict quarantine in the harbour, having a health guardian on board to prevent all communication with the land. Within the next nine days, no fewer than seven of the crew, and the health officer, were attacked with a malignant fever, accompanied with bubos and carbuncles; every one of the cases terminated fatally. Only one of the unfortunate crew survived. Great credit was given at the time to the quarantine authorities that the fever did not spread to the shore.

I must not forget to mention that, among the many hundred men who have been employed during the present century in the lazarets of Malta and Marseilles (those of Genoa and other Italian ports may be added) in expurgating, as it is called, the bales of cotton and other articles of

merchandise in vessels from Egypt and Turkey, there is not a single instance of one of them having ever been attacked. This, with a host of other most interesting facts respecting the true history of plague, was first made known in the Parliamentary bluebook on Quarantine, in 1843, and in the admirable Report of the French Academy published in 1845. Before the appearance of these important documents, the utmost ignorance prevailed. The experience of the French and Italian physicians, and of our own countryman, my late lamented friend, Dr. Laidlaw, who witnessed the severe Egyptian epidemics of 1834 and 1837, has effected an entire revolution in medical opinion upon the subject, by proving the utter fallacy of the old idea, that it is chiefly, if not altogether, by direct contact with the sick or with *fomites*, i.e., articles imagined to be infected, that the plague is liable to be communicated, while atmospheric contamination has nothing to do with the matter. Upon this most absurd belief, the machinery of quarantine regulations has been mainly planned. We now know that the plague, in respect of the circumstances which affect or favour its development and spread, is altogether similar to typhus in our own country. The same measures of prevention and repression are therefore required in both instances. Since the appearance of the French Report, the relations of the plague to quarantine have excited much attention in this and in foreign countries. The publication of the first Report of the General Board of Health, in 1849, gave fresh impulse to inquiry. Our distinguished corresponding member, Professor Sigmund of Vienna, has for many years past done excellent service to the cause of enlightenment and truth by his numerous writings. Dr. Sigmund's authority is the more important, from his personal knowledge of the pestilence in the Danubian provinces at different periods from 1828 to 1837, and his thorough acquaintance with the state of almost all the lazarets on the continent. The results of his observations during his mission to Turkey and Egypt, on which he was lately sent by the Austrian government, are contained in his very valuable work on Quarantine Reform published at Vienna in 1850. It is much to be regretted that our own Government has not followed the example set by France, Austria, and Russia—that of sending competent medical men to those countries where the plague is endemic, or which have been most frequently the scene of its visitations, to collect reliable information upon its history, and to ascertain the actual results which have attended the quarantine and other precautionary measures hitherto resorted to in the cause of public health. Foreign countries charge us with saying much and doing little, except for our own immediate benefit and profit; and unhappily there seems to be too much ground for the charge. In a mere commercial view, no country is so deeply interested in the discovery of the truth and the right application of sound conclusions in practice, as our own.

[To be continued.]

Fitzroy Square, London, June 1853.

THE PROPRIETY AND MORALITY OF USING ANÆSTHETICS IN INSTRUMENTAL AND NATURAL PARTURITION.*

(IN A LETTER TO PROFESSOR MEIGS, OF PHILADELPHIA.)

By J. Y. SIMPSON, M.D., Professor of Midwifery in the University of Edinburgh, President of the Medico-Chirurgical and Obstetric Societies, etc., etc.

(Dated Edinburgh, 1st of August, 1848.)

MY DEAR SIR,—A few days ago, I happened to see your excellent epistle to me on the use of Anæsthesia in Midwifery, extracted, in an abridged form, from the *Philadelphia Medical Examiner* into the *London Medical Gazette*. It reminded me that, amid other avocations and work, I had hitherto indolently omitted to answer the objections

* A recent intelligent writer, who was detained for a week in quarantine at Santa Maura, upon landing from Albania, although that country was in perfect health at the time, describes the lazaret in which he was confined as the most miserable shed imaginable. "In short," says he, "during the whole range of my travels in Asia and Europe, I never met with the equal of this for the utter wretchedness of its accommodation and the insalubrity of the situation." The result of the sufferings he experienced during his detention was a severe attack of fever. (Spencer's *Travels in European Turkey*, etc., 1861.)

† This is but an instance of what is continually taking place in many of the lazarets in the East. It is surely a disgrace that such an enormity should exist in a British colony at all events, in the present day.

‡ The experience of the lazaret at Marseilles accords in a striking manner with that of Malta. No infected vessel had arrived there, and no case of plague had been seen in the lazaret from 1796 down to 1819. Between this year and 1840, only two infected vessels arrived; one in 1825, and the other in 1837. The entire number of cases received into and treated in the lazaret, does not appear to have exceeded four or five; and the only instance of sickness among the attendants and employees of the quarantine establishment occurred in a man who had been put on board an infected vessel as health guardian.

* The following letter to Dr. Meigs has been sent to us for publication by its author, Dr. Simpson. It was printed some time ago in *Philadelphia*; but has not yet been published in this country. ERRATA.

contained in your able and kind letter. And I feel that I am the more to blame for this neglect, on one account, namely, that as in your own country, so also in ours, there are few or no living obstetricians whose opinions and name carry, and deservedly carry, more weight with them than yours. Be so good, then, as bear with me now for a few minutes, while I endeavour to state in what respects I am inclined to demur to your arguments against anæsthetic midwifery.

On reperusing, as I have just done, your esteemed letter, it appears to me, that in it you ground your opposition to the adoption of anæsthesia in midwifery upon four or five different arguments, although you do not specialize them. I shall notice each of these arguments separately. You have not given them in any particular order. Let me begin first with the one which you have placed last.

1. *You object to anæsthesia in deliveries requiring "chi-surgical intervention", and especially in FORCEPS OPERATIONS, on the ground that the sensations of the patient afford us our best aid for the introduction of the instrument.*

In order to introduce the forceps with the greatest safety to the mother, you state that (to quote your own words) "the best guide of the accoucheur is the reply of the patient to his interrogatory, 'Does it hurt you?' The patient's reply, 'Yes', or 'No', are" (you observe) "worth a thousand dogmas and precepts. I cannot, therefore", you continue, "deem myself justified in casting away my safest and most trustworthy diagnosis, for the questionable equivalent of ten minutes' exemption from pain, which, even in this case, is a physiological pain."

In answer to this novel objection, you will excuse me when I say (for I say it most conscientiously), that I think every man who ventures to use the forceps, in any midwifery case, ought to know the anatomy of the parts implicated a thousandfold better than you here presuppose. You would have the accoucheur guide his instrument, not so much by his own anatomical knowledge, as by the feelings and sensations of his patient. In this, as in other points relative to any novel question in practice, we can often, it appears to me, best perceive the soundness or unsoundness of our views upon it, by considering and contrasting them with our established views on other analogous questions, regarding which the opinions of the profession have been long ago fixed and determined. Now, what would the surgical world, at this time of day, think of an operator who, in making a ligature of a large artery, such as the humeral, placed his chance of discriminating the attendant nerve from the blood-vessel which he wished to tie, by appealing, not to his own anatomical knowledge, but to the feelings of his patient, as he touched the suspected structures? "Does it hurt you?—Yes, or No?" Would our surgical brethren not denounce and decry the capabilities of any man who, in operating, required to have recourse to such imperfect and incompetent means for his anatomical direction and diagnosis? Would it be right and moral in a surgeon to deny to his patients the advantages of anæsthesia, in order that their sensations and sufferings should make up for his want of anatomical and operative knowledge?

But, in saying this, do not, I pray you, for one moment suppose that I fancy that the argument which you adduce betrays any want whatever of the highest degree of operative skill on your part. Nothing could be further from my thoughts. And, to confess the truth, I do sincerely believe that you yourself, while using the forceps, do not require to have recourse to any such rude rule as you here propound; and that, in fact, the rule itself, and the objection to anæsthesia in operative midwifery which it contains, is an *afterthought* on your part, which has only sprung up since the practice of anæsthesia was proposed. For, in looking over the excellent precepts which you have given relative to the use of the forceps, in the valuable work on midwifery which you published a few years ago, viz., the *Philadelphia Practice of Midwifery*, I find no trace or mention whatever of such a rule as you have

quoted above, in your letter to me. If that rule really formed, as you now state, the "safest and most trustworthy" guide in the operation, you would certainly have at least noticed it, or alluded to it in some way. In the precepts which you laid down in your work, you would assuredly not have forgot that one rule, which, you say, is worth a "thousand other dogmas and precepts". And further, it would, I think, have been only the more incumbent upon you to have mentioned it, seeing that all other authors omit the notice of it.

I feel assured that, when you come to reconsider dispassionately your opinions regarding the non-employment of anæsthesia in operative midwifery, you will alter these opinions; and when you come to employ anæsthesia in actual practice, in cases in which the forceps are used, you will find that, instead of impeding the application of instruments, the anæsthetic state *very greatly facilitates their use*. It enables you to guide the forceps far more safely to their destination, because it enables you, without any pain to the patient, to introduce your fingers for this purpose, far more deeply between the head and maternal structures, than you could do if the patient were awake, and in her usual sensitive state. You yourself state, in your published work on midwifery, that care should be "taken to direct the point (of the forceps) by the two fingers, as far as they can reach". (p. 300.) "If", you again observe, "any difficulty occurs in getting the second blade forward enough, the two left fingers that are guiding it will serve to guide it edgeways into the proper position." Now, the state of anæsthesia, I repeat, gives you, as I have oftentimes found, the power of fulfilling these and other most important rules, to an extent that never can be attained without it; and I am sure you will find them worth any "thousand dogmas and precepts" derivable from the mere sensations of the patient.

Besides, these sensations,—or rather the expression of them,—would constantly betray you, if you *did* place any dependence upon them. Under the same amount of pain, scarcely any two women would give you exactly the same expression of suffering. What one woman would loudly complain of, another would declare to be nought.

Before interfering instrumentally with the forceps, the labour has generally been allowed to endure for twenty or thirty long hours. After a poor patient has undergone such a protracted ordeal of pain and suffering, her mind in general is not, I fear, in a very fit state to guide the operator by her sensations or directions.

At page 302 of your published work on midwifery, you state that, when the forceps are used, the patient's mind is naturally wound up to a state of great anxiety. "It is strained", you observe, "to the highest tension, by the mere thought that she is under the operation." Now, putting entirely out of view for the moment the propriety of our saving our patients the increased corporeal suffering attendant upon instrumental delivery, is it not, let me ask, our right and our duty as medical men to save her, as we can do, from this trying state of mental anxiety at the time of operating? In most cases, she will have been suffering and struggling on for many hours previously. Why then thus needlessly and greatly intensify both her mental anxieties and physical sufferings at the time of our instrumental interference, when her strength, alike of mind and body, are perhaps little calculated to bear any increase of suffering; and, above all, when the resources of our art furnish us with simple and certain means of saving her from the unnecessary endurance alike of the one state and of the other?

But, in instrumental delivery, besides greatly facilitating the application of the forceps, and relieving the patient from enduring the pains of the operation, and that "highest tension" of mind which is present during it, the state of anæsthesia saves her, I believe, also, in a great measure, from the effects of the shock of the operation, and thus gives her a better chance of recovery. If we omit it, we omit, I believe, not only a means of saving her from the sufferings attendant upon the operation, but a means of

moving her from some of the dangers attendant upon it. When first publishing on the subject of *anæsthesia* in midwifery, in February 1847, I offered one or two observations on this point, which subsequent surgical statistics have amply fulfilled. In allusion to some cases of operative delivery, which I recorded, I observed: "The cases I have detailed sufficiently show its value and safety in cases of operative midwifery. And here, as in surgery, its utility is certainly not confined to the mere suspension and abrogation of conscious pain, great as, by itself, such a boon would doubtlessly be; but, in modifying and obliterating the state of conscious pain, the nervous shock otherwise liable to be produced by such pain—particularly whenever it is extreme, and intensely waited for and endured—is saved to the constitution, and thus an escape gained from many evil consequences that are apt to follow in its train."

The observations which I have hitherto made refer entirely to your opinion of *anæsthesia* in instrumental delivery. But,—

2. *You object to anæsthesia in NATURAL LABOURS, because you hold that the pain of natural labour should not be annulled, and that it is calculated to promote the safety of the mother.*

You regard, you say, "the pain of a natural labour as a state not by all possible means and always to be eschewed and obviated"—"a labour pain being"; you declare, "a most desirable, salutary, and conservative manifestation of life-force".

In the above expressions, you make no distinction between the two separate and distinct elements of which a so-called labour-pain consists, viz., 1, the contractions of the uterus; and 2, the sensations of pain resulting from these contractions. If you apply the language I have quoted to the first of these elements, the uterine contractions (and which contractions are *not* annulled by *anæsthetics*), I decidedly and entirely agree with you. If you apply it, however, to the sensations of pain produced by the uterine contractions, and which sensations are annulled by *anæsthetics*, I most decidedly and entirely dissent from your opinion.

In your treatise on midwifery, you make, correctly, the important distinction to which I refer. You state (p. 148), that "the word (labour) is highly expressive of the violent and painful struggles and efforts of the woman". You add, that "the essential element of labour is the contraction of the muscular fibres of the womb". And, at page 303, in speaking of the strength of these uterine contractions, you observe, "Let it be well borne in mind, that the expulsive powers of the womb are enormously great". In more than one place in your work, you allude to the intensity of the sensations of pain (the pangs and agonies of travail, as you term them, p. 155); and, at page 153, you speak of the "painful sensations" of the mother in the last part of labour as so great in degree "as to be absolutely indescribable, and comparable to no other pain". In your still later work on *Female Diseases*, speaking of these pains—the pains of parturition—you observe, "Men cannot suffer the same pains as women. What", you continue, "do you call the pains of parturition? There is no name for them but *Agony*." (*Females and their Diseases*, p. 49.)

The muscular contractions of the uterus form, you say, the first or "essential element" of labour. In that opinion, you and I are at one. And further, I quite agree that this cannot safely be "eschewed and obviated" in natural labour. Nor are they "eschewed and obviated" under the proper use of chloroform.

But the pain, the second element, is a non-essential element in the process. It is non-essential, because, 1, labour—that is, the uterine contractions—are occasionally, though very rarely, in the course of practice, seen to accomplish the full expulsion of the child with little or no pain; 2, in whole tribes of the human race, as in some of the black tribes, comparatively little or no pain seems to be endured, if we may believe various authorities; and 3, thousands of women have now been delivered with perfect safety, but

without any pain, while placed under the influence of *anæsthetic agents*.

I hold the pain to be *non-essential*, and I utterly protest against the truth of your opinion, that "the pain of a natural labour is a state not by all possible means to be eschewed and obviated". On the contrary, I maintain, that we omit and forego a mighty part of our professional duties whenever we forget the axiom of Bacon, that "it is the office of a physician not only to restore health, but to mitigate pain and dolours". And if, as medical men, we are called upon to mitigate and remove pain of any degree in our fellow-beings, we are surely called upon to mitigate and remove those "pangs and agonies of travail", as you term them, "which in degree are", in your own language, absolutely indescribable, and comparable to no other pain"—"pains for which there is no other name but *Agony*".

In your practice, do you not, let me ask, constantly use measures to mitigate and relieve the pains of headache, of colic, of sciatica, of pleurodynia, of gout, of rheumatism, and all the other innumerable "dolours" that flesh is heir to? Like other physicians, you deem it, I doubt not, your duty to wield the powers of your art in order to free those that submit themselves to your medical care from these and from other similar sufferings. But, if it is right for you to relieve and remove these pains, why is it not right for you also to relieve and remove the pains accompanying the act of parturition? I cannot see on what principle of philosophy, or morality, or humanity, a physician should consider it his duty to alleviate and abolish, when possible, the many minor pains to which his patients are subject, and yet should consider it improper and immoral to alleviate and abolish, when possible, pains of so aggravated a character, that, in your own language, they are "absolutely indescribable, and comparable to no other pains"—pains for which there is "no other name but *Agony*".

3. *You object to anæsthesia in natural labour, because you deem the pain of natural labour "a PHYSIOLOGICAL PAIN".*

"The sensation of pain in labour is", you observe, "a physiological relative of the power or force"; and "to be in natural labour is the culminating point of the female somatic forces".

Now, for the reasons that I have already stated, I entirely doubt if we should look upon the severe sensations of pain endured by our patients as truly "physiological", for, as I have just stated, they are *not* essential to the mechanism and completion of the process in the white races of mankind; and they are absent, to a great degree, in the black. The severity of them could, I think, be easily proved to be the result of civilization, and, as I believe, of that increased size of the infantile head which results from civilization. Parturition is always physiological in its *object*, but not in some of the phenomena and peculiarities which attend upon it in civilized life.

But, waiving this point, or the discussion of it, let me state, that even if I allowed all the intense pains of parturition to be "physiological pains", I cannot conceive that to be any adequate reason for us not relieving women from the endurance of them. Because nature has fashioned any particular physiological function in any particular manner, that, I opine, is no reason why the science and art of civilized life should not, when possible, alter and amend its workings. If it were improper for us, for instance, to intermeddle with the functions of the hair of the head, or of the skin generally, then all hats and other coverings for the scalp, all clothings and coverings for the body, should be at once abandoned and unconditionally condemned. If it were improper for us to alter and amend the functions of the eye, then all optical glasses, the telescope, the microscope, etc., must be thrown aside. And indeed not later than the seventeenth century it was held and argued so in England. For, in his *History* of the first beginning of the Royal Society of London, Sprat tells us that it was generally believed that this "new experimental philosophy (namely, the philosophical papers laid before the Society) was subversive of the Christian faith"; and many, he adds, mortally hated the new philosophy.

vented optical glasses, the telescope and the microscope, as *atheistical inventions*, which perverted our organs of sight, and made everything appear in a new and false light. (Disraeli). You argue as if we should not use means to eschew the pains of parturition *because* that pain is physiological. When Columbus first discovered your mighty American continent, a large portion of the inhabitants were unprovided with any kind of dress or covering. "To most of them," says Robertson, "nature had not even suggested any idea of impropriety in being altogether uncovered." (*History of America*.) And I do think that men living in such a state, could, against the fashion of dressing, use with far greater propriety and consistency than you or me, your own argument against anaesthetics in labour. Chloroform and ether should not be used in labour (you argue), because the pain against which they protect us is natural and physiological. No kinds of clothing or dress should be used (the original Americans might have equally argued), because the cold or heat against which they protect us are "natural" and "physiological".

I have a letter lying before me on the subject of anaesthetics in midwifery, by a very highly and very justly esteemed professor of midwifery in Dublin. It was penned in the end of last year (1847). "I do not," he writes, "believe that any one in Dublin has as yet used ether in midwifery; the feeling is very strong against its use in ordinary cases, and merely to avert the ordinary amount of pain which the Almighty has seen fit,—and most wisely we cannot doubt,—to allot to natural labour; and in this feeling I heartily and entirely concur."

The argument thus used, and so very well expressed by my Irish friend, is one which has been often adduced and repeated. Some minds at first gave immense weight and importance to it. For my own part I must confess that I never could view it as possessing any great force. Look at it as applied to any other practice which happens to be sufficiently old and established; and then we will see it in its true import. Supposing, for example, it referred to the *first* introduction of carriages into use; it would then read thus: "I do not believe that any one in Dublin has as yet used a carriage in locomotion; the feeling here is very strong against its use in ordinary progression, and merely to avert the ordinary amount of fatigue which the Almighty has seen fit,—and most wisely we cannot doubt,—to allot to natural walking; and in this feeling I heartily and entirely concur."

Nay, this frequently repeated argument against such innovations becomes not only, I think, ridiculous, but really almost irreverent, when we look far backward into the march of civilization, and apply it to any practices that are so very long established as to be very antiquated, and with which, therefore, the human mind has been long and intimately familiarized. Some one (but whom I cannot pretend to say) no doubt first introduced the practice of wearing hats, or bonnets, or a covering for the head. Supposing this practice, however, stoutly resisted, as doubtless it was at first, then the argument of my Dublin correspondent against this innovation would read somewhat as follows: "I do not believe that any one in Dublin has as yet used a hat to protect his head; the feeling here is very strong against its use in ordinary weather, and merely to avert the ordinary amount of wetting and cold which the Almighty has seen fit,—and most wisely we cannot doubt,—to allot to mankind: and in this feeling I heartily and entirely concur."

Some day a canal will, in all probability, be made through the Isthmus of Panama. It has, you are well aware, long been proposed to cut one; and there and thus unite the Atlantic and Pacific Oceans. When it was proposed in the sixteenth century, the clerical historian Acosta brought forward the following reasons against it. "I am," said he, writing in 1588, "of opinion that human power should not be allowed to cut through the strong and impenetrable bounds which God has put between the two oceans, of mountains and iron rocks, which can stand the fury of the raging seas. And, if it were possible, it would appear to me very just, that we should fear the vengeance of Heaven for attempting to improve that which the Creator in his

almighty will and providence has ordained from the creation of the world." The arguments which are here brought forward by the earnest Spanish priest against man meddling with and altering the impediments to navigation caused by the natural mechanism of the Isthmus of Panama, are essentially the same as those brought forward against men meddling with and altering the agonies caused by the natural mechanism of parturition in the civilized woman. We can all, perhaps, at this time of day, see through and smile at the character of the old priest's argument with regard to the supposed impropriety of changing and cancelling, if possible, the natural obstruction to naval commerce produced by a geographical isthmus. Some years after this, perhaps, our descendants will equally see through and smile at, the analogous modern argument in regard to the supposed impropriety of changing and cancelling, when possible, the physical suffering produced by a physiological function.

The truth is, all the tendencies of man in a civilized state of society, are to intermeddle with and change, and, as he conceives, improve the action of almost every function in the body. And each such improvement has at the time of its introduction, been, like the practice of anaesthesia, very duly denounced as improper, immoral, impious, etc., etc. I might refer to numerous such cases. Let me cite only one example. The human fingers are admirably constructed by our Creator for the function of seizing and lifting objects. The late Sir Charles Bell wrote a whole octavo volume—a *Bridgewater Treatise*—on the mechanism of the human hand as beautifully adapted for this and other functions. In the reign of the earlier Stuarts, forks were introduced from the continent to assist our hands in the act or function of seizing and lifting the divided portions of meat, etc., that we wished to eat. But this was a very sad and uncalled for innovation upon the old and established physiological functions of the human fingers; and, at the time, it was as loudly opposed and decried as the modern employment of anaesthetics in aiding the physiological function of human parturition. Disraeli tells us that the use of forks was so much reprobated in some quarters, that some zealous preachers denounced it "as an insult on Providence not to touch our meat with our fingers". Nature, they argued, has herself provided us with fingers of flesh and bone and nerve; and consequently it is unnatural and impious in man to attempt, in his human pride and arrogance, to substitute for these, artificial metallic fingers of silver and steel!

I repeat,—all our tendencies and workings in the present state of civilization, are attempts to intermeddle with and change and improve the action of almost every function in the economy. And assuredly if we use means in regard to the function of parturition with the view of ameliorating and abolishing the unnecessary, but, as you call them, "absolutely indescribable" pains that attend upon it, we would be doing nothing more than what you and I and all of us are every day and every hour doing in relation to most of the other natural or physiological functions of our own bodies.*

* "The principal 'moral' objection, as it has been termed, against the employment of anaesthesia in midwifery, amounts to the often repeated allegation, that it is 'unnatural'. 'Parturition,' it is avowed, is a 'natural function,' the pain attendant upon it is a 'physiological pain' (Dr. Meigs), and it is argued that it is improper 'to intermeddle with a natural function'; and to use anaesthetics is a piece of 'unnecessary interference with the providentially arranged process of healthy labour' (Dr. Ashwell). The above is, perhaps, the most general and approved of all the objections entertained and urged at this moment against the practice of anaesthesia in midwifery. But it certainly is a very untenable objection; for, if it were urged against any of our similar interferences with the other physiological functions of the body (every one of which is as 'providentially arranged' as the function of parturition), then the present state of society would require to be altogether changed and revolutionized. For the fact is, that almost all the habits and practices of civilized life are as 'unnatural,' and as direct interferences with our various 'providentially arranged' functions, as the exhibition of anaesthetics during labour. Progression upon our own two lower extremities is a 'providentially arranged' function, a 'natural process'; and yet we 'unnaturally' supplement and assist it by constantly riding on horseback and in carriages, etc. The 'physiological process' of walking is apt to produce pain and injury of the uncovered foot of man, and we 'unnaturally' use boots and shoes to bind the foot, and add to the protecting power of the cutaneous and other structures of the sole. Mastication and digestion are 'natural processes'; but we daily intermeddle with and attempt to aid them by the arts of cookery and dietetics; and so on with regard to other functions." (From *Report on Anaesthetic Midwifery*, by Dr. Simpson, in *Monthly Journal of Medical Science* for October 1846.)

Let me illustrate this last remark by one more example; for, as I have already said, it is only in this way that we can properly judge of the soundness or unsoundness of our views of novel points in theory or practice. You are well aware that the act of parturition has been often familiarly compared, as the late Professor Hamilton expressed it, "to the toils of a journey"; and like it divided into stages. "The sufferings of the mothers", says he, "have been in most languages compared to those of travellers." Now let us for a moment continue this natural simile between the function of parturition and the function of progression. You maintain that "labour is the culminating point of the female somatic forces". One of the most illustrious Presidents of your great American Republic—Thomas Jefferson—makes in his memoirs a remark of precisely the same import regarding walking or progression. He describes the act of walking, but not exactly in the same words, as the kind of "culminating point of the human somatic forces". "Walking", says the American President, "is the best possible exercise; habituate yourself to walk very far. The Europeans, he continues, value themselves on having subdued the horse to the uses of man; but I doubt whether we have not lost more than we have gained by the use of this animal. No one has occasioned so much (as the horse) the degeneracy of the human body. Our Indians go on foot nearly as far in a day for a long day as an enfeebled white does on his horse; and he (the Indian) will tire the best horses."—*Jefferson's Memoirs*, vol. i. p. 287.

Few, or none, perhaps, will question the abstract truth of Jefferson's observations on the above point. But, because walking or progression is a "physiological" function, and the practice of it is reputed salutary, would this be, with you, a proper and sufficient reason for never setting aside or superseding in any way this "physiological" state, in the same way as you insist, on the same grounds, that the physiological pain of labour should not be set aside or superseded. Because progression is a natural condition, would this be any adequate reason for your medical advisers adopting your own arguments against anaesthesia in midwifery, and insisting upon this, that, the next time you travelled from your own city of Philadelphia to the cities of Baltimore or New York, or elsewhere, you should walk the distance on foot, instead of travelling it by railway or any other artificial mode of conveyance? What opinion would you form of the judgment of any medical adviser to whom you entrusted your own health, if, on going next time to the New York or Baltimore railway station, he should gravely and solemnly repeat to you as his patient, what you tell your midwifery patients, and, in your own language, advise you to try to accomplish the intended journey on foot as, to quote your own words, "a desirable, salutary, and conservative manifestation of life-force"? And yet this would really be nothing more than making your *argumentum ad feminam* an *argumentum ad hominem*.

You state, in a passage which I have already quoted, that even the suffering accompanying instrumental delivery by the forceps is a "physiological pain". I do not, I confess, see why the suffering attending the use of the forceps, when the head is impeded by any cause of obstruction, should be regarded as a "physiological pain", any more than the suffering attending the use of the catheter in obstruction from the prostate gland or other morbid conditions of the urethra should be regarded as a "physiological pain". They are both operations intended to remove the natural contents of the respective viscera, when their operative removal becomes necessary.

But let us waive this point and return again to the analogy between the functions of progression and parturition. Suppose you plead with your medical advisers that, instead of insisting on your going on foot, they should allow you for once to take advantage of artificial assistance, and proceed on your journey from Philadelphia to Baltimore or New York by railway, because you were unable to walk the distance in consequence of being incapacitated by a rheumatic knee, or a sprained ankle, or an inflamed or blistered toe, and they replied to you that you should not care for this,

but still proceed and suffer, because the pain you might thus suffer was, to use again your own language, still only a "physiological pain",—would that argument, let me ask, be any adequate philosophic consolation under the endurance of your suffering? Or, would you not laugh at the logic of your medical adviser, and take your seat in the railway carriage in spite of his doctrine? And I have a strong fancy that betimes, in midwifery, patients will learn to adopt exactly the same line of logic and of practice under the analogous circumstances, and think and act too exactly in the same way.

4. You object to anaesthesia in labour, because the mother, in escaping by it from the "pangs and agonies of labour", may, in a few rare cases, be thus made to encounter danger to her own life.

"Should I", you observe, "exhibit the remedy for pain to a thousand patients in labour, merely to prevent the physiological pain, and for no other motive, and if I should; in consequence, destroy only one of them, I should feel disposed to clothe me in sackcloth and cast ashes on my head for the remainder of my days. What sufficient motive have I to risk the life or the death of one in a thousand in a questionable attempt to abrogate one of the general conditions of man?" Let me add that I have seen this argument of yours once or twice republished from your letter, and strongly insisted upon by the opponents of anaesthesia in this country.

And, indeed, in a new practice, such as that of anaesthesia, and with which the mind is yet not at all familiarized; the above forms one of that kind of apparently strong statements, which it is impossible to answer directly, or, indeed, by any other way than by taking, as I have already said, a corresponding illustration and simile from some other matter with which the mind is already familiarized. Let us for a moment longer, then, adhere to the familiar comparison which I have already taken up, under the last head, between the physiological function of human parturition, and the physiological function of human progression. Suppose, then, that you and I were standing at the Philadelphia station on the first day of the opening of the railway to Baltimore or New York. I wish the passengers to Baltimore or New York, or the shorter and intermediate stations, to proceed thither by railway; but you argue with them, like President Jefferson, that "progression is the culminating point of the human somatic forces," and that "walking is a desirable, salutary, and conservative manifestation of life-force," and that progression being a "physiological function," and fatigue a physiological pain, they ought to proceed on foot. I say, "No". Place yourself in a railway carriage, and thus eschew and obviate all the great fatigue and exhausting over-exertion of foot travelling. Then comes that answer and argument of yours which I have quoted, and which would run as follows:—"But should I exhibit, sir, the remedy for fatigue (a railway carriage) to a thousand travellers, merely to prevent the physiological exertion and fatigue of walking, and for no other motive, and if I should, in consequence, destroy only one of them, I should feel disposed to clothe me in sackcloth and cast ashes on my head for the remainder of my days. What sufficient motive have I to risk the death of one in a thousand in a questionable attempt to abrogate one of the general conditions of man, viz., his power of progression upon his own two lower extremities?"

I shall not stop to inquire whether among our supposed lady passengers or patients (uninjured, as most of them are, either to long pain or long walking) more than one in a thousand would not be worn out and destroyed by taking the journey on foot. A less proportion, I believe, would be found to be ultimately destroyed by the perils and dangers of the journey by railway than by the exertion and fatigue of the journey on foot; and the walk would shake and damage, both temporarily and permanently, many more constitutions than the railway carriage. I have a firm conviction that, on the great scale, there would be found a more absolute saving, both of human life and of human

health, by adopting the means invented by art than the means provided by nature. And I most firmly believe also, that a similar difference will yet be found to hold good between the two corresponding practices, of allowing women to pass through labour afflicted with all their usual physiological "pangs and agonies", and carrying them through that process without their being subjected to the endurance of these "pangs and agonies".

But I proceed to remark, that if your supposed theory with regard to the function of parturition were carried out in regard to the other functions of the human body, it would produce a vast and mighty revolution in the practices of civilized life. Follow it out, for instance, with regard to any one of them,—as, for example, with regard to the one we have already spoken of, viz., progression,—and see what would be the results. Ever and anon our newspapers contain paragraphs, telling us of one or more human lives being lost by collisions on railways, explosions of steamboats, upsettings of stage-coaches, etc. Consequently, according to your doctrine, that featherless biped and pedestrian animal, man, should no longer, when travelling, fly in railway cars, ply in steamboats, ride in coaches, etc., for these are evidently all so many questionable attempts to abrogate what you call "one of the general conditions of man", viz., his original pedestrianism.

In the great government and police of nature, disease and death are among the most certain "general conditions of man". If your theory were true, the practice of medicine itself should, I fear, be at once and summarily abandoned, for perhaps, in your own language, it is, at best, a questionable attempt to abrogate one of the general conditions of man—his tendency to disease and death; and I am sure you will agree with me, that in this "questionable attempt", human lives are often lost from the mistakes or the passiveness, or the want of knowledge and skill on the part of the physician. In England and Wales, in 1840, there were, according to the returns of the Registrar-General, above one hundred persons publicly and officially reported as having died from the effects of one drug alone, opium. But would this be any reason, or any ground of reason, for abandoning in medicine the use of opium—perhaps, in itself, the most valuable of all the remedies in our Pharmacopœia? Would this be any adequate argument for refusing to relieve, by a dose of opium, the next appropriate case of pain that you are called to? Or, because chloroform or ether, in a very rare case, now and again produces deleterious or even fatal consequences, should we refuse, in a thousand other persons, to mitigate and annul their agonies by its use?

In your esteemed letter to me, you quote some remarks from the celebrated old work, Raynald's *Birthe of Mankinde*, the first book on midwifery printed in English. Look at the prologue to the work. It is excellent in reference to the very matter we are discussing, viz., whether the rare accidents, from abuse or otherwise, to which any good gift may occasionally subject those who use it, should be a reason for repudiating the general use of that gift. "There is not anything," says Raynald, "so absolute and perfecte, but by the occasion of the abuse thereof at one time or other, may and doth ensue greate damage and danger to mankind." He instances fire and water, "two righte necessary elements to the use of man, without the which he could not live," yet sometimes "by fire hath bin consumed and devoured whole cities and countries; by water swallowed and drowned infinite men, shippes, yea and whole regions. Againe," he continues, "meate and drinke, to the moderate users thereof, doth minister and maintain life; and, contrary, to the unmeasurable and unsatiate gourmands and gluttons, it hath full many times brought surfeet, sicknesse, and at the last, death.... But," he argues, "should men for the avoyding of the aforesaid inconveniences, and for the reasons above said, condemne and banish fire and water, or forsake their meate and drinke? No, it were but madnesse once to thinke it."

Before passing from these, your supposed dangers from and objections to anæsthetics, let me add two remarks:—

First. I do believe that if improperly and incautiously given, and in some rare idiosyncrasies, ether and chloroform may prove injurious or even fatal, just as opium, calomel, antimony, and every other strong remedy and powerful drug will occasionally do. Drinking cold water itself will sometimes produce death. "It is well known," says Dr Taylor, in his excellent work on Medical Jurisprudence, "it is well known that there are many cases on record, in which cold water, swallowed in large quantity, and in an excited state of the system, has led to the destruction of life." (p. 8.) Should we, therefore, never allay our thirst with cold water? What would the disciples of Father Matthew say to this?

But secondly. You and others have very unnecessary and aggravated fears about the dangers of ether and chloroform; and in the course of experience you will find these fears to be, in a great measure, perfectly ideal and imaginary. But the same fears have, in the first instance, been conjured up against almost all other innovations in medicine, and even against innovations in the common luxuries of life. Revert again to our old simile regarding travelling. Cavendish, the Secretary to Cardinal Wolsey, tells us, in his life of that prelate, that when the Cardinal was banished from London to York by his master Henry VIII, many of the cardinal's servants refused to go such an enormous journey; for they were, says Cavendish, "loath to abandon their native country, their parents, wives, and children." The journey, which can now be accomplished in six hours, was considered then a perfect banishment. We travel now between London and Edinburgh (some four hundred miles) in twelve or fourteen hours. A century ago, the stage coach took twelve or fourteen days. And in his life of Lord Loughborough, Lord John Campbell tells us that when he (the biographer) first travelled from Edinburgh to London, in the mail-coach, the time was reduced to three nights and two days; but, he adds, this new and swift travelling from the Scotch to the English capital was wonderful; "and I was gravely advised," adds Lord John, "to stop a day at York, as several passengers who had gone through without stopping, had died of apoplexy from the rapidity of the motion." (*Lives of the Lord Chancellors*.)

Be assured, that many of the cases of apoplexy, etc., alleged to arise from anæsthetics, have as veritable an etiology as this apoplexy from rapid locomotion; and that a few years hence, they will stand in the same light in which we now look back upon the apoplexy averred to be caused by travelling ten miles an hour. And as to the supposed great moral and physical evils and injuries arising from the use of anæsthetics, they will by and by sound, I believe, much in the same way as the supposed great moral and physical evils and injuries arising from using hackney-coaches, were seriously described by Taylor, the water poet, two or three centuries ago, when these coaches were first introduced into London. In his diatribe against hackney-coaches, Taylor warned his fellow creatures to avoid them; otherwise, to quote his own words, "they would find their bodies tossed, tumbled, rumbled, and jumbled, without mercy." "The coach," says he, "is a close hypocrite; for it hath a cover for knavery; they (the passengers) are carried back to back in it like people surprised by pirates; and, moreover, it maketh men imitate sea-crabs in being drawn sideways," and altogether "it is a dangerous carriage for the commonwealth." Then he proceeds to call them "hell-carts", etc., and vents upon them a great deal of other abuse, very much of the same kind and character as that which has been lavished against anæsthetics in our own day.

In the course of your remarks, you imply, I think, though you nowhere explicitly state, another objection to anæsthetics in midwifery, viz.:—

5. *You object to anæsthesia in labour, because you do not consider that the mother encounters danger to her health or life from the endurance of the pains.*

"I have been accustomed," you observe, "to look upon the sensation of pain in labour as a physiological relative of the power or force; and, notwithstanding I have seen so

many women in the throes of labour, I have always regarded a labour-pain as a most desirable, salutary, and conservative manifestation of life-force."

If you hold, as your language appears to me to imply, that the sensation of pain, even when, as in labour, the degree of the pain is "absolutely indescribable", has no morbid or deleterious influence upon those who endure it, then I most decidedly disagree with you. On the contrary, I sincerely believe that the human constitution is so constituted that it cannot endure pain, particularly when that pain is long in duration, or severe in degree, without being more or less affected and injured by it. I know of many medical and obstetric authors, from the time of Ambrose Paré down to the time of Travers, Gooch, Alison, Burns, etc., who have stated and explained the common and hitherto unchallenged opinion of our profession in all ages, that pain was, *in itself*, deleterious and destructive, causing depression of the heart, syncope, and even, when in excess, sometimes producing speedy and sudden death. But, till the discovery in your own country of the possibility of annulling the pains of surgical operations by the inhalation of ether, I know of no writer in medicine, in surgery, or in midwifery, who held that pain, when "absolutely indescribable" in degree, was a matter of no importance in regard to the life or health of the sufferer, and should not be relieved even when we had the complete power of relieving it.

If the mere pain of the labour were, as you state, a "desirable, salutary, and conservative manifestation of life-force", its long continuance—the very length of it—would insure more certainly the health and safety of the patient, than its shortness. Anything "salutary and conservative" to the constitution, should manifestly be safe in proportion to the length, and dangerous in proportion to the shortness of its duration. But as far as regards the life and health of the mother, the pain of labour is perfectly the reverse of all this. It is safe in proportion to its shortness, and dangerous in proportion to its length. In the Dublin Hospital, (the tables of which afford the only data on this point that I know to refer to) when the women were six or eight hours in labour, thrice as many subsequently died as when their pain did not exceed two hours; of those that were from twelve to twenty-four hours in labour, five times as many subsequently died as of those that were from four to six hours ill: and so on in a regular progression. The longer this supposed "salutary and conservative manifestation of life-force", as you term it, endured, the greater became the mortality; so that, in the long run, the maternal mortality was *fiftyfold* greater among the women that were above thirty-six hours ill, than among those who were only two hours in labour; one in every six of the former dying in childbed, and one only out of every 320 of the latter.

Some time ago, I published a long series of statistics, tending to show, that out of a large collection of cases of the same operation (viz., amputation of the limbs), performed with and without anæsthesia, those who were operated on under anæsthesia (and consequently without the usual suffering), recovered in a much larger proportion, than those who had the same operation performed without anæsthesia, and whose constitutions were subjected to the endurance of the usual pains and agonies of the surgeon's knife.

The same result holds good, I believe, in midwifery as in surgery. Save the maternal constitution, either by natural or artificial anæsthesia, from the endurance of the pains connected with parturition, and you will enhance both the chances of her recovery and the facility of it. Among your red Indian and other uncivilized tribes, the parturient female does not suffer the same amount of pain during labour, as the female of the white race; and in consequence of this escape, they recover far more rapidly from the effects of parturition. Nor are fatalities at all common among them. So easy is the convalescence among uncivilized tribes, that Strabo, Marco Polo, and other historians and travellers, tell us of whole communities in which the husband

immediately went to bed for a number of days, upon the birth of a child, and the wife watched and nursed him. "They that write the history of America," says Guillemeau, "tell of the women in that country, that, as soon as they be delivered, they presently rise up and lay their husbands in their room, who are used and attended like women in child-bed." (*Childbirth: or the Happy Delivery of Women*).

Among the patients who have been delivered in Scotland, under anæsthesia, the rapidity of the stage of convalescence has, as a general rule, been increased in a degree that seems often to have surprised the patient herself, as much as her escape from the labour pains themselves. Many of my obstetric brethren have remarked this circumstance to me. In fact, on awaking after delivery, the patient does not encounter and endure the usual feelings of exhaustion and fatigue. Some have declared to me, that they have felt as if they had awoke from a refreshing sleep. And when we consider the capabilities for the endurance of suffering and exertion, among the class of patients in civilized life upon whom you and I attend, perhaps the propriety for employing anæsthesia during labour may appear still more evident. Unaccustomed by their mode of life to much pain and fatigue, patients in the higher ranks of life are not fitted to endure either of them with the same power or the same impunity as the uncivilized mother, or even as females in the lower and hardier grades of civilized society; and hence is there not the greater propriety and necessity in the physician employing all the means of his art, so as to save them, as far as possible, from their sufferings? To illustrate the point, let us revert again to our old comparison between the physiological functions of progression and parturition. Let us compare for a moment our ideas of the effects of fatigue from walking, and of pain from parturition, upon the female constitution: and surely the comparison is not an unfair one for your views, as far as the severity of the effects of the two influences, physical fatigue and physical pain, are concerned; for surely the effects of pain, of "absolutely indescribable pain", should be greater upon the constitution than mere muscular fatigue. Suppose then that our patients, at the end of the ninth month of pregnancy, had to walk on foot a continuous journey of one, two, three, six, or a dozen or more hours' duration, that is, of five, ten, twenty, or thirty miles, or upwards, *instead* of passing through a continuous journey of recurring labour pains of the same duration, the pains gradually becoming stronger, and latterly becoming "absolutely indescribable, and comparable with no other pains"—what would be the result, with, say one hundred ladies of the upper classes of society? Some of them might be little or not at all affected by the journey; others, weak perhaps when they began, would suffer more or less severely from it. Not a few would be inclined sooner or later to stop, and beseech you, if you were the medical attendant upon them, to save them from further exertion and fatigue, by allowing them to be carried or coached the required distance. In answer to their solicitations, would you console them by telling them that, after all, progression was a "conservative manifestation" of life-force, and free from danger; or would you take the other view, and allow them the means of travelling the required distance by carriage or rail? I am sure you would have recourse not to the former but to the latter, for you would fear and dread the effects of fatigue upon the fragile constitutions of your lady patients. And I repeat, that certainly the effects of the endurance of pain are as great, if not greater, upon the constitution, than the effects of the endurance of fatigue. But if you would allow your patients to ride the supposed journey, instead of unnecessarily forcing and compelling them to walk it on foot, equally, I think, should you allow them to escape what you term the "pangs and agonies of travail", by saving them by chloroform, or other anæsthetic agents, during their travail, from all the unnecessary endurance of these pangs and agonies.

You state "I have not yielded to several solicitations as to the exhibition (of anæsthetics) addressed to me by my patients in labour." If, when driving out into the country, you perchance meet one of your fair patients, a husband

from Philadelphia, walking homeward, but so tired and way-worn that every five or ten minutes she stopped and groaned for fatigue, "absolutely indescribable and comparable to no other fatigue", I am sure you would consider yourself bound, on the principles of mere common humanity alone, not to withstand her "solicitations" to be driven home in your carriage, and thus relieved of her present anxieties and suffering (not to speak of the future morbid effects of these). And I cannot see why, if you do this (and who would not do it?) to relieve a patient from the mere effects of fatigue, you could refuse to relieve the same lady when in "the pangs and agonies of travail", from the endurance of pains which are, in your own words, absolutely "indescribable and comparable to no other pains".

"Perhaps," you observe, "I am cruel in taking so dispassionate a view of the subject." Of course it would ill become me to pass any such judgment upon you. But I feel this, that you and I, and other teachers of midwifery, are placed, in reference to this question, in a position far more fearfully responsible than ordinary medical practitioners. The ordinary obstetric practitioner has little or no power, except over the relief or the perpetuation (according as he may choose it) of the sufferings of his own immediate patients. But you and I, as obstetrical teachers, may, through our pupils, have the power of relieving or of continuing the sufferings of whole communities. If, perchance, you persist for some years longer in your present opinion, it will have the effect of inflicting a large amount of what I conscientiously believe and know to be altogether unnecessary agony and suffering upon thousands of our fellow-beings. If you review and alter your opinions, which I earnestly hope you will do, and make yourself sufficiently acquainted with the peculiarities in the mode of action and mode of exhibition of chloroform during labour, a vast proportion of human suffering may, even within the next few years, be saved by your happy instrumentality and influence.

Feeling as I do deeply the great responsibility in this respect of your situation and of mine, I trust you will kindly pardon and excuse me, if anywhere in the preceding remarks I may have appeared to defend my views with too much earnestness. If I had to rewrite or revise the observations, I would perhaps have stated them more accurately; but I must send them as they are; and along with them I beg to send also the most sincere esteem and reiterated respects of,

My dear Sir, yours very faithfully,

J. Y. SIMPSON.

To Dr. MEIGS,
Professor of Midwifery, Philadelphia.

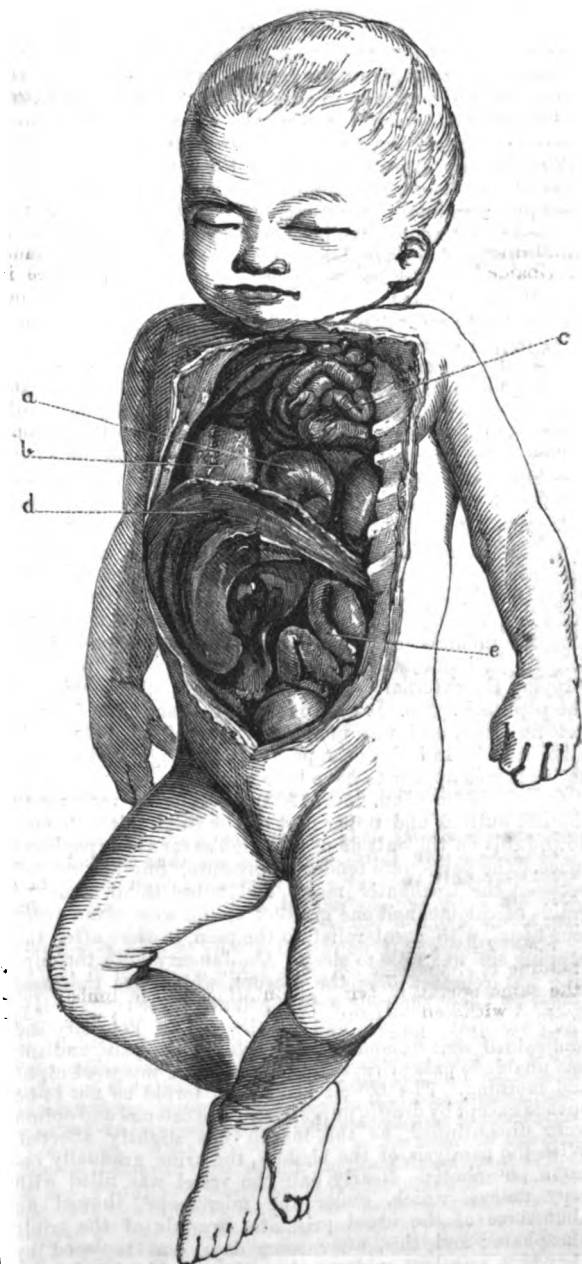
CASE OF CONGENITAL DIAPHRAGMATIC HERNIA.

By JAMES CRANG, Esq.

On February 5th, I was hastily summoned to attend Mrs. K., in her confinement. On my arrival, I was informed that she had been in labour seven hours. On an examination, I found the membranes ruptured, and the head of the foetus presenting. The labour progressed favourably, and she was delivered of a well formed female infant; which showed very faint symptoms of life. The pulsation of the funis having ceased; I instantly divided it, and used every possible effort to save the child. No action of the heart could be discovered on the left side; but on grasping the chest, I felt, as I then believed, a slight pulsation in my thumb. I then placed two fingers on the same spot, and felt two distinct beats of the heart on the right side; after which it ceased. I felt great anxiety to open the body, and earnestly requested the parents to allow this to be done. They readily consented.

EXAMINATION OF THE BODY. On February 7th, my son accompanied me; and on separating the sternum from the ribs, and turning it back, we discovered the heart and both lobes of the lungs folded together on the right side,

and resting on a portion of the ileum, the other portion of which, with the stomach, large intestines, etc., filled the thorax. The diaphragm was perfect, with the exception of a small round aperture, which admitted a straight part of the colon to descend to the rectum. The liver, covering the kidneys, filled the abdominal cavity. The contents of the pelvis were perfect and well defined.



a. Stomach.

b. Heart.

c. Intestines within cavity of thorax, pushing the lungs upwards and to the right side.

d. Left lobe of liver turned up. The rough edge of the diaphragm is seen above it.

e. Portion of intestine within abdomen. The bladder is conspicuously seen in its usual situation.

Dr. J. G. Swayne, of Clifton, has kindly furnished me with a drawing of this case; and I intend exhibiting it at our anniversary Meeting at Swansea. The preparation is deposited in the Museum of the Bristol Medical School.

Timsbury, Somerset, July 1853.

CLINICAL NOTES ON CASES IN THE ROYAL SOUTH HANTS INFIRMARY.

By JOSEPH BULLAR, M.D., Physician to the Royal South Hants Infirmary.

INFLAMMATION OF THE SCIATIC PLEXUS.

DR. ROMBERG, in his valuable and very complete treatise on *Diseases of the Nervous System*, translated by Dr. Sieveking, and published by the Sydenham Society, remarks that we are too apt to look on sciatica as the sole representative of neuralgia of the inferior extremities: whereas there are no branches of the lumbar or sacral plexus which may not be affected; though, by the absence of an accurate diagnosis, founded on a knowledge of the course of the nerves, we are apt to look at them in the gross, and often also to disguise them under the conventional terms of lumbago, rheumatic pains, etc. The following case is to the point. It would have been called sciatica if seen early, or paralysis of the bladder, had its early history not been known; though, by comparing the history and symptoms with the anatomical distribution of the nerves affected, it was evidently an instance of inflammation at first affecting the external branches of the sacral plexus, which form the lesser sciatic, passing subsequently into paralysis; and as the numbness was attended by paralysis of the bladder and rectum, and as these parts are supplied by the internal nerves of the sacral plexus, it is a fair inference that these were also involved. The pain was not severe below the ham, but there was tenderness on pressure between the tuber ischii and the great trochanter, so that the greater sciatic was probably somewhat involved, though not severely.

CASE. Mary N., aged 35, unmarried, a tall and large woman, had been ill four weeks before admission into the Royal South Hants Infirmary. She first suffered from severe pain in her back, and this was followed by a sudden sensation of numbness and loss of power of the upper part of the left thigh, immediately succeeded by very severe pain occupying the external surface of the thigh, and reaching to the popliteal space. It was so intense that she often fainted, got no sleep, and was unable for five nights before admission to lie in bed, as the pain was then aggravated. No active means appear to have been adopted.

On admission (Jan. 25th, 1853) she referred the pain to the left buttock and upper part of the thigh; it extended downwards on the outside of the thigh as far as the popliteal space. The parts were tender on pressure. She was cupped between the trochanter major and tuber ischii, and two grains of calomel and one grain of opium were given every four hours, with great relief to the pain, so that after the cupping she was able to sleep. On January 28th the cupping was repeated over the sacrum, which was the most tender spot, and the pills were continued three times a-day. The pain quite abated; and on the 2nd of February she complained that numbness had replaced the pain, and she was unable to pass urine, so that the catheter was used night and morning. The bowels became so torpid as not to be opened except by drastic purgatives. The calomel and opium were discontinued, as the mouth was slightly affected. With the paralysis of the bladder, the urine gradually became phosphatic. Nearly half the vessel was filled with ropy mucus, which, under the microscope, shewed an abundance of the usual prismatic crystals of the triple phosphate; and this, after some days, was replaced by abundant purulent matter coloured with blood. As this continued to increase, the bladder was injected night and morning with one drachm of diluted nitric acid to a pint of water, and an ounce and a half of the infusion of the *diosma crenata* was given three times a-day. Under these means, the bloody pus diminished in quantity and ceased to be secreted, and the urine gradually regained its healthy, acid state, but the bladder remained paralytic, and the bowels were never opened, except by strong aperients, and then the motions were usually passed in bed. On the 4th

March, one grain of strychnine was added to each pint of infusion of buchu; and on the 9th, in addition, five

grains of the pilula ferri comp. were ordered twice a-day; on the 10th, sixteen minims of the tinct. ferri hydrochl. three times a-day were substituted for the pills. Under the steady use of these chalybeates, the power of the bladder slowly returned; and on the 7th of April she was discharged. The bladder, however, had become more irritable than natural, and she still complained of numbness over the left buttock and outer surface of the thigh, and some weakness of the limb. In other respects she was well. Two months afterwards, although she did not make water more frequently than usual, yet occasionally she would pass it suddenly and involuntarily; and she still complained of the numbness and want of the usual strength of her left leg. Her health was good.

REMARKS. Judging from the seat of pain in the first instance, and from the numbness of the integuments, and the paralysis of the bladder and rectum subsequently, this case was one of inflammation chiefly affecting the internal branches of the sacral plexus which supply the rectum, bladder, and uterus, and of those external branches which form the lesser sciatic. The inflammation, which was severe and acute, was followed with loss of nervous power, indicated by paralysis of the bladder and rectum, and numbness over the gluteal surface, groin, and external surface of the left thigh. Cupping, with calomel and opium, relieved the inflammatory condition of the nerves, speedily subduing the pain, and after the inflammatory symptoms had subsided, the paralytic condition of the bladder gradually yielded to full doses of iron and strychnine. The value of injections containing diluted nitric acid, as recommended by Sir B. Brodie, was very marked in stopping the profuse secretion of purulent matter mixed with blood from the mucous membrane of the paralysed bladder. Until these injections were used, this secretion increased rapidly, commencing with that ropy mucus which is said to be the effect of phosphatic urine or pus-globules, and then becoming like pus mixed with a very considerable quantity of blood, and daily increasing in quantity. The effect of the injection was decided; the secretion diminishing, losing its bloody appearance, and soon ceasing. The infusion of buchu, which was given at the same time, was also of service in restoring the urine to a healthy state. As might have been expected from the severity and long continuance unchecked of the inflammation of the nerve, and the great disturbance of the bladder, the latter remained irritable after the paralysis had been removed, and the integuments supplied by the lesser sciatic nerve continued to be less sensitive than natural.

Southampton, July 1, 1853.

BIBLIOGRAPHICAL NOTICES.

REPORT ON SMALL-POX AND VACCINATION, presented to the President and Council of the Epidemiological Society, by the Small-Pox and Vaccination Committee, the 26th day of March, 1853. Printed by order of the House of Commons.*

This Report commences with a statement of the circumstances under which it was produced, Lord Lyttelton having introduced into the House of Lords a Bill for the extension of Vaccination; and the Committee considering it desirable that he and the Government should be put at once in possession of the facts collected by them. It consists of the statistics of small-pox and vaccination in Great Britain and Ireland, and in various European countries from which information had been received. It also contains an account of the laws and regulations connected with vaccination, adopted in different countries.

This information was obtained from the most authentic sources: in *England*, from the Registrar General, the Poor-law Board, the Board of Health, the public vaccination

* This Report is to be obtained at HANNAH'S, New Turnstile, or at Street, Westminster. Price 6d. It is named on the back "Lancet, Seaton", etc.

and from many hundreds of private medical practitioners throughout the country; *abroad*, from the government of each country, through its ambassador or representative at the Court of Her Majesty. The information thus received has been very full and satisfactory on several points:—

I. THE EVILS OF UNCHECKED SMALL-POX, although too well understood to require demonstration, have been presented before the Committee in a definite and authentic form.

II. THE SAFETY AND EFFICIENCY OF VACCINATION, AS A PROPHYLACTIC AGAINST SMALL-POX, appear to have been satisfactorily established, not only as the concurrent and unanimous opinion of nearly two thousand medical men who have corresponded with the Committee, but also on the following grounds:—

1. The general immunity from small-pox, with which it is found that those who have been vaccinated can mingle with small-pox patients. This fact requires no proof, being fully admitted on all hands.

2. The gradual decrease in the mortality from small-pox, as compared with the general mortality, since the introduction of vaccination. This is illustrated by tables, showing the average mortality from small-pox within the bills of mortality every decennial period, during the half century preceding vaccination, as compared with the mortality during the last half-century. A century ago, the rate was about 100 deaths from small-pox to every thousand deaths from all diseases: the present rate is 16 deaths from small-pox to every thousand. A similar result appears in the various European countries, in which the average deaths from small-pox have been reduced by vaccination from 66·5 to 7·26 per 1,000.

3. The virulose mortality is lowest in those countries in which, by compulsory laws or otherwise, vaccination is most efficiently carried out. "On this point", say the Committee, "we have obtained the most important and authentic information."

"But we would first desire to give a summary of the laws respecting vaccination in some of the principal European states. Those from which we have already received replies to our inquiries addressed to them on this head, are France, Belgium, Sardinia, Prussia, Lubeck, Hanover, Frankfort, Bavaria, the Grand Duchy of Oldenburg, Hamburg, Austria, and Sweden. From the following countries we have not yet received information: Holland, Naples, States of the Church, Parma, Tuscany, Spain, Portugal, Russia, and Turkey.

"With regard to the kingdoms contained in the first category, we may state that, in most of them, with or without the aid of laws rendering the omission of vaccination penal, the performance of that operation is made essential to the enjoyment of so many municipal and other advantages, that the general diffusion of it is pretty certainly attached. In Austria, Bavaria, France, Prussia, Sardinia, Lubeck, Frankfort, and Hamburg, the production of a certificate of successful vaccination is an indispensable preliminary to admission to public schools, and in many instances to private schools. In Austria, Frankfort, Sardinia, Belgium, and Lubeck, no relief is given from public funds in case of poverty; there is no admission to almshouses or orphan asylums, without a similar certificate. In Frankfort, proof of vaccination is an indispensable condition of citizenship; nor is any person allowed to take a servant or apprentice who has not been properly vaccinated. The same rule, so far as apprenticeship is concerned, applies to Bavaria; in which country, as well as in Prussia, even the rite of matrimony is withheld until the proper certificates or other evidence of vaccination have been produced.

"In the kingdoms last named (Prussia and Bavaria), direct compulsion by fine is employed in addition to these means; the fine in Bavaria augmenting annually until the law is complied with. In Austria there is no fine; but if it be known to the police that a person is unvaccinated, they have authority to take him forthwith and see that the operation is performed.

"Two countries only, of those from which we have received information, appear to rely wholly on the system of fine, and do not employ any of those indirect measures which we have enumerated. In Hanover, the punishment is fine or imprisonment. In Sweden, a person who refuses to comply is taken before the magistrate and reprimanded in the first instance; he is after-

wards fined, if he continues to disobey; and the fine is increased until obedience is obtained. It is right, however, to state, that in both these countries, as well as in Austria, Bavaria, and the Grand Duchy of Oldenburg, great facilities for vaccination are afforded to the population by the appointment of district vaccinators (paid generally by the state), whose duty it is to vaccinate at appointed times and at convenient stations, or even from house to house.

"In France and Belgium, rewards (prizes, and gold and silver medals) are given to those vaccinators who have distinguished themselves by zeal in the discharge of their functions.

"In Great Britain and the United States of America, vaccination (except for those who enter the military and naval services, and the like) is entirely voluntary; nor are any inducements held out to medical men to encourage them to exertion."

The results of these opposite modes of proceeding are illustrated in two tables, one of which shows the mortality in various places in England, Scotland, and Ireland, from small-pox, as compared with the total mortality, for ten years, ending 1840 or 1851; the other shows the mortality from small-pox in various countries in which vaccination is directly or indirectly compelled, as compared with the total mortality for various periods stated in the "tables exhibiting the mortality from small-pox in various countries," at the end of this Report. The Report then proceeds as follows:—

"On looking at these tables, we cannot fail to be struck with the fact, that the proportionate mortality from small-pox in England and Wales is considerably more than double what it is in any country in which vaccination is compulsory. So likewise, as will be seen by reference to the tables printed at the end of this Report, the proportion of deaths from small-pox in London to the total mortality is three times, and in Glasgow as much as six times, what it is in Brussels, Berlin, or Copenhagen.

"We are here desirous of stating to the Council our opinion, that the results exhibited in the second of the tables given above, favourable as they are to vaccination, would be still more so, if, in the countries comprised in it, proper regulations existed with regard to the age at which the operation should be performed. In some of those in which direct compulsion is employed, the public vaccinations being annual, it necessarily happens that a large number of the children are many months, a year, or more than a year, old, before the opportunity is afforded them of becoming protected; while in those states in which the compulsion is only indirect (as by requiring certificate of vaccination for school attendance, etc.), it is clear that the operation may be much longer deferred. The consideration is a very important one, for a large proportion of the mortality from small-pox occurs under the age of one year. We shall have to show, by-and-by, that, in England and Wales, this proportion is as high as 25 per cent.; and, though we have not facts for determining what is the percentage in the various continental states, we may infer from the returns which we have from Paris (where it is found to be upwards of 14 per cent.), that this must be very considerable.

"It is possible that to some difference in custom with regard to the age at which vaccination is performed, may be due a portion of the discrepancy found to exist in the amount of mortality in the countries comprised in the second table, varying as it does from eight per 1,000 in Saxony to two per 1,000 in Lombardy. Much also will be due to the nature of the provisions of the various enactments, but probably still more to the zeal and energy with which these are enforced; for, even in those countries in which the laws are most stringent, it is not to be denied that they may be and sometimes are evaded. If good laws could be so worked as to secure universal vaccination, there is little doubt that the mortality from small-pox might be reduced everywhere, even below what it is in Lombardy, if, indeed, it might not be wholly got rid of. In the kingdom of Hanover, in the year 1847, out of a total mortality of 45,850, there were but eight deaths from small-pox, or one in 5,728; and

* "How much depends on this will be seen by referring to some tables inserted in the Appendix (A.), in which are given the vaccinations for ten years (from 1841 to 1850) in the whole kingdom of Belgium and in the province of Luxembourg. From these, it appears that while the vaccinations in the entire kingdom were to the births as seven to twelve only, in Luxembourg they were as ten to eleven. The law in this province being, of course, the same as for the rest of the kingdom, the excellent state of vaccination must be mainly due to administrative zeal and activity."

we find it stated on the highest medical authority, that in Denmark 'variola had at one time disappeared before the defensive influence of compelled vaccination'; though it is added, that 'chance, and a careless security engendered by the absence of the pest, have led to its re-introduction there.'

"The consideration we have just suggested is of the utmost importance, and well worthy of the best attention of our legislators; for we are firmly convinced that no law will be efficacious unless it holds out inducements to stimulate the zeal and energy of those employed to put it in action; while at the same time it is worked with a machinery and in a mode in accordance with the feelings of the people. In the course of our inquiries, we have had ample opportunities of seeing the value of administrative exertions, both with regard to the working of the Vaccination Act in this country by the Poor-law Board, and more especially in the extension of vaccination in Bombay on a purely voluntary system by energetic and indefatigable vaccinators."

4. The efficiency of vaccination as a prophylactic is further demonstrated, by examples of the immunity from small-pox enjoyed by well vaccinated villages or districts, when it was raging as an epidemic in surrounding ill vaccinated places; also by examples of the importation of a case of small-pox into a well vaccinated district, in which, though no particular isolation was observed, the disease did not spread beyond the imported case; and again, by instances of variolous epidemics, which had already invaded a place, being arrested by the prompt vaccination of all who were not protected. These examples, which are very numerous, are supplied by provincial practitioners, among whom may be mentioned Mr. Ceely, of Aylesbury, and other members of the Provincial Medical and Surgical Association.

III. THE STATE OF VACCINATION IN ENGLAND AND WALES is then reviewed by the Committee, who commence their observations on this subject, as follows:—

"A conviction of the value and protective power of vaccination has induced the legislature to pass acts for its extension. The working of these enactments, and the present state of England and Wales with regard to vaccination, have been subjects of the most earnest inquiry by this Committee; and we now proceed to lay the results before you.

"An exposition of this kind is the more urgently required, inasmuch as there is reason to believe that the most serious errors prevail respecting the extent and nature of the legislative provisions made to secure the vaccination of the population, and especially because, as so many years have elapsed since the great discovery of Jenner, and as several acts of Parliament have been passed to promote vaccination, the notion might naturally arise, that, as small-pox still commits such ravages among us, this mortality must have been owing rather to a failure in the protective powers of vaccination, than to any want of its diffusion.

"The only general provision for securing the vaccination of the population is the act of 1840, entitled, 'An Act to extend the practice of Vaccination', as amended by a second act passed in 1841. We have reason to know that an idea prevails to some extent, and even in official quarters, that the National Vaccine Establishment has powers for insuring the vaccination of the people. This erroneous inference renders it incumbent on us to explain that that institution, although it has rendered great service to the community, is, in virtue of its powers, simply and exclusively engaged in supplying lymph, which, as the annual reports show, it has effected to a very large extent. As to the actual practice of vaccination, this is confined to London, and is only carried on there for the purpose of obtaining the necessary supply of lymph, not for securing the vaccination of the population.

"There are two other institutions engaged in providing for the supply of lymph, the Royal Jennerian Society, and the Small-pox Hospital, both of which are supported by private contribution, and have no powers conferred on them by the Legislature.

"The Act of 1840-41, applies to England, Wales, and Ireland, but not to Scotland, for which country no legislative provision has been made. The principal provisions are as follows:—

"1. Boards of Guardians are authorised and required to contract with their medical officers or other practitioners for the gratuitous vaccination of all persons resident in their re-

spective unions or parishes, the expense being defrayed out of the poor-rates.

"2. A copy of the contract so made is required to be transmitted to the Poor-law Board, who have power within the period of fourteen days of the receipt of the contract, to annul the same, if they see fit.

"3. The Poor-law Board are empowered and required to issue regulations, which are binding on the guardians.

"4. The public vaccinators appointed as above, are required, from time to time, to report the number of persons vaccinated by them. The practice is, that the books of the vaccinators are laid before the guardians at each of their meetings, which are held weekly or fortnightly.

"5. Inoculation with variolous matter is declared to be an offence, punishable by imprisonment for any term not exceeding one month.

"6. Vaccination, as performed under this Act, is declared not to constitute parochial relief or alms.

"When this Act was passed, the Poor-law Commissioners were in existence, and to them was intrusted the administration of the measure in the whole of the United Kingdom (Scotland being, as above stated, excepted).

"But in 1847, the constitution of the Commission was altered, and at present the Act is administered in England and Wales by the Poor-law Board, and in Ireland by the Poor-law Board of that country.

"This enactment has now been in force thirteen years; sufficient time has thus been afforded for judging how far it has realised the intention of the Legislature in securing the proper vaccination of the people of the United Kingdom. As regards England and Wales (to which the present Report more particularly relates), we have had ample opportunity of ascertaining the results, and we expect in a short time to be able to present to the Council an exposition of the existing state of vaccination in Ireland.

"The most important source of information to which we have had access, as illustrating the actual state of vaccination in this country, consists of the Reports of the Poor-law Board, and of the annual returns forwarded to the Board from every union and parish in England and Wales.

"But, before proceeding to detail this information, we will give a short sketch of the proceedings of the authorities charged with the administration of the Act of 1840."

The Report then reviews these proceedings up to the present time, including, of course, the subject of fees paid to medical men. It appears that in England and Wales, the fee for each successful case varies from 1s. to 2s. 6d., never falling below or rising above these sums. The average payment per case for the eleven years, 1841 to 1847 inclusive, has been 1s. 5½d. In Ireland, the payment is still lower, generally 1s., often 6d.; in three or four instances 3d. and 4d. The Report notices and justly condemns a most vicious system, which obtains in a few unions in England and Wales, but is almost universal in Ireland, of paying a larger sum for a given number of cases, as 50, 100, or the like, and a smaller sum for all above. It then continues:—

"According to the information we have received, it is found, as might be anticipated that, on the whole, vaccination is more efficiently carried out in those districts where the higher fee of 2s. 6d. is paid; or where, as in large towns, the number and proximity of children requiring vaccination compensate the vaccinator in some degree for a lower payment. Our inquiries also enable us to state, that many public vaccinators deem the usual fee too low; and the consequence is, that vaccination is often delayed till a large number of cases have accumulated, or till small-pox has broken out in the locality, a mode of procedure which it is obvious must often lead to a sacrifice of life.

"It is incumbent on us to state further, that from various quarters we have received information that the exertions of the public vaccinators are not unfrequently discouraged, by members of Boards of Guardians remonstrating whenever any large number of vaccinations had been reported; and we cannot but record our apprehensions, that objections such as these have a tendency to check the efforts of medical officers, and thus to act prejudicially on the public welfare."

In proceeding to their review of the state of public vaccination in England and Wales, the Committee state this fundamental proposition—that the real test of the efficiency of any system of public vaccination is

total number vaccinated under it, but the number vaccinated *within a given period after birth*. The importance of attending to the age at which this operation is performed receives the most ample illustration at the hands of the Committee, and constitutes one of the most valuable features of their Report. They shew that 11 per cent. of the total mortality from small-pox occurs under the age of four months; 25 per cent. under one year; from 51 to 57 per cent. under the age of three; and from 75 to 80 per cent. under the age of five. Thus, of 58,006 persons who died of small-pox in Ireland from 1831 to 1841, 45,826 were under the age of five. Applying these results to the system at present pursued in this country, they shew that, while the total number vaccinated by the public vaccinators falls far short of what it should do under better arrangements, more than half of those who are so vaccinated are not done until after they have attained the age of one year. Thus, in 1852, in England and Wales, while 194,089 children were vaccinated under the age of one year, no fewer than 203,039 were vaccinated above that age: that is to say, for one year after birth at least, they had gone wholly unprotected, although one-fourth part of the total mortality from small-pox occurs within that period. And of course the case is still worse when the operation is still further delayed, as is found frequently to occur, till the child has attained its second or third year. This enormous evil is found to prevail, though in different degrees, in all parts of the country; and the Report gives a variety of illustrations of the prejudicial results of it, and shews how totally unnecessary it is.

The Committee appear to have been struck with the great, and indeed unaccountable, discrepancies found to exist in the various unions and parishes, with regard to the state of vaccination.

"On reviewing the Poor-law Returns, the first thing that strikes the inquirer is the extraordinary difference in the several unions and parishes, especially in the agricultural districts, as to the numbers vaccinated in proportion to the numbers born. These differences cannot be explained by peculiarities connected with one set of unions as contrasted with another set; they do not, for example, depend essentially on the poverty or wealth of a population; nor on the character of a district, whether it is manufacturing or agricultural; nor even on the fee paid to the vaccinator for each successful case. All these may, and doubtless do, operate to a considerable extent, but they are not the determining causes of the relative condition of vaccination. We have found, for instance, that unions under the same general conditions of wealth, employment, and remuneration to the vaccinator, present marked differences as to the vaccination of their population, manufacturing districts compared with manufacturing districts, rural unions compared with rural unions, etc. There are doubtless modifying peculiarities in some unions, such as the practice of vaccinating at dispensaries, at ironworks, in clubs, and so on, where other than the public vaccinators are employed; but these circumstances can have but a limited influence in the kingdom at large. Still, on the whole, it will appear that vaccination is more neglected in rural districts than among town populations.

Then follows a comparison between the numbers vaccinated in Birmingham, Manchester, and other large towns, with the number vaccinated in about twelve rural districts; the results of which are explained in the following comment:—

"Although all these instances indicate great neglect, inasmuch as in the eleven towns enumerated, no fewer than 7,815 persons in twelve months were vaccinated above the age of one year, still the balance, as indicated by the percentage of vaccinations under one year to the total births, is much more favourable than in the case of the twelve rural districts."

In the towns, the births in 1851 being 38,603, there were vaccinated *under* the age of one, 18,359; and *above* that age, 7,815; in the agricultural districts, the births being 6,983, there were vaccinated *under* the age of one, 978; but *above* that age, 2,996.

"The inspection of the tables in the Appendix will reveal instances of the inefficiency of the present system in individual unions in every part of the kingdom. We shall here insert a few examples for the sake of illustration, in considering which,

it must be borne in mind that the numbers in the second column, those showing the vaccinations above one year of age, are all indicative of previous neglect."

Then follows a table, illustrating neglect in individual unions, for the year ending 29th September, 1851; from which

"It appears that in thirty-two unions, in various parts of England and Wales, in which the births were 17,718, there were only vaccinated altogether in 1851, 6,174; and that of these only 1,410, or less than 8 per cent. of the births, were under one year of age.

"The results of such a condition of things are exactly what might be anticipated. When small-pox is imported into a locality thus situated, it finds and carries off a number of unprotected victims; the people are then roused from their apathy, and active exertions are made to obtain that protection which, had it been timely secured, would have altogether prevented the spread of the pestilence. The consequence is, that under these circumstances we frequently find the vaccinations, in a given year, largely in excess of the number of births; and we have thus at once a proof and a measure of the previous neglect. It is so important that this subject should be comprehended in all its bearings, that we here subjoin some instances selected from the Returns to the Poor-law Board.

"In 1850, in consequence of the small number of persons vaccinated in the St. Alban's Union, the Board wrote to the guardians, and at the same time called attention to the fact that some twenty deaths from small-pox had taken place. The state of things will be best understood by the following figures."

The figures shew that in this union there were in the year 1850, 562 births, 73 vaccinated under one year, and 84 above one year; whereas, in the following year, 1851, there were 581 births, 267 vaccinated under one year, and 1,483 above one year; proving that all these 1,483 had been previously neglected. Similar occurrences are also detailed in King's Norton Union and parish, and in Windsor Union.

"The state of vaccination in the metropolis, as will be seen by referring to the Appendix, where the returns for each union and parish are inserted, as might be anticipated, is somewhat more satisfactory than that of the provinces, though even here very great neglect exists.

"The total number of successful vaccinations in the metropolis in 1851 amounted to 36,487, of which 26,854, or about one-third of the total births, were under one year of age; so that 9,633 were vaccinated above that age. In this and other similar cases, it is proper to explain that in all large towns there is a considerable influx of unprotected persons, strangers to the locality, who, on being vaccinated, are of course entered in the second column; this circumstance, however, only changes the neglect from one district or part of the kingdom to another."

The Committee terminate their observations on the official returns with the following important paragraph:—

"We cannot quit this part of our subject without stating to the Council, that the numbers returned to the Poor Law Board as successfully vaccinated tend, to a certain extent, to give us a more favourable view of the actual state of efficient vaccination in England and Wales than is really the case, and that they do not represent, in every instance, the numbers which have been really ascertained to have passed regularly through all the stages of the vaccine disease. It is quite needless to remind them that, in conformity with the doctrine laid down by Jenner, and confirmed by all subsequent experience, unless these stages have been passed through in the normal way, the recipient of vaccination cannot be held as protected against a future attack of small-pox; and in determining that payment should be made only for successful vaccinations, the Legislature doubtless intended that the success should be ascertained in every instance by the personal inspection of the vaccinator, or of some competent person. Generally speaking, this is done; but in consequence of the difficulty in many cases of inducing poor people to give a second attendance, and the impossibility that the vaccinators, hard worked and underpaid, should follow them to their own homes, the practice prevails in many places and districts of entering all as successfully vaccinated who do not return to have their arms inspected. We have ourselves conversed with vaccinators who pursue this plan, and who justify it on the ground that they

have almost invariably found, when they have instituted an inquiry into the reason of a person not returning for inspection, that it has been because the operation was successful; and they have said, that if they were to pursue the opposite course, and report those only whom they saw a second time, the returns would give a far more inaccurate view of the state of the population, as to protection from small-pox, than they do at present. These statements may be perfectly correct, but do not take away at all from the argument for the necessity of inspection; for though it may be quite true that in the majority of cases of this kind the vaccine influence has had its complete effect, there is as little doubt that in many it has failed entirely; while in still more it has produced only a spurious result, a vesicle running an irregular course, sufficiently like the genuine disease to lull the parents of the child into a false security, but perfectly inefficient as a prophylactic against small-pox. *Under any circumstances there is doubt, where there ought to be certainty; and we are ourselves so convinced that the security of the public entirely depends upon their having passed through the genuine vaccine disease, that we think the inspection of the vaccinated at the proper period one of the most essential points to be provided for, and the want of due provision to secure it, one of the greatest defects of the present system.*"

Many cases of gross neglect of vaccination for years together, are mentioned by correspondents.

For instance, Mr. White, of Taunton, says, "Vaccination has become almost extinct in this part of the country." In his district of six parishes, with a population of between 4,000 and 5,000, not one case has offered for vaccination for the last two-and-half years.

Mr. Kimmell, one of the medical officers of Warwick Union, complains of the inefficiency of the Vaccination Act, in consequence of the inadequate remuneration. No medical man will take the trouble; hence, thousands who are vaccinated are never inspected afterwards, and numbers never pass through the disease at all.

Mr. Evans, of Dolgelly, complains of the difficulty of getting parents to bring their children for inspection after vaccination: great evils result from this. Spurious vaccination is put down as effective: on one occasion, he saw as many as nine spurious cases in one day. He desired the parents to meet him again some months afterwards, that the operation might be repeated: not one of them has done it, though this was some years ago. These children, he observes, are as amenable to small-pox as though they had never been touched.

Dr. Star, of Brighton, on a recent outbreak of small-pox at Hove, inquired as to the unvaccinated; and, in a population of 5,000, found 230 to do. What was worse, he found how carelessly and ineffectually many of those reputed to have been vaccinated had been done. He found several families of five or six, from ages of four to eleven or twelve, who had been done and registered, but whose arms presented not the least marks of a cicatrix. On his vaccinating them again, the vesicles ran a regular course, and proved perfectly genuine.

IV. CONSEQUENCES OF THE NEGLECT. "If from this survey of the state of vaccination in this country we now proceed to consider its results, we find them in the fact, which we have already stated, that the proportion of deaths from small-pox to the total mortality is several times as great in this as it is in most of the other European countries. From the annual and other reports of the registrar-general, and from various documents with which we have been favoured by him, it appears, as will be found stated more at length in the Tables on Small-pox in Great Britain and Ireland, appended to this Report, that the average mortality from small-pox in London on a period of thirteen years, has been 913 per annum, and that it is the seventh of all diseases in the order of fatality. In Ireland, for the ten years ending 1841, it was the second in the order of fatality; typhus-fever alone carried off more victims. During this period, as we have already mentioned, it destroyed in that country 58,006 persons. In England and Wales, the total deaths in eight years were 60,691; or, on an average, 7,586 deaths annually.

"Neither the Returns of the Registrar-general in England, nor those of the Census Commissioners in Ireland, enable us to state what proportion of these deaths occurred in the vaccinated and what in the unvaccinated; but with regard to a large por-

tion of them, varying from 75 to 80 per cent. of the whole, there can be no doubt that, with scarcely an exception, they must have occurred among the unprotected, for they all took place under the age of five; and it is allowed by all authorities, that nothing is more rare than a death from small-pox in a vaccinated child under that age. Of the portion (20 to 25 per cent.) in which death took place above that age, there can be as little doubt that the vast majority were unprotected, but we have no sufficient data to determine what the exact proportion may have been.

"But it is not the fatality only which is to be regarded; every one of these deaths is the representative of a certain number of cases, in which the disease, with all its attendant anxieties and perils, may have suffered the patient to escape indeed with life, but may have left him in many instances disfigured, and often not without having developed the seeds of strumous and other diseases in his system. If the modified as well as the unmodified form of small-pox be taken into account, it is a very moderate estimate that there must have been six cases for every death; a computation which would give us 34,800 cases as occurring annually in Ireland, and 45,516 in England and Wales; and if some addition be made for Scotland, for which country there are no official returns, the annual average of cases of small-pox for the United Kingdom will not fall short of 100,000. Such is the humiliating result of our own apathy fifty years after the discovery of vaccination."

V. CAUSES OF THE NEGLECT. These are stated by the Committee to be mainly ignorance, prejudice, and apathy. They do not believe that there is any rooted objection to the practice in the minds of the people, either on religious or other grounds; and they think that this is sufficiently proved by the readiness with which vaccination is accepted by all as a safeguard under the influence of alarm.

VI. CONCLUSIONS. The chief—and, we may add, the unanimous—conclusion of the Committee is, "that no measure, which does not render vaccination compulsory, in some form or other, will be sufficient to ensure the efficient protection of the population of this country from the ravages of small-pox." They leave it to the Legislature to determine the mode.

They consider that all vaccinations should, except under special circumstances, be performed within three, or at most within four, months of birth: and that the registration of births should be made the foundation of the machinery for the registration of vaccinations.

A variety of other suggestions, of greater or less importance, we pass by, and come to the following, which we cannot too strongly commend to notice.

"We deem it our duty to protest against the seventh* clause entirely, as unjust towards the already underpaid public vaccinators; and we suggest that the wording of the first clause must be so altered as not to interfere with the rights of private practitioners.

"We trust that the whole subject of the remuneration of the public vaccinators will receive the earnest attention of the Legislature. Such attention is the more called for, inasmuch as, first, the payment for their present services being already inadequate, it is contemplated by the Act to impose upon them additional and onerous duties; and secondly, because it is obvious that no provisions, however penal, can secure the desired object, unless the pecuniary remuneration be in some degree commensurate with the importance of the services demanded.

"We have already stated our strong conviction that proper means should be taken to ensure the inspection, at the proper period, of all who have been submitted to the operation of vaccination.

"We are of opinion, in order to ascertain the actual progress of vaccination in all points of the country, that more frequent periodical returns to the central authorities than are at present furnished will be indispensably requisite."

Finally, the Committee state that these suggestions are only such as are called forth by the occasion, and do not contain any exposition of what, in their opinion, should constitute a national system of vaccination. They further state that they are preparing a report on the pathological questions connected with the inquiry.

* Now the fifth in the amended bill.

MEMORANDUMS MADE IN IRELAND IN THE AUTUMN OF 1852.

By JOHN FORBES, M.D., F.R.S., Hon. D.C.L. Oxon, Physician to Her Majesty's Household. With a Map and Illustrations. Two vols., 8vo. London: 1853.

We gather from our correspondence that a large number of our members propose to combine in one holiday a short tour in Ireland and a visit to the Dublin Exhibition, with attendance at the approaching anniversary meeting of the Association. The scheme is an excellent one; and to those who intend to adopt it, we strongly recommend the perusal of Dr. Forbes's Memorandums.

Dr. Forbes writes in a forcible, correct, and simple style. His pages are graphic pictures of the scenes and incidents of his journey. It thus happens that, when we draw conclusions similar to, or of an opposite nature from those which are drawn by him, we equally and always feel that we have a true and unprejudiced witness to deal with, and that we may reason on the data placed before us. This very absence of prejudice sometimes, we think, amounts to a too cautious abstinence from expressing strong opinions on contested religious and political questions. A reader is kept alive, and is rarely displeased by the warmth of a moderate advocate; whereas calm and balanced periods are often found to be unsatisfying and unimpressive. For example, we think that, in speaking of the confessional, Dr. Forbes is liable to be misunderstood by the hasty reader: nay, we find that even our Argus-eyed contemporary, the *British and Foreign Medico-Chirurgical Review*, has nodded over this portion of the Memorandums. Whatever may be the Catholic partialities of Dr. Forbes, our contemporary has misstated his views on the subject of confession, in saying that "Dr. Forbes passes a marked though temperate encomium on the practice of confession"; and in further inferring that he even "advocates the practice". We have carefully read the passages in which the subject of confession is noticed; and we can detect nothing in them bearing out such statement or inference. At the same time, we can understand a rapid reader carrying off an inaccurate impression of the author's sentiments.

Without pledging ourselves to the opinions of Dr. Forbes, we commend his volumes, as full of entertainment and instruction.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

TREATMENT OF TAPE-WORM BY THE MALE SHIELD FERN (LASTRÆA FILIX MAS.)

In our PERISCOPIC REVIEW of 11th of February, p. 134-5, we gave an account of the interesting experiments performed by Dr. Küchenmeister, with the view of determining the relative value of the various vermifuges in common use. On referring to that paper, it will be found that kousso was proved to be the most rapid poison to the tape-worm. Regarding pomegranate bark and male fern root, it was said that "their failure may be owing to the habit of administering a laxative in from four to six hours after the exhibition of the vermifuge, by which the latter may be carried beyond the worm". A paper in the current number of the *Monthly Journal of Medical Science*, by Dr. Christison, of Edinburgh, recalls our attention to this subject. Dr. Christison's communication is the sequel of one upon the same subject published in June 1852.

The preparation employed by Dr. Christison is the aleo-resinous extract obtained by ether from the root. He has administered it with uniform success; and in twenty cases communicated to him he states that the result was also favourable; and he remarks, that his "experience corresponds precisely with the much more extended observation of Peschier, at Geneva, more than a quarter of a century ago." As the male shield fern is a common indigenous plant, it is of no small importance for the practitioner to know that it yields a remedy superior even to the vaunted kousso.

The following is an extract from Dr. Christison's paper:—

"In every case without exception the worm was discharged after a single dose, and usually in one mass. In some it was brought away without any laxative, and occasionally in that

case with very little feculent discharge accompanying it. For the most part there was no pain or other uneasiness, either before or during its action. This was the case even in an instance in which the tendency to the disease had existed for no less than seventeen years, and in which the worm evacuated was the largest and strongest I have ever seen. Several patients, who had often previously used other anthelmintics, have noticed this absence of uneasiness during the action of the male shield fern, as something different from what they had experienced invariably before. It must be allowed, however, that several other individuals have complained of griping, sickness, or indescribable discomfort in the abdomen, and sometimes even of vomiting. But it admits of question, whether these occurrences depend on any direct action of the remedy on the human body, or upon the disturbed condition of the worm under the poisonous operation of the remedy on it. In fact, we have yet to learn that the male shield fern exerts any action on the human stomach or intestines, in the course of its deadly action on the parasitical inhabitants of them.

"In only two cases have I heard of the disease having reappeared; and in both, the interval has been about six months. Of course, there may have been others which I have not heard of. When the worm does not show itself in the discharges for some months after the effective operation of the remedy, I think it is more consistent with reason to say that the disease had returned, than to hold with some that the cure was imperfect, that ova were left to reproduce the worm, or that the head had remained to sprout again and renew the multitudinous joints behind it. Nevertheless, I have latterly advised the subjects of tænia to repeat the dose of the extract once a month for a little, until joints shall have ceased for some time to appear. In none of these cases have any joints been subsequently seen in this way. But it is a very simple precaution to take occasionally a remedy so little disagreeable. A patient, as to whom I was consulted by Dr. Graham, of Cupar, had been liable to a return of the disease every few months for nearly twenty years, during most of which time he was in the army, and got oil of turpentine, with partial success, from the successive medical officers of the regiments in which he served. In this instance, I have recommended an occasional dose of male shield fern as a security. The first dose brought away a very large worm without occasioning any inconvenience; and no joints had appeared in the discharges eight months afterwards.

"At first, I gave eighteen grains for a dose. But afterwards, and, I admit, without any reason, except a desire for greater certainty, I have advised an increased dose of twenty-four grains. On the whole, there has been less complaint made of uneasiness during the operation of the remedy since the larger dose has been used—possibly because the worm is killed more speedily, and that the drug has no inconvenient action of its own upon the human alimentary canal, although given even in the larger quantity.

"It was stated above, that the ethereal extract of male shield fern had not failed in a single instance to bring away the worm with the first dose. In one case, which occurred in this city, it did seem to fail. But on repetition of the trial, with an extract prepared under my own instructions and superintendence, the effect was complete and speedy, as in all the other cases. On proceeding to inquire into the circumstances of the previous trial, I found that the extract had been obtained from a druggist, of unquestionable skill, who had made it for the first time; and it appeared that his preparation was of firmer consistence and more resinous-like than what I had been accustomed to use and recommend as made by another druggist in Edinburgh; and its taste was decidedly different. This imperfect extract proved to have been prepared from powdered root obtained from London; so that it was reasonable to conclude that the wrong root had been collected, or that it had been incorrectly dried. I believe that every druggist in good business in Edinburgh can now supply the genuine article."

We may remark, that the "male fern oil" is the favourite remedy for tape-worm with many English practitioners.

ADMINISTRATION OF FOOD AND MEDICINE BY THE RECTUM.

In a communication read to the Medical Society, and published in the *Medical Times* of June 18th, Mr. H. SMITH makes the following remarks, in the truth of which all doubtless concur, though perhaps all may not act up to it upon every occasion.

"When it is the object merely to support the frame and supply nourishment, and when there has not been any loss of

blood or any previous serious depression, strong beef-tea is doubtless the best thing to use. But if there has been severe hemorrhage, and it is required to rouse the patient from dangerous collapse, the mixture which is to be thrown up should consist of equal parts of beef-tea and brandy. Great care should be taken not to inject too much fluid at one time, otherwise it will excite the bowel and be rejected, and do no good. From four to six ounces is the quantity I have been in the habit of using; the whole of this will, in all probability, be absorbed. If necessary, the injection may be repeated in the course of four hours. It is desirable to inject it as high up as possible; and, therefore, a long elastic tube should be used, and passed along the bowel as far as it will go with safety. I need not mention, that it would be well for the practitioner to use the injections with his own hands; for, indeed, the circumstances which call for their use always demand his continual attendance."

NATURE AND TREATMENT OF HOARSENESS.

The following is an abstract of the views of M. TROUSSEAU on the above subject, as given in the *Journal de Médecine et de Chirurgie Pratiques* for last February:—

Hoarseness almost always depends on hyperæmia of the laryngeal mucous membrane; but, in order to cure this condition, not only must it be attacked in its seat, but the circumstances in which it has been produced must be ascertained—whether it is a continuation of inflammation of the pharynx, mouth, or nasal fossæ, in which case it may be often sufficient to apply remedies to these parts.

Among the inflammatory affections of the pharynx which are most frequently propagated to the larynx, is chronic or follicular pharyngitis; the characters of which are enlargement of the mucous follicles, slight edema and redness of the velum palati, with a certain amount of elongation of the uvula. This form is almost always of rheumatic origin, and appears at the end of an attack of apyrexial rheumatism which has lasted three weeks or a month. It recurs a great number of times, and leaves its effects on the pharynx in the form of hypertrophy of the mucous follicles. Generally, however, the inflammation of the pharynx itself proceeds from the mouth or the nasal fossæ. Thus, just as in the child the cutting of a tooth will produce cough by extension to the bronchi of the inflammation of the gums, carious teeth will produce an analogous affection in the adult, by producing a change in the voice which is only removed by the extraction of the diseased tooth. Cases of this kind frequently came under the notice of M. Trousseau. A distinguished *cantatrice* lost her voice for two years, and recovered it only after two wisdom-teeth had been extracted.

There is also an eczematous affection of the nasal fossæ, which is easily propagated to the pharynx, the Eustachian tubes, and the larynx. There are also persons who are constantly the subjects of nasal catarrh; and in these the catarrh is propagated to the pharynx and larynx. The vocal cords, softened by the thickening of the mucous membrane, then cease to vibrate, and mucus is deposited in the ventricles of the larynx.

Treatment. If the pharynx is the primary seat of the disease, M. Trousseau employs strong stimulants to that region. The best of these is a solution of one part of nitrate of silver in three of water. This is applied daily for a week, by means of a brush, to the arches of the palate, to the palate itself, and to the tonsils. It is afterwards repeated three times, twice, and once a week; and once a fortnight for some months. This treatment should be applied more perseveringly in proportion as the hoarseness is of old date, and should be continued after the voice has returned, without, however, paying regard to the hypertrophy of the follicles, which sometimes lasts for an indefinite period after chronic pharyngitis. If, from any reason, this mode of treatment cannot be adopted, the patient should be taught to accustom himself to touch the pharynx with the index-fingers—the right finger for the right side, and the left for the left side. When this can be done, the patient will be able to apply with his fingers a powder composed of one-fourteenth of a grain of white precipitate and ten drachms of powdered sugar. If this remedy, which is very effectual, fail, alum gargles may be used. Many singers use the gargle of Bennati, an old Italian physician, half an hour before entering on the stage, when they are labouring under hoarseness from subacute inflammation. The following formula is given by M. Trousseau: Alum, from 10 to 30 parts; water, 500 parts; honey or mulberry syrup, 100 parts. Whatever gargle is employed should be used as hot as it can be borne; cold gargles are useless.

In a very large number of cases, the pharyngeal affection is of a herpetic nature. In a person, for instance, who has had eczema of the nose, the disease may have produced union of the nasal fossæ with the pharynx and the Eustachian tube; thus giving rise to obliteration. If eczema of the nose is still present, and coryza appears under the influence of cold or after meals, the hoarseness must be treated by applications to the nasal fossæ. One part of sulphuret of potassium is dissolved in one hundred parts of water, and a tea-spoonful is put into some very hot water, and forcibly inhaled by the patient for some minutes, three times a day. The same solution, in a larger proportion to the water, is to be used at the same time as a gargle.

In cases of this nature, sulphureous waters also are very useful, taken two or three times a day. The patients may also be made to take into the nose small pinches of white or red precipitate.

Some changes in the voice are only to be benefited by direct treatment, viz., inhalation of arsenic, and cauterisation with a strong solution of nitrate of silver. Cauterisation is sometimes difficult; and in this case, the use of arsenicated cigarettes is more simple, and not less efficacious. The cigarettes are made with one part of arsenite of potash to twenty-five of water: in this some filtering paper is dipped, then rolled into cigarettes, and dried. These must be smoked slowly—eight or ten inspirations each time, three times a day. The metallic arsenic is condensed on the larynx.

SURGERY.

POLYPI OF THE RECTUM.

The following is an abstract of an article by M. A. FORGET, in the *Union Médicale* for June 21st:

Polypus of the rectum is a disease of which very few cases have been recorded. M. Dufresse-Chassaing related two instances to the Surgical Society of Paris: the following is a brief history of them.

CASE I. In a boy, aged 14, the polypus was as large as a cherry, and was two centimètres above the anus: it was pedunculated. With each stool, there was an escape of blood: hence the patient was pale, and much weakened. M. Dufresse pulled down the tumour, and applied a double ligature to the pedicle; he then divided the latter below the ligature. A short time later, the threads were evacuated with the fecal matter. There was no more escape of blood; and the boy began to regain his health and strength.

CASE II. In a strong, healthy child, aged two years, who had never passed blood by stool, M. Dufresse found the anus blocked up with a small tumour. In exercising slight traction on it, to discover its origin and point of adhesion, its pedicle broke at the point of union with the tumour. A little blood escaped, and the child recovered without any unfavourable accident.

From an examination of the different cases of rectal polypi which have been described, M. Forget describes the following forms as capable of occurring.

1. *Mucous polypi*, produced by hypertrophy of the superficial layers of the mucous membrane, having a limited attachment, of small depth, and rarely returning after removal. According to researches, these polypi have but few vessels; they have epithelium on the surface, then a tissue without regular structure; it is difficult to find there some fibres of cellular tissue in the midst of the amorphous mass, which is of a more or less marked red colour.

2. *Fleshy polypi*, also called sarcomatous, or vascular. They arise from hypertrophy of the entire thickness of the mucous membrane, with its vessels and glands. They are composed of cellular tissue, numerous vessels, fibroid tissue or fibro-plastic elements, and an epithelial layer on the surface.

3. *Cystic polypi*, arising from simple glandular hypertrophy. The follicles of the intestine become obliterated, and are transformed into cysts, which, in growing, become provided with pedicles. These polypi are generally numerous. M. Robert removed, in the Beaujon Hospital, at least thirty of them from a girl: they were small, isolated, and globular. Under the microscope, they presented an epithelial mucous layer on the surface; and there were also very plainly present all the different elements composing the intestinal glands.

4. *Fibrous polypi*, the results of hypertrophy, or rather products of the submucous fibrous tissue. They belong to the intestine.

5. *Fibrous bodies of the rectum* are developed externally to the rectum in the recto-vaginal space.

M. Forget believes that the ligature is the only mode of treatment admissible, as a general rule, in the treatment of polyp of the rectum.

DIVISION OF THE TENDO ACHILLIS IN THE TREATMENT OF FRACTURE.

At the meeting of the Royal Medical and Chirurgical Society, on November 27th, 1849, Mr. CAMPBELL DE MORGAN brought forward the subject of division of the tendo Achillis in certain cases of fracture of the bones of the leg. The object was evidently to overcome the displacement caused by the action of the muscles of the calf.

In the *Lancet* for February 12th, 1853, we find the following remarks:—

"The division of the tendo Achillis, as a means of facilitating the reduction of fracture of the leg, in cases where such reduction presents difficulties, seems now to be pretty generally used in our hospitals. This practice, which originated in Germany, and has been adopted in several countries besides England, has the great advantage of allowing of reduction without the powerful traction (and accompanying pain) which must sometimes be used in cases of complete riding or widely displaced fragments, when the gastrocnemius muscle draws the lower fragment upwards with a great degree of force.

"Mr. SHAW has a male patient, aged forty years, who was admitted January 19th, 1853, with a simple fracture across both malleoli, with complete twisting of the foot outwards and towards the front of the leg. Reduction was found extremely difficult, and Mr. Shaw thought it advisable to divide the tendo Achillis, to render the parts more yielding and manageable. This measure had the desired effect, and the leg was easily reduced; the limb was then placed into the usual apparatus (side-splints and foot-piece), and the patient is now doing extremely well.

"A severe case of compound fracture of the leg was admitted October 20th, 1852. The patient was sixty-one years old. He was run over by a cab, and suffered a compound fracture towards the lower third of the leg. The fragments were so widely separated, and the action of the gastrocnemii and solei muscles so powerful, that Mr. Shaw divided the tendo Achillis, besides removing a small portion of bone. Reduction became then comparatively easy. Suppuration has been profuse, and the diligent exhibition of stimulants became necessary; but, by dint of care, cleanliness, etc., the patient has done well, and the wound was almost healed three months after admission.

"Mr. HILTON had lately recourse, at Guy's Hospital, to the division of the same tendon in a case of compound fracture of the leg of a very severe kind. Reduction was found extremely difficult before tenotomy was performed, as the separation of the fragments was considerable, and the traction of the muscles insurmountable. After the division of the tendon, the limb was secured in a favourable position; and, by the use of opium and stimulants, the patient is likely to recover.

"Mr. Hilton had two other cases of the same description, in which tenotomy proved very beneficial. One was that of a woman, sixty-seven years of age, who was admitted with compound dislocation of the ankle-joint. Mr. Hilton proposed amputation, but the patient would not consent; he was therefore obliged, in order to bring the parts into tolerable apposition, to divide the tendo Achillis, the peronei tendons, and that of the tibialis anticus. By the continued use of stimulants, etc., the patient recovered.

"A woman suffered simple fracture of the lower third of the tibia and fibula. The foot became so everted by the action of the peronei muscles, and the lower fragment was so strongly pulled upwards, that Mr. Hilton divided the tendons of the peronei and the tendo Achillis. Reduction was then effected with comparatively little trouble, and this patient has done well."

METHOD OF APPLYING COLD WATER IN SURGERY.

The following is taken from the *Lancet* for January 29th.

The irrigating means hitherto employed at Guy's Hospital has consisted of a receptacle for water (a glass funnel generally, with a cork inserted in its narrow end), suspended as best it could be to some part of the frame of the patient's bed, with worsted threads so placed that one set of ends could be immersed in the water, and the others hang over the part to be irrigated, capillary attraction completing the rest of the intention. Mr. HILTON, observing the occasional inefficiency of this instru-

ment, has had constructed, by Mr. Bigg, of St. Thomas's Street, the following apparatus.

The instrument consists of a zinc reservoir, with a vulcanized India-rubber tube opening from it at its side, close to the bottom. The entrance of water into the tube is regulated by a stop-cock; at the other end of the tube is affixed a broad zinc head, resembling a compressed or flattened rose of a watering-pot, a linear series of perforations being cut through its lower or convex edge. Equidistant from each other, and about half-an-inch apart, threads of worsted are passed through these holes from within, and made to project about three-quarters of an inch below the metal. This end is suspended over the part to be irrigated; the reservoir charged with water is placed upon the usual little shelf situated at the head of the bed, and the stop-cock being turned, allows the water to escape into the tube. The extent and rapidity of the irrigation are, by the aid of the stop-cock, perfectly regulated. A small sheet of oil-silk is placed under the arm and separated from the bed, the oil-silk being so arranged as to conduct the water which has passed over the limb into a basin or upon the floor of the ward. It is obvious that water of any temperature, or medicated in a prescribed manner, may be made, by this simple and cheap apparatus, to distribute itself over any part, however small or extensive it may be. The advantages of this instrument are, that the supply of water can be regulated by a stop-cock, so that there may be a definite and equable amount of irrigation to every part of the injured structure, or to any particular region, which irrigation can be regulated according to the sensation of the patient, or the temperature of the textures under treatment. By enlarging or diminishing, by elongating or shortening, the head, or varying its form, the drops may also be carried simultaneously over a larger or smaller, or any irregularly formed surface.

TOXICOLOGY.

BITE OF THE RATTLESNAKE SUCCESSFULLY TREATED BY LARGE DOSES OF WHISKEY AND AMMONIA.

The beneficial effects of stimulants, especially of large doses of ammonia, in certain poison diseases (such as scarlet fever, hooping cough, glanders, erysipelas, and the prevailing furunculoid epidemic) have been at various times brought under the notice of the profession. It appears, from the subjoined remarks of Dr. T. A. ARCHISON, that diffusible stimulants are equally useful in poisoning from the bite of the rattlesnake. The following is abridged from the *Southern Journal of the Med. and Phys. Sciences* for March 1853, published at Nashville Town.

"On the 20th September, 1852, Dr. Archison was summoned to attend Miss R., aged 17, who had been bitten by a rattlesnake. When he arrived—two hours and a half after the accident—he found her almost moribund, with a pulse wavy, and scarcely perceptible at the wrist. The surface was bathed in a cold perspiration; the pupils were dilated; and the mind was wandering. It was found that the bite had been inflicted upon the instep of the left foot: two little punctures were very perceptible; around which there was a greenish areola, with some puffiness.

"Having heard of the marvellous efficacy of spirits in similar cases, Dr. A. administered half a glass of whiskey, which was swallowed with avidity. The wound was freely scarified and cupped, and the extremities placed in a hot saline bath. Twenty grains of carbonate of ammonia were then given; which were immediately thrown up, together with the contents of the stomach, coloured a bright grass green. A glass of whiskey and twenty grains of carbonate of ammonia were given alternately every half hour, until three pints of the former and eighty grains of the latter were taken. Not the slightest intoxication ensued; on the contrary, the urgent and alarming symptoms gradually gave way, warmth was restored to the surface, the pulse returned to the wrist, the mind was called back from its wanderings, and she fell into a quiet sleep, from which she awoke at five o'clock, A.M., complaining of intense pain in the foot, shooting up the inside of the leg to the knee. She was then ordered, morphia one-fourth of a grain, fomentations of laudanum and camphor, followed by a poultice of linseed, with the effect of entire relief of pain. The following day castor oil was given to move the bowels. From that hour she suffered no further inconvenience from the bite."

The author concludes his paper with the following remarks:

"The instinctive avidity and impunity with which this delicately nurtured young lady took so large a quantity of spirits, sufficient under ordinary circumstances to have killed a regular habitué, would excite astonishment, if we did not reflect that it

was antagonized by the depressing effect of the poison on the nervous system.

"But the most interesting feature in this case remains to be stated. Miss R., at the time she was bitten, was the subject of well-marked hooping cough, which was then epidemic in the neighbourhood; she had had the disease about three weeks, consequently it was at its acme, but on recovering from the effects of the poison, to her great surprise and gratification, her cough had disappeared also, nor did it return."

In connection with this paper, we request our readers to peruse an article on glanders, which we intend to insert in the Periscopic Review of next number.

CASE OF BITE OF COBRA DI CAPELLO: TREATMENT BY AMMONIA: RECOVERY.

Dr. W. CHALMERS, of Brighton, relates the following case in the *Glasgow Medical Journal* for April 1853:—

CASE. On 25th June, 1819, at 11 p.m., Dr. Chalmers heard from the outside of his house, at Barrackpore, near Calcutta, a loud call for his immediate attendance. It proved to be from Colonel Lumley, whom he found with a lantern in his hand, entreating him to come with him at once, as his *mehturane* (female sweeper) had been bitten by a cobra di capello. He took a phial of solution of ammonia, of the usual strength, a case of scalpels, and a large sized elastic gum male catheter. On arriving at the hut occupied by the woman and her husband, he found her stretched outside on the ground, her head resting on her husband's knee. Her body was cold and collapsed; there was neither breathing nor pulse; her eyes were wide open, and insensible to light; the mouth was also wide open; the tongue cold; in fact life was, to all appearance, extinct. How long she had lain in this position could not be ascertained; her husband conjectured an hour at least. On the back of the right hand were discovered two punctures, as if made by a needle, about an inch and a-half apart, marking the entrance of the poisonous fangs of the snake. Upon each puncture there was a drop of nearly colourless fluid, without any hæmorrhage, tumefaction, or ecchymosis.

Here was a case sufficiently discouraging, if not, to all human appearance, hopeless. However, Dr. Chalmers resolved not to abandon the case.

Bricks having been ordered to be heated for application to the præcordia and the feet, the first step of the treatment was to pour down her throat a teaspoonful of ammonia, with as much water, but all power of deglutition being lost, some difficulty was experienced in accomplishing this object. By the aid, however, of the catheter, as an œsophagus tube, he succeeded admirably. The next step was to cut out and pare off the integuments and subjacent cellular and muscular tissues, extending incision about one-fourth of an inch beyond the punctures. From the large wound, which was of an oval shape, not a drop of blood escaped in this operation. The husband was now directed to apply his mouth to the wound, and suck with all his powers, which he proceeded to do most readily, the natives having great faith in such a measure. This he continued, with all the energy he was capable of, for fully half-an-hour, without succeeding in procuring any moisture, while the ammonia was repeated steadily every ten minutes, till a full ounce was consumed. At length their perseverance was rewarded by some hopes of a restoration, for the poor distracted husband leaped up in an ecstasy of joy, exclaiming in his own language, "*Lohpo dàt sahib*" (blood is coming, sir), showing his tongue covered with the vital fluid. In a few minutes more the action of the heart was faintly perceptible; the pulse at the wrist was just traceable in a threadly thrill; she moved her head, gave a deep sigh, and sat up. The only treatment pursued afterwards was the free cauterization of the wound by nitrate of silver,—the application of a pledget of lint dipped in melted resin cerate, covering the whole with a hot poultice. The wound healed kindly by granulation, and she was able to resume her duties in a few days.

REMARKS. In this case the powers of the ammonia were proved most incontestably as a safe and sure remedy in all bites of venomous reptiles. Such is the confidence of the natives in the remedy, and more especially the native soldiery, who in their huts are much exposed to these injuries, that the moment any one gets bitten, he runs to the nearest European officer, calling out for the "*Safed Dawy*", the "*white medicine*", assured that with a few doses of that, he is safe, and disappointment in the curative effects is never experienced. By "*the white medicine*" is meant a preparation of ammonia, which used to be imported in great quantities from England, and generally kept at hand by

every officer,—the old-fashioned *Eau de Luce*, *Liquor Ammonia Succinatus*.

Dr. Chalmers observes, that one cannot help regretting that the medical officers of the hospital into which the unfortunate fellow, who was bitten in the Zoological Gardens last year, was admitted, were not apparently sufficiently acquainted with the powers of ammonia in such cases. If they had been, it would no doubt have been had recourse to.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

JULY 4TH, 1853.

Dr. BABINGTON, PRESIDENT, in the Chair.

YELLOW FEVER as IT APPEARED IN ANTIGUA IN THE YEARS 1835, 1839, AND 1842. BY THOMAS NICHOLSON, M.D., OF ANTIGUA.

We can only give a few of the leading points of this elaborate and admirably written paper.

Dr. NICHOLSON is of opinion that yellow fever is not a contagious disease. The outbreak of yellow fever in Antigua, in 1835, was preceded by a hurricane, with remarkable changes in the barometer. Dr. Nicholson himself soon became a victim of the disease, and the symptoms which he felt were described. In very malignant cases, blood often exudes through the mucous membranes, and even through the skin. The author recognizes several kinds of yellow fever; he described two varieties, which he called the *ardent* and the *congestive*, with great minuteness. In speaking of the pathology of yellow fever, he observed, that the yellow colour of the skin comes out more distinctly after death; and that the blood is highly fluid, and fails to coagulate. In one case he found frothy blood in the heart, indicating the presence of gaseous matter in the circulating system. The mucous membranes were generally softened in a greater or lesser degree. Dr. Nicholson is confident that yellow fever is different from any kind of endemic remittent fever. It attacks the same person once only in life. Localities, in which there is great heat of sun during the day, and a deposition of dew during the night, are favourable localities for the disease. Venesection, in the first stages of the disorder, is often an excellent remedy.

Dr. GAVIN MILROY said, that one remarkable statement in Dr. Nicholson's paper was, that yellow fever had been absent from Antigua for the long period of fifteen years. Many persons would imagine that after so long a respite, the island could only have received the disease by a re-introduction of it from without, which it had been distinctly shown was not the case. Ships, also, did not bear away the disease from Antigua. It is a curious fact that yellow fever almost invariably occurs in towns, and not in the country. In this it differs from scarlet fever and small-pox, which extend by continuation from towns into country districts.

With reference to treatment, Dr. Milroy observed, that in Jamaica, extreme antiphlogistic measures had been found injurious, while large doses of calomel and quinine had proved of service.

Dr. GAVIN said, the author of the paper had said that there was no true diagnostic symptom of yellow fever in its early stages; but he (Dr. G.) believed that an injected state of the fauces was a good and early diagnostic symptom. The causes of yellow fever were exposure to local miasmata; and the favourite localities of the disease were low, damp, filthy places, and close buildings—just such places, indeed, as those which favour the spread of typhus in this country. In the West India islands, the seats of the disease could be predicated by a careful and experienced observer. Dr. Gavin could not agree with Dr. Nicholson, that, in all cases, Europeans were more liable to yellow fever than the natives of tropical climates; he had seen epidemics in which the reverse obtained.

Mr. RICHARDSON said that there were many points in Dr. Nicholson's paper which are peculiarly interesting to a physiologist and pathologist, though he may not have seen an epidemic of yellow fever. The author had said that, in the dandy fever, which preceded one of the epidemics of yellow fever, arthritic inflammation was an important symptom. This was very curious, for arthritis was sometimes a complication in cases of yellow and scarlet fevers. With reference to the effects of meteorological changes, he (Mr. R.) did not think that such changes had any very great influence over the epidemics of this country; but the remarks of Dr. Nicholson on the great heat of the sun in the day, and the great coldness at night, were

the night, and on the effect of these conditions in causing fever, were of considerable moment. The wonder was, not that the functions of the body became deranged under such changing conditions, but that those functions should in any case remain unimpaired. Here, indeed, a simple physical cause might perhaps be found to account for fever, without having any recourse to the doctrine of miasmatic influences. Dr. Nicholson's observations on the blood of yellow fever patients differed from those of other observers who had found the blood *superfibrinized* in that disease. It was impossible to speak fairly of the treatment of an epidemic disease, without having actually seen the line of treatment pursued; but certainly it does not seem to be a very philosophical proceeding to abstract blood, and to give mercury, in cases of disease in which the blood is already destitute of its fibrinous constituent.

Dr. CAMPS asked if the verberna had proved of use as a medicine in the treatment of yellow fever?

Dr. GAVIN had received extensive accounts of this remedy. It might have some virtues, but he had no faith in it as a medicine positively valuable. He disagreed with a previous speaker as to the effect of meteorological changes: some such changes had a great influence, the changes of the wind especially. In Martinique, the French physicians say that a south wind always brings the yellow fever.

Dr. McWILLIAM said, that Dr. Nicholson was the first author he had met with, who had spoken of a special and non-recurring disease as a non-contagious disease. In some forms of yellow fever, the depressing line of treatment certainly was injurious.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the meeting of the Committee of the Medical Benevolent Fund, June 28, the minutes of the preceding meeting were confirmed, and several matters of business arising therefrom were disposed of. The Treasurer's report was read, from which it appeared that £673:5 had been received in subscriptions during the year, and that £611:10 had been paid in benevolent aid, and £55:0:9 in expenses; making together £666:10:9, and leaving a balance of £6:14:3 in the hands of the Treasurer. Subsequently, £50 were voted to the several cases; thus leaving a balance due to the Treasurer of nearly £45. Auditors of the accounts were appointed, and the Committee then adjourned to the 12th July, to be specially convened on that occasion, to consider the Report. The list of the Committee was revised, and some alterations were proposed, which will be submitted to the meeting of Committee on 12th July.

The following cases were considered and relieved:—

- i. The orphan of a medical man who died abroad, to whom small sums had been previously given, to assist in her education, £5.
- ii. Two ladies, of the respective ages of 42 and 47, the daughters of a well known medical man, who had struggled through narrow circumstances, and were now disabled by disease from acting as governesses, £10.
- iii. The widow and family of a medical man in Derbyshire, in great distress, £5.
- iv. The widow and family of a medical man, to assist in defraying the expenses of emigration, £5.
- v. The widow and family of a medical man, who had known days of affluence and comfort, but were now quite destitute, £10.
- vi. A medical man in the Isle of Wight, disabled by paralysis, with his wife and family, £10, in two half-yearly payments.
- vii. A very aged medical man, a candidate for an annuity, to help him until November, £5.
- viii. A worn-out surgeon (diploma 1807), in great distress, £5.

METROPOLITAN COUNTIES BRANCH:—NOTICE OF ANNUAL MEETING.

The Annual Meeting will be held at Mr. Lovegrove's Brunswick Hotel, Blackwall, on Tuesday, July 19th, at 4 P.M., precisely. The Members will dine together at 6 o'clock. Members who intend to dine are requested to furnish their names to the Secretary as early as possible, and not later than July 10th.

Tickets for the dinner 10s. 6d. each, including ices and dessert.

JOHN FORBES, M.D., President.
T. OGIER WARD, M.D., Hon. Sec.

N.B. Members of the Association become Members of this Branch by paying an Annual Subscription of 2s. 6d.

NORTH WALES BRANCH:—ANNUAL MEETING.

The Annual Meeting of the North Wales Branch of the Provincial Medical and Surgical Association, was held on 21st June, 1853, at Holywell, under the able Presidency of Peter Williams, Esq., M.D. The following Members were present: T. T. Griffith, Esq., (Wrexham); D. Kent Jones, Esq., (Llangefni); G. T. Jones, Esq., (Denbigh); Robert Jones, Esq., (Conway); W. P. Jones, Esq., (Holywell); J. Lloyd, Esq., (Llangefni); T. Morris, Esq., (Marford); Augustus Parry, Esq., (Llanasa); J. Roberts, M.D., (Bangor); O. Roberts, M.D., (St. Asaph) President Elect; E. Williams, M.D., (Wrexham); H. Williams, Esq., (Llansaintffraid); W. Williams, M.D., (Mold). Dr. G. Harvey Williams, (Oswestry) member of the Shropshire Branch; Dr. T. W. Williams, (Denbigh); and James Williams, Esq., (Holywell) were present as visitors.

MEETING OF THE COUNCIL.

The Members of Council present proceeded to arrange the usual preliminaries for the General Meeting; and in the absence of Dr. Hughes, of Mold, the retiring President, who was prevented attending by an urgent professional engagement, T. T. Griffith, Esq., of Wrexham, was unanimously voted to the chair.

Mr. LLOYD, observing a newspaper reporter present, said it was quite irregular at a Meeting of Council for private business, that the latter should sit there; and he was accordingly requested to withdraw, which he immediately did.

NEWSPAPER REPORTERS.

A little after twelve o'clock, just before the usual business commenced, Mr. LLOYD stated that he was sorry to have to call the attention of the Meeting to a subject of a painful nature, but which it was impossible for him to pass over. He had already occasion to draw their attention to the presence of the reporter of the *North Wales Chronicle*, at an improper time; but he had now to lay before them a most serious complaint against that paper, viz., that of not only grossly misrepresenting two members of this Association, but of refusing to give the slightest correction or explanation of the incorrect statements it had published, and even accompanying that refusal with additional abuse. This was the *gravamen* of the charge. Editors of newspapers were no doubt much at the mercy of other parties for their information, and it was useless to expect but that much that was incorrect should find its way into their publications; but it was well known with what alacrity the respectable portion of the press always corrected all misrepresentations. However, here was an instance of the very reverse of this conduct, of so gross a character, showing so much recklessness and hardihood in making and maintaining incorrect assertions, that he felt it would be unbecoming in them to sanction the presence of the representative of a publication which had been guilty of such conduct.

On the motion of Mr. GRIFFITH, the following resolution was unanimously adopted, and an intimation of its purport was communicated to the reporter in question:

"That it is the wish of this Meeting that no reporter from a newspaper be admitted on the present occasion, as it is the intention of the Meeting to draw up for themselves an account of their proceedings, and transmit it direct to the *JOURNAL of the ASSOCIATION*."

PRESIDENT'S ADDRESS.

Mr. GRIFFITH, in vacating the chair, thanked the Meeting for again placing him in that honourable position; and

Dr. PETER WILLIAMS, having occupied it as President of the day, then addressed the meeting in the following words.

Gentlemen,—Not having the gift of elocution like my respected friends and enlightened predecessors in the chair, and without the privilege of their mantle being thrown over me (which should have been done by them), I must crave your indulgence in permitting me to read the little I have to say in addressing you upon this occasion. In taking the chair, which you have done me the honour to assign to me, I beg to offer you my grateful acknowledgements. It is an honour I never anticipated, because I am but too conscious of my not possessing those essential qualifications, desirable and necessary to constitute the important and honourable distinction of "President of the North Wales Branch of the Provincial Medical and Surgical Association". Seeing myself surrounded by gentlemen of acknowledged talents and high professional attainments, I might,

* For a full explanation of this proceeding, vide Mr. Lloyd's letter at page 601.

were I a vain man, indeed, justly feel proud of such a distinction. But, I assure you, gentlemen, I accept the chair with great diffidence—yet not without relying on your kind indulgence, and that you will take the will and the desire for the act and the deed, in attempting, however imperfectly, to fulfil the duties which you have called upon me to perform. In the first place I would heartily welcome this meeting on its assembling for the first time in Holywell, to do honour to the shrine of St. Winifred; an event which, no doubt, will be chronicled in our annals. We meet together as members of a high and honourable profession; to hold friendly converse on medical topics, and for our mutual instruction; to uphold the interests, the honour, and dignity of the profession, and to cement the bonds of friendship by social intercourse; and last, though not the least object—to promote the welfare of suffering humanity; and I hope and trust we shall not relax in so laudable a duty. Amongst the subjects which we anticipate will be brought before us for discussion this day will be one of high and growing interest, viz., the wonders of the Microscope as a novel and powerful means of discovering the pathology of structural and organic disease, and bringing to light many valuable facts hitherto hidden from the naked eye. I again thank you, gentlemen, very sincerely, for the honour conferred upon me, and relying on your indulgence, I now sit down, deeply impressed with your kindness, and with my humble services at your disposal.

REPORT OF THE COUNCIL.

The report was then read; and after a brief discussion, on the motion of Dr. W. WILLIAMS of Mold, seconded by Mr. ROBERT JONES of Conway, was adopted. It referred to matters of Finance; and also alluded to the "Medical Reform Bill" of the Association, on which it sought the opinion of the meeting.

ELECTION OF OFFICERS.

Upon the motion of H. WILLIAMS, Esq., of Llansaintffraid, seconded by G. T. JONES, Esq., of Denbigh, Dr. Owen Roberts, of St. Asaph, was unanimously appointed President-Elect for next year.

Dr. WILLIAMS, of Mold, moved that Rhyl be the place of the next annual meeting. This was seconded by Dr. E. WILLIAMS of Wrexham, and carried.

Dr. J. ROBERTS, of Bangor, moved, and W. P. JONES, Esq., of Holywell, seconded, that a vote of thanks be given to the treasurer and secretaries, and that they be re-elected. This was agreed to unanimously.

MEDICAL REFORM.

Mr. GRIFFITH, of Wrexham, wished that the resolution he had to propose had been entrusted to some one more conversant with the details and progress of the reform measures now in contemplation. At the same time, he felt, in common with all present, a deep conviction of the necessity for such measures, and an earnest anxiety for their success. The great majority of medical men have become unanimous in the feeling, that a change and reform are required to amend the many anomalies connected with the education, position, and influence of those who practise the healing art in this country. Whilst aiming at such a reform, they are sensible that a serious obstacle to their wishes exists in the opposition of the College of Surgeons; and though the opposing body may be numerically small, its opportunities and influences are great, from the circumstance of many of its leading members being in frequent communication professionally and privately with the higher classes of society in London, and thus having it in their power to give a decided bias to the opinions of those who in Parliament are to determine the success or failure of any measure of reform brought before them. Ignorant as most of the members of the legislature must be of the real state of our profession, of its internal arrangements and constitution, its defects and requirements, its varied and unsatisfactory modes of education, and the absence of legitimate tests by which to prove the adequate qualifications of its professing members; they gladly receive from what they justly consider the highest sources of information, such representations, arguments, and opinions as may enable them to give a vote on the question. To remove this ignorance, every professional man should take every opportunity of explaining to members of Parliament the actual position of the profession, the disadvantages under which it peculiarly labours, and an anxious wish to obtain at once such redress as might secure the privileges, protection, and the respectability in status and influence, to which, when not forfeited individually, members of a liberal profession are entitled. He would express a decided opinion in favour of the Bill drawn up by the Council of the Parent Association.

Mr. GRIFFITH then moved the following resolutions.

"That this Branch views with much concern the present very unsatisfactory state of the laws relating to the medical profession in this kingdom: That a petition be presented to each House of Parliament signed by the president and members of this branch of the Provincial Medical and Surgical Association, praying for immediate legislation and suggesting that the bill drawn up by the council and members of the Parent Association and submitted to the Prime Minister and Secretary of State may be the basis whereupon a wholesome measure of medical reform may be enacted."

J. LLOYD, Esq., of Llangefni, having seconded this resolution, it was unanimously carried.

THE RETIRING PRESIDENT.

A vote of thanks to Dr. Hughes, of Mold, Retiring President, was moved by AUGUSTUS PARRY, Esq., of Llanasa, and seconded by T. MORRIS, Esq., of Marford, and carried with acclamation; the meeting expressing their great regret that he was prevented from attending.

CASES AND COMMUNICATIONS READ.

Mr. LLOYD related the history of a singular disease of the nervous system, which appeared to arise from the excitomotor system. The case was characterized by constant convulsions of all the voluntary muscles, similar to chorea, and occasionally at night by fits of violent hysterical convulsions, ending in ecstatic sleep, or a state approaching somnambulism, which lasted till morning. And now commenced the most curious symptom of all, namely, that of constant gaping from morning to night, without the slightest interruption, causing fatigue and exhaustion of the most painful character. Another curious point was, that the faculty of taking food had gradually diminished, until at last the patient had come to take nothing whatever to support life, except a few drops of water once a day. This state of things had lasted for nearly three weeks, bringing the patient down to the lowest state of debility and exhaustion.

Dr. WILLIAMS, of Mold, drew the attention of the meeting to the last volume of Rokitsansky's work, in which there was related a case of constant gaping, which had been benefited by arsenic.

Dr. O. ROBERTS also recommended a trial of this remedy, if the state of exhaustion of the patient permitted.

Mr. GRIFFITH recommended the trial of nutritious enemata, to keep up the strength. He related some interesting cases from his own experience, to show the benefit of such practice.

Mr. LLOYD said, that great difficulty had been found, for some weeks past, in administering such remedies, on account of the great weakness of the patient; every attempt producing violent fits and convulsions.

Various other cases were alluded to by different members, forming the subjects of animated conversation.

THE JOURNAL

Formed the subject of conversation. No specific resolution was proposed; but the feeling of all present was expressed as decidedly favourable to the plan and character of the JOURNAL of the Association, as now conducted.

VOTE OF THANKS TO THE PRESIDENT.

Before separating for dinner, a vote of thanks was unanimously given to the President of the day, Dr. P. WILLIAMS, for his excellent address and conduct in the chair; which was acknowledged by him.

Letters were received from various members, regretting their inability to attend, one of which, from John Pughe, Esq., of Aberdovey, proposed that W. Owen, Esq., of Machynlleth, be elected a member of this Branch. This was unanimously agreed to.

THE DINNER

Took place at half-past three. The President, Dr. PETER WILLIAMS, was in the chair; and T. T. GRIFFITH, Esq., of Wrexham, occupied the vice-chair. There were also, in addition to all who attended the general meeting, the following gentlemen present as guests: the Rev. the Vicar of Holywell, and Rev. — Roberts, the Curate; Alexander Cope, Esq.; Samuel Williamson, Esq., of Holywell; and Mr. W. Wood, surgical instrument manufacturer, of Manchester.

After the various loyal toasts, the President gave the "health of the Bishop and Clergy," connecting with this his respected friend and neighbour, the Vicar of Holywell. They had then an opportunity of observing how diligently the ministers of religion discharged their duties.

The Rev. the VICAR returned thanks, stating that he was most happy to meet so many members of the medical profession on this occasion, as he considered that their two professions were inseparably united in benefiting humanity.

Mr. WILLIAMSON (solicitor), on his health being drank, returned thanks in a humorous and eloquent speech. He complained that the Vicar had omitted his (Mr. Williamson's) profession from the fraternal combination which he had mentioned. (Laughter.) He was, however, very happy to be amongst them, as he was deeply indebted to members of the medical profession for their skilful attention to himself and family.

Various other toasts and sentiments followed, and the greatest hilarity was maintained, until the time arrived for members to separate for their various homes.

WEST SOMERSET BRANCH:—ANNUAL MEETING.

The annual meeting was held at Clarke's Castle Hotel, Taunton, on Wednesday, June 29th. The following members were present: R. Burridge, M.D. (Taunton), President; W. E. Gillett, Esq. (Fairwater, near Taunton), President Elect; H. Alford, Esq. (Taunton); G. R. Burt, Esq. (Ilminster); W. Coates, Esq. (Wington); James Crang, Esq. (Timsbury); Alfred Haviland, Esq. (Bridgewater); W. M. Kelly, M.D. (Taunton); G. Kidgell, Esq. (Wellington); W. Land, M.D. (Taunton); R. Marchant, Esq. (North Curry); H. L. Nazer, Esq. (Wiveliscombe); W. C. Pyne, Esq. (Wellington); H. W. Randolph, Esq. (Milverton); G. F. Wills, Esq. (Crewkerne); and F. H. Woodforde, M.D. (Taunton), Treasurer and Secretary.

The minutes of the proceedings at the last annual meeting having been read, the report of the Local Council and the Treasurer's account were read and adopted.

OFFICERS AND PLACE OF MEETING FOR NEXT YEAR.

The following resolutions were adopted:—

"That the next annual meeting be held at Wellington; and that G. Kidgell, Esq., be the President Elect.

"That W. Reynolds, Esq., and G. Brock, M.D. (of Wellington), R. Marchant, Esq. (of North Curry), H. Alford, Esq., and W. M. Kelly, M.D. (of Taunton), and H. L. Nazer, Esq. (of Wiveliscombe), together with the President, President Elect, and the Secretary, form the Local Council for the ensuing year; and that Dr. Woodforde be requested to continue to act as Local Secretary and Treasurer."

VOTES OF THANKS TO RETIRING OFFICERS.

A unanimous vote of thanks was given to the retiring President, to the Council for the past year, and to the Secretary.

THE JOURNAL.

It was resolved unanimously,—

"That the improvement manifest in the ASSOCIATION JOURNAL, since it has been under the management of the present Editor, has the warm approval of the Members of this Branch."

THE DINNER.

After the meeting, the members present dined together. Among the toasts received with cordial applause were, success to the Association; the President of the Council; the General Secretary; the Editor of the Journal; Mr. Newnham, and the Benevolent Fund.

REPORTS OF THE ANNUAL MEETINGS OF THE BRANCHES: CAUSE OF THEIR DELAY EXPLAINED.

We have this week received Reports of the Proceedings of the BATH AND BRISTOL BRANCH, and of the LANCASHIRE AND CHESHIRE BRANCH, more than enough to fill one entire number. Being unwilling, without correspondence with the Secretaries, to make the necessary curtailments, we delay these Reports, though at great inconvenience; because, having provided a large sheet for this week's impression specially on their account, we are now obliged to fill it with matter destined for next week's number.

Carefully condensed Reports, appearing immediately after the Branch Meetings, are, we feel assured, those which are most read and appreciated. In future we shall arrange with the Secretaries in such a way as to prevent delay in publishing the reports.

EDITOR'S LETTER BOX.

EXCLUSION OF THE REPORTER OF THE "NORTH WALES CHRONICLE" FROM THE MEETING OF THE NORTH WALES BRANCH.

LETTER FROM JOHN LLOYD, Esq., TO THE EDITOR.

SIR,—In reference to the unanimous resolution of excluding a reporter from the Meeting of the North Wales Branch of the Provincial Association, allow me to give a more complete explanation of the circumstances which led to it, than, I believe, can be inserted in the Report of the Meeting. Nothing could exceed my regret at finding myself compelled thus to occupy the time which would have been more usefully devoted to other objects. But I confidently appeal to our fellow-associates, and ask them whether any other course could have been pursued?

In October last, I was desired to visit, in consultation, a sub-officer belonging to the extensive harbour works at Holyhead, who was a patient of Mr. Duncan, the surgeon to the works. I found Mr. Duncan exceedingly anxious about him, as the most unprofessional attempts (he said) were being made to interfere in the case, by a person who, he had every reason to believe, had not long settled in the town, with the intention of supplanting him in his office as surgeon to the works. He also bitterly complained that this interference, systematically carried on against him, was backed by appeals to the ignorance and prejudices of the workmen, with which he was unable to contend, from his imperfect knowledge of the Welsh language, and other causes.

To the patient in question, however, we directed our best attention, and had the pleasure of seeing him recovering from a severe attack of acute dysentery, chiefly under the influence of anti-phlogistic and mercurial treatment. Mr. Duncan, in a few days, pronounced him convalescent. This good result appeared to be too much for the feelings of the interfering doctor and his friends, and the patient was, almost *vi et armis*, withdrawn from under Mr. Duncan's care. He immediately became worse, and died in a very short time.

Under these disagreeable circumstances, Mr. Duncan consulted two highly respectable practitioners in this island (not members of the Association), who strongly advised him to have an inquest held. This was accordingly done; and Mr. Duncan, his assistant, and myself, attended. I took careful notes of the proceedings, which will at any time be at the service of the Association. At the inquest, there also attended Mr. T. Richards, a surgeon, of Bangor, who had seen nothing of the case, but who appeared to be present in order to defend the party whose conduct was the subject of inquiry. He asked me a simple question, calculated to lead to an answer favourable to his friend: this, however, I declined answering on oath, as it was of a speculative character, and did not bear directly on the facts of the case. In return, I asked Mr. Richards how he could give an opinion on a case which he had never seen? To this question he did not give a direct answer.

This short and simple conversation being all that passed between us, the editor of the Bangor newspaper (*North Wales Chronicle*) published a statement that Mr. Richards had made a violent attack upon me! This, however, formed only a part of a running fire of paragraphs and letters for weeks after the inquest, containing the grossest abuse and misrepresentation of Mr. Duncan and myself. To Mr. Duncan, these misrepresentations were of the most serious consequence, as, in conjunction with other equally unjustifiable proceedings, they were endangering his situation.

We both immediately wrote a short contradiction to the first statement which appeared; and this was allowed to appear in the paper. Afterwards, however, a great change appeared to take place in the "freedom of the press"; that "palladium of British liberty", etc. A violent agitation was excited against Mr. Duncan, and no doubt assisted greatly by this string of newspaper paragraphs. As these were seriously calculated to damage the official position of Mr. Duncan, I drew up for publication a careful statement, correcting many of the misrepresentations, and certainly commenting in severe terms upon the disreputable and truculent proceedings of which we had such just cause to complain. A copy of this document will be forwarded to you. Its publication in the newspaper referred to was promised us; it was then said to be too long; then it was too severe, and I was modestly asked to draw up a very mild, moderate, civil letter. I declined this very mild offer; and requested that if not all the

paper, at least a sufficient portion of it should be published, to form a reply to the misstatements. I also mentioned that I had been casually told by some legal friends that the paragraphs in the newspaper were *libellous*.

In the mean time, the storm against Mr. Duncan continuing to rage, he went personally to the editor, to ask him to publish the defensive statement. This was again refused. He therefore directed that it should be published as an advertisement in the *Carnarvon Herald*. What follows? The editor of the Bangor paper declares with the coarsest abuse that he will not publish any part of the statement, and defies me to go to law with him.

Now mark the consequence. All this combination of wickedness and impudence had at last the intended effect of acting upon the prejudices of the workmen at the Holyhead works, and Mr. Duncan, against whom no charge whatever had been preferred, was deprived of part of the emoluments of his situation, among scenes of violence, which would be a disgrace to a Tipperary mob. I am sorry to add that he has since resigned in disgust, and has left the place.

From this eventful story, your readers will see the justice of the proceeding, by which a representative of a press which had thus acted against two members of the profession, was unceremoniously ejected from the meeting of the North Wales Branch of the Association at Holywell.

I am, etc.,

J. LLOYD.

P.S.—I beg to direct your particular attention to the "elegant extract" in which the editor and proprietor of the Bangor paper notices the act of justice which has just been dealt to him. He appears to be anything but "serene", as he calls it; for, after venting his indignation upon the secretaries and the members generally, he (to use his own refined phraseology) "spits his venom" abundantly on my humble self. Without having been present or represented, he says that my statement at the meeting was false. The simple fact of my reading and calling attention to the fourth fundamental Rule of the Association, "that we are to maintain the honour and dignity of the profession," he says, was "a deliberate misrepresentation of our bye-laws"; and, speaking of a body of men who enjoy the confidence of the public, he hypocritically affects to tremble for the safety of those who are occasionally obliged to submit themselves to their care". And this is from an adventurer who has been settled in this country only a few years!

Llangefni, Anglesey, June 1853.

NEWS AND TOPICS OF THE DAY.

COURT OF QUEEN'S BENCH, JUNE 22.

FENNELL v. ADAMS* FOR SLANDER.

This was an action to recover damages for slanderous words alleged to have been uttered by the defendant, prejudicial to the professional character of the plaintiff.

The defendant pleaded "Not Guilty", and "justification".

Mr. M. Chambers, Q.C., Mr. Serjeant Wilkins, and Mr. Petersdorff, appeared for the plaintiff. The Attorney-General (Cockburn), Mr. Bramwell, Q.C., and Mr. Hall, were for the defence.

Mr. Chambers thus stated the case. The plaintiff is a surgeon at Wimbledon, and is medical officer of an institution there, called "The Maternal Society", of which the wife of the Rev. Mr. Adams, the defendant, is the treasurer. The charge made against the plaintiff by the defendant was calculated to affect seriously his professional reputation. The words complained of were to the effect, that the plaintiff had, in many cases, been very negligent in his attendance upon various females when in labour, and that several children had been, consequently, strangled in the birth.

Mr. Edward Fennell, the plaintiff, deposed that he is a surgeon residing at Wimbledon. In 1834 he purchased Dr. Wright's practice at Wimbledon, and paid £1000 for it. He was subsequently appointed to the Kingston Union, and to "the Wimbledon Maternal Society". In 1849 he received a letter from the Hon. Mrs. Adams, treasurer of the Maternal Society, and wife of the defendant, who is curate of Wimbledon. The letter contained general complaints, charging him (plaintiff) with neglect

of the female patients, but not naming any particular case. He called on Mrs. Adams in consequence, when she mentioned the case of Mrs. Gregory, wife of the coachman of Mr. Lefevre. He (plaintiff) attended her in 1848 or 1849. She had puerperal fever. He consulted with Mr. Parrott as to the treatment. She sank under the complaint. Mr. Lefevre expressed his satisfaction with the treatment. There had been 385 cases of midwifery under his (plaintiff's) charge, this was the only patient he had lost. In the case of Mrs. Elsley, Mrs. Adams refused to pay him his fee of half-a-guinea. He wrote to her for an explanation, and received a letter in reply, which stated, that, according to the regulations of the institution, the surgeon was not entitled to his fee unless he was present at the birth. He had attended Mrs. Elsley, who was the wife of a labourer, in three confinements, and on the occasion in question, Mrs. Riley was her nurse. He went to Mrs. Elsley immediately when he was called. He was at the time in attendance on a child named Roy, who was severely ill. When he arrived at Mrs. Elsley's he remained an hour in attendance, and finding the case was not pressing, he left, and went to see the child Roy, whose residence was within sight of Elsley's house. He (plaintiff) left word where he was going, and returned in twenty-five minutes to Mr. Elsley's. He then found the child born, and did what was necessary. There was a nurse and a midwife there at the time. The patient did well. He issued a circular, in answer to the injurious rumours which had been circulated regarding him, in which he stated that it had never occurred to him to have a child "strangled in its birth". Plaintiff subsequently called to see Mr. Adams but was informed by Mrs. Adams that he did not wish to be mixed up in the case.

Plaintiff, in cross-examination, deposed that he had no recollection of the nurse at Elsley's having said to him, when he was leaving: "I hope you are not going to leave me, as you did the last time?" When he returned to Elsley's, he had only to remove the placenta. He did not hear Mrs. Elsley make any declaration, and he asked several women whether there was any truth in the statement; and he subsequently drew up an official declaration, according to their statements, for them to sign. He attended Caroline Chester in two confinements; but could not recollect that he was present at the first of the births. At the second birth he did not remove the placenta. He was at the time in attendance upon another patient, who had a prior claim upon him, and he left to attend her before he removed the placenta. The woman might have said, upon his leaving: "Who shall we get?" and he might have said to her, "Who you can." When he returned, the placenta was still adhering. They called him up the next morning, at half-past five o'clock, and told him the woman was suffering, and asked him to give something to relieve her. He gave something, and called about nine o'clock, and removed the placenta. The plaintiff was then, in continuation of the cross-examination, questioned as to his attendance on Ann Dossett, Julia Rapley, Sarah Nicholls, Elizabeth Phipps, Mrs. Finch (who was twenty-five hours in labour), Mrs. Nicklebury, Mary Anne Frost, Mrs. Jordan (an Irishwoman), Mrs. Croach, and Mrs. Rapley. In those cases, the complaints principally were, that he (the plaintiff) was absent when the children were born, and a charge of neglect was imputed to him by the defendant's wife, and a further charge, that he (the plaintiff) was regardless, in such cases, of the claims and condition of the poor.

Mrs. Mary Savory, the late curate of Wimbledon, and others, gave testimony in favour of the plaintiff's professional and private character.

The Attorney-General addressed the jury for the defence, and submitted that any allusions made to the plaintiff by the defendant were made at a meeting of the lady subscribers of the Maternal Society, at which that gentleman presided as chairman, and that they were of the nature of a "privileged communication", and, as such, not actionable. He denied that the defendant had expressed any charge against the plaintiff about children strangled in their birth; but he admitted that he had accused him of gross neglect in the midwifery cases.

In support of the defence, Caroline Chester, Mary Freedy, Elizabeth Elsley, Maria Riley, Mary Stacey, Sarah Nicholls, Elizabeth Phipps, Mary Anne Elms, Mary Anne Hiddlebury, Mary Anne Frost, the Rev. Mr. Adams (the defendant), and Mrs. Holroyd, wife of Mr. Commissioner Holroyd, were called, and deposed to what passed at the meeting of lady subscribers to the Maternal Society. They had no recollection of anything having been said at that meeting by the defendant about strangled children.

The other female witnesses were principally those who had been confined by the plaintiff, and they spoke in favour of him.

* Sitings at Nisi Prius, at Westminster, before Lord Chief Justice Campbell, and a Special Jury.

which he had not been present at the moment of the birth of the child. It appeared, however, that he was in the neighbourhood, and came soon afterwards.

Dr. Arnott gave evidence that it was not good practice to leave the placenta in the uterus without placing the patient in experienced hands; but he stated that it was impossible for any medical man to foretell exactly the moment when a child would be delivered.

Dr. Murphy gave evidence of a similar character.

Mr. Montagu Chambers replied on the evidence, and urged upon the jury, that the communication casting imputations on the plaintiff was not a "privileged communication"; that it was a communication calculated to do the most serious injury to the plaintiff; and that he (the plaintiff) was therefore entitled to reparation in damages at their hands.

Lord Campbell summed up. The case was certainly a most painful one on one side and the other. The witnesses on both sides had conducted themselves in a most creditable manner. It did not appear that there had ever been a quarrel between the plaintiff and defendant, neither did it appear that the defendant had ever entertained ill-will to the plaintiff. Plaintiff, it appeared, had attended between four and five hundred midwifery cases in the course of his practice, and had never, he deposed, lost but one case, in which death resulted from puerperal fever. In the cases of the female witnesses who had been examined, there did not appear to be any serious evidence of neglect. He attended when called, and, perhaps, had other pressing cases when he left to go elsewhere. The questions for the consideration of the jury would be,—whether the communication of the defendant was a "privileged communication", and whether he had made out his pleas of "Not Guilty" and "justification". If they found that it was a "privileged communication", they would pronounce the defendant "Not Guilty", and the plaintiff would not be entitled to any damages; and, if they found that defendant had not made out his plea of "justification", they would then give a verdict for the plaintiff, which would entitle him to the costs of the trial, but not to damages.

The jury returned a verdict for the plaintiff, on the plea of "justification"; and for the defendant, on the ground that the communication was "a privileged communication", and, therefore, not a guilty one.

Lord Campbell: I am perfectly satisfied, gentlemen, with your verdict. I am happy to say, that by it both parties go out of Court with their characters reestablished.

MEDICAL BENEVOLENT COLLEGE.

The foundation stone of this institution, which is to be erected in the neighbourhood of Epsom, was laid on Wednesday last, the 6th instant, at 4, p.m. It had been announced that His Royal Highness Prince Albert would perform the ceremony; but, in consequence of His Royal Highness labouring under an attack of measles, the Right Hon. the Earl Manvers, President of the College, officiated. The absence of the Prince, and especially the cause, were the subjects of universal regret. The Lord Bishop of Winchester performed the religious portion of the ceremony; and appropriate psalms were sung by the parochial school children of Epsom. A large concourse of spectators were present, among whom were a goodly number of ladies. The band of the Royal Marines attended.

After the stone had been laid, a large portion of the company present adjourned to an adjoining tent, where a *déjeuner* had been provided. The Earl Manvers occupied the chair.

After the usual loyal toasts, coupled with expressions of regret at the cause of the absence of Prince Albert, had been drank, the following were proposed and duly responded to. "The Medical Benevolent College"; by the President. "John Probert, Esq., the Founder of the Medical Benevolent College"; by Henry Pownall, Esq. "The Ladies", who had so warmly supported the Institution; by Nathaniel Clifton, Esq. "The Earl Manvers"; by the Rev. Mr. Pocock. "The Bishop and Clergy of the Diocese"; by J. W. Freshfield, Esq., M.P. In reference to this toast, Mr. Probert stated, that in his applications to the Bishops, he had always met with a most cordial reception.

Mr. PROBERT stated, before the company separated, that he was not yet able to state the exact sum which had been collected on that day. It is believed, however, that the amount was not far short of £2000. He then read a list of donations received for the day, among which were the following: the Earl Manvers, £52; 10; B. E. Winthrop, Esq. (of Dover), £525; the inhabitants of Epsom, £130; the Croydon and Epsom Railway, £100; Dr. Forbes, £100; John Churchill, Esq., £100; Sir Charles M. Clark, £21; besides numerous donations of ten guineas and five guineas each.

MEDICAL STAFF OF THE BURMESE ARMY. "Here is an extract from Sir John Cheape's despatch:—'To Surgeon Andrews, 67th Native Infantry, and the medical department, I have to return my best thanks for the performance of their very arduous duties in the care of the sick and wounded; and to Assistant-Surgeon Murphy, officiating staff-surgeon to the division, in particular my special thanks are due; he was the senior medical officer until the arrival of the reinforcements from Rangoon, and all the arrangements made by him have been most perfect. On the 19th instant, the wounded men were attended to by him under a very heavy fire, and though wounded (I am happy to say very slightly), it did not deter him a moment from the zealous discharge of his duties; he has performed them throughout in the most unwearied and able manner, accompanying the men in the boats to the steamers, and seeing them carefully attended to, and disposed of. I consider the force fortunate indeed in having a medical officer of his talent and character in such trying circumstances, and I feel assured the Major-general will accord his approbation of the services of this officer.'

"Sir John Cheape is a scientific officer, being of the corps of engineers, and is therefore especially qualified to give an opinion of the merits of a scientific body. In the British army, officers of the Artillery and of the corps of Engineers are, by the habits of this country, altogether excluded from command, whether in peace or in war. In the Indian army, it is otherwise. Sir Geo. Pollock and Sir William Whish both held command of armies, although officers of Artillery; and Sir John Cheape, more remarkable still, is, as we have said, an officer of the highest scientific class, namely, an engineer. It has been observed, that, the more scientific an officer is, the more friendly does he prove to the military surgeon. Abercrombie and Moore were the intimate personal friends of Robert Jackson."—*Lancet*, July 2nd.

DON TOMAS DE CORRAL Y ONA. This eminent obstetric physician of Madrid has been appointed to attend the Queen of Spain during her pregnancy and confinement. Her Majesty is in the third month of her gestation. This appointment has deservedly given much satisfaction to the profession and the public in Madrid. Dr. Corral y Ona is the author of an excellent work on Homeopathy, entitled "*La Homeopatía, ó Farmacología Analogo-Infinitesimal, ante el Criterio y el Sentido Común*".

MEDICAL JOURNALS OF MADRID. The first number of a new medical journal, *La Crónica de los Hospitales*, has just appeared in Madrid. It is to be published on the 8th and 24th of each month, by Bailly-Baillière of the Calle del Príncipe. The other medical journals of Madrid are the *Boletín de Medicina, Cirugía, y Farmacia*, and *El Heraldo Médico*. We regularly receive the two last named weekly periodicals in exchange for the ASSOCIATION JOURNAL, and shall be glad to establish a similar reciprocity with the *Crónica*.

SALT. In the House of Commons, on Monday, the Marquis of Westminster, in presenting a petition from the inhabitants of the town and neighbourhood of Northwich, praying that English salt might be imported into all parts of British India upon the same terms and conditions as other goods and manufactures, said: If the advantage from opening the trade would be great to the commercial gentlemen of Lancashire and Cheshire, it must be much more so to the unfortunate Hindoo, who, during eight months of the year, lived entirely on rice, and, during the other four months, on any other vegetable matter he could obtain. Salt to the Hindoo was an absolute necessary of life, and it saved him from disease and death. Notwithstanding the importance of a sufficient and pure supply to the people of India, the policy pursued by the government of India had introduced a system of adulteration which was utterly incredible. It was well known that the impurities attaching themselves to salt amounted to about 13½ to 100 lbs; but, in the salt sold wholesale by the Company, the impurities increased to a much larger amount; and it had been estimated that, of the salt sold in retail, the adulteration was not less than one-half. From this cause, the salt sold to the natives was so distasteful to them, that, previous to using it, they were obliged to resort to a process of purification.

FEMALE PHYSICIANS. The Female Medical College of Pennsylvania will commence its next course of lectures on the 1st of October. Its Faculty consists of five male and two female Professors,—the latter regularly graduated physicians, as well as the former,—while the Demonstrator in Anatomy is also an able female physician.

MEDICAL REFORM.

[House of Commons, Monday, July 5th, 1853.]

Colonel DUNNE inquired what course the Government intended to take with respect to the introduction of a Bill for regulating the Medical Profession? He also wished to know whether certain regulations or bye-laws of the Pharmaceutical Society had been referred to the law-officers of the Crown?

Lord PALMERSTON hoped to be able to bring in a Bill, but probably not so much with the view of passing it this Session, as with the view of submitting its provisions to consideration. At the same time, he did not preclude himself from proposing it with the view of carrying it. With respect to the bye-laws of the Pharmaceutical Society, they were presented to him for approval. He sanctioned them, subject to any legal decision which might be come to in one of the articles, to which objection had been made as not being consistent with law. He would not take on himself to decide that point; neither did he think it expedient to refer it to the law-officers of the Crown.

LONDON MEDICAL REFORM COMMITTEE. We understand that a meeting of this body was held on Tuesday evening last, to consider the statement made by Lord Palmerston in the House of Commons on the previous evening. It was resolved, that the Committee should hold themselves prepared to act promptly, in case of any bill for medical reform being brought forward by the government; and, as little doubt was felt that the measure introduced would be the same as that which has already been so much discussed by the profession, it was determined that active assistance should be rendered to the government, to enable it to be passed into law.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. MEMBERS admitted at the meeting of the Court of Examiners on the 24th June:—Slade Innes Baker, Hayford Warren, Oxfordshire; Joseph Barker, Durham; William Griggs, Little Easton, Dumfries; William Angelo Knaggs, Kensington; William Hitchin Pendlebury, Bolton, Lancashire; Henry Pratt, Montreal, Canada; Robert Bath Smart, Balsham, Cambridgeshire; Henry G. Sturkey, Fachwen Tregynon, Montgomeryshire; Harry Barrington Tuttielt, Ventnor, Isle of Wight.

APOTHECARIES' HALL:—PASS LIST. Thursday, June 23rd, 1853:—Fergus Armstrong, Appleby, Westmoreland; Edmund Chapman; William Kaylet Curtis, Harting, Petersfield; Horace Kersey Debenham, Norton, Suffolk; Christopher Deighton, Edinburgh; Joseph Ferguson Lindley, Stalybridge, Lancashire; William Robert Faun Marchant, North Curry, Somerset.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

CLARKE, W. T., Esq., elected Surgeon to the Huddersfield Infirmary.

GREEN, Joseph Henry, Esq., F.R.S., appointed Consulting Surgeon to St. Thomas's Hospital.

*SOLLY, Samuel, Esq., F.R.S., elected Surgeon to St. Thomas's Hospital.

TATHAM, T. B., Esq., elected Surgeon to the Huddersfield Infirmary.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

GRAVES, William Henry, Esq., Surgeon, at 40, Trinity Square, Tower Hill, aged 52, on June 27.

NICHOLL, W. K. L., M.D., formerly of Ryde, Isle of Wight, at 7, Upper Porchester Street, Hyde Park, aged 75, on June 23.

WETHERHEAD, George Hume, M.D., at Foot's Cray, Kent, aged 63, on June 22.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ADVERTISEMENTS.

Just Published, Part I, with Engravings on Wood, Price 3s. 6d.

The Pathology of the Bronchio-

PULMONARY MUCOUS MEMBRANE. By C. BLACK, M.D., Bachelor of Medicine, and formerly Medical Scholar in Physiology and Comparative Anatomy in the University of London; Fellow of the Royal College of Surgeons of England, etc.

London: SIMPKIN, MARSHALL, & Co. Edinburgh: SUTHERLAND & KNOX.

New Volume of Braithwaite's Retro-

SPECT OF MEDICINE. JANUARY TO JUNE, 1856. Just published, price 6s., the 27th Volume of this Work, giving a careful Analysis of the most Practical Papers, Lectures, and Transactions of Societies, published in all the Medical Journals within the last Six Months. Appended to which is an Alphabetical List of Diseases; with the most recent Suggestions of Treatment. Edited by W. BRAITHWAITE, Lecturer on Obstetric Medicine in the Leeds School of Medicine, etc.

N.B. A limited number of Sets of the above work, Vols. 1 to 25, have been made up, and are offered at the reduced price of £4, in cloth. Separate vols. at the original prices, viz. vols. 1 to 3, at 4s. 6d. each; Vols. 4 to 11, at 5s. 6d. each; Vols. 12 to 27, at 6s. each.

London: SIMPKIN, MARSHALL, and Co.

Edinburgh: OLIVER and BOYD. Dublin: HODGES and SMITH.

Recently Published, 6s. Cloth.

On Certain Diseases of the Skin

generally pronounced intractable, illustrated by upwards of Forty Cases. By THOMAS HUNT, F.R.C.S., Surgeon to the Western Dispensary for Diseases of the Skin.

OPINIONS OF THE MEDICAL PRESS.

"Mr. Hunt has transferred these diseases *en masse* from the category of the *in-curable* to that of the *curable* maladies; and we venture to say that there are few English practitioners who have failed to profit by these important investigations."—*Lancet*.

"The directions given by Mr. Hunt are very different from those generally laid down by preceding writers. His observations are highly judicious, and fraught with instruction and benefit; the ultimate results of which indeed can scarcely be calculated."—*Provincial Medical and Surgical Journal*.

"No one can rise from the perusal of the work without some insight into the cause of the frequent failure of the treatment of affections of the skin. Nor ought we to omit bestowing on Mr. Hunt that praise which is due for having abstained, in a small work on skin diseases, from all quackery and self-laudation."—*Medical Times*.

"The method of treating chronic skin diseases upon the plan so ably recommended and illustrated by our talented associate, Mr. Hunt, has been tried in America with considerable success."—*Provincial Medical and Surgical Journal*.

Also, by the same Author, 1s., stitched,

On SYPHILITIC ERUPTIONS; with

especial reference to the use of Mercury.

"We regard Mr. Hunt's views to be of considerable importance."—*Ranking's Abstract*.

London: JOHN CHURCHILL, Princes Street, Soho.

Marischal College and University,

ABERDEEN—Besides the ordinary Examination Terms, (in April and October,) there will this year be a third, in the last week of July, to meet the case of Candidates for the Assistant-Surgeoncy H.E.I.C.S. offered by Col. Sykes to the best competitor among the students who have completed their academical course at King's or Marischal College; and for the Assistant-Surgeoncy in Her Majesty's Service, offered for competition to the students of Marischal College, by the Director-General of the Army Medical Department.

CASES IN WHICH MEDICAL PRACTITIONERS MAY BE ADMITTED, WITHOUT RESIDENCE, TO EXAMINATION FOR MEDICAL DEGREES.

Practitioners may be admitted, without residence, to Examination for the Degree of M.B., who have held a Diploma or a Licence in Medicine or in Surgery for at least five years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

Practitioners may be admitted, without residence, to Examination for the Degree of M.D., who have held a Diploma or a Licence in Medicine or in Surgery for at least ten years, and who produce satisfactory evidence of good moral character, and of having been engaged in practice during that period.

Practitioners who have held for at least three years the Degree of M.B., obtained without residence, may receive the Degree of M.D., upon producing satisfactory evidence of good moral character, and of having been engaged in practice during their possession of the inferior Degree.

YORK COUNTY HOSPITAL.

A Special Court of Trustees and

GOVERNORS of this Charity will be held at the Hospital, on FRIDAY, the 22nd of JULY next, at ONE o'Clock in the Afternoon, for the Election of a HOUSE SURGEON.

He must be an Unmarried Man, between the Ages of Thirty and Forty-five Years. He will have to reside in the Hospital, and to undertake the whole internal management of it under the House Committee. The Salary is £200 a year, with Board and Lodging.

Candidates are requested to send Testimonials to my Office One Week, at least, before the day of election.

JOHN HUGHES, Secretary.

York, June 9, 1855.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXVIII.

LONDON: FRIDAY EVENING, JULY 15, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. The Subscription runs from January to January; and members now joining will receive the Numbers of the JOURNAL from the commencement of the year. Members receive the JOURNAL free by post.

LETTERS TO THE EDITOR ON THE SUNDAY QUESTION.

On the 24th of June, we introduced to the notice of our readers the petition of six hundred and forty physicians, surgeons, and general practitioners in London, praying Parliament not to alter the existing law so as to allow the Sydenham Crystal Palace to be opened on Sundays for the gain of its proprietors. We, at the same time, recognised the political importance of the right decision of the question whether Sunday should be a day of rest, or a day of pleasure. We advocated the right of the toil-worn population to a weekly holiday, for their secular recreation, at home or abroad; and we exposed, as the offspring of mistaken philanthropy, the schemes of those estimable men, who are now wishing to destroy the present character of Sunday, and to make it a grand legalised day of extradomal pleasuring. On the low grounds of political expediency, we showed that the prosperity and patriotism of our population could not be maintained, unless one day in seven was generally observed as a domestic day.

On the 1st of July, in reply to Dr. Forbes, we carried our argument a little farther; and, having called attention to the fact that Sunday Slavery necessitate the addition of weekly Sunday Slavery to six days' hard labour, we remarked:—

"Can words be too hard, whereby to designate this cruel tyranny of the many over the few? . . . If man really be born to immortality, the establishment of so strict a quarantine between the creature and the Creator is a crime of magnitude too enormous for words to compass."

We have thought it necessary thus briefly to repeat the grounds upon which we defended a weekly day of rest from labour, because, after perusing the letters of Dr. Markham and Mr. E. Sheppard, it occurred to us that our readers might begin to fancy that the views assailed by these gentlemen were the views which we had advanced and advocated. This is wide of the truth. We never described religion as an irksome duty, as a sort of necessary, yet dreary penance; nor did we ever seek to identify prayer with the "technicalities" of breviary and bead, of liturgy or litany. On the contrary, the whole tenor of our writing proceeded on the assumption that religious duties are refreshing both to the body and to the mind, and that what Dr. Forbes so happily calls *technical* religion, is not religion at all. We were not

oblivious of the fact, that the same Divine Being who commanded the Jews to "remember the Sabbath day to keep it holy", and who likewise instituted many ceremonial observances, taught his people carefully to distinguish between forms of religion and religion itself. In the first chapter of Isaiah, we remembered that these words are written:—

"Bring no more vain oblations; incense is an abomination unto me: the new moons and Sabbaths, the calling of assemblies, I cannot away with: it is iniquity, even the solemn meeting.

"Wash you, make you clean; put away the evil of your doings from before mine eyes: cease to do evil:

"Learn to do well: seek judgment, relieve the oppressed, judge the fatherless, plead for the widow.

"Come now, let us reason together, saith the Lord: though your sins be as scarlet, they shall be as white as snow; though they be red like crimson, they shall be as wool.

"If ye be willing and obedient, ye shall eat the fruit of the land."

The letters of Dr. Markham and of Mr. E. Sheppard in no way touch our arguments, and are calculated to import into the controversy a great deal of irrelevant materials. As for the letter of our respected friend, who adopts as his signature a reference to Isaiah, we feel perplexed beyond measure. If words have any meaning, the beautiful passage to which he refers is an overwhelming answer to every argument in favour of Sabbath pleasuring, provided that we consent to try the question by the Bible. The only three letters which we have received for publication, in opposition to our views, are those to which we have now referred, and which will be found in subsequent pages of this number. We invite our readers to peruse them, in connexion with our previous articles, and decide between their authors and ourselves.

From upwards of fifty letters which we have received in support of our own views, we print as many as space will allow. The different points from which different accomplished minds contemplate the subject, and yet reach the same conclusion, cannot fail to interest and to edify a numerous portion of the members of the Association, though the opinions expressed may not always command assent. It is with inexpressible pleasure that we read and publish such letters as that of Professor Miller; yet we must, as medical journalists, confine the discussion within the limits which we have already indicated, and rest satisfied by vindicating the present law and custom of this nation in reference to Sunday, on the grounds of—

I. POLITICAL EXPEDIENCY;

II. THE CRIMINALITY OF ESTABLISHING A QUARANTINE BETWEEN THE CREATOR AND ANY NUMBER OF HIS CREATURES; and

III. THE PHYSICAL AND SANITARY REQUIREMENTS OF THE HUMAN RACE.

For some weeks to come, we cannot possibly return to this subject; but we may revert to it upon some suitable occasion. In the mean time, we commend to

general attention the letters published in this day's number, as they afford a cheering and convincing proof that the soundest principles of Christian ethics deeply pervade the profession of Medicine.

THE BRANCH MEETINGS.

THE length of our reports of the Branch Meetings leaves us very little space this week for leading articles, and obliges us to postpone much matter which we had prepared in the departments of Bibliographical Notices and Periscopic Review. The great interest and value of the reports, however, will make them generally acceptable to members. If it were possible to prevent so many Branch meetings happening simultaneously, the result would be felt as a general benefit to the ASSOCIATION; as it would enable the proceedings of the Branch meetings to be promptly reported, without disturbing the usual plan of giving a varied character to the contents of each number. We are very far from thinking that our Branch meetings are too frequent: nay, we are every day becoming more and more convinced that the best method of increasing the usefulness and augmenting the power of the Association is for district meetings to be multiplied, and for members to feel that attendance upon them is a duty which they owe to themselves and to their profession. Formal business assemblies are not always required; and a meeting may often be productive of great present and prospective advantages, although its proceedings claim but a small amount of space in these columns.

The remarks upon the importance of more frequent meetings made by the President of the Suffolk Branch particularly arrested our attention; and we think that resolutions in accordance with the spirit of his speech might well be acted upon throughout the Association. If the medical profession ever attains to its legitimate social status and political power, it will be by its members being better organised, and meeting more frequently with each other, not merely for scientific improvement, but for the purposes of brotherly intercourse, and of discussing the medico-political and professional topics of the day. Then, and not till then, will it be possible to form any conception of the immense and ever augmenting benefits bestowed upon the medical profession by Sir Charles Hastings, when he founded the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

ORIGINAL COMMUNICATIONS.

IMPACTION OF THE RECTUM FROM UNGROUND WHEAT.

By T. INMAN, M.D.

CASE. A. B., aged 60, was admitted into the Northern Hospital, July 5. He was a poor Irish emigrant, and seemed too ill to give any account of himself. The sickening odour which proceeded from his breath and body prevented a prolonged examination of his person. He was, on his admission, making constant but ineffectual attempts to vomit, and told us that he was purged. Further inquiry indicated that "he was not purged at all, but that every thing came up the other way". The pulse was very weak, and the man seemed almost in a dying state. The symptoms being those of strangulation of the bowel, I examined the groins, and found that there was a double scrotal hernia. There was, however, no tenderness on pressure, nor anything to show that the mischief was there. The first object was to gain as accurate information as possible respecting the condition of the bowels; whether there was really constipation, or not. Castor-oil was ordered, and his strength was supported by wine.

The oil operated freely, producing copious watery evacuations, which were seen by the house-surgeon. On my next visit, the man was evidently worse; and he then informed me that ten days ago they had given him wheat instead of rice, and that "nothing had passed through him since". Having heard of a similar case, where peas had been eaten too freely, I directed an enema to be administered, to ascertain whether there was any lodgment in the rectum. The man, however, died before it could be administered, twenty-four hours after admission. He had hiccough before death, and an intensely sickening breath, which had something of a spirituous odour; at least, after trying to think what it reminded me of, this came the nearest to it. On making a post mortem examination, the same odour was very strong about the bowels. The bowels were much distended with flatus; the ileum was, in some parts, perfectly contracted, in others distended. The whole of the intestines were gorged with blood, and congested; but there was no effusion of lymph. The inguinal canals were very large, and quite clear from any part of the gut. The colon was greatly distended with flatus. The sigmoid flexure and the rectum were stuffed full of wheat: a great part of this had been chewed, and consisted of the husk alone; the rest consisted of grains, swelled and distended by the absorption of fluid,—about a quart was collected in all. It had a smell similar to that exhaled by the breath; but I cannot say that there were marks of fermentation.

REMARKS. Had this man been seen earlier, or had he been able to give us a clear history of his case on admission, I think it exceedingly probable that his life might have been spared; for an examination of the rectum, or the effects of an enema, would have made the case clear. As it was, the absence of clear information, and the necessity for procuring it before proceeding to act, rendered delay necessary,—and that delay was fatal. To give an idea of the conflicting nature of the history I received, I may mention that the man said he was never purged. The patients in the wards said he was constantly going to the stool; the nurse, that he passed liquid motions; and that the house-surgeon, who saw them afterwards, imagined the man had diarrhoea.

Liverpool, July 1853.

THE LOCAL TREATMENT OF CARBUNCLE AND FURUNCLE.

By RICHARD FLINT, Consulting Surgeon to the Stockport Infirmary.

It is the distinguished triumph of modern surgery to be able to relieve and cure many of the ailments within its province, by methods less painful and protracted, and more certain than were formerly employed. The diseases at the head of this short notice cannot, I fear, be classed under this category. I was only aware, in an inquiry into the recent epidemic which has so severely and widely extended its visitations as to remind us of the "Plague of boils in Egypt", that the old treatment in the great hospitals of the country and with the most eminent surgeons, remained unchanged, and was holding its inglorious sway, from the comfortless and hopeless poultice, to the deep crucial incision of the scalpel; yet having at least the merit of being as impartially and equally inflicted on a professional brother, as on the laity or public at large. This practice by fomentations and poultices of every kind and description, soothing and stimulating, with ointments and plaisters of a like quality, has, from time immemorial, been the common inheritance of household and professional surgery. And it has often been pursued with the most indefatigable zeal and perseverance, without relief to pain and suffering, which have been in many cases intolerable, and with scarcely discernible progress in the condition of the diseased parts; until both surgeon and patient, full of disappointment and vexation, have looked to the knife as their only remaining alternative—if haply it be in time—to arrest or prevent the tendency to direful symptoms which too frequently result from the larger carbuncle or sloughing boil.

It is not my design here to investigate or trace out with Dr. Laycock* the laws which govern the invasion of these exanthemata: yet I confess there seems full ground, from the facts adduced, for his ingenious and philosophical speculations as to their epizootic origin. Nor is it my intention to enter with Dupuytren† into those minute proximate changes which are effected in the tissues involved in these affections. My only purpose is to give an account of a local method of management—simple and obvious in itself—which forced itself upon my attention more than twenty years ago, and which has been followed in my hands, and I trust will be found equally so in the hands of others, by such invariable and uniform success, as I think may almost entitle it to the term of “specific”. The advantage is, that it is adapted to every condition of the system and every stage of the morbid action, which it seems at once to check and control: and whether the disease be of the more acute, subacute, or chronic form, or the habit plethoric, asthenic, or cachectic, I find the application equally appropriate and efficient.

But it is understood that a suitable constitutional treatment is conjoined with the local dressing. It has long been my conviction that carbuncle and boil generally arise from the same or similar conditions of the blood, as they often exist at the same time in the same individual, the boil not unfrequently running into a carbuncle, and the structures involved being the same. The latter would in general appear to be only a more extended or advanced stage of the processes of the former; but with this difference, that while the primary actions of a boil are in the cutaneous tissue, with an acuminated phlyctæna or pustule, and the subjacent membrane is affected secondarily, in a carbuncle the order of attack is in the inverse direction.

Considering these morbid actions as manifesting want of power in the vascular system of the parts affected, I sought for an application that would, if possible, assist or increase it, and at the same time not interfere with the natural excretions from the skin. This I thought I saw in the common lead or litharge plaster, spread on the white leather of the shops. The former, if correctly prepared, will answer fully the object intended; and the latter ought to be well dressed, having no hard or harsh parts in what is selected for use. There is in lead plaster, besides its unirritating quality, a valuable property, which seems to have been often overlooked or forgotten—that of promoting or inducing perspiratory exhalation from the skin. Every surgeon must occasionally have noticed that, where the common lead fascia (containing no resin) has been allowed to remain on any part of the trunk or limbs for weeks, when it is removed there will be seen a considerable quantity of perspiratory fluid which has been pent up, showing no other consequences than a little soddening of the skin upon which it has been so long confined. For this reason, I always prefer using the plaster without any admixture or combination; and, if fresh, it has every requisite adhesive property. To this peculiar effect on the cutaneous exhalants, I attribute much of its beneficial influence in the more acute boil or carbuncle. It must, however, be allowed, that in the extremely acute forms of this disease, the most soothing applications to the surface of the skin are indispensable, and that fomentations and poultices, for twenty-four hours or longer, may be quite necessary. But I would say that as soon as the plaster can be borne, it ought to be applied without delay. It is likewise to be remembered that there are idiosyncrasies where a plaster, entirely unirritating under ordinary circumstances, cannot be endured, from the cutaneous irritation and excitement which follow its use. This, of course, is to be regarded as an exception to a rule.

The mode of application is the following. After spreading the plaster in the ordinary manner, it is to be cut in dimensions according to the size of the carbuncle or boil to be dressed; carefully observing that it is large enough to include from half-an-inch to two or three inches of the sur-

face around the tumour. Where this is large and deep, as in a carbuncle from four to six or eight inches in diameter, the circumference to be embraced should be proportionately large; and the leather, in such a case, should be chosen soft and strong, in order to obtain an amount of adhesive mechanical support to the surrounding and subjacent parts, so as to enable them to originate and establish a new action. It must be well remembered that it is not enough, in any of these dressings, to cut the plaster the exact size only of the tumour. It is expected that some of the surrounding surface should be taken in also.

In twenty-four hours after dressing, a favourable change in the appearance of the parts is generally discernible; and—what will be allowed to be a highly important result, in those cases where the local irritation is fast inducing a state of cerebro-spinal distress and lesion, likely soon to end in coma and death—it will often, in a less period of time, afford a mitigation of suffering which comes upon the patient like a charm, and restores him the rest and sleep to which he had long been a stranger. If the tumour be prominent or pointing in any part, a crucial incision is to be cut in the plaster, and placed directly over it, that the discharge may have free egress: and should there be at first no suppuration, this mode of dressing quickly promotes it, and assists the living parts to detach and throw off, at the least possible loss, the sloughy cellular membrane. If the tumour is not disposed to slough or suppurate, the application decidedly hastens the resolution or absorption of the effused matter.

In a boil, the dressing is precisely the same as in a carbuncle; taking care that the plaster has sufficient hold of the tissues around—perhaps from half-an-inch to an inch. In a few hours, the acute pain and suffering of the patient, which had unceasingly disturbed his rest and comfort, become greatly mitigated, and soon afterwards wholly removed; and the improvement in the condition of the parts is strikingly apparent on every renewal of the plaster. The little trouble and inconvenience of this method, both to patient and surgeon, strongly contrast with the inconvenience, wearisome labour, and attention required by the old plan; and whilst the latter necessarily confines the patient, even in minor cases, to the house, in bed, or on couch, the former will often be little or no restraint on his usual avocations.

It is requisite that the plaster be changed more or less frequently, according to the extent of discharge or slough; but the longer the interval, the more desirable, as the less the parts are disturbed the better. If there be much discharge or slough, soiling the cut edges of the plaster, it may be changed once a day; if there be little, every third or fourth day will be sufficient; but the linen pledgets and bandage adjusted over the plaster, and absorbing the discharge as it exudes, may be replaced frequently. In general, no other dressing is required to the end of the treatment. The plaster must be reduced in its dimensions as the tumour lessens in size, whether it be by suppuration, slough, or absorption. In some instances, towards the close, simple or calamine cerate may be desirable. The solution of the nitrate of silver, of the strength of 3i. to 3i., will also be found of great value as a cicatrizer; for I concur with my friend Mr. Higginbottom that, besides other valuable properties, which he has so ably advocated, there is no agent in the surgery so useful for promoting healthy cicatrization or removing excoriations as lunar caustic. It likewise excels all other means in giving increased vigour and strength to a new cicatrix.

From what I have seen of this method of treatment in a number of patients during the last several years, and from the speedy relief or total removal of pain and distress in the worst cases, and in bad temperaments, I have looked upon it as of great value, if attentively carried out; for I am persuaded that it will render recourse either to the knife, to caustic remedies, or any of the other more severe measures of our art, unnecessary. Should, however, the choice of the surgeon and patient lead them to the latter alternative, I would strongly enforce that, whether it be the knife, or the caustic, it be always used at an earlier stage of the disease

* Medical Times, March 8th, 1851.

† Clinique Chirurgicale, tome iv, p. 210.

than is yet commonly practised; as this, like the early free incision in diffusive inflammation of the cellular membrane, will prevent the destructive ravages of tissue, as well as the fatal constitutional symptoms which follow the unchecked and protracted course of the disease.

As an illustration of the effects of the dressing here described, I will relate two or three cases.

CASE I. About the end of last year, a gentleman, aged 68, was convalescent after a dangerous attack of bronchitis, which had confined him to bed and to his room for six weeks. At the end of this time, he was regaining the healthy powers of his system; his digestive organs were vigorous; the strength which he had lost was gradually returning; and my attendance upon him had so far declined that he only required a call every third or fourth day, in order to watch his progress. On one of these occasions, in answer to an inquiry how he had been, he said, smilingly, that he was going on very well, but had lost sleep from a troublesome boil; yet, entertaining a belief in the humoral doctrine, that boils had a healthy indication, he supposed that he must wait patiently until it passed away. His countenance, neither on this nor the next visit, denoted any injurious effects from pain or irritation; but, on calling a third time, I discovered that he was losing the ground which he had gained; his appetite had greatly lessened; and he confessed that he had had little or no sleep for a week, having found no relief in any position from the pain he suffered, although his daughter had very assiduously fomented and poulticed the parts affected. On a closer examination, it was evident that his general powers were declining; but, conceiving that his indisposition only arose from a boil, he evinced no anxiety or wish for me to see it. I requested immediately, however, to look at it; and found a true carbuncle, extending across the loins, and measuring five inches by eight; it formed a broad tumour, with great induration, and was, from interstitial deposit, one and a half or two inches in depth at its centre, decreasing to the circumference. There were two ulcerated points on its surface, showing sloughy cellular membrane within. The nature of the case was clearly apparent; and indeed it might be regarded as one of the later cases of the epidemic which had prevailed for many months in this neighbourhood. The poultices were removed, and the plaster applied according to the plan described; and, though at first it felt, as he said, rather tight and close, his pain was soon relieved; he had a better night than for a week before, being able to turn himself round more readily (he had before spoken of the extreme difficulty of moving, from the severity of pain during the use of poultices). Every succeeding day and night were followed by improvement. It was surprising how little of the cellular membrane sloughed, and how gentle and moderate the suppuration was, considering the formidable character of the tumour. The discharge exuded and escaped regularly through the opening in the plaster, and was absorbed by the pledgets over it; and every renewal of the dressing gave ease and comfort to him. His appetite and general strength were soon regained; and he had not afterwards a single unfavourable symptom. He is at the present time in his usual health, or even better.

In this case, there was no other dressing used but the plaster, reduced in size as the tumour diminished; and the solution of nitrate of silver, to remove a slight excoriation, and to quicken the healing of the two points where the shreds of cellular membrane had escaped. Towards the close of this treatment, a common boil made its appearance within a few inches of the carbuncle; it was treated with a plaster, and its progress at once checked.

CASE II. A few months ago, an old gentleman, aged 75, always previously of good health and invariable appetite, was seized with two large carbuncles, which he called boils, one on the lower end of each scapula. His pain and suffering were so great for ten days and nights, that, not being able to rest in bed, he spent most of the time in his parlour, partly on a couch, and partly walking about, but refusing any surgical assistance. The poultice system had

been persevered in from day to day, without the slightest abatement of his distress; and he at last consented, at the end of the period above named, that I should see him. I found his appearance very much altered; his strength and appetite were wholly gone; and he had every symptom of a man fast sinking into death. On examining his back, I found one carbuncle, four inches by four, and another, four inches by six. Each had inflammatory redness, of a low character, on the surface. One showed a point of ulceration, with sloughy cellular membrane within; the other had two points, with a like appearance. I had no expectation of restoring the patient from his prostrate and exhausted condition, as the continuance and severity of pain had produced such an extent of cerebro-spinal lesion as to deprive the digestive organs of all power to take the ingesta requisite for his support. He begged only for relief from his unremitting distress. A plaster was applied to each of the tumours, in the manner described; and, although the vital powers could not be successfully rallied, the effect, upon the diseased parts, of the plasters, which were renewed every third day, was very surprising, inducing a regular suppuration and detachment of slough, with a manifest increase of comfort and ease to the patient; and his life was prolonged for a fortnight.

CASE III. The third case was that of a gentleman of middle age, who had been poulticing a sloughing boil, about an inch in diameter at the base, which had for several weeks occupied the space between the metacarpal bone of the thumb and fore-finger. He had excellent domestic nursing, but the parts made no progress towards healing. He suffered great constitutional irritation, with inflammation of the absorbents of the forearm; and his family became anxious about him. The plaster was applied, and gave him immediate relief. A new action was set up; a deep slough, which could not be detached before, was quickly thrown out; he had a daily increase in his comfort; the cavity filled up, and was healed over in a short time. The constitutional condition of this patient was carefully attended to; and, after some weeks, his health was greatly established. He had, however, a succession of boils for months afterwards. There was a large one in each axilla; and, though in a most unfavourable situation for treatment, they were pursued, one after the other, by the same method, with equal success, and with little restraint from business.

I think it right to observe, on this occasion, that it has been long a practice with me to use, with a similar object, and from the same mode of reasoning, a like plan of dressing in various classes of tumours, of a subacute or chronic kind, where there is an evident deficiency in the vital actions of the diseased and contiguous parts: and it has appeared to me more successful in many cases than the ordinary treatment by fomentations, poultices, and embrocations. Where there is an unavoidable suppurative tendency, the plaster will accelerate it better than the cataplasm. When the tumour is disposed to point, the cut edges of the plaster, as in the former case, should be placed directly over where it is desirable for it to open; and I find it well accomplished this object. On this subject, however, I may perhaps enlarge at a future opportunity.

Stockport, July 1st, 1853.

THE TREATMENT OF CERTAIN DISEASES IN REFERENCE TO THEIR PRESENT CHARACTER AND TYPE.

By C. M. DURRANT, M.D., Physician to the East Suffolk Hospital.

(Read before the Suffolk Branch of the Provincial Association, June, 1853.)

"NOTHING, in my opinion, strikes the mind that contemplates the whole and open domain of medicine with greater wonder, than the well known varied and inconsistent character of those diseases which we call epidemic. It is not so much that they reflect and depend upon different condi-

tions of climate in one and the same year, as that they represent different and dissimilar constitutions of different and dissimilar years." These are the remarks of that close observer of nature, Sydenham; and it must, I think, be apparent even to the most superficial inquirer into the varying phenomena of disease, that the symptoms which now present themselves to his notice at the bedside are, in reference to their intensity, their progress, and their termination, of a totally changed and modified character, as compared to the distinct and lucid delineations, to which, as a student, his attention has been more especially directed.

That the type of disease generally has, for some years past, been undergoing important modifications, every practical and observant man must be ready to admit. The routine practice of the books, in the treatment of the pyrexias, for example, all important as it is as a groundwork for the student's guide, and necessary as it was under the influence of an earlier type of disease, must now be adopted with great caution, and only as the result of that discrimination, which close observation at the bedside can alone confer.

The character of disease at the present day is strictly asthenic. In the most acute attacks, the nervous symptoms will be found, very early in the progress of the case, to assume an important feature in its management. The invalid becomes prostrate very rapidly, and if depressing measures be too vigorously prosecuted at the onset of the treatment, increasing exhaustion will obtain, and the patient will sink, despite the most persevering exhibition of stimulants and tonics.

In the following observations, it is not my intention to enter upon the history of the changes which have taken place in the phenomena of disease during the past twenty or thirty years. An able paper upon this subject, by a member of our Association, Mr. Caleb Williams, printed in the last volume of the *Transactions*, renders it unnecessary. To this instructive essay I would therefore beg to refer, while I confine myself to the consideration of the character of some of the diseases peculiar to the three great cavities, with such general observations upon their treatment as reference to the prevailing type appears to demand.

Commencing with affections of the nervous system, we shall find that the severe and acute symptoms, with which we have been familiarised by books and lectures, now obtain less frequently, and in a modified form.

Thus the apoplexia gravior of older authors, requiring for its successful treatment large bleedings, repeated again and again, will now no longer, in the majority of cases, demand this heroic and formerly necessary practice. The type of the disease is changed. The greatest discrimination will be required. The lancet must be used with caution; or we shall surely find that the vital energy will be irrecoverably depressed, and death, preceded by cold clammy sweats, will too speedily close the scene.

In making these observations, I am far from wishing to deprecate the judicious use of the lancet in the treatment of these affections.

I am only anxious to instil caution:—

1. By bleeding only when absolutely necessary.
2. By abstracting the smallest quantity of blood commensurate with the severity of the symptoms.
3. I would caution the young practitioner against too hastily adopting the heroic practice of the books, without well weighing every feature of the case, and at the same time bearing prominently in mind, that the present type of disease generally is of an eminently asthenic character.

Again, in reference to paralysis, so far as my own observations tend to show, we are more familiar now than formerly with this symptom (for it is only a symptom), as a result of cerebral disorganisation—softening. It may be inflammatory, or the contrary; but surely the routine practice of withdrawing a large quantity of blood from the system simply because paralysis obtains, is neither philosophical, nor practically, so far as reported cases in-

dicates, is it attended with success. It is in these cases that local depletion to relieve the capillaries, counterirritation, the prolonged exhibition of the bichloride of mercury in small doses, and stimulating diuretics, including the tincture of cantharides, often prove of signal service.

Epilepsy, again, in the present day, will neither bear, nor does it require, general blood-letting; and if the theory of Dr. Marshall Hall be correct, the laryngismus will not be removed by large depletions.

Not less apparent is the altered type of disease, as evidenced in the cerebral affections of infancy.

Notwithstanding the injunctions laid down by authors, in reference to opening the jugular vein, and the repeated application of leeches, in some of these affections, I must admit that the propriety of doing so is contrary to the experience which my own observation has afforded. Indeed, cases have occurred, in which the abstraction of blood, even by a single leech, has, by further prostrating the already depressed vital power, induced death from irremediable exhaustion.

It will be unnecessary for me farther to advert to the great similarity which obtains, in many cases, between the symptoms arising from the two extremes of cerebral disturbance, as seen in children, viz., the hyperæmic and anæmic conditions of the brain. That the latter exists in the present day more frequently than is imagined cannot, I think, be denied; and if, under these circumstances, even a small quantity of blood be withdrawn from the system, a fatal termination of an hydropcephaloid character may very probably result.

It is in these cases that a well regulated diet, with strict and daily personal inspection of the alvine evacuations, coupled with the exhibition of the salts of iron, and above all, cod-liver oil, will often, even under apparently hopeless circumstances, be attended by the happiest results.

It is not, however, only in the anæmic condition of the brain above referred to, that we are to exercise such caution in the use of depletory measures, but also in those cases of a more acute character, which formerly required and were benefited by a correspondingly active treatment.

Passing from the head to the chest, we cannot fail to notice the result of the asthenic constitution, as evidenced more particularly by pleurisy and pneumonia. I need only appeal to the experience of those who have been in practice some years, to be assured that they are now called upon to use the lancet much less frequently than formerly.

The observations of all, if carefully made, will equally prove that the symptoms of these very acute diseases, are now frequently far from being of that sthenic decided character, which formerly required such vigorous and active depletory treatment.

Again and again, have I witnessed the difficulty which has been experienced in restoring the powers of the system during the convalescence from pneumonia, previously reduced by only a single bleeding.

The character of the symptoms is changed, and the tendency of pneumonia now is, unless the vital tone be sufficiently maintained, to assume a chronic form; the lung becoming more or less condensed by conversion into a dirty greyish mass of cacoplastic deposit.

Another termination of the low form of pneumonic inflammation, by no means unfrequent under the influence of the present type of disease, is gangrenous abscess; and although the prognosis in reference to recovery under these circumstances is, on the whole, favourable, still the necessity of refraining from the indiscriminate use of the lancet cannot be too strongly urged, in order to avoid the inducement, by lowering measures, of this formidable complication. Inflammation of the serous membrane, whether of the chest or abdomen, is equally prone to the depressing influence of the prevailing type. Acute pleurisy and peritonitis are now, numerically speaking, of rare occurrence when compared to the great frequency of these affections under a more asthenic form.

Instead of the severe stabbing pain, and intense fever, with the progressive well known symptoms, formerly so

constant accompaniment, we are now frequently called upon to combat an amount of disease, the existence of which, from the negative character of the direct symptoms, has been almost unsuspected by the patient himself. It must have occurred to all to be surprised at the amount of thoracic, as well as abdominal disease, in connexion with inflammation of the serous membranes, which has been found to obtain, while the patient, farther than feeling weak and somewhat out of health, has scarcely been compelled to forego his usual occupation.

In these cases, if a too lowering treatment be adopted, the necessary reparative powers will inevitably be interfered with; and a cacoplastic, or even tuberculous deposit upon the membrane, with a dirty, shreddy collection of sero-purulent fluids within its cavity, will be the result of the too active remedial interference.

Not only to the diseases to which I have thus in the foregoing observations very cursorily alluded, but also to fevers, puerperal affections, and the whole extensive range included within the limits of toxæmic influence, will similar remarks apply.

In conclusion, I may state, that in troubling you with these observations, it has not been under the impression that I could advance anything novel, but because I have felt, and daily experience convinces me of the fact, that the amount of influence which is exerted upon disease by its prevailing type is not sufficiently regarded. I have been anxious only to instil caution, and to insure reflection, prior to using as a routine necessity the powerfully depressing measures which we possess, and by the indiscriminate adoption of which we expose ourselves to the impertinent inuendos and insinuations of the followers of the leading quackery of the day.

The judicious abstraction of blood by the lancet will unquestionably every now and then be necessary; but he who will allow himself to regard its use as an exceptional, rather than as a necessary part of the treatment of the majority of diseases as they at present obtain, will prove, I can but think, the most successful practitioner. The tendency of inflammatory affections, particularly of the lung, while it exalts the sensibility of the diseased portion, undoubtedly depresses the system generally. An active eliminative treatment, powerfully operating through the three great channels of the skin, the bowels, and the kidneys, may, in the majority of cases, be beneficially substituted for general bloodletting.

These measures, by avoiding the unduly lowering the powers of life, and by not interfering with the process of repair, so necessary to the cure, will tend to insure a safe and comparatively short convalescence, free from that depressing debility to which, in the strumous subject, is so frequently to be traced the first commencement of tuberculous cachexia.

Ipswich, July 1853.

CASE OF RECOVERY AFTER COMPOUND FRACTURE OF THE FRONTAL BONE, AND LOSS OF CEREBRAL SUBSTANCE.

By GEORGE MALLETT, Esq.

THE following case of severe cerebral injury is, I think, important and interesting. It proves very decidedly that *Nil desperandum* ought to be the motto of a surgeon; and it also exhibits in a remarkable manner the wonderful power of nature in repairing injuries that are apparently mortal.

CASE. R. Booth, aged 60, a stonemason, was struck on the forehead by the handle of a windlass in rapid motion. He was taken up by his fellow labourers quite insensible, and conveyed to his house, about a quarter of a mile from the spot.

The medical gentleman residing in the neighbourhood soon saw him; and considering the case to be utterly hope-

less, and that life could not continue many hours, he came to the conclusion that nothing could or ought to be done.

The accident occurred in the afternoon; and on the following morning I was requested to visit the man, as he was still alive.

Upon examination, the frontal bone was found to have received a compound fracture and to be much shattered. The entire breadth of the bone, and from one inch to an inch and a half of its height were driven into the brain. A very considerable quantity of the cerebral matter was adherent to the adjoining parts.*

The man was quite insensible; the breathing was slow and almost stertorous; the pulse slow and full.

I had formerly seen some desperate cases of cerebral injury, which recovered: an account of which was published in the seventh volume of our *Transactions*. I therefore at once resolved to remove the fractured pieces of bone and give him a chance.

Mr. B., the medical man who had seen the case on the preceding evening, was sent for; but he not being at home, I, with the assistance of a medical friend, proceeded to remove the shattered fragments of the frontal bone, some of which were found deeply imbedded in the substance of the brain. Twelve pieces of various sizes were removed, and still the man remained quite insensible to our operations; but on the extraction of the thirteenth, and, as it proved, the last, which was a larger piece and more deeply imbedded than the others, he started up in bed and uttered—no doubt from his accustomed habit, and quite unconscious of what had been going on—an oath. Water dressing was applied, and the head was directed to be kept cold by the constant application of that fluid to the scalp.

I saw him on the following morning, and found him quite sensible, and exhibiting no unfavourable symptoms. I left him in charge of the neighbouring surgeon, requesting that his bowels should, if necessary, be occasionally relieved by a little castor oil; and we agreed that if any unfavourable symptoms should arise, I should be immediately informed. The only intelligence I had was, that he was gradually advancing towards a restoration to health; and after a few weeks I heard no more of the case, and therefore concluded that all was well.

About three months after the accident, I was greatly surprised and pleased to see the man enter my surgery, having walked from his own home, the distance being from three to four miles. The wound was completely healed by granulations, but had left a most frightful deficiency of bone. The pulsations of the brain were seen immediately under the newly formed skin. His intellect, as far as I could judge, was unimpaired; and the muscular power not at all paralysed. In fact, I may say, as he did, that he was quite well. I never saw him afterwards; but I was quite convinced, and endeavoured to convince him, how precarious his existence must be without the greatest care, from the very delicate and insufficient protection which the anterior portion of the brain possessed, being deprived of so large a portion of the frontal bone, no reproduction of which was to be expected.

Bolton, July 2nd, 1853.

[This interesting case is another illustration of the impropriety of forming an absolutely unfavourable prognosis in certain cases of compound fracture of the skull, even when accompanied by considerable loss of cerebral substance. Recoveries are not at all uncommon, when the bone which is broken is the *frontal*, and the portion of brain lost belongs to the same region. Confirmation of this remark will be found at p. 375 of our *Periscope Review* for 29th April.—EDITOR.]

* The quantity of brain lost could not be accurately estimated, but it was not thought to be less than from one to two tablespoonfuls.

ASSOCIATION INTELLIGENCE.

SOUTH WESTERN BRANCH:—NOTICE OF ANNUAL MEETING.

The Annual Meeting will be held by direction of the President-elect, Baruch Toogood, Esq., on Wednesday, July 27th, at Webb's Royal Hotel, Torquay. The Chair will be taken precisely at one o'clock.

The dinner will be at Webb's Hotel, at four o'clock. Dinner and dessert, exclusive of wine, 8s.

Those who propose to dine, are requested to intimate their intention to Mr. Toogood, or to the Secretary, before the 24th instant, that definite arrangements may be made.

W. D. KINGDON, M.D., *Secretary*.

METROPOLITAN COUNTIES BRANCH:—NOTICE OF ANNUAL MEETING.

The Annual Meeting will be held at Mr. Lovegrove's Brunswick Hotel, Blackwall, on Tuesday, July 19th, at 4 P.M., precisely. The Members will dine together at 6 o'clock.

Dinner 10s. 6d. each, including ices and dessert.

JOHN FORBES, M.D., *President*,
T. OGIER WARD, M.D., *Hon. Sec.*

SHROPSHIRE BRANCH:—NOTICE OF ANNUAL MEETING.

The next Annual Meeting will take place at the George Hotel, Shrewsbury, on Tuesday next, the 26th inst. The chair will be taken by Robert Broughton, Esq., of Ruyton, President, at 12 o'clock. The members will afterwards dine together at 4 P.M.

T. J. DRURY, M.D. } *Hon. Secs.*
J. R. HUMPHREYS, }

SUFFOLK BRANCH:—ANNUAL MEETING.

The Anniversary Meeting of this Branch took place in Ipswich, on the 24th of June, under the presidency of ROBERT MARTIN, Esq., of Holbrooke. There were also present—Henry Bartlett, Esq. (Ipswich); John Beales, Esq. (Halesworth); J. Beddingfield, M.D. (Needham Market); B. Chevallier, M.D. (Ipswich); P. M. Duncan, M.D. (Colchester); C. M. Durrant, M.D. (Ipswich); William Ebdon, Esq. (Haughley); Spencer Freeman, Esq. (Stowmarket); Edward Gross, Esq. (Earl Soham); John Growse, Esq. (Hadleigh); C. Hammond, Esq. (Ipswich); Wm. Jeaffreson, Esq. (Framlingham); Robert Jones, Esq. (Melford); J. Kirkman, M.D. (Melton); W. P. Kirkman, Esq. (Melton); George Mingay, Esq. (Wilby); William Muriel, Esq. (Wickham Market); Roger Nunn, Esq. (Colchester); James Pennington, Esq. (Needham Market); Charles Read, Esq. (Stradbroke); George Sampson, Esq. (Ipswich); B. Symmons, Esq. (Bures); — Wake, Esq. (Hadleigh); W. Waylen, Esq. (Colchester). The following visitors were also present: James Francis, Esq. (Ipswich); C. Garneys, Esq. (Bungay); Dr. Junod (Berne, Switzerland); A. Partridge, Esq. (Colchester).

Dr. BEDDINGFIELD, the retiring President, took the chair, and spoke as follows:—

GENTLEMEN,—When I had last the pleasure to address you from this chair, I expressed my regret at the retirement of a gentleman* who had filled it so worthily, so wisely, and so well, in order to make room for one much less competent to the discharge of its duties; but, upon the present occasion, instead of expressing regret, allow me to congratulate you upon your appointment of so highly qualified and so highly gifted a successor. Of this I feel persuaded, that my friend, Mr. Martin, will do honour to your choice.

For the honour you conferred upon me by appointing me your President for the past year, accept my sincere acknowledgments and heartfelt thanks. It now only remains for me to request that Mr. Martin take possession of the chair, which I now vacate with my best wishes for the continuous prosperity of our Association.

ROBERT MARTIN, Esq., having taken the chair, spoke as follows:—

PRESIDENT'S ADDRESS.

GENTLEMEN,—With great pleasure I accept your presidential chair, and thank you much for the honour your election of me has conferred. The duties which the office imposes I will endeavour to discharge with zeal, and with such ability as is

* Mr. Jeaffreson, of Framlingham.

placed at my disposal. It is not my intention to trespass on your valuable time by a lengthy address, as I rejoice to learn that able heads and able pens have been engaged in preparing papers and cases of interest for our instruction. Thus then, briefly but sincerely thanking you, I at once proceed to direct your attention to the important business of the day.

It affords me much satisfaction to inform you that my good friend, Dr. Kirkman, who has so efficiently discharged the duty of honorary secretary for some years past, kindly consents to continue his exertions during the year of my presidency; and that Dr. Durrant has graciously agreed to hold the office of vice-president.

It has been generally admitted that the establishment of our Medical and Surgical Association has been a benefit to us, not merely *en masse*, but individually, by bringing before us the experience and the opinions of the many, and by the effect of social intercourse in polishing off those angularities inevitably resulting from exclusiveness. Yet, valuable as the institution has proved, it is insufficient for the attainment of all those desiderata, which might be effected by the more frequent meetings of the members of its various branches. In the present unsettled state of our profession, many subjects of general interest arise, in which unity of action (most important to our welfare) can alone be attained by consultation and discussion.

Within the past year, subjects of importance have transpired, on which, as a body, the members of the Suffolk Branch have recorded no opinion, and are in fact nonentities with regard to these matters which deeply affect their individual and common interests. These are the Professional Income-Tax, the Vaccination Extension Act, and the Medical Reform Bill; on which latter, petitions and counterpetitions are at this moment so bewildering. Lords Aberdeen and Palmerston, that the latter may well define Medical Reform to be a fearful labyrinth and chaos. I have this morning received from my friend Mr. Kelson (of Seven Oaks), together with his expressions of regret at not being able to be with us this day, a copy of a letter addressed by him to Lords Aberdeen and Palmerston, as well as Lord Aberdeen's reply, both of which, with your permission, I will read. (The President here read the letters, which have been published in the daily papers.) I produce these letters in support of my assertion, that more frequent meetings are required to produce unity of action among us, and to render individual interference unnecessary, if not unseemly. And last, though far from least, of the subjects requiring these more frequent meetings, is the homœopathic question; a system fraught with danger to the public, and, for a season, with serious consequences to the regular practitioner, who, after devoting his patrimony and his life to the study of his profession, is treated with distrust, contempt, and even the hatred of partizanship, by the dupes of the reigning fallacy. If its dogmas be true, let them be adopted; but if they be based on error, and supported by falsehoods, those errors and falsehoods should be publicly exposed, not merely in medical, but in general periodicals; that the antidote may be administered where the poison has been imbibed. The main support of the homœopath, the system of expectancy, or the trusting the cure of disease to dietetics and the *vis medicatrix nature*, is of very ancient date. Asclepiades, the cotemporary and friend of Cicero, who was born 106 years before the Christian æra, denounced the indiscriminate use of medicines by the practitioners of his day; and trusted almost exclusively to mental excitement and dietetic means for the removal of chronic disease. Pliny the elder, about one hundred and fifty years afterwards, denounced him as an impudent quack, who gained practice by humouring the whims of his patients, and ministering to their imaginations, and not to their diseases. Asclepiades, however, the first practitioner to draw a line of distinction between acute and chronic diseases, and an upholder of the corpuscular theory, whose keen observation could discriminate those cases which with safety could be entrusted to the influence of dietetics and excited imagination, would have scorned the globulistic humbug of the present day.

The ascendancy which this absurdity has obtained over the minds of some, in other respects able and intelligent individuals, may be exemplified by the following authentic anecdote. A gentleman in this town, of the highest respectability, insisting on the marvellous effects of infinitesimal doses, assured me that, as the result of taking a single globule containing only the billionth part of a grain of sulphur, a silver pencil-case, worn in his waistcoat pocket, was blackened by its influence! He was ignorant of the fact, that a far larger portion of sulphur formed a component of his own body; and unmindful of the circumstance that, while using his pencil-case, his fingers were in frequent contact with vulcanised India-rubber bands, used for hold-

ing papers, which afforded a more probable solution of his problem, than the billionth globule of a grain of sulphur. Argument, however, prevailed nothing.

"The man convinced against his will,
Is of the same opinion still."

He lived and died a homœopath.

Opportunities for discussing subjects of professional interest appear to me a great desideratum; one, however, I think, might be readily supplied in this locality, by grafting, on this our Annual Meeting, a Quarterly *Soirée Médicale*, to be held in Ipswich, and presided over by the President for the year, after the manner of the London Medical Societies. At such meetings, subjects of medico political interest, of irregular practice, and of medical ethics, might be discussed; papers likewise might be read, and cases reported. This would afford a supply of intelligence for our Journal, make known our sentiments throughout the whole Association, and constitute a legitimate field for honourable emulation. Should this idea meet more than one concurrent mind, it may probably appear before you in the form of a proposition, to be dealt with according to your estimate of its merits.

LETTERS FROM ABSENT MEMBERS.

The Secretary (Dr. Kirkman) read letters expressive of regret for non-attendance, from Dr. Hake (Bury); Dr. Ranking (Norwich); Edward Lock, Esq. (Debenham); R. V. Gorham, Esq. (Aldburgh); George King, Esq. (Hartest); William Worthington, Esq. (Lowestoft); William Mudd, Esq. (Hadleigh); Geo. Mayhew, Esq. (Stradbroke); Dr. Lanchester (Yoxford); R. R. Carley, Esq. (Laxfield); C. R. Bree, Esq. (Stowmarket); Geo. Humphrey, Esq. (Cambridge); Dr. Wake, and James Williams, Esq. (Southwold).

Letters were also read from several distant members of the Association, who, though not connected with this Branch, would have been present if practicable.

NEW MEMBERS.

The following new members were proposed and admitted:—George Mingay, Esq., of Wilby, by Dr. Durrant; George Bullen, jun., Esq., of Ipswich, by Henry Bartlett, Esq.; B. Harling, Esq., of Stowmarket, by Dr. Kirkman; and Dr. Gillam, of Aspell, by Edward Gross, Esq.

CASES AND COMMUNICATIONS.

1. H. BARTLETT, Esq., introduced two patients to the notice of the meeting. One was a case of excision of the elbow-joint in a female, after disease of eight years standing. The other was a successful case of Syme's operation, which excited great interest among the members generally.

2. Dr. DURRANT read a paper on the prevailing type of diseases of this period, which led to a good deal of discussion between the President, Dr. Duncan, Dr. Durrant, and Mr. Read. [This paper appears as an Original Communication, at p. 608.]

3. Mr. GROSS introduced Dr. Junod, of Berne, to the meeting, and made the following remarks on the instrument which he brought before them.

In drawing attention for a few moments to this valuable invention by Dr. Junod, called *Méthode Hémospasique*, I much regret that it has not found a more efficient exponent than myself; but, while I beg your indulgence, I must request your attention to a very useful therapeutic agent in most cases where blood-letting would be beneficial; and this too without any of the ill consequences too frequently attending upon it. It is now twelve months since it was first introduced to my notice by Dr. Junod. Since then, I have frequently used it; and by way of illustration, I will briefly mention a few instances in which I found it particularly serviceable.

The most important case in which I proved its efficacy, was one of strangulated hernia in a man 72 years of age, who refused to submit to an operation. For eight days it resisted every means that my experience could suggest to reduce it (except bleeding, and this I dared not hazard in his exhausted state). As a last chance, I resolved to test the efficacy of Dr. Junod's *appareil*. At this time, the patient was suffering acute pain in the abdomen, with hiccup and stercoraceous vomiting, and a sinking pulse. In half an hour, the more urgent symptoms gradually subsided, the pulse became firmer, and he sank into a quiet sleep, suffering but little pain during the night. Early the next morning, I was able to return the formidable mass without difficulty; and, after a few weeks, during which he suffered from extreme debility, the patient was restored to his usual health.

The next case worthy of note, was a child, aged four years, who inhaled the steam from a kettle of boiling-water, producing acute laryngitis. When brought to my surgery at seven o'clock

in the evening, the child appeared almost in a dying state. Its pulse was frequent, feeble, and irregular; its face livid; breathing difficult; the brain oppressed; and the extremities cold. I immediately applied the *appareil*, continuing its use occasionally, as I found from the state of pulse the little sufferer could bear it. During this time, I also applied mustard plasters to the throat and chest, giving small doses of calomel, and moistening its mouth with a little warm arrow-root. In four hours, the child was sufficiently relieved to be taken home; and, after a few days, during which I gave a little calomel and antimonial-powder, it was restored to perfect health.

Again, in the inflammatory stages of whooping cough, I have used it with marked success, applying it every third or fourth day, as the urgency of the case required, and never failing to relieve the violence of the cough and febrile symptoms. In fact, in almost all the diseases of children, where local or general bleeding appears necessary, this derivative is in my opinion far preferable to depletion.

In cases of paralysis, congestion, aggravated hysteria, and suppression of the catamenia, I have found it eminently serviceable, sometimes as a valuable auxiliary to medicine, occasionally even superseding the necessity of it.

But not to occupy your time with any further details of my own limited experience, I would at once refer you for a fuller exposition to my friend Dr. Junod, its inventor, whom I now have great pleasure in introducing to this meeting.

Mr. JEAFFRESON supported the opinion of Mr. Gross, and referred to cases where he had successfully used the instrument.

Dr. JUNOD detailed the minutiae of its application.

4. Dr. DUNCAN read a case of great interest, of extensive disease of the chest, with unusual symptoms; and another of disease of the knee-joint.

5. Dr. CHEVALLIER read a case of endocarditis.

A delicate looking but generally healthy girl, aged 12, who had been ailing for some days, was attacked on the 14th March with deep seated pain in the right hypochondrium, extending to the loin, and occasionally shifting its position. She was found to be labouring under symptoms of rheumatic fever; the joints of the lower extremity became successively affected. The treatment up to the 18th had consisted of salines and diaphoretics; but on this day, calomel and opium were given. On March 20th, she complained of pain in the region of the heart; a slight blowing murmur was heard to accompany the first sound; it was most distinct at the apex. A blister was at once applied. Subsequently the joints of the upper extremities became affected. She recovered: and on June 14th, was considered by her friends as perfectly well. There still remained a loud bruit, and a slight increase in the heart's impulse, but without palpitation or pain of any extent. Dr. Chevallier had hoped at first that this was one of the rare instances of acute rheumatism alluded to by Dr. Walshe, where the systolic sound at the left apex is roughened and murmurish for a few days, but then loses this quality entirely. He now, however, feared that there was lasting injury to the mitral valves.

6. Mr. WILLIAM P. KIRKMAN related a case of suicidal melancholia, in the Suffolk County Asylum, in which, after repeated attempts at self-destruction, the patient swallowed seventy-two stones ineffectually.

PLACE OF MEETING FOR 1854.

The following resolution was proposed by Dr. BEDINGFIELD, and seconded by JOHN GROWSE, Esq., and unanimously carried: "That the place of meeting for 1854 be Bury St. Edmunds; and that Dr. Probart be requested to take the chair."

VOICES OF THANKS.

It was proposed by HENRY BARTLETT, Esq., and seconded by CHARLES HAMMOND, Esq.:

"That, from the acknowledged omission at the last meeting, to embody in a resolution the thanks due from this Branch of the Association to their late Secretary, C. R. Bree, Esq., for his valuable services since the formation of the Suffolk Branch, till his resignation in 1851, the thanks of this meeting are now most cordially conveyed to him for the same, coupled with expressions of regret at his loss."

It was proposed by SPENCER FREEMAN, Esq., and seconded by JOHN BEALES, Esq.:

"That the best thanks of this meeting be expressed to those gentlemen who have recited cases and read papers."

It was proposed by WILLIAM JEAFFRESON, Esq., and seconded by WILLIAM MURIEL, Esq.:

"That the best thanks of this Association be given to the Directors of the Eastern Union Railway, for the use of their room at Needham Market last year."

It was proposed by HENRY BARTLETT, Esq., and seconded by Dr. KIRKMAN,

"That a cordial vote of thanks be given to Dr. Bedingfield, for his hearty services as President, throughout the past year."

After a vote of thanks unanimously proposed and seconded, to the President, Robert Martin, Esq., the meeting adjourned at 5 o'clock to dinner.

THE DINNER.

About thirty members assembled at the White Horse. The interests of the Association were not lost sight of in the social intercourse of the evening.

Among other topics, the appointment of sub-committees, with occasional meetings for special purposes on the pressing questions of the day, was urged on the attention of the members; and, after affording full evidence of unity of principle and expressions of determined unity of action for the professional and public good, the meeting separated with friendly cordiality.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

The annual meeting of the Lancashire and Cheshire Branch of the Provincial Medical and Surgical Association was held at the Town Hall, Manchester, on June 29th. The following gentlemen were present:—E. Batty, Esq. (Liverpool); C. W. Bell, M.D. (Manchester); James Black, M.D. (Bolton), President for the year; S. T. Chadwick, Esq. (Bolton); S. Crompton, Esq. (Manchester); G. Daglish, Esq. (Wigan); Oswald Dicken, Esq. (Middleton); J. Dickinson, M.D. (Liverpool); A. W. Dumville, Esq. (Manchester); T. Eden, Esq. (Liverpool); E. L. Falloon, Esq. (Liverpool); J. S. Fletcher, Esq. (Manchester); John Galt, Esq. (Ashton-under-Lyne); Joseph Godden, Esq. (Oxton, Birkenhead); H. Halkyard, Esq. (Oldham); J. Bower Harrison, Esq. (Manchester); John Hatton, Esq. (Manchester), Honorary Secretary; Dr. Heckscher (Manchester); John Howe, Esq. (Marple); Ellis Jones, Esq. (Liverpool); J. M. Kirkman, Esq. (Manchester); A. O. Leete, Esq. (Newton-le-Willows); E. Lund, Esq. (Manchester); R. H. McKeand, Esq. (Manchester); T. Mather, Esq. (Ashton-in-Mackerfield); J. Medd, Esq. (Stockport); G. Mallett, Esq. (Bolton); T. Mellor, Esq. (Manchester); D. Noble, Esq. (Manchester); J. Nottingham, M.D. (Liverpool); J. Pendlebury, Esq. (Bolton); J. F. Pennington, Esq. (Ashton-in-Mackerfield); W. B. Pickering, Esq. (Denton); T. G. Richmond, Esq. (Manchester); John Robertson, Esq. (Manchester); J. M. Robinson, Esq. (Bolton); G. Southam, Esq. (Manchester); H. Swift, Esq. (Liverpool); Alexander Thom, Esq. (Dobcross); F. Tinker, Esq. (Hyde); Thomas Turner, Esq. (Manchester); A. T. H. Waters, Esq. (Manchester); E. Waters, M.D. (Chester); W. J. Wilson, Esq. (Manchester); M. A. Eason Wilkinson, M.D. (Manchester); J. Woollam, M.D. (Ashton-under-Lyne); G. Woolstenholme, Esq. (Bolton); etc.

In the absence of Mr. BICKERSTETH, President for the past year, Mr. ELLIS JONES, of Liverpool, was called to the chair, and, after a few remarks he resigned his position to Dr. BLACK, president for the year.

PRESIDENT'S ADDRESS.

GENTLEMEN,—I return you my best thanks for the distinguished honour you have, on this occasion, conferred upon me. Instructed and encouraged by the example of my worthy predecessors, I shall endeavour so to fulfil my duties, that however short they may come of your requirements, they may, at least, avoid occasion of injury.

Allow me to congratulate my fellow associates on the continued prosperity of this elder Branch of the Association. With our Parent, we have always lived on terms of goodwill and useful cooperation for the progress and honour of our common profession; and, though equal to any of our sister branches in respect and allegiance to our Parent, we have never been, for these seventeen years, indebted to her for the least part of our maintenance. We have, on the contrary, contributed to the Benevolent Fund of the Association from our savings.

Though we have of late years celebrated our anniversaries at the great *termini* of trade, manufacture, and science in the county Palatine, under the ægis and shade of the first men and names of our profession; yet, humbly speaking for myself, my more numerous associations with this branch are in my memory connected with our former resort in *medias vias*, espe-

cially when I remember that a Holme, a Jeffery, and a Kendrick there regularly shed a venerable grace and honour on our discussions and entertainments.

Since we last year met under the respected and urbane presidency of Mr. Bickersteth, at Liverpool, important subjects have been agitated—subjects which have not only affected the economy of the PROVINCIAL ASSOCIATION, but which have also excited a deep interest throughout the profession. Though this branch last year was, in a manner, called upon to declare its opinion regarding the measure then proposed for the change of the place of publication of the JOURNAL, previous to the decision of the question at Oxford, it was thought expedient, after a good deal of consideration, to pronounce no decided opinion—unprovided as many of us were with data as to the means and talents which the proposer of the change had in view for the benefit of the ASSOCIATION. The change was, after a good deal of opposition and some little discussion and chagrin, decided upon at Oxford: and we have now had about six months observation and experience to enable us to judge, how and how far the publication has fulfilled the promises and hopes of those favourable to the removal to London: and in what degree have been satisfied the wants and desires of the members at large. It would be irrelevant to my present office to criticise the new series of the JOURNAL. I may, however, be permitted to say that I think we have gained in a literary, medical, and scientific point of view; though I could have rather wished to have seen such valuable returns issuing from the provinces, and the prefix of "PROVINCIAL" still attached to the title of our periodical. As it is likely that the expenses of a weekly Journal will be a heavy charge upon our general finances, members must probably make up their minds to be deprived of the Annual volume of Transactions. This, to some, may be a subject of regret; while others may conceive that they are compensated by the more copious information afforded by a weekly JOURNAL.

Owing to the pressure of business in the hands of Her Majesty's Ministers, the struggling patient, Medical Reform, seems to be left to the *placebos* of the day, or till the aggravation of symptoms requires immediate remedies to avert convulsion, or the coma of professional apathy. In any bill for Medical Reform that may be submitted to the legislature, it is desirable that the legal titles to practise be not increased in number, but rather, if possible, be reduced, if we cannot attain to the simple division, in the working part of the profession, into the two classes of the ordinary and consulting practitioners. At any rate, I think there is no need to increase the number by creating, as is proposed by the bill of the Association, a new licentiatehip, which alone would satisfy many entering the profession, without being compelled to proceed to further honours in medicine and surgery. Instead of this, all the members and licentiates of the nineteen universities, colleges, and schools, might, after registration, be legally authorised to practise in all parts of the three kingdoms and colonies, by a simple Act of Parliament made for that purpose. And to render the qualification equal throughout to all noviciates, a *minimum curriculum* of education might be laid down by the Act, for all colleges and other bodies to observe before diplomas or licenses be granted. This would be introducing no new machinery, nor entailing expenses, but only enforcing uniformity, so that equal and universal privilege may be enjoyed. As to registration, there seems no necessity for the erection of a separate Council or Board, with an exclusive staff throughout the country; this very requisite business might easily be effected, for small fees, by the official clerks of cities, boroughs, and counties.

In the public relation of the profession to the State and to those entrusted with the official administration of its subordinate affairs, medical practitioners have still much to complain of, as well in the scanty remuneration for their services, as in the little respect and deference observed to them as members of an educated profession. We have only to instance the internecine struggle still going on between our brethren in practice, throughout many parts of England and Ireland, and the Poor law Guardians. To this deprecatory treatment of medical services and character now in existence since the enactment of the Poor-law, there has, this session, been all but finally passed another onerous call on medical men for their ill-considered and ill-requited labour, in the Vaccination Bill—a measure seemingly brought forth and conducted in Parliament, without the least reference to either the public opinion of medical men, or to the manner in which it could be practically worked out for the benefit of the public and individuals immediately concerned.

However much we have, from these and other unfavourable

causes, to lament the present dissociated condition of the profession, and to remonstrate against each fresh inroad upon our legitimate dignity and privileges, we have every reason, as a profession, to claim no small merit for our endeavours and success in promoting medical science and surgery, by which the ills of mankind are diminished, and the aims of our godlike calling vindicated before the public.

I need not before this meeting specially advert to the great progress that is yearly making in histological anatomy, and in the composition and chemical reactions of all the fluids in the body, aided by the revealing powers of the microscope, and by a more refined process of analysis. We have only to look at the labours of Kiernan, Bowman, Paget, and Johnson, to see how the intricate structure of the liver, the kidneys, and the muscular fibre, have been revealed to us, and how the nature of fatty degeneration and other diseases of these organs and structures have been eliminated by these gentlemen, and successfully treated by a Budd and a Bright. The cell-structure of the glands, and of the nerve fibres, with all the special distribution of motion, sensation, and of organic life throughout them, have had such light thrown upon them, that there seems now only wanting the discovery of the principle of life itself, to make our knowledge of the animal body complete in all its parts. Such knowledge is for us, however, too wonderful to attain to; and notwithstanding all the insight we have acquired into the arcana of structure and function, we are still compelled, in the treatment of diseases to which these are liable, to bring in, for a successful and beneficial solution of the problem in which we may be engaged, the important element of experience: for, as Sydenham says, "*Experientia, optima duce et magistra, ad cujus leges et normam nisi exerceatur medicina, eam prorsus exulare satius esset*". In taking experience for our leader and mistress, we must at the same time be prepared to give a scientific reason for the faith that is in us, and not act like those who appeal to alleged facts of successful treatment, without knowing, or pretending to know anything of the nature and functions of the organs upon which they empirically or superstitiously operate. For, though we have not been able to detect the initial germs of many diseases in the blood and fluids of the body, yet we know how they are affected when once developed, how the vessels and secretions are modified or altered; and from a knowledge of their physical and chemical metamorphosis, we can so far apply therapeutics derived from our experience in similar or analogous instances, with such curative result, as to stamp the exercise of our profession with the appellation of one of philosophy and science.

The progress and advancement of rational and bold surgery have also increased their claims upon the estimation and gratitude of the public, as may be witnessed in the improved and expectant treatment of fractured and contused limbs, which were formerly consigned to primary amputation, but are now, in many cases, saved, and made more or less useful to the sufferer. The excision also of diseased joints has been successfully adopted in cases where once no measure was ever thought of but amputation of the limb; and in these, the later days of surgery, the removal of the largest tumours from the pelvis and abdomen has been performed, and with a success equal to the average recoveries from our capital operations on other parts of the body.

The science and practice of therapeutics are also daily becoming more simplified and improved, to the benefit of the patients' health, the mitigation and abolition of pain in severe operations and in childbirth, and to the diminishing of the apothecaries' bill; though there are yet some grounds for thinking that the latter part of the benefit, owing to the want of intellectual progress in the vulgar mind, is not so justly appreciated as it should be, for a *big bottle of stuff* is yet too commonly associated with the alleged amount of talent and attention in the prescriber or dispenser.

The great and important question of sanitary measures is also highly indebted to the medical profession, for the philosophical and practical views that are and may be brought into operation for the preservation of the public health and the promotion of longevity; though medical men have never countenanced the enthusiastic views of lay staticians and official empirics, that the average mortality in such places as Manchester may be brought down to that of the valleys and plains of Westmoreland and Cumberland.

Gentlemen, in venturing to bring before you, in a very textuary manner, some of the principal points in the polity of our profession, as well as setting forth some of the claims we have to the respect and estimation of the public, I would further presume to invoke your continued energy and persever-

ance in the noble pursuit in which we are engaged—irrespective of official prescriptions and interpolations, on the one hand, and of the hosts of dishonest pretenders and quacks, on the other. Narrowed though the sphere of legitimate practice may become, from the bold inroads and illicit attacks of these various invaders of the rights, privileges, and emoluments of our profession, still, with truth, science, and experience on our side, we shall ultimately prevail, and vindicate our calling as one worthy of all acception.

[We have been obliged to omit very many paragraphs, and condense others, doing thereby a great but an unavoidable injury to this address.—EDITOR.]

Mr. HATTON, Honorary Secretary, read the

REPORT OF COUNCIL.

The Council, in presenting their Annual Report, congratulate the members upon having arrived at their seventeenth anniversary celebration.

To prove that the profession do not consider this Branch to have retrograded in its energy and usefulness, they have the satisfaction to state that, during the past year, fifty-five new members have been enrolled. This fact is highly gratifying at a time when the united strength of the profession is required to accomplish that desirable realisation of medical reform, for which the entire Association has so long been exerting its most strenuous efforts, viz.

1. Uniformity of qualification.
2. Equal right to practise throughout the United Kingdom; and
3. Representative councils for the governance of the profession.

The Council had hoped to be able to report to the Anniversary Meeting a satisfactory termination to the question; but from what has recently transpired in the House of Commons, and more especially from the observations of the Home Secretary, they are apprehensive that there is little likelihood of the matter being finally settled during the present session of Parliament.

They recommend, however, that the following Petition shall be signed by the President and Honorary Secretary, on behalf of this meeting, and be forwarded for presentation to the two Houses of Parliament.*

The Council have to explain to the members assembled, that the discretionary power given to them at the last anniversary, to alter the place of meeting from Chester to Manchester "if necessary", has been exercised by them for the welfare of the branch, as they found but few members of the profession in the former locality likely to co-operate very actively in procuring a numerous and influential meeting. The experiment has been made on two separate occasions; and the Council are unanimously of opinion that, *for the present*, it is for the well-being of the Branch to alternate the anniversary meetings between Liverpool and Manchester. Nevertheless, if the profession in any of the larger towns in this increasing and improving district willingly come forward, and give the Council such reasonable assurance of support as to render probable a numerous and successful meeting, they would gladly recommend the anniversary celebrations to be held in various places, being convinced that the Association has only to go into new and untried ground to provoke union of all legally qualified and respectable practitioners.

The Council have to announce the gratifying result, that from the limited subscription of 2s. 6d. per member annually, the Branch has not only been able to clear itself of a debt which was yearly increasing when the subscription was but optional, but has been enabled through the liberality of the last annual meeting, to hand over a donation of five pounds to the Treasurer of the Benevolent Fund. As this is the only instance of the kind in the experience of Branches, they trust that others will follow the example of the Lancashire and Cheshire Branch, and henceforth pay their own expenses, in order that the Association at large may be as little stinted as possible in the finances.

Another subject to which the Council would allude, is the Vaccination Bill recently introduced by Lord Lyttelton. There are some clauses in the Bill to which they would give their support; but there are others so decidedly objectionable to the profession, that they request the members here assembled to sign the Petition in the hands of the Honorary Secretary, praying that the Bill may not become a law until the profession

* The petition is the same as that published at p. 280 of the *Association Journal* for May 6th.

have had ample time and opportunity for considering its provisions and expressing their feelings and opinions thereupon.

OBITUARY. During the past year, the Council have to lament the loss by death of four active and valuable associates, viz.—Dr. Thomas Jeffreys, late of Liverpool; Mr. Thomas Fawsitt, of Oldham; Mr. Sumner, of Lynn; and Mr. Mather, of Ashton-le-Willows.

FINANCES. After paying a donation of five pounds to the Benevolent Fund, there remained last year a balance of £2:1:7 in favour of the Branch. Since the last anniversary, the receipts have amounted to £14:2:6, and the expenses to £18:3:2, which leaves a balance of £3:0:11 in favour of the Association.

The expenses during the past year have been rather heavier than usual, in consequence of having a *verbatim* report of the proceedings at the last anniversary, and of the Secretary having issued five hundred circulars to all legally qualified and respectable practitioners within the limits of the Branch to induce them to join the ranks of the Association.

Although the responses have not been as numerous as the Council would desire, yet they hope the way has been paved for the individual members of the Branch to induce their fellow-practitioners to join their ranks, and by becoming united, to further the objects they have in view, viz.—

“Maintenance of the honour and respectability of the profession, in the provinces, by promoting friendly intercourse and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession.”

Mr. F. TINKER, of Hyde, said: I have very great pleasure in moving—

“That the Report of the Council now read be adopted, and transmitted by the Secretary to the Editor of the JOURNAL for publication, together with the proceedings of this meeting.”

I must, Sir, express my satisfaction at the manner in which you have, in your address, alluded to the measures that have been taken with a view of improving the position of those members of our profession who are connected with poor-law unions, as regards the meagre salaries meted out to them for services which are of a more than ordinarily arduous character. With regard to the Vaccination Bill, my experience has led me to the conviction that something like an imperative law should be passed on the subject; for, at present, religious prejudices, as I know, do to a great extent interfere with the operation, which we know is so extensively sanitary in preventing a disease not only most malignant in its character, but most dangerous to the community at large. I do not speak without some experience as to the objections raised upon that score. Much good might be effected, and much assistance given in carrying out the intentions of the legislature, if clergymen, and ministers of various persuasions, would lend their kind and influential aid in disabusing the minds of those with whom they may come in contact, of any prejudice which can at all interfere with the due effect of this wise and truly sanitary measure.

Mr. GEORGE MALLETT, of Bolton, said: The report meets with my entire approbation. With regard to the Vaccination Bill, I have great objections to it in its present form, as I believe we all have; and I think that at present our efforts should be devoted merely to stay its progress. By turning the whole subject over in our minds previous to the next meeting of Parliament, I hope and think that we should be able to come to some unanimous decision as to what is best to be done. As the feeling throughout the profession is so strong and general against it, I do not think that Parliament will press it upon us in its present shape. I have very great pleasure in seconding the motion.

The motion was agreed to unanimously.

ELECTION OF OFFICERS.

Mr. EDMUND LUND, of Manchester, said: The resolution which has been placed in my hands is to the following effect:—

“That the thanks of this meeting be given to the past officers and Council; that the next anniversary be held in Liverpool; and that the following gentlemen constitute the officers and Council for the ensuing year:—PRESIDENT: James Black, M.D., of Bolton. VICE-PRESIDENT: R. Dundas, M.D., of Liverpool. HONORARY SECRETARY: John Hatton, Esq., of Manchester. MEMBERS OF COUNCIL: Samuel Crompton, Esq.; Daniel Noble, Esq.; Thomas Radford, M.D.; George Southam, Esq.; Thomas Turner, Esq.; W. J. Wilson, Esq.;—of Manchester: Edward Batty, Esq.; R. Bickersteth, Esq.; P. Macintyre, M.D.; Joseph Dickinson, M.D.; Thomas Inman, M.D.; Ellis Jones, Esq.;—of Liverpool: George Daglish, Esq., of Wigan; John Halliday,

Esq., of Seacombe; William Lax, Esq., of Ormskirk; John Medd, Esq., of Stockport; J. A. Pearson, Esq., of Woolton; J. M. Robinson, Esq., of Bolton; John Sharp, Esq., of Warrington; and E. Waters, M.D., of Chester. PRESIDENT-ELECT: Joseph Dickinson, M.D., of Liverpool. VICE-PRESIDENTS-ELECT: D. Noble, Esq., of Manchester; G. Mallett, Esq., of Bolton.”

I am sure that, in bringing forward this proposition, it is unnecessary for me to make any observations in commendation of the manner in which the officers and Council have discharged their very responsible duties during the past year. We have all one common interest in associations of this character; but I fear that we all feel, also, somewhat lethargic on the point of taking an active part in conducting them. We all like to participate in the benefits which so necessarily ensue from their existence; but we hardly like to undertake the responsible and increasing duties attendant upon an official connexion with them. For this reason—and quite independent of their deserts for the very efficient manner in which their duties have been performed—I am sure you will agree with me that the officers and Council for the past year are in every sense most deserving of our warmest thanks.

Dr. NOTTINGHAM, of Liverpool, seconded the motion, which was unanimously agreed to.

NEW MEMBERS.

The following gentlemen were proposed, as members of the Parent and Branch Associations:—S. T. Chadwick, M.D., of Bolton; James Pendlebury, Esq., of Bolton; T. Mather, Esq., of Ashton-in-Mackerfield; and John Galt, Esq., of Ashton-under-Lyne.

PRESIDENTS OF THE PARENT ASSOCIATION.

The CHAIRMAN having asked if any gentleman had business to bring before the meeting previous to the reading of papers,

Mr. GEORGE SOUTHAM, of Manchester, said: I have a resolution, which I should wish to propose, with reference to the mode of appointing the Presidents of the Anniversary Meetings of the Parent Society. Reverting to the names of those gentlemen who have held the office of President, you will find that there have been seventeen physicians appointed, and only four surgeons. I know that occasionally it has been a source of difficulty to the parties to whom it has been left to suggest the President, as to whether they should select a physician or a surgeon; as the Association is one consisting of both physicians and surgeons, and as we recognise no other class in the profession. All will admit that surgeons are now quite as well educated as physicians—that there is a difference in name only, not in education. I will therefore propose,—

“That this Branch meeting is of opinion, that the Presidents of the Parent Association are selected too frequently from the class of physicians; and that it is due to the body of surgeons that the President shall be chosen from their order, if not alternately with the physicians, at least much more frequently than is the case at present.”

This suggestion has been sent from this Branch once or twice, but it has not been much acted upon: and I think that it would promote harmony between the two classes of the profession, if some regular plan were followed in the appointment of Presidents.

Mr. SAMUEL CROMPTON, of Manchester, seconded the motion; and it was unanimously agreed to.

THE JOURNAL.

Mr. CROMPTON said: I think that an expression of opinion ought to go forth from this meeting, to the effect that the members of this Branch are satisfied with the great improvement that has taken place in the Journal under the present editorship. My motion would be,—

“That this meeting do hereby express its great satisfaction at the improvement which has taken place in the Journal since Christmas.”

The motion having been seconded;

Mr. DANIEL NOBLE, of Manchester, said: I would submit to this meeting, whether there be any necessity for passing that resolution. I do not at all object to the opinion expressed in it; but I rather doubt whether we ought virtually to pass a reproach upon the Worcester management up to the period of the change. I confess that I do not see the necessity for it, however I may concur in the sentiments which the resolution expresses. It appears to me that it is ungracious to Sir Charles Hastings, and to those other gentlemen, to whom the Association not only owes much for the management, but for the sustenance of the Journal. It is quite gratuitous, to say the least of it, to pass a resolution which virtu-

ally conveys a slight upon them. I shall vote against it, and I hope the meeting will not pass it; for it does convey a slight to those to whom the Association owes much.

The PRESIDENT: Do you move an amendment?

Mr. NOBLE: No; I shall simply vote against it.

The PRESIDENT: It is certainly rather an important question, as to a point of courtesy.

Mr. E. L. FALLOON, of Liverpool: I think, sir, that we have reason to be proud of the present editor of the Journal; and I think, also, that we must all feel that the progress of a publication like ours very much depends upon ourselves—an editor must have much and wide spread assistance. I wish therefore to convince members, that much depends upon ourselves and our contributions. Ours is a provincial journal, and its main support ought not to come from the metropolis; although it is quite proper that its head quarters should be in the metropolis. I wish to throw no discredit upon the previous editors; my reason for rising to support the resolution is to urge that we should each resolve to endeavour to make the Journal as valuable as possible. The editor is as able a man as any in England, but it is impossible that he can do all: he must be supported by contributions from the provinces.

Dr. DICKINSON, of Liverpool: I hope, sir, that the resolution will be withdrawn; for I believe that there would be a vast difference of opinion as to the increased efficiency of the management of the Journal. The resolution casts a very uncalled for slur upon the previous conductors of the Journal, to whom the Association owes so much. Like Mr. Noble, I must vote against it if it be pressed.

Mr. CROMPTON: At Oxford there was a very strong feeling against the former management of the Journal; and I think that the feeling was universal among the members. I remember that, on a former occasion at a meeting of this Branch, when the management was alluded to, there was a very strong outcry against it. Certain members were named as a committee at Oxford to undertake the transfer of the Journal to London, and its publication there under the new management. I was nominated a member of that committee, but I retired when I learned that a majority—if not all—of the committee had resolved in the first instance to offer the appointment to Dr. Cormack. I thought that the editorship of the Journal ought to have been thrown open—that an advertisement ought to have been put into the medical publications, calling for the best talent that the whole kingdom could produce. On that ground I withdrew from the committee; and therefore I may be considered to be at variance with them. I utterly disclaim any feeling of hostility, against either Sir C. Hastings, or anyone else, in bringing forward this resolution. If the Journal has done well for the Association—and it has increased the number of members enormously—I say that it is most ungenerous for us, after having on former occasions given our support to the *Worcester Journal* by remarks at these meetings, not to come forward and support Dr. Cormack, the present conductor, and those who incurred the responsibility of giving practical effect to the Oxford resolution. If the Worcester members take offence at it, I say that is not intended to give them offence; it is, as it purports to be, simply intended to express the satisfaction which this meeting feels at the manifest improvement in the Journal.

Mr. J. MEDD, of Stockport: May I be allowed to ask the mover of the motion, if it would not meet his views, and be quite sufficient, to compliment the editor on the efficiency of the Journal, without referring to the particular period at which the change of management took place? It would really imply something very like a censure upon the previous management, if the resolution were passed as it now stands: and I should oppose it if it were put to the vote.

Mr. CROMPTON: I should be quite content with the alteration.

The PRESIDENT (after a pause, while Mr. Crompton was referring to the wording of his motion): The words "since Christmas" are struck out.

Mr. NOBLE: That alteration will not mitigate my opposition one iota; because the purpose, the reference, and the intention of it are still equally patent. I say that a resolution like that, or any resolution making comparisons between the present state of the Journal and its state at any former period—[Mr. CROMPTON: It does not do that]—is ungracious, and almost an injury, to Sir Charles Hastings and his collaborators at Worcester.

Mr. CROMPTON: I beg to correct Mr. Noble, so far as to say that the resolution, as it now stands, draws no comparison whatever.

The motion of Mr. Crompton was put by the President, and negatived by a considerable majority.

PRESSURE IN CASES OF ANEURISM. BY T. TURNER, ESQ.

Since there is a division of opinion respecting the treatment of cases of aneurism, some surgeons of the present day opposing the attempt to cure by pressure, and trusting wholly to the operation of tying the main artery, it might be interesting to know that a successful case of cure by pressure had occurred in Manchester, under the observation of Dr. Bowman. Mr. TURNER was not furnished with a written paper, nor with full particulars of the case; but he thought the mention of a few facts, showing the manner in which the cure was brought about, would prove interesting to the members. His purpose was to give a few observations respecting a case of aneurism, in which compression of the femoral artery and the upper part of the thigh proved perfectly successful, so that there did not remain a single vestige of the disease. Surgeons are divided in opinion as to whether the successful cases by compression are sufficient to justify its universal adoption in practice, when compared with the success which often results from the operation of tying the artery; and also as to whether the number of cases in which compression has failed ought not to discourage us in having recourse to it at all as a remedial measure. We know well, however, that in many cases, the tying of a main artery is followed by bad effects; in some cases, by mortification of the limb; and in others, by a necessity for amputation. The question, therefore, is this: shall we gain any advantage whatever by the adoption of pressure as a preliminary step to tying the blood-vessel, provided it is necessary to have recourse to the operation, in consequence of the failure of compression? Mr. Turner's experience led him to the belief that, in every case, pressure should be attempted in the first instance; that if it does not succeed in obliterating the artery, so far as is necessary to the cure of the aneurismal swelling, it is productive of good in increasing the collateral circulation, and thereby averting risk of mortification of the limb. In a case where he had an opportunity of observing the changes effected by pressure on the artery and contiguous parts, in a patient at the Manchester Infirmary, on whom he operated, assisted by his colleague, Mr. Wilson, the changes resulting from pressure were such as to show its beneficial effects; and he believed that if the compression had been continued, and if he had not been a restless patient to contend with, the cure would have been most fully accomplished. On cutting down on the artery, at the usual point, and tying the vessel, there was such a confusion of parts, that it was scarcely possible to distinguish one from the other. The sheath of the vessels was thickened to an enormous extent; and when laid open, it was scarcely possible to determine the contained vessels of the sheath, as they were all matted together in the most confused manner. The calibre of the artery was diminished by the thickening of its walls to a very considerable extent. The vessel was tied, and the case terminated favourably. He mentioned it as showing the change that really does take place from pressure; and he repeated, that if it had been continued in the way he should have to relate in connexion with the present case, a perfect cure would have been effected. In every case of aneurism he would adopt pressure in the first instance; and should it fail, the operation of tying the main trunk might, he believed, be had recourse to afterwards with far more chance of a successful issue. The only difficulty resulting is in the performance of the operation; but that may be overcome by devoting a little more care and time to its performance.

In the case to which he alluded as coming under the observation of Dr. Bowman and himself, he (Dr. Turner) requested the patient the other day to give him some few particulars respecting the history and progress of the disease. He would state them in the words of the patient:—

"About the end of February, last year, I felt a pain underneath the knee, which, upon exertion, seemed to extend down the calf of the leg, and to cause a pain, with a lameness and stiffness of the limb. The swelling was at the time small, but there was considerable pulsation in it. It gradually increased in size, and the pain grew worse, until I walked quite lame, and had often to stop in the street when walking quick. All the time the surface of the skin was very hot and dry. I consulted Dr. Bowman on the 15th April."

It appears that he had observed the swelling, and had suffered inconvenience, from the end of February. Dr. Bowman saw the patient; and in a very few days afterwards Mr. Turner was requested to meet him in consultation. The aneurismal swelling occupied nearly the whole of the popliteal space; the pulsation was violent, and extended up to the point where the artery perforates the tendon of the triceps muscle. When pressure being applied to the groin, the pulsation ceased.

tumour gradually subsided. They concluded that these facts were very favourable to a trial of compression. The patient stated, that he always found the pressure to act quicker, and with less pain, when applied to the thigh than when applied to the groin. Now this is a very important fact. In the first instance, an apparatus was used, by means of which the pressure was applied alternately to the femoral artery in the thigh, and at the point where it passes over the body of the pubis. But for this apparatus was substituted a single pad and screw, by which the pressure was vertically directed upon the artery up the upper third of the thigh. This the patient bore for different periods, with different degrees of patience and perseverance. It was found, however, the pressure could not be relaxed, without material injury to the progress of the cure; and it seemed confirmed that the total obliteration of the vessel is not indispensable to the cure of aneurism by compression.

The patient began to attend to business on the 4th of August; the tumour gradually became harder, and the pulsation decreasing, and at length entirely ceased about the 20th of January in this present year.

Mr. NOBLE asked whether the swelling was quite gone?

Mr. TURNER replied, almost entirely. He would (with Dr. Bowman's permission) show any member the case.

The PRESIDENT was sure they must all be much obliged to Mr. Turner for bringing this case forward; for it would serve as the basis of further investigation and experiment.

Mr. SOUTHAM said, that with reference to the reasons which appear to have prevented other parties from succeeding in the cure of aneurism by pressure, he believed that many of them have failed in consequence of the pressure having been applied too tightly. It was for some time considered necessary that all circulation through the artery should be stopped; but the case now brought forward proves that such a thing is not necessary; and the Dublin surgeons, in answer to objections, have pointed out that the amount of pressure necessary to cure aneurism need not stop the circulation entirely. If this is kept in mind, there can be no objection to applying pressure in any case; because, the pressure not being excessive, you do not produce that meeting of the parts which, if the pressure fails, prevents recourse to the operation of tying. In one case where he saw it successful some years ago, there was no necessity to produce any great degree of pain.

Dr. NOTTINGHAM, of Liverpool, said, that it has been contended that the old idea as to the cure of aneurism is incorrect. Several years ago he published an account of a very carefully made *post mortem* examination, where the patient lived some years after the operation, and resumed his occupation; but there was found to be a canal through the aneurism, by which the arterial blood was circulated. In a very considerable number of cases, where the ligature has been applied, that would be the state of things. With regard to the condition of things for tying, after pressure has been applied, there are two important points. There is the mechanical state of things with regard to the state of the parts to which Mr. Turner had alluded; but there is also the question of the vital condition of the lining membrane of the artery, which has not been alluded to. He should be afraid (if one had sufficient opportunities of ascertaining this matter, in many cases where pressure has been applied), that we should find the lining membrane in a condition not favourable to a cure by other means. He had had an opportunity of examining the femoral artery in a case where the attempt to cure by pressure had failed; and he found that the parts were blood-red from the aneurism to the knee. Such a state of things could scarcely be favourable to the results of the application of the ligature.

Mr. TURNER: Might not the excess of pressure be such as to cause the inflammation referred to in the lining membrane?

Dr. NOTTINGHAM: Yes, certainly.

Mr. TURNER continued: In the case related there was no swelling at all remaining, nor could he detect any inflammation by means of the stethoscope. There was no discoloration of the parts.

Dr. NOTTINGHAM believed that, in no case of aneurism that has been properly examined, has it been found that the artery has been restored to its natural position. In some cases it may fairly be said that there is no artery.

Mr. TURNER only meant to say that the tumour is entirely gone, and that there is no pulsation to be perceived. The fact of there being no pulse does not of course do away with the possibility of a canal for the transmission of blood through the artery; because there would be no pulsation when the sac is surrounded by thick coats.

MECHANICAL CONTRIVANCES.

Mr. THOMAS PLATT, of Moor Lane, Bolton, exhibited some improved elastic substances, for bands, belts, etc., which were carefully inspected by several gentlemen.

Mr. W. D. STEVENSON, of Cross Street, Manchester, exhibited a new iron invalid pan. By means of a small handle on the outside edge of the frame, a portion of the mattress was caused to fall into some catches connected with an iron arm, which could be turned out, the piece of mattress removed, and a small pan inserted in the hole by the same process: all this can be done without the necessity of moving or at all altering the position of the patient. By means of a small rack near the head, a portion of the bottom could be raised to any inclination desired, or which might be found necessary for the patient's comfort. Several gentlemen expressed their approval of the arrangements.

Mr. MEDD pointed out to the exhibitor that it would be advantageous to have a second rack for the purpose of raising the feet-end of the bed; as, however weak or languid the patient might be, he might be so placed as certainly to maintain his position when the upper part of his body was elevated, which would not be the case under the present arrangements.

Messrs. J. and W. WOOD exhibited the following instruments:—A portable electro-galvanic machine; an instrument for injecting fluid caustic; an improved utero-abdominal supporter; pessaries made of porcelain, in various forms; a light ladies' elastic abdominal belt, with adjusting strap at the bottom; microscopes, manufactured by Nacet, of Paris; midwifery forceps; and a variety of operating instruments.

CASE OF DOUBTFUL SEX.

While the arrangements of the bed were being explained, Dr. NOTTINGHAM (previous to reading his paper) was exhibiting a cast taken from a person with regard to whose sex doubts had long been entertained. He remarked (as was understood) that many gentlemen in Manchester and in Liverpool had seen the patient from whom the cast was taken; and all had manifested great interest in the case. In rural districts, children born in this state frequently had the misfortune to have their sex mistaken. This individual was taken for a female, and considered as such until the age of sixteen, wearing female attire, etc. At that age, he or she left her native village and travelled to a town more or less distant in Germany, where the case came under the notice of physiologists, and it was made out that the sex was male. The posterior portion of the bladder could be seen, but of course the anterior aspect was wanting, as was also the anterior part of the abdominal apparatus. The upper half of the penis was wanting, as were also the continuation of the urethra, and a portion of the pubic bones. The sexual feeling was very strong, and the testicles were well developed. The man stated that the erection was very complete, and went on to the extent, as he said, of five inches. It was not a little remarkable that this man got married. He was in a hospital in Germany, and one of the nurses took a fancy to him and married him. He had no children by his wife, for which he accounted by saying that the serum passed off at the sides, and did not enter in a straight forward direction.

MALIGNANT DISEASES OF THE EYE.

Dr. NOTTINGHAM read a paper on this subject. He added, that it was originally his intention to have completed the paper by adding some particulars as to cases of different kinds of tumours, but that he had been unable to do so.

VOTE OF THANKS TO THE PRESIDENT.

Mr. MEDD moved, "That the best thanks of the meeting be given to Dr. Black, for his patience and courtesy in discharging the duties of Chairman."

Mr. ROBINSON, of Bolton, seconded the motion; and it was carried by acclamation.

[A number of gentlemen, before proceeding to the Albion Hotel for dinner, were taken by Mr. Hatton to the Royal Manchester Infirmary; Mr. Ferneley, one of the stewards, having kindly offered to point out the improvements that were being introduced into the centre and oldest part of the hospital.]

THE DINNER

Was attended by about forty gentlemen. After the usual loyal toasts had been proposed, the following were amongst those heartily responded to by the members present:—"The Provincial Medical and Surgical Association, and Sir Charles Hastings"; "The Lancashire and Cheshire Branch"; "The late President, R. Bickersteth, Esq."; "The President, J. Black,

M.D."; "The Vice-President, Dr. Dundas"; "The Council, etc."; "The Honorary Secretary, John Hatton, Esq."; "The New Members"; "The Visitors"; etc., etc.

BATH AND BRISTOL BRANCH.

The Anniversary Meeting was held at the Bristol Medical Library, on Wednesday, June 30th, at 3, p.m., when there were present the following members:—John Barrett, Esq. (Bath); J. G. Barrett, Esq. (Bath); J. S. Bartrum, Esq. (Bath); William Budd, M.D. (Bristol); J. B. Burroughs, Esq. (Clifton); Henry Clark, Esq. (Bristol), President; John Colthurst, Esq. (Bristol); James Crang, Esq. (Timsbury); J. G. Davey, M.D. (Northwoods, near Bristol); W. Davies, M.D. (Bath); W. C. Fox, M.D. (Northwoods); James Godfrey, M.D. (Bristol); James L. Green, Esq. (Bristol); Thomas Green, Esq. (Bristol); Thomas Hawkins, Esq. (Bristol); W. B. Herapath, M.D. (Bristol); J. C. S. Jennings, Esq. (Malmesbury); George King, Esq. (Bath); Crosby Leonard, Esq. (Bristol); E. S. Mayor, Esq. (Bristol); W. F. Morgan, Esq. (Bristol); George Norman, Esq. (Bath); George Ogilvie, Esq. (Bristol); Augustin Prichard, Esq. (Bristol); G. Rogers, M.D. (Bristol); Thomas Sawyer, Esq. (Clifton); W. Y. Sheppard, Esq. (Bristol); P. R. Sleeman, Esq. (Bristol); Charles Smerdon, Esq. (Clifton); John Soden, Esq. (Bath); John Smith Soden, Esq. (Bath); J. K. Spender, Esq. (Bath); John Stanton, M.D. (Bristol); R. N. Stone, Esq. (Bath); T. L. Surridge, Esq. (Clifton); J. G. Swayne, M.D. (Clifton, Bristol); S. H. Swayne, Esq. (Bristol); E. H. Sweete, Esq. (Bristol); W. C. Trotman, M.D. (Clifton); James Tunstall, M.D. (Bath); J. G. Wilson, Esq. (Bristol); F. H. Woodforde, M.D. (Taunton). Numerous visitors were also present.

The retiring President, GEORGE NORMAN, Esq., having taken the chair, requested the Secretaries severally to read the notice of the present meeting, and the minutes of the last anniversary at Bath. This having been done, he, in a few appropriate remarks of thanks to the members and compliment to his successor, inducted to the vacant chair HENRY CLARK, Esq., who read the following address.

PRESIDENT'S ADDRESS.

In commencing his address, Mr. Clark referred, in terms of the highest respect for his abilities as a teacher, and his character as a gentleman and a Christian, to the late J. C. Swayne, Esq., Lecturer on Midwifery in the Bristol Medical School, who had, about three years previously, filled the office of President of the Branch.

The subject of the address was an account of some of the practical results which have been achieved by science and art within the last generation. On this point, he (Mr. Clark) felt justified in using the most congratulatory language: when he reflected on the facility acquired of preserving and restoring man's physical frame in its integrity and symmetry, whether it be the trunk, the limbs, or the features; on the improvement that had taken place in the treatment of the insane; on the successful efforts made for the education of the idiot; on the power obtained, through the medium of anæsthetic agents, of alleviating suffering; and on the increasing knowledge of those principles of hygiene, which hold out to humanity happier days and a longer life.

CONSERVATIVE SURGERY. Thirty years ago, diseases of the joints were very imperfectly understood. The sweeping term "white swelling" comprehended all the severe diseases of the different textures of which the joint is composed. Sir Benjamin Brodie did essential service, by separating these affections, and teaching us that the different morbid phenomena must be studied as they appear in synovial membrane, bone, or cartilage; and that, according to the structure primitively or principally engaged, so ought our treatment to be varied. By his judicious counsel, and attention to the dictates of his experience, many limbs have been saved; yet, notwithstanding a knowledge and a skilful adaptation of the best curative means, the integrity of the particular structure has occasionally been destroyed beyond hope of future usefulness, and with danger to life from constitutional irritation. Under such circumstances, loss of the limb was at one time thought to be the only alternative. To the man who has to earn his subsistence by his hand rather than by his head, this sacrifice is incalculably great. How highly, therefore, should we prize the knowledge that, in many instances, resection will suffice. Thus, in cases of diseased elbow-joints, incurable by ordinary means, and heretofore consigned to amputation, the limb may be saved by removal of the heads of the bones; and, for the most part, this may be accom-

plished with little risk to life, and with a rational hope of preserving a useful member. The head of the humerus may also be removed, with expectation of a favourable result.

We are often taught, by the result of accidents, the power that nature can exert to effect repairs in parts which have been seriously injured, and to accommodate them to their altered condition. An instructive instance occurred lately in the Bristol Royal Infirmary, under the care of Mr. Green.

A little girl, about eight or ten years of age, had the head of the humerus, the neck and part of the body of the scapula, and the scapular end of the clavicle, carried away by a gun-shot, with much injury to the soft parts; so that the limb seemed all but severed from the trunk, and appeared to invite its entire separation: yet this limb has been saved, and will even prove a useful member.

Resection of the head of the femur is more difficult, and less likely to prove successful, than is that of the humerus. Nevertheless, there have been several cases which seemed to warrant the operation, and in which it has succeeded.

Similar attempts with the bones entering into the knee-joint have also been made; but the ultimate results are not so encouraging: still, of late, many have proved successful.

But it is in the ankle-joint and the tarsus, where disease so often exists, that the operation of resection has been found so decidedly advantageous. The extremities of the tibia and fibula are removed, and the thick, firm covering of the heel and sole preserved. On this, progression is effected with little help, and with very trifling inconvenience. If Mr. Syme be not the original proposer of this mode, he certainly has been the most successful and frequent operator; and the favourable results of his practice in numerous cases have stimulated others to adopt it. Some years since, when Mr. Clark was travelling through Edinburgh, Mr. Syme was kind enough to show him two or three cases under treatment; and at that period he told him, that many patients, on whom he had performed this operation, were able to walk without difficulty eight or ten miles a day.

In the present day, every finger and toe is scrupulously preserved, which proves to be of any benefit; but not long since they would have fallen with their offending fellows.

It may be said, that the mode of saving limbs by resection was not the suggestion of men of our own day, but was adopted at the close of the last century. This may be true; but its successful application in numerous cases, and its judicious limitation, comparatively, to certain joints, is due to men of the present generation.

To a more recent period belongs the successful mode of removing deformities by subcutaneous section of tendons. Our grandsires, in a few isolated cases, were bold enough to divide the tendo Achillis, dividing at the same time the superimposed parts. Nearly thirty years ago, Mr. Clark had seen that talented and skilful surgeon, the late M. Dupuytren, similarly divide the double tendon of the sterno-cleido-mastoideus, in a case of wry-neck. These operations were, however, painful and hazardous, producing a gaping wound, and causing much inflammation. To Stromeyer we are indebted for that almost painless and bloodless operation, the subcutaneous section, by which we are now enabled to remove deformities, especially of the extremities, which, a few years ago, were thought to be beyond the reach of art. Good results have been effected in this department of surgery, at the Orthopædic Hospital in London.

Great as have of late been the triumphs of surgery, in preserving and restoring the symmetry of the trunk and limbs, the features, which have been marred by disease or accident, have received equal benefit. What could detract more from the beauty of the human face divine than obliquity of the eye? And how readily now is squinting removed! Rhinoplastic operations are more successfully and completely performed, under even disadvantageous circumstances. The mouth has been perfectly restored. Parts have been brought together by parallel sections in the adjacent structure, and by subcutaneous divisions, allowing the intermediate portion to be adjusted in a way not previously thought of. Autoplastic operations are more frequent and successful. Mr. Augustin Prichard has demonstrated their advantage lately in two cases, by restoration of the eyelids.

Perhaps in no instance has this principle of transposing flesh been found so successful as in removing the deformity occasioned by burns. Many are acquainted with the case related by Muller, of America. It was equally characteristic of its great and apparently irremediable character of the deformity, as by its prompt and effectual removal. A similar instance occurred in Mr. Clark's practice at the Bristol Royal Infirmary.

A boy, about twelve years of age, from the effects of a burn received many years before his admission into the hospital, had his chin drawn down near the sternum, his lower lip and the teeth of the lower jaw everted; the saliva continually dribbled from his mouth. The face was greatly disfigured by the traction of the fibres of the platysma myoides, and the tears flowed down the cheek, from the fixed, depressed, and ectropial condition of the lower eyelids. For the relief of this case, Mr. Clark divided the skin from one side of the neck to the other, removed a portion of the hardened cicatrix, and cut the bands of fascia and superficial muscular fibres which tied down the head. A gaping wound was made, about three inches broad, by five or six inches long. Two flaps were then formed, by transfixing the flesh from the side of the neck, and passing the knife downwards over the deltoid to the extreme point of each shoulder. Each of these flaps was about three inches broad, by four or five in length. They were brought across the neck, attached together on the central line by sutures, and were above and below adjusted to the neighbouring parts. The whole was then covered with cold water dressing. Union became perfectly established, and the deformity was at once greatly removed, with the probability of time aiding the restoration.

MENTAL DISEASES. We have not expended our energies in our attempts to improve man's physical frame. The treatment of the disorders of his mind has alike undergone a beneficial change.

There was a time, and that lately, when the maniac's emotions were tried to be calmed by opening his veins; and his passions were attempted to be controlled by manacles and confinement. Violence was overcome by rude force; and the rule of terror was the chief moral government. How different the case of the maniac now! and how much happier the result! The clanking of the chain has been but rarely heard, since Pinel unshackled fifty-three with his own hands. Restraint of any kind, in its special signification, is seldom had recourse to; blood is not recklessly spilt, under the guise of remedial agency, but a moral treatment, combined with appropriate medicinal means, is adopted, founded on a knowledge of the habits, tastes, and peculiar talents of the individual; so that the disturbing forces may be kept passive by the activity of other faculties. The mind, being thus pre-occupied by subjects judiciously selected, is kept from dwelling on those disordered associations which had dethroned the judgment. Kindness has taken the place of severity; threatening has given way to entreaty; and the calmness and amiability of the attendants have struck a chord of sympathy in the minds of those who previously brooded over nothing but vengeance and misrule. Our private asylums are no longer viewed as prisons, or mere houses of safety, but as comfortable homes, where nothing that can ruffle the passions is suffered to intrude, and every suitable provision is made for the employment of any special talent. In them, with appropriate medical treatment, that kind of training and moral education is adopted which is most likely to restore the healthful balance of the mental faculties.

The perusal of accounts of the management of some of the extensive public institutions in this country, or in France, must give rise to feelings of the highest gratification, especially when we compare their state with that of the asylums of the last century. Mr. Clark referred to the changes introduced in Hanwell Asylum, under the guidance of Dr. John Conolly, formerly the conductor, and now the consulting physician. See him (said the speaker) pass fearlessly among the hundreds (952) of unshackled inmates of that asylum. Listen to the voice of kindness, that immediately obtains a response. Observe the calmness and firmness of the attendants in the discharge of their duties. Go into the banquetting-room, and witness the general joy evinced by the lunatic guests on their festive occasions. Follow them to their dormitories, and notice the quiet repose that succeeds; and you will be struck and delighted with this peaceful result. Rise with them in the morning; and you will find that these numerous occupants have each their appropriate engagements; and that, while the utmost liberty is permitted them, every destructive agent is withdrawn, and the greatest watchfulness exercised. Follow them, day by day, through these active scenes, to the termination of the week; and the Sabbath begins with attention to religious exercises, when the seriousness and devotion of some would afford a fitting example to many who call themselves sane.

Thus, by establishing order and regularity, introducing active occupations, exercising the mind agreeably, ruling by kindness and entreaty, overcoming violence without angry efforts, and the judicious use of medicinal means, our asylums have be-

come pleasant domiciles, and those favourable results have promptly been experienced which the old system of heroic medical treatment, threatening, and restraint, could never have effected.

There are doubtless evils yet to be rectified; and surely that must be considered one, which allows lay commissioners the power of interfering with the medical management of the inmates of asylums, and of dictating the propriety of their admission, and the appropriate time for their discharge. This duty should I think, be assigned to a professional supervisor; while the lay visitors should confine their attention to seeing those laws enforced which relate to the general economy of the establishment. Pseudo-philanthropy has of late been too apt to exhibit itself in the officious discharge and protection of the maniac; while to their more sane neighbours no kindly feelings have been cherished.

As proof of progress in the treatment of the insane, may be recounted the establishment of schools in various public asylums, and the pleasing fact that, in 1845, in the Bicêtre at Paris, of eight hundred lunatics, two hundred were receiving instruction. Success has also crowned the exertions made of late to benefit the condition of idiots, by strict attention to their *bodily health*, arousing the dormant senses, and fanning the feeblest spark of intellect. Many instances are recorded, in which the idiot has been raised from an animal, or almost vegetable life, to the position of humanity.

The name of Guggenbühl, a Swiss physician, is familiar, from his having distinguished himself by devoting his energies to the cure of cretinism. For the welfare of such poor creatures, he is dedicating his life and powers, regardless of all difficulties, in a solitary spot, on a high mountain, near Interlachen. He has an assistant, who has had experience in the instruction of the deaf and dumb; and Sisters of Charity act as nurses. Some of his patients have been the most degraded of their class, and evinced scarcely more than the functions of vegetative life—the voice more animal than human; the ear inattentive to any ordinary sound; the eye fixed on no object; the taste and smell so depraved as to allow them to receive and swallow the most loathsome food; and the limbs unequal to any steady movement. The assimilative powers have been assisted, and the muscular system strengthened, by tonics, baths, and friction. The ear has been roused to the influence of sound by a speaking trumpet; and the eyes solicited to fixed action by figures made by phosphorus on the wall, in a darkened room. The functions of the body being somewhat restored, and the senses rendered capable of conveying impressions to the brain, a higher order of education has been commenced, which, in many instances, has proved successful. Man wields a vast moral power, for good or for evil. If he speak a wise word, it is well; if he perform a good act, it is better. Our words and actions have an undying influence. Example, however, surpasses precept. Little, perhaps, did Dr. Guggenbühl think, when pursuing his modest but meritorious labours, in a sequestered spot, apart from the "noise of cities", and the hum of men, that he should attract the attention of a traveller (the Rev. Dr. Andrew Reed), who should return to England, actuated with a kindred spirit, and arouse his countrymen to the importance of copying the example of the Swiss physician; and that two institutions should soon be opened, affording relief and instruction to two hundred and fifty-six idiots; and that, after the lapse of another short period, an institution should be established, under the patronage of our Queen, the foundation-stone of which was laid by Prince Albert only last week, the funds already subscribed towards which amounted to £10,000. This institution will most probably awaken public attention to the claims of a very helpless race, and be followed by the establishment of other similar asylums. Thus, the unostentatious example of one devoted man, pursuing his occupation on a retired spot on a Swiss mountain, may be copied throughout Europe, and the idiot part of our population never more be abandoned as incurable or incapable of instruction.

ANÆSTHESIA. Having gained power over the evils which afflict man in his body and mind, we have further learned, within few years, how to assuage his pain. Mr. Clark here referred to the discovery in America of ether as an anæsthetic agent; and to the subsequent discovery of chloroform for the same purpose, which rewarded the untiring energy of Dr. Simpson of Edinburgh. The experience of six years has taught us that the fears at first expressed on the subject of anæsthesia were too great; that, if lives be occasionally perilled or lost by its administration, a larger proportion are saved by its adoption, as there are numbers who,

would it, would die from the mental or the corporeal shock of a severe operation.

We have not only found an agent capable of subduing pain, but one of surpassing power in various derangements of the nervous system. In tetanus, chorea, infantile convulsions, and other obstinate spasmodic diseases, that have resisted all previous treatment, it has proved occasionally an effectual remedy. Mr. Clark suggested the propriety of renewing the attempts to cure tetanus by the section of the nerve leading to the injured part, or by the entire removal of the latter, especially when it can be accomplished without the loss of an essential member; for, unless tetanus be the result of accumulative toxæmia, of the nature of which poison (if it exist) we are quite ignorant, it must be the correct practice to endeavour to remove the exciting cause of irritation, and to lower the reflex irritability. The former has been often attempted without any anæsthetic agent, but with too little success to warrant its further adoption; but, under chloroform, the probabilities of a favourable issue are certainly increased. Without it, another shock is inflicted upon the depressed and irritable nervous fibre; and the injured part must be removed during spasm and extreme suffering. With chloroform, we achieve the double object of removing the source of irritation without inflicting pain, and lowering the reflex irritability. Thus the chances of success are manifestly increased.

A few weeks ago, Mr. Prichard, acting in concert with all the other surgeons of the Bristol Royal Infirmary, removed, by Chopart's operation, part of the foot of a young man, who was the subject of acute tetanus from an injury of two of his toes, and in whom the symptoms were so rapidly developed, that no other probable chance of relief could be entertained. He, however, survived the operation only twelve hours. No alleviation followed the operation, except a little more capability of swallowing. In this case, it was attempted as a *derrière ressource*, truly a *remedium anceps*: and the failure in this instance ought not to militate against further trials.

In a little while after this, another case occurred. The patient had a crushed great toe. Trismus had commenced, when it was decided to remove the whole of the injured part by sawing through the metatarsal bone of the toe. This was done under the full influence of chloroform. The pulse fell from 110 to about 80; and the spasm was mitigated for two or three days, when opisthotonus began, and was again subdued by chloroform, which was repeated, as often as the spasm recurred, for many successive days. When it was apparently entirely overcome, pneumonia occurred, of which the patient died on the fourteenth day after the operation.

A third case then happened; it was the result of a severe lacerated injury to all the toes in a young man. Here the spasm was confined to the limb, which was frequently drawn up by a tonic convulsive effort; the countenance appearing very anxious, and the pulse being rapid. The whole of the toes were removed, under chloroform, at the tarso-metatarsal joints; and some opium was administered. The spasm was stayed in the limb; nevertheless, the next day, he bit his tongue from a convulsive snap of the jaw. This had not recurred; and, at the time of Mr. Clark's address, the patient was progressing favourably; but it was only the fourth day after the operation.

These cases will be shortly published in detail.

We must not entirely forget that, like all things terrestrial, anæsthesia is not an unmixed good. The rose has a thorn. Twenty-five deaths are recorded, and these are not half that have occurred since its introduction. True it is that, if the drug be good, and it be cautiously administered, and the symptoms carefully watched as they pass from excitement to deranged function, and thence to stupor and coma, and we here arrest its exhibition ere the respiration or heart's action become seriously involved, very few such instances will happen. Nevertheless, we must be aware that these successive stages are not always followed in this precise order. The ultimate link of the chain is suddenly seized. The citadel falls before the outposts have had timely warning.

HYGIENICS. Cheering it is to mark the means now adopted for the preservation of the body in its completeness and symmetry, and to observe the successful efforts that are made in restoring the mind and lighting up the latent sparks of intellect, and the power we possess of rendering many free from suffering; but it is a still greater pleasure to notice the great impulse which has of late been given to the promulgation of those principles which are calculated to *prevent* disease, to add to man's comfort, and

lengthen his days, by making *our cities more pure, and rendering our fields more fertile.*

By late fiscal regulations, the blessing of light is not so much restricted as heretofore. The dwellings of the poor and the rich may now share it more equally. It is not, however, yet sufficiently appreciated; and the axiom cannot be uttered too wide or too loud, that,

"Where the sun does not come,
The doctor does."

The value of pure air, and of a free supply of it by ventilation, is becoming better understood. The construction of model houses and rural cottages must tend in this respect to amend the condition of the labouring population.

The readiness with which water is now obtained in our large cities, and conveyed to the houses of the poorer classes, and the public baths and wash-houses that have of late been established throughout the country, must prove of essential benefit; for we are told that "cleanliness ranks next to godliness."

Light, air, and water, are God's gifts to man. He gives them bountifully. They are all essential to man's welfare. May we prize them more, and take care that, in our dwellings, we do not shut out the cheering sunbeams; that we admit the air free and untainted; and that we have a supply of water pure and copious. To effectually obtain these important advantages, the drainage of our cities must be made more complete. Happily, the public attention is now directed to this object, and with great probability of its being accomplished; since it has been clearly shown that our sewage ought to rank among our natural resources; and that what may be destructive in our cities may be made regenerative in our fields; proving the truth of the remark quoted by a great living statesman, that "dirt is only a good thing in a wrong place."

Various means of deodorization have been proposed and are now adopted; and we learn that one patentee has secured by lease, for the city of London, the sewage flowing into the Thames by Puddle Dock, Paul's Wharf, Dowgate, and Lower Thames sewers; and that, from these sources, he will be enabled to obtain thirty tons per day of a dry deodorized residuum, or about ten thousand tons per annum; valued at about £20,000. The town of Leicester has recently effected like arrangements.

This hygienic progress is not confined to our cities. Science has lent her active aid to agriculture; and the country is generally becoming more *healthful and productive*. The right principles of rural drainage are being widely promulgated, and the small cylindrical pipes, buried deep in the soil, are no longer pointed at with derision as "Machi's pencil-cases", but are found to render good service. Until of late, the object of drainage in the country appeared to be to convey away the waters that descended, and not the water that ascended. It was forgotten that the office of the rain which came from heaven and fell upon the surface of the earth, was to fructify; that it brought with it the materials of increase; while the water that burst up from the soil beneath was void of those qualities, and served to keep the land *cold and barren*. The depth at which the pipes are now placed is measured by feet, not by inches. The effete water does not rise beyond the level at which they are placed. The ground above, though ever so *tenacious*, becomes at length porous. It is first dried by the action of the sun, and the withdrawal of the stagnant under-water; then cracks take place, which extend from the surface down to the pipes; and the worms are diligent and successful borers. By these channels, fissures, and pores, the fertilizing rain and warm air have access to deep parts, passing through clay and earth that before they never permeated. Previously, by capillary attraction, the under-washed land water was carried upwards, saturated the earth, and, by preoccupation, prevented the absorption of the fertilizing showers; while, in other soils, the clay was so *tenacious* that the rain which fell upon it passed over its surface and ran off by the rivulets, to pass away into the rivers, without dispensing the benefits which the Almighty designed. By the means of deep laid pipes, rendering the soil more accessible by its porosity to the action of light, air, and rain, its fertility is *doubled*, and *man's wants, therefore, are better supplied*. The same object is facilitated by altering the temperature of the land, and thus it is rendered *not only more fertile but more healthful*. There is an anecdote of an agriculturist who was often seen with his gait coat, but after a time was as frequently seen without this and. He had, in this transition period, "*thorough drained*," his land; and the result was, that he considered it *quite a warmer*.

In this great agricultural theatre, *new lessons* are in physiology and pathology; and old truths, *so* fit to man, are being confirmed. *Hence it is that*

taught the importance of giving an adequate supply of appropriate food during the infantile period; that, if we suffer it to pass without attention to this law, defective vitality is stamped on the organization, and remains throughout the whole of the future life.

In this instructive field of investigation is demonstrated, on a large scale, the double object of food; viz., for *nourishment and fuel*. That substances containing nitrogen are for flesh-making; while starch and sugar, and other non-nitrogenous articles, are destined to give heat. The gluten of the one is transformed into muscle and blood, the carbon of the other is burnt up by the oxygen inhaled; while warmth, by this combination, is emitted, and carbonic acid exhaled. True it is, as Professor Playfair most graphically states, that the body of the animal may be regarded as the furnace; the carbonaceous food the fuel; the excrement the ashes; and the gases that escape from the mouth the same as those which escape from the chimney. Animals seem almost to know by instinct the special food required. Hence it is almost useless to give them chaff till the cold weather comes on. As the winter deepens, they eat it with avidity; but in spring they gradually leave it off, and then actually refuse it: just, in fact, as we light up our fires at Michaelmas and extinguish them in May.

Again, we are taught by our treatment of animals how much temperature has to do with maintaining condition. If our poor are clothed and housed badly, they require more food. One fourth less nutriment, with adequate shelter and bodily covering, will be requisite to maintain a healthier state than when deprived of these advantages. Hence the Russian takes train oil, and the Eastern his rice; the difference of temperature of necessity causing this variation in the quality as well as in the quantity of the food.

Here, also, we are daily learning the astonishing power of hereditary influence. Whether it be horn or hair, fat or flesh, either can be modified in quality or proportion at the will of the breeder. Nature is so plastic under scientific management, that fat can be laid on either within or without the body, as is most expedient. Flesh can be developed on parts where it is most required; symmetry can be handed down from one generation to another, and even temper transmitted. How invaluable is this lesson, if it be duly considered in reference to the formation of matrimonial alliances.

Mr. Clark then alluded to the great saving of human life, which had been effected by a knowledge of disease in the cow and its transmission to our species. Had not a Jenner lived, millions would have perished ere life had scarcely dawned. By the direful scourge of small-pox, a funeral pile of eighty thousand would have been raised annually in Great Britain alone; and when we look through the wide world and contemplate the ravages that this disease might have made, the thought may well affright us. If then the chisel and the marble fail to adequately record the memory of the man who stayed this plague, there is a colossal monument remaining in the millions of lives preserved, that will louder and still louder proclaim the name of Jenner, when the columns of brass and the pillars of stone, that tell of the warrior's fame, shall have fallen into decay.

Other discoveries of a similar kind still wait us: indeed, experiments of surpassing interest are now being made in this country, France, Holland, and Belgium, with cattle; and may prove pregnant with benefit to the human species. Mr. Clark alluded to the supposed discovery made by M. Willems, a Belgian, for the prevention of a most fatal disease among cattle (pleuro-pneumonia) by inoculation. M. Willems has taken the secretions from the lungs of a diseased animal, and inserted it in the tail of a healthy one. It has then produced local disorder, with some constitutional disturbance; and ever after there has been immunity from pleuro-pneumonia. The subject is undergoing the most searching investigation. The commission appointed by the governments of Holland and Prussia have given a favourable report; but Professor Simonds, who was selected in this country to examine the question thoroughly, has come to an opposite conclusion.

Mr. Clark would ask, whether we have not cause for exultation this day, since it is true that comparatively in a few short years we have done much more than our ancestors to preserve and restore man's physical frame, to correct the disorders of his mind, and to light up the very embers of intellect, to save him much suffering, annihilate agony, to prevent disease, to add to his comforts and prolong his life. He could just imagine a disciple of Malthus to be frightened at this picture, and pensively brooding over it, to say. If the infant be saved, and the

mother be spared—if disease be prevented and life be prolonged—shall we not jostle each other, and will our island be adequate to the required increase of food? Happily there is an Almighty, one who watches the fall of the sparrow, and clothes the lilies of the field, who is not unmindful of the wants of man, whom He has formed after His own image. He who "weighs the mountains in scales", and the hills in a balance, and metes out the waters in the hollow of His hand, He has storehouses in the air above, in the earth, and in the deep, yet to unlock; and at His set time He can call off the people to the far east and the west, by shewing them hidden treasures; precious metals for ages unheeded under their feet; and can direct them to a rocky isle of Peru almost unknown and uninhabited save by wild fowl and screaming birds; and in that desolate situation He has founded a garner of the richest fertilizing materials waiting the demands of an increasing population. No sooner has the fiat "Increase and multiply", been accomplished, than this storehouse has been opened to replenish the earth. We need not, however, travel to distant isles to discover these omniscient marks of design and beneficence. On our own coast we have found vast materials, which were entombed in the bowels of the earth ere the waters covered it—the coprolite, the fossil dung, and remains of gigantic antediluvian lizards, rich in phosphate of lime, a most fertilizing manure. All these teach us in a language that all nations can understand—that from the reptile which crawls on the earth, to the bird that flies in the air, all movements are directed by an unseen but almighty hand, and that for the benefit of His creatures.

[We regret that we have been obliged to curtail the report of this eloquent and instructive address. EDITOR.]

Mr. COLTHURST, Secretary, presented the

REPORT OF THE COUNCIL.

As it has become the well understood duty of your Council to give at each Annual Meeting some account of their stewardship, and to call your attention to any subject that may seem to affect the well being of our Society, there is, perhaps, some fear lest the frequent recurrence of this period should induce indifference. This ought not to be; the review of the events of a past year can never be unimportant. Nor should it ever be permitted to dwindle into a point of routine, since it involves that most pertinent of inquiries—Have we been well occupied? has our time been well or ill spent? Your Council do not consider that you need shrink from the inquiry, as they can point with pleasure to the large attendance at your Quarterly Meetings, to the ample supply of papers and cases which have sustained the interest of those meetings, and to the beneficial discussions and conversations connected therewith.

The COMMUNICATIONS made have been as follows.

On October 7th:—

Dr. WM. DAVIES. A Case of Abscess of the Right Ovary terminating in Rupture into the Peritoneum, and Death from Acute Peritonitis.

Mr. PRICHARD. A Paper on Extraneous Bodies removed from the Eye.

Mr. COX. A Paper on the Co-existence of Gonorrhœa and Syphilis.

Mr. JOHN BARRETT. A Case of an Infant exposed, in which he had employed Mr. Bloxam's test, for deciding whether the child's Lungs had been inflated naturally or artificially.

March 24th, 1853:—

Mr. HINTON. A Paper on Internal Strangulation of the Bowels.

Mr. MASON. A Case of Congenital Occlusion of the Duodenum.

Mr. JENNINGS. A Paper on the use of the Hot Bath in Suspended Animation.

Dr. SWAYNE. Two Cases of Frontal Presentation.

Dr. W. DAVIES. An unique Case of Cerebral and Spinal Apoplexy.

Dr. C. EDWARDS. A Paper on the question, as to whether an excess or a depraved state of the Gastric or Pancreatic Juices can decolorize the Bile and simulate Functional Disease of the Liver.

Mr. NORMAN. A Report of a Post Mortem Examination of a Case of Extensive Prostatic Disease.

The December meeting was omitted, in consequence of two special general meetings being held on a subject which is too fresh in the painful remembrance of all the members, to require any further mention.

INCREASE OF MEMBERS: THE JOURNAL. It is gratifying to the

Council to report that our numbers have increased during the last year. Your Council has reason to believe that this increase has mainly depended upon the change in the plan, etc., of the JOURNAL. This change was determined on at the annual meeting at Oxford, but through some supposed irregularity in the proceedings, was likely not to have been carried into effect, had not your Council held a special meeting in Bath, on September 3rd, 1852, at which Mr. Sheppard, the central Secretary, attended. Your Council then protested against the central Council at Worcester attempting to override a vote of the general Association, without calling a special general meeting. Your Council took this step without at all wishing to enter into the merits of the proposed change, but with a view to avoid so dangerous a precedent as would be presented by so irregular a course on the part of your central Council. And it may be well to notice here, that while the present mode of publishing the JOURNAL weekly instead of fortnightly considerably increases the demands upon the finances of the Association, it remains to be proved whether the members generally take so much more interest in their own Journal as to make it a favourite with the profession; because, should they not do so, and should not our numbers still materially increase, it must not be supposed that we can continue to enjoy at the price of £1:1:0, that which is supplied to others at the very different charge of £1:10:4.

THE POLITICAL QUESTIONS in which we have been particularly interested, are the Income-tax, the Medical Reform, and the Vaccination Bills.

The only modification of the Income-tax that has been obtained, is the very trifling one, that we may be rated upon the average of three years instead of the last.

The Bill introduced by Lord Lyttelton for effecting compulsory Vaccination is one that deserves attention, since it is very questionable whether the beneficial and salutary discovery of the immortal Jenner would not be rendered odious and unpopular thereby, and the prevention by general and complete vaccination of the recurrence of small-pox be still further endangered. Your Council further consider that the Bill is objectionable on account of the amount of ill requited labour thrown on the medical profession, seeing that no measure can be effectual which does not secure the zealous cooperation of that body.

As to the progress made in the never failing and ever wearying subject of medical reform, your Council, although fully aware of the efforts made, and the glowing anticipations of early fruit held out by the Central Committee appointed at Oxford, cannot promise much. They find no chance of any measure being carried that is not taken up by the Government; they find the Premier and the Home Secretary, upon being told that we are unanimous, promising to introduce the subject, and immediately afterwards they find the same parties backing out, as upon inquiry they learn the unanimity to be a fiction. How can it be otherwise, with the College of Surgeons of England and the Medical Faculty of Glasgow directly opposing, our own South-Western Branch strongly condemning, and the College of Physicians of London only upholding the Bill, whilst that College makes a great stride for itself, and obtains its long-desired charter, which very materially enlarges its power, and extends its influence over the whole of England? The only probable result of this parliamentary session will be this Charter. Your Council are fully alive to the extreme difficulties besetting the question, arising out of what may be termed the vested interests of the nineteen different sources from which licenses to practice may be obtained, as well as from the extreme laxity with which any individual, qualified or unqualified, has been permitted to style himself doctor or surgeon, as the humour or convenience of the moment dictated.

Your Council do not propose any special course for adoption; but they are anxious to express their belief, that no better regulation of the medical profession can be effected while the present utter want of uniformity in professional qualification prevails; nor can the medical profession hold a fitting position in the body politic until there be a system of registration, by which men who have been properly educated, and who possess a legal qualification to practise, may be distinguished, not only from ignorant and dishonest pretenders, but from those who, having undergone a slighter education and a slighter test, still assume the same title.

BENEVOLENT FUND. Your Council pass with much pleasure from the consideration of these subjects to the more grateful one of the Benevolent Fund, which they are thankful to know is not neglected by you, whilst it pursues its sphere of unobtrusive usefulness under the guidance of its most industrious and warm-

hearted advocate, Mr. Newnham. Your Council also deem it worthy of notice, though it is not so immediately connected with your Association, that the more aspiring scheme of Mr. Probert has, during the past year, not only met with great pecuniary success, but with royal favour,—the Prince Consort having graciously signified his intention of laying the foundation stone of the new College at Epsom, on the 6th of July next.

OFFICERS. Before closing their report, your Council beg to state the result of the ballot for eight new Members of Council, in the room of those retiring by rotation, viz.—*Bath district*: Messrs. Crang, Colborne, George, and Godfrey. *Bristol district*: Messrs. Morgan, Green, Estlin, and Ogilvie.

Your Council have also to notify to you the retirement of the Bristol Secretary. He has for some time past intimated his wish to be relieved of his official responsibilities, in consequence of being unable to give that attention to the duties of his office which he considered it to merit; he has, however, retained it until your Council could propose to you a successor, which they now do in the person of Mr. Crosby Leonard, of whom your Council will only say that they believe he will be valued by all, his private worth and professional attainments being highly spoken of by those who have had the best opportunity of observing him.

It was moved by Mr. GODFREY, seconded by Mr. JOSEPH BARRATT, and resolved unanimously, after a few remarks from Messrs. King and John Barrett on the Medical Reform and Vaccination questions, that the Report of the Council be adopted.

VOTES OF THANKS.

A vote of thanks to the retiring President, GEORGE NORMAN, Esq., for his zealous and efficient services to the Association during the past year, was, on the proposal of Drs. TUNSTALL and SWAYNE, carried by acclamation.

Mr. NORMAN acknowledged the gratification that such kindness from his professional brethren always gave him.

It was then moved by Dr. HERAPATH, seconded by Dr. DAVEY, and resolved unanimously, that the best thanks of this meeting are hereby given to the council and secretaries for their constant attention to the interests of the society during the past year, especially to those gentlemen who now retire by rotation, viz.: Messrs. Crang, Colborne, Godfrey, George, Estlin, Kay, M.D., Morgan and Ogilvie.

ELECTION OF OFFICERS.

Mr. CRANG proposed JOHN SMITH SODEN, Esq., as President-elect, pointing out his long attachment to the Association, the general esteem in which he was held, and the eminent position he had attained, as admirably fitting him for that honourable office.

Mr. MORGAN seconded the proposition; which was carried unanimously.

Mr. SODEN accepted the duty, stating that although he had almost withdrawn from professional pursuits, yet he would do his best to meet the wishes of his brethren.

Mr. COLTHURST was desirous of moving the next resolution, as it would enable him to thank them for their continued kindness to him during his five years of office. He must acknowledge that he could not sever himself from his post without a considerable feeling of regret. It was necessary however to do so, as he knew that he could not give the time which the office merited. He was therefore about to propose the reelection of Mr. Bartrum, whom they valued too highly to require any additional encomium from him, although he might be permitted to speak of him as his able and agreeable colleague; and then to propose for election with him Mr. Crosby Leonard, a gentleman well known at the Bristol Royal Infirmary for his devotion to his professional pursuits, whilst his industry, punctuality, and amiability, rendered him a general favourite.

Mr. CLARK, although in the chair, must take leave to second this proposition, as he could not allow Mr. Colthurst to name a successor to himself without expressing the regret the society felt at losing his services. If, however, Mr. Colthurst could not continue, he had long known Mr. Leonard, and believed him to be in every way suited to fill the vacancy.

MESSRS. BARTRUM and CROSBY LEONARD were then unanimously elected Secretaries.

A vote of thanks to the Medical Library Society for their liberality in permitting the use of their room, was, on the proposition of Mr. BARTRUM and Dr. WOOLHOUSE, unanimously recorded.

After conversation on the Vaccination Bill of 1852, it was decided that the two councils should meet on the 15th of July next.

the bill; and subsequently, on behalf of the society, present to Parliament such petitions thereon as may seem to them necessary.

COMMUNICATIONS.

Dr. DAVEY read a paper "on the Physiological Uses of the Ganglionic Nervous System."

Dr. HERAPATH exhibited a specimen of an aortic aneurism which had opened into the trunk of the pulmonary artery, producing sudden death.

Dr. SWAYNE exhibited a preparation of an infant, where, from the absence of a diaphragm, the abdominal viscera had thrust themselves into the thorax, compressing the lungs and displacing the heart. The case occurred in the practice of Mr. Crang.

This case is published at p. 589 of the ASSOCIATION JOURNAL for July 8th.

A vote of THANKS to THE CHAIRMAN for his attention and urbanity was carried by acclamation.

THE DINNER.

The members then adjourned to the White Lion Hotel, where, under the spirited presidency of Mr. Clark, honoured by the presence of the Mayor of Bristol, and the Rev. Mr. Knight, rector of St. Michael's, upwards of forty gentlemen spent a very agreeable evening, fully impressed with the social as well as the scientific advantages of the ASSOCIATION.

MONMOUTHSHIRE AND SOUTH WALES BRANCH: ANNUAL MEETING.

The second Annual Meeting was held on Wednesday, the 6th inst., at Chepstow. The members of the medical profession on their arrival in the town were entertained by the President, TREVOR MORRIS, Esq., M.D., at his residence. An elegant breakfast was provided, and many gentlemen partook of the hospitality extended towards them.

The meeting was held in the Public Room, Bank Buildings. Among those present were—John Audland, Esq. (Tintern); F. C. Batt, Esq. (Abergavenny); G. Gwynne Bird, M.D. (Swansea), President of the ASSOCIATION; B. M. Bradford, Esq. (Chepstow); George Cherry, Esq. (Caerleon); G. Davies, Esq. (Merthyr Tydvil); Andrew Davis, Esq. (Pentwyn); W. T. Edwards, M.D. (Cardiff); J. Essex, Esq. (Pontypool); T. Evans, Esq. (Cardiff); W. P. Evans, Esq. (Swansea); T. King, Esq. (Chepstow); — Lawrence, Esq. (Pontypool); W. H. Michael, Esq. (Swansea); W. W. Morgan, Esq. (Newport); Edward Robathan, Esq. (Risca, near Newport); R. Stack, M.D. (Newport); S. H. Steele, M.D. (Abergavenny); Charles Sylvester, M.D. (Cowbridge). There were also in attendance:—The Rev. J. B. Gabriel (Chepstow); the Rev. G. Williams (Chepstow); Fenton Hort, Esq. (Chepstow); W. T. Colville, Esq. (Wye Cottage); — Colville Esq.; W. E. Toye, Esq.; W. Martell, Esq.; A. B. Savery, Esq. (Hardwick Lodge); John Smith, Esq. (Hardwick); J. L. Baldwin, Esq.; E. Baldwin, Esq.; D. G. Thomas, Esq.; and Rees Davies, Esq.

The proceedings commenced by Dr. BIRD, as President for the past year, returning thanks for the kindness and consideration which had been accorded him during his term of office.

Dr. MORRIS, before he took the Chair which had been vacated by Dr. Bird, begged to move that a vote of thanks to that gentleman for his services during the past year be entered upon the records of the Association.

The motion, having been seconded by Dr. STACK, was carried amid applause.

The PRESIDENT (Dr. MORRIS) then proceeded to deliver his address, which was listened to with the greatest attention, and frequently interrupted by warm expressions of approbation.

PRESIDENT'S ADDRESS.

GENTLEMEN,—The opportunities for reunion presented to us by the meetings of the Branch Societies of the Association, must afford peculiar pleasure to the members of a profession whose arduous and engrossing duties generally fix them throughout the year to particular localities, and prevent them from participating in the ordinary facilities of intercourse enjoyed by gentlemen of other pursuits. In order to remove this disadvantage, the Monmouthshire and South Wales Branch of the Provincial Association has been formed; and at this, its second anniversary meeting, over which you have called me to preside, I greet you with a cordial welcome, in full trust that this reunion may promote those feelings of good will, confidence, and brotherhood, which should characterise gentlemen engaged in our philanthropic

calling. By your kindness I occupy the distinguished post I now fill; and if I should be found to perform its duties imperfectly, I must throw myself upon that indulgence, which originally selected me for this honour. I am conscious of succeeding a President who performed the duties of his office with that high talent and urbanity which are well known to distinguish him in all the duties and intercourse of life; and while I feel a just pride in following in his honoured steps, I am rendered only the more sensible of the responsibility of the office which I am called upon to discharge.

It is with much satisfaction that I welcome my medical friends to the ancient Saxon town of Chepstow, celebrated in our annals for the industry, valour, and loyalty of its inhabitants, and in song for the enchanting beauty of its scenery—its woods and cliffs, soft slopes, and winding river. It may perhaps be said truthfully that all the elements of the picturesque and the beautiful seem to have combined, to make this neighbourhood a rich illustration of the fine and varied landscape of our country. The visitor will admire the princely castle where the Fitzosbornes, the Strongbows, the Mowbrays, and the Herberts successively held lordly rule, and mustered their men-at-arms, for feats of the battle-field or for defence, and the monastery where the Benedictine fathers once counted their beads, and chaunted their vespers. Both now exist in venerable ruins, reminding us of the departed chivalry of our past history, and shading with a solemn sentiment the lovely landscape on which Nature seems to have bestowed with a liberal hand her choicest attractions.

I recommend my friends to pay a visit to the interesting relic of feudal grandeur, Chepstow Castle, situated with singular beauty on the edge of a lofty cliff, with its walls clothed with ivy and its embattlements dismantled. From its hall the celebrated Richard Strongbow set out to make the conquest of Ireland; here a band of brave and loyal troops held the fortress against the insurgent Parliamentarians, and the iron hearted Cromwell was compelled to confess a defeat. Eventually, indeed, the Parliamentarians took possession; and those halls which had been graced for centuries with the flower of British chivalry, owned the haughty and severe Lord Protector for their master. A round tower in the first court is memorable for having been, for twenty years, the prison of the regicide, Harry Martin.

Chepstow church contains the tomb of this stern republican. We are not without other records of Harry Martin; an interesting portrait of him, said to have been painted by Walker, an artist of eminence, in the reign of Charles II, being in the possession of my worthy and highly esteemed friend, Mr. Lewis, of St. Pierre, who resides in one of the most charming seats in this neighbourhood, where the classically grand in execution and the rich and beautiful in nature unite to please the purest taste. The church is a portion of what was formerly a Benedictine monastery; and it cannot be denied, that the founders exhibited their usual taste in the selection of a spot for their habitation. Its western front, with its round arch and zig-zag moulding, is an admirable and rare specimen of the Saxon or early Norman era; but the structure also exhibits decorations of a later period.

Moynes Court, Matherne, and Caerwent, are equally deserving your attention. The elegant iron bridge which now spans the Wye has replaced a more ancient structure which had many interesting associations for the antiquary; but the bridge and its memoirs are swept away, and we must console ourselves with the utilitarian reflection, that although we may have lost something in the picturesque, we have gained in suitability and mechanical elegance of structure. The march of modern ideas has reached even the quiet, time honoured town of Chepstow, and threatens to bend our predilections to its practical and unromantic tastes. The genius of the place will, I have no doubt, struggle hard against the invaders. Connected with this bridge, I may mention that the tide rises here with extraordinary rapidity, and mounts as high, on the average, as fifty feet. The archaeologists of the Association will find pleasure in visiting the Roman encampments, several of which are to be found in this neighbourhood, and one at Southbrooks, which is very remarkable. But the sovereign charm of our scenery is the beautiful and winding Wye, with its toppling cliffs, its surrounding woods and dells, its green meadows and wild copses, its peeps of orchard ground, and cottage gardens, constituting "a most living landscape", crowned with the far famed Tintern Abbey. This prospect poets have delighted to sing; here Wordsworth, Coleridge, and Southey, tutored the eye of taste, and penned their poetic inspirations. Returning to the scene of his youthful delights, Wordsworth's muse seemed to swell with a richer and deeper melody when he sang:

"Again I hear
These waters rolling from their mountain springs,
With a sweet inland murmur. Once again
Do I behold these steep and lofty cliffs,
Which on a wild secluded scene impress
Thoughts of more deep seclusion, and connect
The landscape with the quiet of the sky."

But apologising for these few remarks in reference to the attractive features of our scenery, I must enter upon other considerations.

We have reason to rejoice, gentlemen, at the rapid progress which medical science is now making; and the more effective means for the relief of "all the ills that flesh is heir to" which the sister arts have supplied. The microscope reveals a new world of life, and form, and motion—the heretofore invisible region, in which the mysterious and plastic hand that shapes and builds the human fabric, conducts in silence and in secret his subtle operations, bringing this wondrous world to light; it exhibits with accuracy the elementary forms of organisation; it enables us to distinguish and characterise the peculiarities of the cells proper to each structure, to observe the movements of the minute molecules, almost to witness their growth, and to surprise, as it were, organic life in its very birth. The more intimate acquaintance with nature thus afforded, has enabled us to discriminate with great accuracy the various forms of disease, and therefore to apply our remedies with more precision, and with greater prospect of success. That fell disease cancer, for example, is becoming more accurately defined; and the structure, formation, and relations of malignant affections generally are better understood. Many affections at one time considered to be of a scirrhus nature, have been very recently subjected to the searching power of the microscope, and are now classed under the head of enchondroma, etc., and in this category are deprived of their terrors. The use of the microscope has doubtless tended also in a great degree to divest medical practice of its empiricism. A century ago, and even much more recently, very little was known of the ultimate forms of organic structures, and pathology was an untrodden land. Then the cure of disease was a purely experimental art; drugs were collected from all quarters of the world and all regions of nature, and exhibited in every variety of combination that ingenuity could devise. These were the barbarous days of medicine. How much is the practice altered now! Now the blind art is becoming more and more a clear sighted science; we walk in the daylight of truth, and though we stumble now and then, we see whither we are tending, and know the good at which we would arrive.

Dr. Morris then at considerable length sketched the progress of pathology, and dwelt on the triumphs of modern conservative surgery. He then discussed the subject of medical reform, after which he thus proceeded:—

He who desires to succeed in his profession can only attain that legitimate object, by establishing an implicit confidence respecting his skill and integrity in the breasts of those whose afflictions compel them to entrust their health and life—nay, not seldom, the carefully guarded secrets of the heart—to his honour and counsel. It is a sacred privilege—a privilege testifying with a thousand tongues to the pure and delicate honour of our brethren, that we are often made the depositories of family secrets under the most trying circumstances of life, that our judgment is often appealed to for aid, and a life of future happiness or woe often hangs upon our decision. In all such delicate occurrences it becomes us to be faithful and upright, to combine truth with gentleness, to listen with sympathy to the "still sad music of humanity", to alleviate griefs by friendly advice and succour—to act, in short, the part of the good Samaritan, who, rather than turn aside from misfortune, poured oil upon the wounds, and breathed words of comfort to the bruised heart. In this way shall we best fulfil the noble mission of our order, and act nearest to the likeness of the Divine Physician who healed the sick, the halt, and the blind, and visited the widow and the fatherless in their affliction. The conscientious and humane medical practitioner walking about doing good, appears to approach most nearly to the beautiful exemplar of our Saviour's life. He who, through his power of healing bodily infirmity, wins the gratitude and confidence of his fellow-men, makes an easy conquest over the heart disposed to lean upon his physician as a friend. In the hour of affliction the ear is open, the heart is responsive, and the truth finds a ready acceptance. It is found that the medical man is the most successful missionary in Eastern Asia. The Chinese, bigoted to their own system of paganism, politically and religiously jealous of foreign interference, and rejecting the Gospel from the lips of its appointed ministers, will listen, it is said, to the persuasions of the phy-

sician whose skill has relieved their physical suffering, and whose charity has dissipated their distrust. There is now a considerable number of our brethren engaged in the divine mission, and we bid them from our hearts God speed. How know we the important influence their teachings may have exercised over the hearts of the Chinese, and the extent to which their labours may have sown the seed of that religious movement, reported to be inspired with Christian principles, which is now rapidly spreading through that vast empire, threatening to overthrow the barriers that have hitherto separated these people from the fellowship of nations, and to bring them anew into communion with the other families of the human race?

The public owe much to the noble heroism and self-sacrificing devotedness of the medical character in many other phases of life. Cherished be the memory of the great hearted Sidney Bernard, who, when the plague ship arrived before the rocks of Madeira, with the yellow flag flying from her mast, and the dying and the dead between her decks, when the floating pest-house dared not enter the harbour, and with a tempest rising feared to put to sea, and none could be found to render aid,—

"Alone, alone, all all alone,
Alone, on a wide, wide sea;
And never a saint took pity on
Their souls in agony,"

he, the young surgeon, volunteered to the rescue, and procuring a crew of seven men from a merchant vessel lying in the harbour, went on board the dreadful ship, prepared to encounter every peril to his own life to save that of others, steered the fated vessel home to the Mother-bank, when he, too, caught the fever, and the hero of humanity fell a martyr to charity—a victim to his own generous philanthropy. Honour to Conolly, who struck the shackles from the limbs of the maniac, and by gentleness and affection rekindled the spark of reason, and recovered the suspended affections. Think of Granville Sharp, who first pleaded the cause of the kidnapped negro, and who, with Clarkson and Wilberforce, forms one of a memorable triumvirate, champions of freedom for the negro slave. But, who can enumerate—their name is legion—why enumerate the names of those men in our ranks who have signalised themselves in the cause of suffering humanity? When "the pestilence that walketh in darkness" issued from its Indian jungle, hovered over our isle, ravaged our towns, and carried death into our habitations; when friends and relations too often fled from under the roof on which the blight had fallen, in dismay and despair, and heard no comforting voice, then the members of our profession, true to their mission and foremost in duty, plunged into the noxious atmosphere unhesitatingly, and exposed themselves to the influence of the grim destroyer, glorying in the privilege of succouring the plague-stricken, raising up the fallen, the forsaken, and the apparently dying. There is an exalted degree of heroism in such acts as these, that would be given to trumpet-tongued fame if they were less common. The public expect our services, regardless of our self-sacrifices, and in few cases are they disappointed. If the soldier encounter many perils on the battle-field, surely those confronted by our own profession, the soldiers of philanthropy, in the combat with the dark and mysterious pestilence, are not less painful or deadly. We enjoy no immunity, as the world, struck with admiring wonder, are somewhat prone to fancy, which they themselves do not possess; and the medical attendant is frequently laid low in the performance of his sacred duty, by the poisonous emanations from the dying fellow creature whose life he came to save. When the cholera raged in St. Petersburg and in Sligo, the mortality among the medical men was excessive; but the fate of the fallen scared not the living practitioners from grappling with the fell destroyer. Such, then, are the perils we encounter, not only in the fearful times of great epidemics, but every day and every hour of our existence is life risked: hence our services derive a value which no conventional usages of remuneration can adequately exaggerate or repay. Let me here protest against a narrow notion, occasionally expressed, and too often governing many of the contracts for medical services, such as poor-law appointments and others, to the effect that our profession must be regarded as any other trade, and dealt with in accordance with the ordinary rules of stipendiary employment or commercial transactions. No sentiment can be more unworthy. What! does not the physician sympathise with his patient in his suffering? Is he, indeed, deaf to his groans? Does he feel no pleasure to see the cheering hues of recovery suffuse the cheek? Is there no well-wisher to his heart? Are there no electric sensibilities in his system? Invested of all those tender and sympathetic feelings, which bind us to our fellow-men, and teach us to "love our neighbour as ourselves,"

were our own"? I verily believe that a great majority of our profession feel a peculiar delight in the relief of suffering, from a generous sense of the benefit they confer; and that the thought of remuneration, if it arise, is but a secondary consideration. In truth it may be affirmed, that there is not another class of men in the walks of life that devotes so much unpaid service in the cause of humanity; and which, so far as regards temporal concerns, has made the world more deeply a debtor. But if the world may be thought occasionally to regard us from an unfavourable point of view, it may in some degree be owing to our own conduct. We should not reproach others unless we are ourselves innocent of blame. Sir Benjamin Brodie has said: "the medical profession is a noble profession, but is a low trade". Let us take care, then, that in our hands a trade it never shall become! So soon as a sordid calculation of profit and loss in relation to human suffering enters into our reflections, we lose all claim upon the gratitude of those we benefit; for we cannot expect others to regard our services more highly than we estimate them ourselves. I am happy to think that the condition, as well as the character and attainments of our profession, has much improved during the last quarter of a century. Its members generally have a higher status, a more comprehensive knowledge of medical and general science, and enjoy that distinction with the public which superior information usually confers. A more kindly and generous feeling exists also among themselves; they are more social, more confiding, and more united. The jealousies that formerly distracted and divided our ranks, and which were maintained by the absurd distinctions created by the mischievous laws that govern the profession, are rapidly subsiding, and a more cordial and generous understanding is becoming established. The heart of the profession has burst its fetters, and swells beyond the conventional restraints imposed upon it by obsolete charters and oppressive laws. The age has outrun the narrow policy of its institutions, and demands that they shall be remodelled in accordance with its high interests, its necessities, and its sense of right and truth.

To this grand result the organisation established by the Provincial Association, through the agency of my excellent and esteemed friend, Sir Charles Hastings, has mainly contributed; for through its instrumentality those who, living distant and apart from one another, engrossed in the onerous duties and anxieties of their calling, are unable to meet frequently to cultivate friendly sympathies, or to compare the results of their experience, may now, once in the year at least, or oftener, enjoy the opportunity of social intercourse, may awaken old friendships already begun to sleep, and keep alive that sacred flame which makes our life so much the happier, by so much as it enjoys more of the fostering glow of friendship with congenial minds. "*Idem velle et idem nolle, ea demum firma amicitia est.*" And they may, while renewing old associations, or recording the sad recital of those connexions that are gone for ever, add fresh ones to the register, and thus learn to experience the truth that the world never grows old to those who live in the midst of its sympathies, and will open their hearts to give them a dwelling. I can remember very well, before the institution of the Parent Association, and before, too, let me add, the establishment of railway transit became general, that the members of our profession, on settling down in a remote district, voluntarily banished themselves, so to speak, from their fellows, and were cut off from nearly all communication with the rest of the profession. Then there were few medical journals, and less taste or inclination to figure in their columns: whereas now, the name of an old friend is turning up every now and then in the pages of our weekly or monthly press, thus associating our thoughts once more with his studies and labours. This extreme individuality militated against professional sympathy, and prevented the formation of that class feeling, that pride of caste, that *esprit de corps*, which, whatever disadvantages may be thought to attend them, have the privilege of creating and sustaining a high professional spirit and zeal, and a generous and honourable competition.

There can be no doubt that the ASSOCIATION JOURNAL has had these beneficial effects; and if it should have no other advantage, surely this is one that cannot be lightly esteemed. We have received this boon from the Journal, and we owe it the duty of communicating the results of our experience and meditations, so that it may be worthy of the Association and of contemporary literature. I consider that during the past year its character and usefulness have very much improved; and I have no doubt that it will eventually become a truthful and honourable representation of medical science and practice in the provinces. There are in our ranks men of shining talents, and the largest experience. We have among us still our Jenners, our Heys, our

Dalrymples, and our Martineaus; and if such foremost men would only resolve to discard fashion, and to adopt the Journal as their organ, it would be eventually raised to the highest point of literary and scientific repute; and the Association itself would acquire dignity from the reflected lustre derived from the fame of its more brilliant and distinguished members.

The strengthening professional ties consequent on the meetings of the Provincial Association and its branches, has been of great benefit to our less fortunate brethren, through the instrumentality of the Benevolent Fund. This fund is one of the most wholesome fruits of the sympathies cultivated by our Association—a positive and real boon, whose blessings will, I hope, continue to multiply until no object worthy of our aid shall be turned empty away. Such a fund is an imperative requirement of our profession, for in no other are the means of subsistence so precarious, and health and life so uncertain. A man, full of energy, and intellectual strength, and hope, may, by an inscrutable dispensation of Providence, be disabled in an hour, or death may smite him in mid-career, and his family, deprived of his aid, may be cast penniless upon the world's wide stage. Medical men have rarely the ability to save against the vicissitudes of fortune, or the calamities of life. The necessities of a suitable establishment, even from the first hour of starting on their doubtful career; the obligation generally considered incumbent on them to marry early; the wants of an increasing family; the uncertainty of remuneration for services rendered; and the hourly encroachments upon their purse for charitable purposes, often beyond their means or their duty to meet, prevent them from making that provision for their families which is usual among other classes of society occupying a respectable position. They are not usually rich when they begin their career; and, in the majority of instances, are poor or embarrassed when they leave it. The conventionalities of their station impoverish their purses and cripple progress. Thus it happens that hundreds, alas! of our industrious and deserving brethren are working their way through the thorns and briars of the bitterest penury, or are in old age dragging a wearisome existence, until at last their families become recipients of some charitable fund. Shall not then a community, whose province it is to relieve suffering, and who must necessarily, in the course of their career, have shed priceless blessings on many a wounded spirit, receive sympathy and assistance in the day of their distress from those to whose comfort and happiness they have so abundantly contributed? Cannot the public be induced to give a little out of their superfluity to aid our struggling charities; and thus, in the most graceful and tender way, redeem a part of the obligation under which medical science and skill must at some time or other have placed every family in the land? I really believe that it is by our own fault that the public have extended so little help, and that if the cause of the widow and orphan had been pleaded with more zeal, a generous response would have been made to our advocacy. The Medical Benevolent College, now in course of formation under the auspices of that good man, Mr. Probert, a worthy companion of our Benevolent Fund, affords ample evidence of what the public are willing to do for the benefit of our humble brethren. Let the good cause go forward! There is plenty of room for extending the hand of benevolence.

Dr. Morris, after depicting quackery in its various fashionable forms, thus concluded his address:—The notoriety of a day is not true fame; and that man sells his character at a low price, who is content to barter his principles for a transitory repute. If there exist a fear that the high character which our profession has been gradually acquiring for integrity and purity of principle, and the implicit confidence now reposed in us by the public, may be shaken, if we begin to tamper with our conscience in relation to the great principles of truth and honour which should actuate and govern us as a professional body, let us avoid the possibility of the contamination. We must separate ourselves from the temptation, and show our aversion to the deceit by renouncing those who live by its profits. And now, gentlemen, I have one word to say in conclusion. I sincerely trust that this meeting will tend to cement many friendships, and to unite in a more genial and cordial manner than our opportunities have hitherto permitted, the large body of medical practitioners residing within the limits of this Branch. The relaxation from duty on this occasion will prepare you for a more vigorous application to the onerous and responsible pursuits of your vocation, on your return to your respective homes; and it is my earnest wish, as it is my belief, that our meeting this day will be found fraught with many present and future advantages, and will be associated in memory with many gratifying recollections.

Mr. BRADFORD moved the thanks of the meeting to Dr. Morris for his able address, with a request that he would allow it to be printed for circulation. The proposition was carried by acclamation.

The Secretary (Mr. MICHAEL) then proceeded to read the report of the Council, which, with the other proceedings, we must defer till next week.

[To be continued.]

EDITOR'S LETTER BOX.

THE CRYSTAL PALACE COMPANY NOT DESIROUS OF OPENING THEIR EXHIBITION ON SUNDAY.

LETTER FROM W. O. MARKHAM, M.D., TO THE EDITOR.

SIR,—I am sure, from your known candour, that you will not refuse to correct an unintentional mis-statement, made by my friend Dr. Stewart, in that letter of his, wherein he renders an account of his chivalrous exploits against steamboats, tobacco-shops, railroads, omnibuses, costermongers' carts, crystal palaces, and other pandering fosterers (on a Sunday), to the vicious propensities of our fallen human nature.

Dr. Stewart holds forth, that "tempting profits" are the inducements which have operated on the minds of a powerful trading company; that lucre, not the health of the minds and bodies of the masses, is the incentive in leading that company to hope for the opening of the Crystal Palace on a Sunday. Now, the truth is, that the Crystal Palace Company have not stirred a finger in the business; and I feel satisfied that you, who write liberally in this matter, will be glad to place on record a few of the sentiments uttered by the eloquent chairman of that company in March last, at a general meeting of the shareholders—sentiments which were countersigned, and accepted, and published as its own, by this lucre-seeking, soul-destroying company.

"Let each one," said Mr. Laing, "retain his own individual convictions . . . but let us, as a company, retain a position of neutrality; do not let us attempt to alter or evade the law of the land as we find it. . . . I think our unanimous feeling is, that if this were simply a question of profit and loss, the undertaking ought not to be opened on a Sunday. If ever it is to be opened on the Sunday, it must be from a regard to the interests of the working classes of London. That is a very large question, a question I do not mean to discuss. . . . it may be raised in Parliament; our business is to acquiesce strictly and loyally in the law of the land as we find it for the time. I may say further, that viewed simply as a question of profit and loss, my own belief is, that we have no interest whatever in getting that restriction removed. . . . I believe, as a question of profit and loss, it is just as likely that we shall gain as lose by acquiescing in the state of the law as we find it. I may state strongly and decidedly, that I do not think it is a question of profit and loss at all. . . . We, as directors, felt that this undertaking had originated very much in motives of public spirit; and rather in a desire to perpetuate and extend the civilizing processes and influences of the Great Exhibition of 1851, than as a mere commercial speculation; and, therefore, apart from any expectation of profit, it was not right that the building should be thrown open indiscriminately on the Sunday in a manner which might give well grounded offence to the religious portion of the community."

I only wish, sir, that your space would permit the insertion of the whole of Mr. Laing's calm and philanthropic views on this point; they would be found to contrast strangely with the fiery eloquence of my friend, your correspondent, and to give a much more consoling view of the depraved condition of the mercantile, "man-using-up-spirit" of this golden era, than he does. It will be a satisfaction to Dr. Stewart to hear that one of the most influential men connected with this powerful trading company, and in whose name Dr. S. will recognize a countryman, Mr J. Henderson (of the firm of Fox and Henderson), actually got up a petition *against* the opening of the Crystal Palace on a Sunday, which petition, as I happen to know, was signed by the men in his works at Birmingham.

I think I have great reason to express a doubt whether Dr. Stewart's petition does really represent the opinions of the medical men in London; my hopes that it does not, may be in part perhaps father to the doubt; but these are the reasons for my unbelief. Every man of the world knows the easy way

with which one friend will accommodate another with his signature to things of this kind; and it is notorious that extraordinary energy, the energy of enthusiasm, was exerted in canvassing for and procuring signatures to this petition. I myself was canvassed by a medical friend in my own house, and set upon by the chaplain for the same purpose at the hospital to which I am attached, where the petition was, in my opinion very improperly, laid upon the Board-room table for signature. On the other side, I have neither been asked to sign, nor have I signed, nor do I know a single person who has signed, any petition in favour of the Palace being opened on a Sunday—strongly as I am desirous of its so being.

Dr. Stewart is very hard on those who venture to differ in opinion from him. Why should "sound physiology, ordinary humanity, and, above all, Christian morality", be the property of those only who see these things with his manner of seeing them? And is he logical? He quite forgets that his conclusions are based on *opinions*, not on *facts*. You, sir, in your last number tell us that you will prove the increase of labour (it is not then yet proved), or appalling using-up of men, as Dr. S. has it, that will be requisite if the bill be passed. I am very curious to see your proofs; for my own firm opinion is, that an *actual diminution* would be the result.

Why should the spirit of Knox or Land be breathed into this medical body of ours? I admire, as much as Dr. S. can, the sentiment of our old heathen friend Terence; and it is just for this very reason, because, in my belief, humanity will be affected in all its higher attributes, by the turning of the people's minds from bodily degradations and pollutions of every sort to the pure and gentle influences of ennobling science and art, that I differ as to its interpretation from him. Let us each quietly possess and express our differing opinions, but not presume to judge of the motives of others; this is the prerogative of no earthly being.

"Let not this weak unknowing hand
Presume Thy bolts to throw,
And deal damnation round the land
On each I judge Thy foe."

I am, etc.,

W. O. MARKHAM, M.D.

Clarges Street, July 6th, 1853.

THE CRYSTAL PALACE OUGHT TO BE OPEN ON SUNDAYS.

LETTER TO THE EDITOR FROM EDGAR SHEPPARD, ESQ.

SIR,—I am anxious to say a few words on the subject of the opening of the Crystal Palace on Sundays. To my mind, which so fully accords with, and subscribes to, the philanthropic sentiments uttered by Dr. Forbes, it seems that there can scarcely anything more be added to his forcible observations. But to you, sir, who advocate, with many members of our Association (most conscientiously, I doubt not), the opposite side of the question, much more may be required ere you will feel satisfied that *ours* is the correct, and *yours* the incorrect, position.

Trusting, therefore, that you will give me credit for being actuated by the best intentions, I venture to make a few suggestions upon a subject which has already occupied, and is destined still more to occupy, so large a share of public attention.

Now, sir, it seems to me that the great mistake which the advocates of *your* view of the question are making, is that of setting apart the Sunday as an exclusive day of rest and prayer. To make it an *exclusive* day is at once to make it a drag and a heavy burden, even to many a conscientious and religious man. Superstition forbids to such a one the slightest mental culture and intellectual improvement, though he has no time to spare for such improvement upon any other day out of the seven. What is the consequence? Either he becomes a religious fanatic, calling down heavy judgments upon his happier (for his religion yields but little happiness) and equally conscientious brethren; or, feeling the thralldom of a day so unlike any other, he despises every Christian ordinance and becomes a habitual scoffer. "A few", it has been written by an able professor at one of our English Universities, "may possibly use the whole Sunday profitably for purely spiritual action; but I suspect that they are very few; and the more acute their sense of the sacredness of the hours, the greater the danger of misery from it. Especially (he continues) I can testify that for several years, when a youth and very young man, Sunday was to me the most painful; because, with all my sanctity, I could not practically reach up to my sanctity." In how many a bosom does such a response? In how many a disciplined heart does it not hear an echo?

Whether Sunday be a political or a divine institution, it is our obvious duty to turn it to the best account. And how is this to be effected? Is it by driving the poor tired artisan within the walls of some conventicle, where he may hear nothing but fearful denunciations of divine wrath against the sinful and unbelieving—where religion never wears a smile, but is clothed only in eternal frowns? Is it by enticing him within the circle of a more orthodox communion, where he might be enchanted by its beauty, and won over to the ways of godliness, but for that lack of charity which limits the divine mercy to this or that particular section of Christians? Is it by compelling him to sit in his miserable and gloomy home, with his not less miserable and gloomy family, groaning over his own and the world's unrighteousness? Ah! no, sir; you and those who espouse your views can never think this.

Rather may this profitable spending of the Sabbath be effected by each man doing what he feels most conducive to his own and his family's moral progress. It matters not whether it be listening to the Rev. Ebenezer Howler at Bethesda chapel, or meeting the Deity (where he may more surely be found) face to face in the thousand natural objects of beauty with which He has surrounded us. "If the deed be lawful, so that the moralist is satisfied, the question for the spiritualist is not, what it is, but in what spirit it is done." Shall we stop up the channel of our railroads on a Sunday, and refuse to carry out of the great and sinful Babylon some of its miserable sons of toil (toil how much increased by the demands and exactions of pleasure's daily votaries, albeit Sunday's strict observers), because the employment of a score or two of officials is involved, who might otherwise be sleeping on the platform, or boozing at a public-house? Is this real philanthropy?—nay, has it any semblance of religion? He who made us, and has meted out to some so hard a lot, will not form so harsh a judgment of the sons and daughters of six-day tribulation, because they seek to recruit their wearied and exhausted frames on the seventh day, and hold at the same time their quiet and thoughtful communion with Him, rather beneath the dome of His, than that of man's architecture. Is there nothing in the spirit of "silent adoration"? Surely God may as much, nay, far more, be worshipped thus, beneath the sky which he has spangled, than within the steamy walls of many a temple. The devout mind may find Him and worship Him in every spot: in the dewdrop, in the opening flower, in "the cattle upon a thousand hills", and in the waves of the mighty deep. And, by parity of reasoning, if the good man can find Him, the wicked man can fail to trace Him, anywhere. If we enlarge and render permanent the sphere of its usefulness, the Crystal Palace at Sydenham, like its great prototype in Hyde Park, shall contribute in no small degree to the intellectual and moral welfare of a great community. Within it is to be gathered everything of beauty and wonder in art and in nature. To these things the upper and middle classes of society may have daily access. The lower classes may have access once a week. Whose fault is it that they cannot go oftener? That of the proud and rich: that of the grasping and the selfish. It is difficult to say how the moral and religious tone of a people *must* be elevated, if it be not by constant intercourse with the works of nature and of God. The rich man can have it any day, the poor man only on what has been so aptly called the poor man's day.

Let not us, then, members of a profession which has the only true insight into the cause of disease—of a profession which yearly reveals such dreadful realities, such tales of over-taxed and exhausted frames, dropping prematurely into unhallowed graves—let not us, I say, choke up the opening avenues to so much good. Let intellectual and moral growth attend the progress of our common Christianity. And "he is the best Christian," be it remembered, "who most advances the cause of mankind."

Is that cause to be promoted, or is it not, by the opening of the Crystal Palace on Sundays? I maintain that it is, even against the opinion—"Alas! that it should be so" (as Dr. Forbes says)—of 640 medical men! The extract quoted by this learned physician and noble philanthropist, from his recent work on Ireland, cannot be too earnestly perused by the 640 gentlemen above alluded to. May they never know the privations and sufferings necessarily incidental to the lot of the swarming populations of our great towns; may they breathe more of the breath of heaven than these poor wretches breathe in their weekly round of irksome toil; may they see as much of nature and nature's God *every day*, as not specially to require both for one day.

I am, etc.

EDGAR SHEPPARD.

Enfield, July 9, 1853.

THE SABBATH.

LETTER TO THE EDITOR.

SIR,—Yours is a difficult course to pursue, considering how many people you have to please; but as you have thrown down the gauntlet in your article entitled "SUNDAY—AT HOME OR ABROAD?" you must allow me a word on the same side of the question which my friend Dr. Forbes has so quietly and yet so well advocated. It is extremely undesirable that our JOURNAL should become theological as well as medical.

I do not for a moment impugn the motives of Dr. Stewart and his coadjutors; and I claim from them the same charitable judgment. I yield to no one in my desire that the first day of the week should be devoted to rest from labour—to the worship of God—and to the attendance on those means of improving our moral nature which are within our reach, whether at home or abroad, and to the cultivation of all the social virtues: that it should be the day when all the cares of the present state of existence should be banished from our minds.

We live in an age of combinations. The human hive could not for a week hold together if we all had to brew our own beer, bake our own bread, make our own clothes, etc. It is the same principle which is a necessary result on Sundays of the congregation of large numbers of human beings in cities and towns. I stepped into a baker's shop last Sunday, in a bye street, and asked him how many dinners he had cooked? He answered, seventy. That is to say, seventy families were saved cooking on Sunday, and were able to go to church. From Dr. Stewart's special mention of "the bakehouse", one might suppose he objected to this arrangement. In some primitive conditions, such as that of the Israelites, it was possible—nay, it was necessary, in obedience to God's commandment—to abstain from all labour on the Sabbath day. Yet what a rebuke was administered to the Pharisaic observers of the outward show by our blessed Lord himself!

Now what is a day of rest to Dr. Stewart, to you, and to me? Dr. Stewart sits in his library after service, and reads the last controversial tract. You, sir, I have no doubt, lock up your study, and do not open a letter till Monday. My rest is a cigar and a good book, in the greenhouse. Now, take a tradesman, and ask him what his rest would be. Assuredly the grocer would like to get away from the smell peculiar to his trade; the tailor would find little rest in sitting—Heaven bless him, he has been sitting the whole week!—and so it is with all. True rest to them is utter separation from and forgetting of their weekly occupation. They ought to know that their first duty is the worship of God their Creator, their preserver, their Saviour; and this, the first, should sanctify the whole duties of the day, should throw a solemnity over everything that is undertaken or that is spoken; should hallow us, our tongues, our hands, our very thoughts.

But what is worshipping God? It has, by a strange perversion, come to signify the passive act of listening to a sermon. Now, to my idea, worship is an act of itself, and far too seldom entered into and sought as a means of gaining heaven's blessing on our daily work. But, having worshipped God, not as a form, but as a reality, are we to insist upon people all staying at home for the rest of the day? Is the whole machine to stand still for the sake of the few dozens required to set it in motion? Most decidedly not. But it is wearying to argue with those who insisted that relays of horses and postboys should be kept ready on the old coaching roads, in case of sickness, etc., on Sundays, involving the labour of hundreds, that two stokers might be saved from working. The police must be on duty; the scavengers must sweep away our refuse; and it is no less an act of necessity and mercy to give the poor the means of getting away from the scenes of their weekly toil. I thank God, I live in the country, and I rejoice to see, on Sundays, the roads in each direction pouring forth their stream of well dressed artisans with their wives and their children. I have a cold dinner, and sit at home, because that is my true rest, my Sabbath. They go abroad, because their Sabbath consists in motion. What a fearful result has been found in Glasgow and Edinburgh of the severe discipline of the Sabbath as there outwardly so well kept! It is this—that a large proportion of the population are on Sunday steeped in whiskey.

It is an evil thing that the misdirected exertions of such good men as Dr. Stewart and others drive men to despise the Sunday, and to seek the advocacy of the infidel and the unbelieving philosopher. If the six hundred and forty medical practitioners would each put down their £5 to build a church at Sydenham; to have the most gorgeous ceremonial; the most captivating music; the most eloquent preachers if you will; anything to

allure people to the house of God; that even the scoffer may stay to pray. Oh, if the clergy were not asleep, would they not be up and doing—would they not have early services, real morning prayers and early communions for those who could then attend them, and seek a blessing on their holy day?

One more point—I suppose one is to give just as much weight to the six hundred and forty signatures to this petition as was to be given to that of the teetotallers. It was difficult to refuse when asked to sign it; but it has made me very sceptical indeed of the sincerity, particular of “the most eminent” of our profession.

I am, etc.,

ISAIAH lviii, 5.

THE SABBATH.

LETTER FROM JOHN GRABHAM, M.D., F.R.C.S., TO THE EDITOR.

SIR,—I am unwilling to obtrude my feeble pen upon your pages; but my attention has been arrested by your last week's leading article, and a sense of duty prompts me, as an old member of the Association, to express my deep regret that, through ignorance of what was in progress, I did not attach my name to the petition against opening the Crystal Palace for gain on Sundays—even though I place myself with those who are only “moderately versed in the knowledge of human nature—the charlatans” of Dr. Forbes. The well earned high position of this gentleman gives double force to opinions promulgated by his letter to you; and I believe them to involve the penalty of “doing evil that good may come!”

Belonging to the Church of England, I am commanded, every Sunday morning, to “keep holy the Sabbath day”; and I utter the prescribed response—a prayer for grace to do so. Immediately afterwards, Dr. Forbes would have me travel “by land or by water, by omnibus, boat or rail”, pleading the advantages of relaxation, while I “forge additional chains” for the poor creatures by whom I am conveyed! “Strange and most illogical indeed!” The doctor will pardon this echo of his own words. Alas! I fear such “philosophical consideration” is akin to that which was long ago described as “philosophy, falsely so called”. He mentions “religious exercises and study” as “retarding progress by over long persistence”. “The brain,” he says, “is apt to be exhausted, and the thoughts to become weakened and confused, in religious pursuits.” It may be so under the discipline of Ignatius Loyola; but, happily, the system to which I adhere is “perfect freedom”.

I have been for forty years a hard-working member of the profession; and, as I am anxious to show that my conclusions are the result of experience, I may be permitted to “magnify my office” (which Dr. Forbes's station leaves at humble distance), viz., that of appointed medical attendant to large numbers of the poor; of whom I unhesitatingly assert, as a general rule, that their habits are respectable, or otherwise, in proportion to their correct observance of the duties of the Sabbath, and their abhorrence of *Sunday pleasure jaunting*, which, in my observation, has been almost invariably the precursor of dissipation, poverty, and domestic misery.

Dr. Forbes appeals to “everybody who has had anything to do with the instruction of others, or who has ever attempted the acquisition of knowledge in his own person.” I lament, indeed, my own short comings; but the importance of illustrating a subject so vital bids me spurn the imputation of vanity, and claim for my family the honour of having instructed hundreds of poor persons of both sexes, adults as well as children, by unwearied personal efforts at *Sunday schools*, which an extended adoption of Dr. Forbes's views would annihilate.

Often am I cheered by letters to members of my circle, from persons now respectable and scattered widely about the world, expressive of undying gratitude to those who snatched them, when Sunday wanderers, from “the highways and hedges”, and taught them—not merely to read and write, but—to value, as Christians, the privilege of Sabbath services; while, provident and well conducted, they found legitimate opportunities for healthful recreation.

With profound respect for the intellectual powers, the moral virtues, and the good intentions of Dr. Forbes, and passing over his “hard words”, I venture to submit, that even “the wise and prudent” are not always safe expositors of Divine truth. I am thankful for his admission, “that there is a growing disposition among the clergy and the upper classes generally in England”, to accord with the six hundred and forty of our brethren who discharged a sacred duty. The “astounding

announcement” might engender misgivings. Long may the doctor live in health and happiness; and, when age advances, may he cheerfully confess that—

“The soul's dark cottage, battered and decayed,
Lets in new light through chinks that time has made.”

I am, etc.,

JOHN GRABHAM, M.D., F.R.C.S.

4, Lonsdale Square, Islington, July 4th, 1863.

THE MEDICAL PROFESSION AND THE CRYSTAL PALACE.

LETTER FROM H. SANDWITH, M.D., TO THE EDITOR.

SIR,—You will have a provincial response to your editorial remarks, on the proposal to open the Crystal Palace on Sundays, quite as cordial as that of the six hundred and forty medical men of London. You take a true ground in shielding a large minority of working men from increased toil on the Lord's day, in the event of its more extensive desecration; and not less so when you designate the remedies proposed by certain politicians for the diseased condition of an overworked population, as “charlatanic treatment of the body politic”. In the wish you express, “to maintain Sunday as a domestic day”, for purposes of family converse and religious instruction, you also faithfully echo the wants and wishes of society. All these are sound and wholesome views of the question at issue, based as they are on a regard to the moral, no less than the physical, wants of human nature. Full justice cannot indeed be done to the former in pages devoted to physiological science.

Let the question, however, be fairly stated. One might suppose, from the way in which the promoters of the opening of the Crystal Palace on Sundays argue, that a legislative refusal to grant this indulgence would imply the extinction of all existing facilities for recreation on that day; whereas, the real question is, whether things shall remain as they are, or whether a floodgate shall be opened to inundate the country with such scenes of Sabbath profanation as those which deluge the continental nations.

Neither is the question fairly stated, when it is assumed that the *opponents* of the opening of the Crystal Palace on Sundays are satisfied with the existing condition of the operative classes. They cheerfully admit, that a greater amount of out-door recreation is necessary both for their health and for the improved character of their religious exercises.

How then are the admitted evils of the present system to be met, so as to secure the required physical and moral good?

Yourself and others have suggested a solution of the difficulty, by proposing for the operatives “a weekly holiday”. There are, moreover, indications of a heaving in the bosom of society for the adjustment of this claim of the operatives on their employers. Witness the victory achieved in the case of factory labour. Witness the early closing of shops. Witness also the anticipation of the very suggestion before us by the successful movement in Manchester, and partially in Glasgow, in favour of a weekly half-holiday. The petitions against the opening of the Crystal Palace on Sundays were signed in sufficient numbers by the operatives themselves, to show that Sabbath dissipation is not the source to which they look for relief; but rather to an occasional closing of the Temple of Mammon. While the physical wants of human nature justly demand some relaxation from toil on week-days, its moral ones can ill afford more time for recreation on Sundays. The religion cherished by the existing order of things in England and Scotland may be stigmatized as “technical”; but who that has compared Paris with London, can doubt for a moment which of them contains more of the sham, and which more of the reality of devotion? We may admit, that “over-done” religious exercises and study are “ill done”. But to warrant the implied censure, it should be shewn that our religious services are of inordinate length, leaving too brief intervals of repose, or that the change of occupation on Sundays yields no advantage, and is fraught with no special solace. It is marvellous how easy one should, from mere physiological and hygienic considerations, conclude that a sound philanthropy suggests what must be considered an invasion of the sanctity of the Lord's day, to secure justice to the labouring man. The annals of these speak another language. They tell of Sabbath profanation, with all its boasted physiological advantages, as being one of the most prolific sources of vice. The *most* of these relaxation every year from bodily toil, gained from the Crystal Palace, doubtless aimed at securing

than physiological advantages; for here, as in all other beneficent arrangements of the Deity, a simplicity of means is crowned with a complexity of results. So long as the claims of physiology and an enlightened hygiene can be fairly met on the lower level of political economy, there is nothing to warrant us in invading higher and holier ground, and in frittering away the sanctity of the Christian Sabbath.

I am, etc.,

HUMPHRY SANDWICH.

1, Albion Street, Hull, July 4th, 1853.

THE SABBATH.

LETTER FROM CHARLES COWAN, M.D., TO THE EDITOR.

SIR,—I am much pleased with the general tone and tendency of your two leading articles upon the question of Sabbath observance.

That a large majority of the medical profession do think and feel with you, it is pleasurable to believe; and that your views are justified by the records of the past, and sustained by an authority, which, when once submitted to, becomes supreme, cannot be successfully disputed.

Independently of the axiom, that no secondary good can ever justify the use of wrong instrumentality, and that the classes of our population for whose advantage the proposed innovation in our habits is ostensibly intended, are precisely those who would be burdened and not benefited by the change—there is, as you rightly maintain, the long and uniform evidence of experience, to warn us that the moral elevation and physical well-being of a people have in no degree corresponded to the prevalence of Sabbath amusements, but have ever been closely associated with the national recognition of the law which God has imposed, and of their observance of the precepts which our common Christianity enjoins.

It is madness to imagine that the best interests of any population can be promoted, by indulgences at variance with the dicta of revealed truth; and whosoever may attempt to solve the vast problem of man's social improvement by means inconsistent with God's requirements, will only demonstrate anew their inefficiency and folly, and aggravate the disease they are intended to remove.

The simple truth is, that the neglect of Bible principles is the true solution of our unsuccessful schemes and of our endless controversies, and no age is more illustrative of the fact than the one in which we each now play his little part. Empiricism, in law, physics, science, and divinity, is everywhere rampant. The Tower of Babel is again being raised with a renewed and frantic zeal, and we are vainly anticipating the advent of a coming blessedness as the reward of our own contrivings.

I am, however, quite aware, Mr. Editor, that our JOURNAL should not be the arena of theological discussion; but at the same time I trust, that in the advocacy of every great question, where principles higher than human wisdom demand their proper application, you will not hesitate to give them their due prominence in the discussion, feeling confident that by so doing you will command the approval and sympathy of the great body of your readers.

I am, etc.,

C. COWAN.

Reading, July 5th, 1853.

THE SABBATH.

LETTER FROM JAMES MILLER, Esq., F.R.S.E., PROFESSOR OF SURGERY IN THE UNIVERSITY OF EDINBURGH.

SIR,—I am much gratified to find that you editorially take up the defence of the Sabbath; and I do most earnestly hope that the profession will support you, thoroughly, in the course you are pursuing.

Dr. Forbes has done great and good service in his day to the profession; and there is no man for whom I entertain a higher respect. But this does not prevent me from saying that there is nothing from which I more entirely dissent, nothing which I more deeply regret, than the sentiments he has expressed in regard to Sabbath observance, in our ASSOCIATION JOURNAL for July 1st.

In my own mind, the whole matter in dispute resolves itself into an appeal to God's law, as revealed in His word: a law which will ever be found in perfect harmony with enlightened human experience. The wisest and most observant of all men, in all times, have rested most satisfied that "the conclusion of the whole matter is, *Fear God, and keep His Commandments; for this is the whole [duty] of man.*"

The higher and more accurate the progress of all philosophy, the more surely will it tally with the truths of the Bible. Geology and astronomy, for example, at certain points of their extension, may have seemed to come into collision with these; but the very next step of real progress has exhibited them more clearly than ever in the attitude of stern and faithful witnesses.

And so it is, and will be, with the philosophy of the human frame. It is a crude and imperfect physiology, which opposes itself to the Fourth, or indeed to any of the Ten Commandments. The more perfect that science becomes, the more plainly will it declare that God's way of spending the Sabbath is the best for the body, as well as for the spirit of man. And therefore, while I cordially approve of what you have done, I do desiderate that you mount up from the platform of mere philosophy, and argue the question on Bible ground. "To the Law and to the Testimony! If they speak not according to this Word, it is because there is no light in them."

I am, etc.,

JAMES MILLER.

51, Queen Street, Edinburgh, 5th July.

THE SABBATH.

LETTER TO THE EDITOR.

SIR,—I beg to give you my best thanks for the manly, straightforward way in which you, as Editor, have expressed your opinions on the effect of converting the English into the Parisian Sunday. That the great majority of our members will agree with you, I have no doubt at all. The question is a poor man's question, for he will be the sufferer; and the working men of London are beginning to view it in its true light—that they will be the losers, and their day of rest will be curtailed for the amusement of those who are richer than themselves.

I lately read a pamphlet, by a shoemaker, named Delvin, in favour of opening the Sydenham Palace on Sundays. It was written with spirit, power, and eloquence; but all the arguments he brought forward were, according to my mind, upset by his own admission in the conclusion.

"Even now," (writes this powerful shoemaker) "I am no willing desecrator of the Sabbath. Lightless and unlettered as my teaching and bringing-up have been, I have in some way grown to pay to it a more respectful deference, and feel for it much sincere admiration. To me, and such as me, it has always been the best of friends; its whole history tells me so; for had it not been for the institution of such a day, *mammon*, indeed, long ere this, would have reigned all-dominant; powerless toil be whipped to its task of the day on every day—no rest, no nothing but work—ignorance, filth, nudity, disregarded complaining, unsavoury and meagre food, and a rapid death! I cherish, then, almost to adoration—nay, even to actual adoration—this so-far bulwark against unmitigated industrial slavery and uncommemorated wretchedness."

These are burning words seething up from the hot and vivid experience of an actual life of toiling poverty; and were the writer as broad in his views as he is energetic, he would have seen that he was undermining the very building whose structure he was admiring and trying to improve; or, according to the more homely and apt illustration, he was killing his goose for an immediate supply of golden eggs. He adores the present day of rest—he looks at it as the only bulwark between him and the complete despotism of *mammon*; and yet he would open the way to a complete change of its character. Make the Sunday a day of amusement and pleasure, instead of a day of rest, as it is now, and the poor of the nation will suffer just as the servants of a family do when their employers enjoy themselves. The family, for instance, enjoys its Sundays, making the day one of festivity; and the servants are kept in the kitchen, and worked harder than on any day of the week. Another family habitually acts in a way to decrease their work, having nothing cooked or done on that day which can be cooked or done on the previous or succeeding day; and their servants enjoy a quiet day of rest, and are thankful for it. So is it with a nation. The poor will suffer. If it is not a day of amusement to them, it is a day of rest; and now that they have got it, may they (with God's help) keep it, and employ it in his service.

I am, etc. A MEMBER OF THE COUNCIL.

July 5th, 1853.

ON THE PROPOSAL TO OPEN THE CRYSTAL PALACE ON SUNDAYS.

LETTER TO THE EDITOR FROM HENRY DAYMAN, ESQ.

SIR,—I cannot but admire the manly and independent spirit you have shown in your articles on the Sunday pleasure controversy: and this feeling has been shared by many much esteemed associates with whom I have lately conversed.

The subject appears capable of being viewed under two aspects, namely, How does the proposal to throw open the Crystal Palace on Sundays affect us as citizens? and how as medical men?

To answer the first question, it would not be difficult to produce evidence, drawn from authentic sources, to show that, from the earliest ages of Christianity, the Lord's day has been observed as one of sacred rest, of joy and gladness; and that the first Christians carefully avoided keeping the Sabbath day after the manner of the Jews, which consisted then, as it does now, in following secular amusements. Religious exercises, and the moral training of the mind, were the especial duties of Christians on Sunday. Thus St. Ignatius says, in his *Epistle to the Mag-nesian*, "Let us no longer sabbatise, but keep the Lord's day, on which our Life arose"; and Lord Chancellor King, in his excellent work on the "Primitive Church", tells us that "the way wherein the first Christians sanctified the Sunday was the employing of themselves in acts of divine worship and adoration". Moreover, there is something revolting to Englishmen in the idea of throwing open a place of public amusement on a day which from time immemorial has been kept holy.

I am well aware, sir, that many excellent men would tell us this is a question with which the legislature has nothing to do, and that "the law of liberty" forbids the civil magistrate to interfere with the Christian's conscience; in fact, that people should be left to follow their own ways, in order to test the sincerity of their faith. To this I answer, that, if the people themselves ask for protection even against themselves, it is the business of the rulers to listen to the appeal. Now, it is well known that the mind of the public is against opening the Crystal Palace on Sundays; and, therefore, if the sense of the community has been taken in the matter, the duty of a wise government is made clear. Let those gentlemen who affect to ignore what is called a *national* religion listen to the words of an old divine, who certainly was not prejudiced in favour of church, or any other principles of an established form. Speaking of Sunday, he says, "On this day, throughout all ages, hath the edification of the churches been carried on, and that public revenue of glory been rendered unto God which is his due. Not only have the wisest and holiest men, who have complained of the sins of their several times and ages wherein they lived, which procured the pouring out of the judgments of God upon them, constantly reckoned the neglect and profanation of the Lord's day among these sins; but such instances have been given of particular severities against them who have openly profaned this day, and that upon unquestionable testimonies, as may well affect the minds and consciences of those who profess a reverence of God in the holy dispensations of his providence."

In discussing the second part of our subject—namely, how the question at issue affects us as doctors—I have no intention of introducing arguments either for or against the proposed scheme on physiological grounds. It may be that the laws of mind are derivative laws, consequent on those of animal life; but this does not appear to me a proper place to engage in an analysis of psychological principles, founded on the imperfect data which physiology at present can furnish. Such an inquiry belongs to the subtle logic of the moral sciences. It is enough to know that six hundred and forty thoughtful practitioners in medicine have given their verdict on this important question; and this fact alone is sufficient to justify the editor of a journal which is supposed to reflect the mind of two thousand gentlemen in drawing attention to the subject, and to command the serious consideration of every right thinking member of the profession.

I am, etc.,

HENRY DAYMAN.

Milbrook, Southampton, July 12th, 1853.

[Letters in defence of Sabbath observance from Dr. ALLISON and Dr. COWDELL have been squeezed out by the advertisements encroaching on our space. They are in type, and shall appear next week. EDITOR.]

* Dr. John Owen's Preliminary Exercitations, xxxix.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXIX.

LONDON: FRIDAY EVENING, JULY 22, 1853.

NEW SERIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY. In reply to several letters which we have received from Edinburgh, requesting us to add the Edinburgh Medico-Chirurgical to the societies of which we give regular reports, we beg to say that we shall be very glad to arrange with a competent and trustworthy reporter for the meetings of next session. Persons who will engage to furnish faithful and early reports, we are prepared to treat with. In mean time, we have obtained reports of the recent meetings of the session which has just concluded.

PROPOSED SOCIETY FOR THE SUPPRESSION OF FRAUDULENT AND OBSCENE ADVERTISEMENTS.

On the 17th of June, we presented to our readers some observations upon "Four Strongholds of Quackery in the Fourth Estate", in which we particularly directed attention to—

- I. NEWSPAPERS, especially those published in the Provinces and in the Colonies;
- II. RELIGIOUS (?) PERIODICALS;
- III. PSEUDO-MEDICAL PAPERS; and
- IV. MEDICAL JOURNALS.

Since the period referred to, we have been in correspondence, upon the subject of the suppression of fraudulent and obscene advertisements, with many influential persons; and the conclusion generally arrived at has been, that this object might be accomplished, to a great extent, by a judiciously managed society; but that, without the organization of such a body, little fruit could be expected from the isolated efforts of respectable editors and others. We expect very soon to be able to announce the actual establishment of this society—a society with which we shall always be rejoiced to co-operate, in endeavouring to redeem the better part of the periodical press from its present degraded position of hiring servitude to medical swindlers and obscene advertisers. The literature of Holywell Street, and the pseudo-medical papers, may be found to require special treatment.

If the attack on quackery in the fourth estate be wisely directed and well sustained, it cannot fail to be crowned with success. There are a few, we know, ready to maintain, that so essential is the money of the quacks to the very existence of most of the provincial newspapers, that such an attempt as that proposed can only be regarded as a well meant but hopeless crusade. A pretty extensive inquiry into the state of public feeling leads us to adopt a more cheering view of the case. We feel assured that there is an enormous power, slumbering at present, but quite ready, upon a proper signal being given, to march forward in united phalanx, and drive forth the quacks from their "strongholds in the fourth estate", which at present seem almost impregnable. The reformation required is fortunately keenly desired not only by the medical profession, but by large numbers of the nobility, clergy, and gentry.

The preliminary organisation must be extensive and careful; and the movement, when once commenced, must be ever onward, with unflinching hand and unfaltering step: but, if these conditions be complied with, victory is certain.

As some encouragement to deal faithfully and firmly with offenders in the fourth estate, let us recall attention to our former remarks upon the appearance of quack advertisements in periodicals aspiring to be considered the champions of religion. We particularly complained of the strange inconsistency of the *Edinburgh Christian Magazine*, which, in its number for April last, denounced quackery as a practical "denial of the wisdom of God's arrangements in the world", and yet sold a place upon its wrapper to the *soi-disant* Professor Holloway, for his "extraordinary cures". The publishers, to their honour be it proclaimed, have for the future resolved to keep their advertising columns free from Holloway's swindling notices; and we have no doubt that many other proprietors of papers which seek to be called religious and Christian, could be induced, by means of suitable representations, to make their conduct harmonize with their professions.

Dr. DOUGLAS MACLAGAN, of Edinburgh, on perusing our article of June 17th, to which we have already referred, forwarded it, with an expostulatory letter, to Messrs. PATON and RITCHIE, publishers of the *Christian Magazine*. The high character and respectability of these gentlemen may be inferred from their reply, which we subjoin:

To Dr. DOUGLAS MACLAGAN, }
Heriot Row, Edinburgh. }

Edinburgh, June 20th, 1853.

DEAR SIR,—We have to thank you for drawing our attention to the article in the ASSOCIATION MEDICAL JOURNAL, anent quackery: but we had previously determined to withdraw the advertisement from the columns of our Magazine. We are

Very truly yours,
PATON AND RITCHIE.

Most of the cheap serials are contaminated with fraudulent advertisements of various descriptions. There are, however, some honourable exceptions. The *Family Economist*, published by Groombridge and Sons, Paternoster Row, disdains all quack advertisements, and in this sets an honourable example to other publications which pretend to offer unexceptionable domestic reading.* The *Scottish Guardian*, a Glasgow newspaper, excludes quack advertisements; and we believe that there exists a small and honourable self-denying minority who act in the same way. Generally speaking, the Scottish newspapers are much less offensive than the English provincial papers; and those printed in Edinburgh—though some of them are open to severe censure—are, as a group, decidedly the most respectable regarding which we have as yet had complete returns.

* We recommend this modest publication to the notice of our readers. Volume Fifth, price One Shilling, containing 236 closely printed pages, is now before us. The *Family Economist* is written chiefly, we believe, for intelligent artisans.

The journals pretending to strict religious principles and aspiring to be the organs of particular parties, when they do transgress, are certainly the most demoralizing of this class of offenders. They gain access to families from which papers avowedly licentious are excluded; and thus religion herself is made the pimp of vice.

The *North Wales Chronicle*, of July 15th, has been sent to us, we presume, in consequence of some observations which it makes upon our echo of the censure lately passed by the North Wales Branch of the Association upon its unfairness in its treatment of Mr. Duncan. The paper, however, is more useful to us as affording a ready example of the class to which it belongs, and against which it is our special duty, as good citizens and medical journalists, to defend society and our profession. The *North Wales Chronicle* devotes a great portion of its space to quack advertisements and ecclesiastical affairs. What Dr. Forbes has so well named "technical religion" is the obtrusive religion of this newspaper. For example, the proper way of repeating the Lord's Prayer is very learnedly handled according to the doctrines of various authorities, including "Bishop Mant, one of the greatest of modern ritualists". One correspondent writes as follows:—

"And as to the alleged custom of the Universities, I question much, from all that I can learn, whether it be true as regards some of the college chapels. And even if it were so, this point is not to be decided by a majority, for in that case it might turn out that, in the Principality at least, we should not have the Lord's Prayer repeated by the people at all. Besides, at the Universities, they always kneel and pray into their caps at the 'bidding' to prayer before the sermon, whereas when the prayer itself (i.e. the Lord's Prayer) is said by the preacher, they do not at all join in it, though *bidden* or exhorted so to do; and such I apprehend is the case in most of our cathedral churches."

As another specimen of the religion of this newspaper, we quote a few lines from the editor's denunciation of the Roman Catholic religion.

"It" (the Roman Catholic religion) is the fiendish system under whose direct auspices such atrocities were perpetrated, that is now attempted to be reimposed upon the people of this Bible-reading and liberty loving country. It is to bring back this organized system of blasphemy and foul superstition, red with the blood of martyrs, that the superhuman efforts of the Propaganda are directed. They instinctively feel that so long as the Protestant institutions of these realms flourish, there is no hope for the regeneration of the world. While the fleets of Great Britain carry her missionaries to the remote ends of the earth to proclaim the glad tidings of salvation through the merits of a crucified Redeemer alone, the devotees of an effete creed dread the mask being torn, that conceals the hideous deformity of Popery."

In juxtaposition with communications on the technical performance of the Lord's Prayer, and the above passage about Popery, we have many columns of quack advertisements. Among them in bold relief at the top of a page, with the prefix

HEALTH FOR ALL WHO NEED IT:

we find a beastly proclamation from a veneralist—a document which is an outrage not on Christianity alone but on the common decencies of social life. That no one may impute to us unnecessarily severe language, we quote a part of this disgusting manifesto; which, we may remark, is issued by "a chemist" residing in the market place of Bangor, and who is the agent of the vile veneralist.

"A Medical Book on the Physiology of Marriage, Infelicitous and Unproductive Unions, and other Secret Infirmities and Disorders of Youth and Maturity, usually acquired at an early period of life, which enervate the physical and mental powers, diminish and enfeeble the natural feelings, and exhaust the vital energies of Manhood; with practical observations on the Treatment of Nervous Debility and Indigestion, whether arising from these causes, close study, or the influence of tropical climates: Local and Constitutional Weakness, Syphilis, Stricture, and all Diseases and Derangements resulting from Indiscretion. With Coloured Engravings, illustrating the Anatomy, Physiology, and Diseases of the Reproductive Organs, explaining their structures, uses, and functions, and the various injuries that are produced in them by solitary habits, excess, and infection."

"Country patients are requested to be as minute as possible in describing their cases, age, mode of living and general occupation. The communications must be accompanied with One Pound for Advice and Medicine, without which no notice can be taken of their application, and in all cases the most inviolable secrecy may be relied on. Medicine can be forwarded to any part of the world, however distant, securely packed and carefully protected from observation."

It is passing strange that a newspaper containing such a hotch potch of Christian archaeology, fiery protestantism, and unveiled obscenity, should be tolerated in this Christian kingdom; and yet we grieve to say that it belongs to a numerous class of publications which are to be found in the drawing-rooms of our gentry, and even in the studies of some of our less thoughtful clergy. Is it not written—

"Woe unto you, Scribes and Pharisees, hypocrites! For ye pay tithe of mint, and anise, and cummin, and have omitted the weightier matters of the law, judgment, mercy, and faith: these ought ye to have done, and not to leave the other undone."

"Ye blind guides, which strain at a gnat, and swallow a camel."

The editor of the *North Wales Chronicle* appeals to his readers as a Bible-reading people: and it is therefore quite in place for us to tell him that although the Bible does not direct us to say the Lord's Prayer "into a cap", or according to any other prescribed ritual, it distinctly tells us—our Saviour himself says it—that we are to use this form of words, "when we pray". The prayerful heart is the only thing exacted. The man who, with sincerity of soul, prays, "Thy kingdom come, Thy will be done on earth as it is in heaven", will assuredly agree with us in thinking that it is more important to exclude obscene reading from our families than to settle the cap controversy, or to abuse the Papists. It is worse than folly to waste our strength and our days in contending so eagerly about the archaeology and fashion of the casket of Christianity as to lose sight of the priceless gem itself; allowing it to be trodden upon by the feet of the scoffer as a worthless and vile bauble, while we proceed with our puerile wranglings.

Here, for the present, we must leave this subject; and in doing so, we have peculiar pleasure in calling the attention of our readers to the letter of *Πιστοβυρεπος*, printed in a subsequent page.

As St. Paul was accompanied in his evangelistic journeying by "Luke, the beloved physician", so let us at all times rejoice to go hand and hand with the faithful heralds of the cross: but in doing so, let us beware lest we give any occasion to the adversary to say, that we are using religion as the cloak of charlatanism.

We have been led into the above train of thought by the

conviction that fraudulent and obscene advertisements can never be suppressed except by a firm alliance between the two sacred professions. The proposed society must work as much through the piety of the clergy as through the orthodoxy of the medical profession.

DISCUSSION IN THE HOUSE OF COMMONS ON THE SALARIES AND SERVICES OF POOR LAW MEDICAL OFFICERS.

A FEW nights since (July 12th), Mr. MILES rose in his place in the House of Commons, to make a motion on Poor Law Medical Relief.

In strict accordance with an old custom, the members present were so few in number when the medical question came into the field of argument, that the House had to be counted, in order to satisfy a listless member that the necessary "forty" were really present. The "forty" being present, Mr. Miles opened the debate, and was followed in turn by Mr. Baines, Sir John Trollope, and Mr. Wodehouse.

It is due to these gentlemen to say, that they all considered that the salaries of medical officers were "low"; and Mr. Miles and Mr. Baines have supplied us with so many interesting calculations on poor law medical matters in general, that we are able to present to our readers, in a very few lines, a more full and correct statement of the value of poor law medical appointments, than has been offered perhaps at any previous time.

It appears, that the number of parochial medical officers in England is 3,233, and that the number of poor patients treated by these officers annually is 835,000, or about 260 patients by each officer. The sum paid for medical relief in the year 1852 was £212,050, to which must be added £25,894 for vaccinations, and £30,727 for "extra fees for surgeons"; the whole affording the sum of £268,671, which, being divided amongst the 3,233 officers, gives to each the average sum of £83 : 2 : 0½.

This is the rate of payment of our parochial officers. Let us now look at the services rendered by them for that payment. We have before said, that each officer has under his care 260 patients annually, according to Mr. Baines's figures. As these are all cases that have been returned in the medical relief book, it is fair to infer that they are all serious cases, and cases requiring long and careful attendance. From a large amount of personal knowledge on this subject, we would not fear to state that, in cases thus returned, the average number of visits paid is from ten to fifteen; but, as we wish to speak under the mark rather than above it, we will content ourselves by saying that the figure 7 shall represent the average number of visits paid to each patient, and the average number of times that medicines are supplied.

With reference to vaccination. The amount received by all the officers is £25,894, implying, at 1s. 6d. per case, which is the highest sum paid, 388,410 vaccinations, or rather more than 120 vaccinations by each officer, annually.

In extra surgical fees £30,727 are paid. The cases for which these fees are received are generally cases of fractures and dislocations, with an occasional amputation or an operation for hernia. The fee in these cases varies from £1 to £5: we will take £3 as the standard. This will give a total number of 10,262 special surgical cases to the medical

officers collectively, and, we will say, three cases to each individually. It must be borne in mind that these are all very serious cases, cases each of which is on hand at least six weeks, and has to be visited three or four times weekly, often many times more, during the whole of that period; so that, if we say that seventy-two extra surgical visits are paid on an average by each parochial surgeon in the course of the year, we shall speak under the truth.

To sum up: Were the sums paid to poor law medical officers equally divided, and were their services also equally divided, an account sent in at the end of the year by one of them, might be represented as follows:

To professional attendance on 260 patients, including one thousand eight hundred and twenty visits, and necessary medicines on each visit	£65 11 9
Vaccinating 120 persons	8 0 2
Attendance on four serious surgical cases including seventy-two visits, surgical appliances and medicines	9 10 1
Total	£ 83 2 0

This is, indeed, a most strange looking account. If the reader will consider each vaccination as equivalent to a visit, (it is something more, for the vaccinator must look after the vaccinated and report the success of the case) 2,012 visits, at most of which medicines are supplied, will be found to have been made. Divide £83 2s. into 2,012 parts, and 9¾d. comes with impertinent smallness before the eye—9¾d. per visit and medicines, and a ride or a walk of six miles—9¾d. per surgical operation, and a burthen of responsibility that would make Atlas bow-legged in a fortnight! Rather gentlemanly pay this, to a member of a gentlemanly profession, from a gentlemanly public, is it not?

"It is a long lane that has no turn in it", says the old proverb. The lane of misery in which we travel now *has* no turn in it, nor do we see that it has an end; but we do see before us many yards of ground, still more miry than any we have yet passed. We must wade through this, however, before we lay down the pen; and then we will mark the spot, leap the fence, and rest for a week, at all events. A parochial medical officer does not retain a district for one month, before he secures the acquaintance of a large class of invalids, who can receive no medical relief but through parochial charity, and whose cases are not such as to demand absolutely an "order" from the "relieving officer". Some persons may tell us that the medical man is doing more than is his duty, in attending to these applicants without official command. Such persons can and do know nothing whatever about the matter. The parochial medical officer must attend to the class of applicants to whom we refer: his own good heart impels him to it; for how can he, with the feelings of a man in his bosom, oblige every poor old patient that applies to him for "a box of pills and a bottle of cough mixture"; to drag his or her wearied limbs some miles, perchance to obtain at last, amidst a torrent of insult, "an order" from what the law calls the "relieving officer", who too often is a low, snarling, heartless wretch, that might pass current as the hybrid produce of Caliban and a female Cerberus.

But more; if the medical officer were disposed to force the "order" in the class of cases of which we now speak,

he could not; for he would know well that such a line of conduct would do hurt to the benevolent feelings of the public, against which no man can rebel so little as the doctor. Oh, no! such a proceeding is impossible. The poor would howl at it; the trader would cut off his respect; his worship at the hall, and the clergyman, would frown and hold back greeting.

It is impossible to say what amount of medical relief is afforded to the poor by the union practitioner, without being recorded; but it is enormous. It is at least three times greater than that stated in the returns. And when this is considered, the salary of the parochial officer becomes so infinitesimally small, that a homœopath might examine it, and find it inadequate to cover such a yearly drug bill as he even would require for parochial medicines alone.

We reserve some further observations on the late parliamentary discussions for our next number; and conclude now by remarking, that if one subject shows more powerfully than another the importance of a fair representation of medical men in parliament, it is the subject which we have discussed on this occasion with so much licence and unhidden disgust.

THE "NORTH WALES CHRONICLE" AND THE NORTH WALES BRANCH OF THE ASSOCIATION.

THE Editor of the *North Wales Chronicle*, Mr. Augustus Robert Martin, has sent to us, for publication, a very violent MS. denunciation of Mr. Lloyd, and a more general printed attack upon the profession in North Wales. We do not feel that it is necessary to defend Mr. Lloyd; and therefore we refrain from giving space to a document which we could not insert unless we accompanied it by an exposure of its unscrupulous character.

Independent of the reason just stated, we conceive that the following paragraph is a sufficient justification of our silence upon the present occasion. If our "productions are not worthy of any serious notice" in the columns of the *North Wales Chronicle*, of course it cannot greatly distress our editorial brother to be informed that we decline to insert his "productions" in this Journal. From the last sentence of the subjoined extract, it appears that Mr. Martin considers himself a pretty good prophet.

"We have seen the attack upon us in the Journal of the Provincial Medical and Surgical Association; but as we have no doubt whatever that Mr. Lloyd has for the nonce acted as editor, reporter, and correspondent, the productions are not worthy any serious notice in these columns. His animus towards the *North Wales Chronicle*, since he was refused the opportunity of using it for the display of his malignity towards other professional men, is sufficiently well known in the neighbourhood, and we have no apprehension that his statements will be believed beyond his own small coterie. It will be surprising to us if his services to the Association do not soon lead to its dissolution.

SECOND READING OF THE VACCINATION EXTENSION BILL IN THE HOUSE OF COMMONS.

WE record with sorrow and amazement that Lord Lyttelton's Bill was read a second time, without a division, at a forenoon sitting of the House of Commons, on Wednesday, the 20th instant.

The discussion which took place was short, but ominous of evil. It is thus reported in the *Globe* of the same day.

"Sir JOHN PAKINGTON moved the second reading of the Vaccination Bill, and entered into a great many statistics to shew the practical difference in the rate of mortality from small-pox between countries where vaccination was by law compulsory and countries where it was left optional, establishing the conclusion that the rate of mortality in the latter was nearly double what it was in the former. It was proposed to make vaccination compulsory by this bill, and he hoped the House would adopt the principle.

"Lord PALMERSTON was prepared to support the principle of the bill, but its machinery required alteration. He would, however, vote for the second reading.

"Mr. BRADY opposed the bill as inefficient for its object, and impracticable in its details.

"Sir GEORGE STRICKLAND objected to the bill, and thought they ought to adopt the voluntary and not the compulsory principle. By the bill they were to force parents to send children for vaccination, and on that ground he opposed the bill.

"Mr. FREWEN also opposed the second reading.

"The bill was then read a second time without a division."

It yet remains for the House of Commons to discuss the Bill in Committee, so that some chance exists of frustrating the unfair and injudicious attempt which is now being made to hurry this radically bad measure through Parliament. Granting, even, that the compulsory principle be a good one, the machinery by which it is proposed to carry it out is pregnant with many and vast evils, as we have already fully shown. We trust that a last but resolute effort will be made to arrest the progress of the Bill. Let every reader of these lines, who is hostile to the measure, express strongly by letter his opinion to his representative in Parliament, and to any other Member of the House of Commons with whom he may be acquainted. Much benefit may yet result from the general adoption of such a course. Let petitions for delay also be sent in from those places which have not petitioned.

It is indeed strange beyond measure, that Lord Palmerston should be so fastidious as to the promotion of medical reform, so long as there is not perfect unanimity among rival medical corporations; and that he should at the same time be quite content to allow the profession to be injured by obnoxious legislation, in a matter regarding which there is no cause for haste, and many reasons against endangering the extension and the efficacy of vaccination by the precipitate and random legislation which is now being attempted.

ORIGINAL COMMUNICATIONS.

OPERATION AND RESULTS OF QUARANTINE
IN BRITISH PORTS SINCE THE BEGINNING
OF THE PRESENT CENTURY.

By GAVIN MILROY, M.D.

*(Read before the Epidemiological Society, June 6th, 1853.)**[Continued from page 622.]*

I HAVE next to consider the relations of quarantine to yellow fever. Various circumstances within the last few years,—more especially the case of *H.M.S. Eclair*, the recent publication of an Official Report on the disease by the General Board of Health, and the still more recent occurrences connected with the arrival of the West India mail steamers at Southampton—serve to give much interest, at the present time, to this part of my inquiry.

Fortunately, there is not any lack of evidence upon the subject; and although, as usual, there has been on most occasions no little discrepancy of statements, not to say of opinion as to the bearing of the statements, it will be easy to steer clear of controversy by appealing, almost exclusively, to the testimony of those writers, who have been the most zealous upholders of quarantine as a trustworthy defence against the invasion of the pestilence under consideration.

I select the visitations of Gibraltar, as affording perhaps the best means of testing the point. Since the beginning of the present century, Gibraltar has been five times the scene of epidemic attacks of yellow fever; viz:—in 1804, 1810, 1813, 1814, and 1828. These successive occasions present a singularly favourable opportunity for careful investigation; and as the Rock is all but separated from the mainland of Spain—being connected with it only by a narrow sandy isthmus which is easily watched—it may be regarded, for our purpose, as strictly insular, with every facility for complete isolation and rigorous quarantine. During the first three years of the century, yellow fever had prevailed in several towns on the southern shores of Spain, especially in Cadiz, Malaga, Alicante, and Carthagena. There was a recurrence of it in the following year.* In consequence of the great dread of the disease at Gibraltar (which had hitherto escaped), a most stringent quarantine had been perseveringly kept up against all arrivals from the neighbouring infected or suspected ports. Sir William Pym was then the quarantine officer of the harbour. In the month of July, he left his post on leave of absence, and did not return till the middle of October, when he found that yellow fever had fairly broken out in the town. The earliest suspicious cases had been observed about the beginning of September, in a notoriously filthy and unhealthy spot on the Rock; and to this spot the disease was for some time confined. The disease then rapidly spread, and eventually caused an immense loss of life. In less than three months, 6000 persons, out of a population, including the troops, not exceeding 16,000, perished. By the end of November, the pestilence had greatly abated; and it ceased entirely before the end of the year. As to the manner in which the pestilence has been alleged by some parties to have eluded the vigilance of the quarantine establishment, the following explanation is proposed by Sir William Pym,—not however, be it remarked, as the result of his own personal inquiries on the spot, but merely on the oral authority of one of the medical officers of the artillery, forming part of the garrison:

"A shopkeeper, named Santos (who resided in Boyd's Buildings), arrived from Cadiz on the 28th of August, 1804, and was taken ill on the 29th; he had lodged in a house at Cadiz, where some persons died of the then prevailing fever.

Mrs. Fenton (wife to bombardier Fenton, of the Royal Artillery) was the second person attacked; she was taken ill on the 3rd of September. Her husband and a child of the name of Roland were taken ill on the 8th, and died on the 12th. Mrs. Boyd, who had visited Mrs. Fenton, was taken ill on the 13th, and died on the 19th; her husband was taken ill on the 14th, and died on the 16th. All those families were neighbours. The disease was confined for some time to this particular part of the town, and to those who had intercourse with them."

Such a loose unconnected statement as this can scarcely be received as evidence to prove anything beyond the alleged date of the first case, and the circumstance of the disease being limited for some time to the locality where it first appeared, and which is known to have been the most filthy and insalubrious on the "Rock". No intercommunication, it will be observed, between the first and second cases is even so much as mentioned; the connexion of the one with the other is merely guessed at. Unless medical evidence on so important a point of inquiry as that of the introduction of a pestilence be different from such a specimen as this, I fear that it will never command public confidence or respect.

Fortunately, there is another historian of this epidemic, Sir J. Fellowes, who was at Gibraltar during the greater part of its prevalence. Sir James, it is to be remembered, was a most zealous upholder of the contagion of yellow fever, and of the necessity of strict quarantine measures for its exclusion. His testimony is, therefore, the more valuable. Now, from his work, it clearly appears that there was no recognised or known yellow fever in Cadiz either at the time when the man Santos was there or when he left it; and moreover, it is certain that he obtained a passport from the British Consul there, before he went on board the vessel in which he took his passage for Gibraltar. The vessel too, it seems, remained quite free from sickness. All, therefore, that can be made out is simply that a man, arriving in apparently good health, at the usual sickly season—in a year, too, characterised by remarkable atmospheric distemperatures—went to reside in a confined and crowded house, in a notoriously filthy locality of a very unwholesome garrison town, and that, within a few days subsequently, he had an attack of fever, from which he recovered; also, that other cases of fever occurred immediately afterwards in the immediate neighbourhood of the said locality.

It must not, moreover, be omitted to be mentioned that Sir James Fellowes had pretty strong grounds for believing that a fatal case of fever had occurred ten days before the man Santos' arrival, in the person of a smuggler from Malaga, who, if the authenticity of the case is to be admitted, must also have managed to have evaded the regulations of the port. Whatever view be taken, it is, at all events, quite obvious that the quarantine precautions failed in giving that security to the town which it was their object to impart.

Dr. Nooth, who acted as health officer of the harbour during the temporary absence of Sir Wm. Pym, as well as many other medical practitioners in Gibraltar at the time, and of the ships of war in the bay, were of opinion that the disease was of local development, and that foreign importation had nothing to do with it. It should always be borne in mind that there was not, perhaps, a more unwholesome garrison town in the British dominions than Gibraltar was then, and continued to be for many years afterwards. The unnecessary sacrifice of life among the troops there, not to mention the civil population, during the first fifteen years of the present century, must have been enormous.

After the cessation of the severe visitation of 1804, the Rock remained free from the pestilence in an epidemic form for the next five years and a half, although occasional cases of the ordinary endemic fever of the place, accompanied with a dark yellow suffusion of the surface and sometimes also with black vomit, occurred in most years, even when the garrison was declared to be healthy. During the whole of this time, the Spanish ports, which had suffered so severely during the first four years of the century, were equally exempt. This cessation or lull in the course of

* It may be worthy of notice, as indicating a wide spread sickness in distant parts of the world, that in 1804 the yellow fever was extremely prevalent in the West Indies, and caused very great mortality among our fleet, etc. Between seven and eight hundred died of it in the naval hospitals of Jamaica and Antigua alone, during this year.—Sir G. Blane's *Observations*.

pestilential visitations, is a very suggestive and significant fact in epidemiology; and the fact is the more important as regards our present inquiry, as, during the very same period that the yellow fever disappeared from the southern shores of Spain, not only (as already mentioned) was epidemic plague absent from Egypt and Turkey, but there was also a very remarkable diminution of typhus fever in England at the same time. Whether there be any connexion between these coincident occurrences in distant countries, is a question of the utmost interest, but one as yet nearly quite unexplored.

In the summer of 1810, yellow fever re-appeared in most of the Spanish seaports which had been previously affected; nor did Gibraltar escape. The atmospheric peculiarities of the season were very similar to those which had been observed in 1804. Upon this occasion, it was believed that the disease was imported from Carthage, as it was thought to have been on the former occasion from Cadiz. The facts related by Sir W. Pym, who was the quarantine officer of the port at the time, are these. Four transports, with deserters from the French army, arrived from Carthage on the 19th of September. One man had already died from the fever on board one of the vessels, and there were several others seriously ill. The transports were anchored at least half a mile from the shore, and kept under the strictest quarantine. Sir W. Pym applied to the Governor to send them off to Minorca, as there was a lazaretto on shore there, and there was not one at Gibraltar. But this severe measure, very fortunately, could not be carried into effect. Sir W.'s narrative proceeds: "During the time that the disease had been going on on board the transports in the bay, the garrison continued in perfect health till the 20th of October, when, in consequence, as I must suppose, of a breach of quarantine regulations (which, however, could not be detected), a Minorcan family, in the south district, belonging to the dockyard, was attacked with the disease." A story was afterwards circulated, that some intercommunication had taken place between the person first attacked and the transports; but it could not be substantiated; and, as Sir W. Pym himself candidly admits that the pestilence found its way into Gibraltar through some undiscovered channel, while a most rigid quarantine was maintained all the while under his own directions, it is scarcely necessary to dwell any longer on the subject. Most of the medical practitioners on the Rock considered it to be of local and indigenous origin. It will be observed, too, that the fever again appeared about the same time of the year; and Sir W. Burnett, who was then principal medical officer of the Mediterranean fleet, mentions that, after very heavy rains in September, which had brought down a prodigious quantity of putrid decomposing matter from the upper parts of the town to the beach, the weather had set in very warm, with a prevalence of the oppressive easterly wind. Dr. Hennen states that, in the months of July and August, bilious remittent fever was more than usually prevalent in the town, and that the type of the disease became more malignant and fatal in September.

It may not be undeserving of passing notice, that some of the physicians in Carthage alleged that their epidemic in 1810 was brought to them from Gibraltar; while the quarantine authorities of the Rock attributed their visitation to their Spanish neighbours. This sort of mutual incrimination is far from being infrequent in the history of quarantine.

The next time that yellow fever broke out in Gibraltar was in September 1813—the year, it will be remembered, of the plague in Malta. This epidemic proved much more fatal than the preceding one. Sir W. Pym, who was still at the head of the quarantine department there, states that "it was again traced to importation"—"that the individuals who brought the disease into the garrison were ascertained"—"that one of them was ill when he arrived"—

"that the disease was communicated to the persons residing in the same house, and speedily on both sides of the street in which the house was situated". Unfortunately, he has omitted to give any particulars respecting these several allegations; nor does he state who were the parties that brought the disease, or whence they came, or when they arrived. We are necessitated, therefore, to look elsewhere for information as to the origin of this epidemic; and, happily, there is good evidence at hand. That most truthful writer, Dr. Hennen, who, when principal medical officer of the garrison, examined with great care all the official documents in the public archives touching the previous epidemics, states that cases of the disease had occurred a couple of months prior to the date assigned to its appearance by Sir W. Pym. "One neighbourhood", he says, "viz., *Boyd's Buildings*, was, as usual, the theatre where the disease made its early appearance in the town; and, on the 6th of July, Mr. Frazer met with a case of highly suspicious fever, which proved rapidly fatal: there is little doubt that it was a genuine instance of that fever which afterwards committed such ravages." The accuracy of this important statement is verified by Sir W. Burnett and by Mr. Amiel; who, with all other writers on this epidemic, have alluded in the most emphatic manner to the notoriously unwholesome condition of the town of Gibraltar at the time, from the excessive crowding of the population, and the horribly filthy state of the lanes and houses, aggravated, as on former occasions, by the continued prevalence of easterly winds.

It is scarcely requisite to specify the stories that have been related by those who seem to imagine that, whenever a disease, which is only of occasional occurrence, appears in a place, it must necessarily have been introduced by some person or another, forgetting all the time that the atmosphere is the readiest vehicle of all. One of the rumours was, that the pestilence had been brought from Cadiz, by a vessel which arrived in the bay on the 11th of August: but, upon referring to Sir James Fellowes's history of the fever of that year in Cadiz, where he was the principal medical officer of the British garrison at the time, it appears that the earliest recognised cases there were not observed before the beginning of September. His words are: "Early in September, I heard that a suspicious case of fever had occurred in the well known *Barrio de Sta. Maria*"; the very locality in Cadiz where the disease first showed itself in 1800, and again in 1804. Sir James does not so much as even hint the idea that the disease had been this year imported into Cadiz *ab extra*. Moreover, Mr. Frazer, who was at the head of the medical staff in Gibraltar at the time, candidly admitted, notwithstanding his decided opinion as to the contagiousness of the disease, that he had great doubts as to its importation in 1813.

It was upon the cessation of this epidemic, that the series of queries, which elicited so large an amount of valuable information respecting the sanitary state of Gibraltar, was addressed by the medical department of the army to the medical practitioners, civil as well as military, on the Rock.

In the following year, during the autumnal season, there was a fresh outbreak of the disease. It has never been alleged, as far as I know, that, upon this occasion, importation from abroad had any share in its development. The early cases appeared in the filthy, crowded localities, affected in former years.

After 1814, Gibraltar remained exempt from any epidemic visitation of yellow fever till 1828, a period of fourteen years; although sporadic cases, having all the characters of the true pestilence, occurred now and then in the autumn months. It was in 1828 that the plague prevailed in various parts of Greece, and in Wallachia, Moldavia, and other countries in the north of European Turkey. The Russian army, engaged at the time in war with the Turks, experienced disastrous losses from the ravages of the disease. At Gibraltar, the yellow fever appeared about the same season of the year as upon all the former visitations—a circumstance that is highly suggestive in an epidemiological point of view. The earliest cases occurred about the

* It deserves to be noticed, that in consequence of the known presence of the plague in Malta this year, the vigilance of the quarantine authorities at Gibraltar was even greater than usual.

beginning of August. Dr. Hennen was the principal medical officer of the garrison at the time; he was also health officer of the port. Unfortunately for medical science, he fell a victim himself to the fever. He left, however, very ample notes respecting the circumstances connected with its development; and his son, who edited the valuable work on the *Topography of the Mediterranean*, informs us that his father had quite satisfied himself that the disease could not be traced to importation. Sir Wm. Pym (who then occupied the post which he now fills) was sent out by the Colonial Secretary of the day, Sir George Murray, to examine into the history of the epidemic, at the head of a commission appointed for the purpose. He appears to have come to the same conclusion, if we may judge from the following statement in his book respecting the vessel which was at first suspected to have brought the pestilence from Havanna;—"I think it right", says Sir W., "to state, that there was no evidence to convict her, and that I stated my opinion generally that she ought not to have been under suspicion, as she underwent the regular period of quarantine, and was released therefrom in the regular way, with the approbation of the Inspector of Health in the quarantine department, and by the authority of the Lieutenant-Governor."

We have thus seen that, during little more than the first quarter of the present century, Gibraltar was five times the scene of epidemic yellow fever, notwithstanding the utmost vigilance of the quarantine department there, and the stringency, not to say severity, of the precautions taken to exclude the disease. That the most rigid measures were enforced, will be pretty manifest from the following particulars, related by Sir James Fellowes.

In Jan. 1811, two English transports, with between four and five hundred German recruits on board from Carthage, were kept under quarantine for upwards of a month in the bay, without being allowed to communicate with the land. It does not appear that there was any actual disease on board; but they had come from a suspected port. They were then sent on to Cadiz, at that time in the possession of the English army. On their arrival there, although the men were still free from sickness, they were not allowed to be landed at once; and as, unfortunately, the weather became very tempestuous, the soldiers were obliged to keep below in the between decks, most of the time. "When the weather moderated, every assistance was afforded them; but it proved that, during the few days that the hatches were covered over in consequence of the heavy rains, a complete typhus fever* had been formed; that the men (who appeared to be well while they had been kept on deck constantly, and the fresh air had been allowed to pass through the ship) were falling down with a malignant disorder, the germs of which, it was evident, had been brought by them from Carthage, and had exploded into fever in the vitiated air by which they were surrounded in the close and crowded between decks."

There were upwards of one hundred already attacked. Prompt steps were at once taken by Sir J. Fellowes to separate the healthy from the sick. Four hundred, after due ablutions and change of dresses, were landed and sent to a temporary hospital, a mile from the town; while one transport was entirely evacuated, and after being thoroughly cleansed, ventilated, and fumigated, all the sick were removed into it. Eventually, all the sick were brought ashore. Due precautions were taken to prevent communication between the sick of the troops in the garrison and the inhabitants of the town; and although a good many deaths had taken place in the hospital, and more than two hundred in all had been attacked with this "highly contagious disorder", it at length ceased, without any detriment to the public health, either of the other shipping in the bay, or of the population on shore.

From Gibraltar we now pass on for a few moments to the rocky island of Ascension, in the Atlantic Ocean, about

seven or eight hundred miles from the coast of Africa. Its latitude is about 8° south of the equator, and its longitude is 14° 28' west. It is resorted to by shipping for refreshment and watering; but the island itself is entirely unproductive. Our ships of war upon the African station, when they have become sickly, often visit it. In 1823, soon after the arrival from Sierra Leone of the *Bann* frigate, which had lost many of her crew during the voyage, yellow fever broke out in the small garrison, and committed considerable ravages. As no quarantine restrictions had been adopted towards the ship, it has been generally believed that the disease on shore was directly introduced by the *Bann*. Sir William Burnett, who was sent out by the Admiralty to examine into the particulars of the case, and afterwards published an exceedingly interesting narrative on the subject, leaned to this view of the question; but he did not hesitate to avow, at the same time, that the evidence was not without some defective links. The circumstances were, however, so suspicious that, in future, ships arriving at Ascension with malignant African fever on board were directed to be detained for some time in quarantine, before having free communication with the garrison. Notwithstanding this precaution, there was a partial outbreak of the disease among them in 1838, several weeks after the arrival of the *Bonetta* in a sickly state from the African coast. The surgeon of the garrison regarded the distemper as of local origin; and Dr. Bryson, (in whose valuable work the particulars will be found), while he is of opinion that it was imported, nevertheless admits the impossibility of tracing the mode of its introduction, after all the pains he had taken to discover it.

The mention of the African station in connexion with yellow fever and quarantine, naturally brings to our minds the sad case of the *Eclair* in 1845, in as far, at least, as its history bears upon our present subject. It will be remembered that, in consequence of the crew becoming very sickly at Sierra Leone, it was deemed advisable to leave the coast and go to Boa Vista, one of the Cape de Verde islands; and that, while there, her sick were landed upon a small islet in the harbour, but that the disease nevertheless continued to rage with great severity. The result was that after a short stay all were reembarked, and the *Eclair* proceeded on to England, where she arrived at the Motherbank, after a run of fifteen days from Boa Vista, on the 28th September. Already upwards of one half of the crew had perished since the commencement of the sickness in July, and every day added fresh victims to the list. It is needless to say that the utmost alarm and depression existed among all on board. The surviving medical officer urged the immediate landing of the crew, as the only means of arresting the terrible ravages of death; and Sir John Richardson, the physician of Haslar Hospital, expressed his readiness to receive them into the wards of that noble institution,—an advice that was cordially seconded by Sir William Burnett. Had this step been taken, much distress would have been spared, a heavy expense avoided, and, what is of far greater consequence, several valuable lives might have been saved. But, unhappily, the fears of our quarantine authorities prevailed over their judgment. The unfortunate remnant of the crew were doomed to rigid confinement within the walls of the pest-smitten ship; and this, too, in sight of the shores of their own country. After remaining three or four days in close quarantine at the Motherbank, the *Eclair* was ordered round to Stangate Creek, before either the sick or the unattacked were removed from her, but not till many fresh attacks and several deaths had occurred. She was not released from quarantine till the end of October, or five weeks after her arrival in England. It is altogether painful to look back upon the sad history of this vessel. The serious errors that were committed with respect to the management of the sick at Boa Vista, were only outdone by those that were perpetrated after her arrival off our own coast. The case made a deep impression on the mind of the medical public; and it was hoped that a more judicious practice would in future be adopted by our quarantine authorities, in the event of a similar occurrence.

* From other statements in the narrative, it is obvious that the disease was genuine yellow fever.

The proceedings which have recently taken place at Southampton, in reference to the mail steamers arriving from the West Indies, seem to indicate that the system to be pursued is essentially the same, although some of the details may be modified. It is, indeed, not easy to ascertain the principles upon which the course now adopted is based. The mail bags are landed *instantly*, while the passengers and crew are detained on board. Pratique is at once given, although men may be dying of the disease on board at the time, provided only their seizure took place six days (ten were at first deemed necessary) before arrival. A health officer goes on board an infected ship, and returns on shore himself, while he leaves the ship and all on board (the mail bags always excepted) in quarantine. At one time, not only the bedding of the sick, but everything which may have come in contact with them, is recommended to be burned; and then the corpses of persons, who have died on board of casual diseases, have been ordered to be taken out several miles to sea and buried there, before the vessel is permitted to come into port. Surely, such steps as these can serve but to spread alarm and bewilder the public mind, while they can give no real protection to the public health.* And be it remembered that, at the very moment when all this was going on towards the mail steamers at Southampton, the authorities at Port Royal, Jamaica, were receiving without delay or hesitation the sick from H.M.S. *Higflyer* into the naval hospital there;—that the wards of the public hospital at Kingston were open to the sick from the ships in the harbour;—and that, at Barbadoes, the suffering crew of H.M.S. *Dartless* were at once landed and conveyed to the military hospital. With such facts before us, is it not high time that our quarantine system be looked into, with the view not only of bringing its regulations into harmony with the results of well attested experience, but also of establishing something like uniformity in its requirements?

It remains now to invite your attention to the relation between quarantine and the Asiatic cholera.

The whole history of this formidable pestilence is so interesting and instructive on all points of epidemiological inquiry, that it must ever occupy a very prominent place in every attempt to ascertain the laws which influence the development and diffusion of wide spreading diseases. No epidemic, moreover, has been so minutely and extensively observed, and of none have we such varied and thoroughly trustworthy records. We can trace its career almost step by step, and with something of the connected sequence of an historic narrative, from the time when it first—after having been for ages, for all that we know to the contrary, limited to one district of Asia, viz., Hindostan—began to assume the character of a great migratory pestilence, and go forth, at the bidding of Almighty Power, upon its mission of warning and judgment, to the ends of the earth. Its course and progress can be followed on the map as we follow the track of any of those hordes of the human race which, breaking loose from their place of long abode in some remote corner of the East, spread themselves of old over the face of the European continent. We can mark the advances of the invading foe from country to country; we can tell how long it was upon its successive marches; the dates of its arrival in different parts, the rapidity of its movements, the length of its stay, the places which it ravaged, and the very districts in each place upon which its chief fury fell. We know the means that were taken in every country that was invaded to avert the stroke, to keep the enemy out, or to resist its progress and mitigate its ravages; and we know, too, the amount of success or benefit which attended the efforts that were made. We know that the Russian government, in 1831, having tried quarantine, and other like mea-

sures, to protect different parts of its dominions, speedily found their utter inefficacy, and abandoned all attempts of the sort; that the Austrian Emperor formally declared that his government "had committed an error in adopting the vexatious and worse than useless quarantine and cordon regulations against cholera", frankly admitting that it did so before the nature of the disease was rightly understood; that Prussia, too, having in vain tried the same expedients, was forced to give them up; that in our own country measures of the most extraordinary stringency to prevent the introduction, and to arrest the spread of the pestilence, were at first recommended and attempted to be carried out, and that they proved so utterly valueless that they were promptly discontinued, and the government of the day intimated, in the speech delivered from the throne, more than incredulity as to their use or expediency; that the French Academy of Medicine formally declared their opinion to the same effect; and that transatlantic experience, both in the United States and in Canada in 1832, testified to a similar result. We know that, in the following year, the disease found its way into different ports of Spain, notwithstanding a rigorous quarantine; that, in 1834, it eluded the vigilance of the health officers at Gibraltar, as yellow fever had done in former years; also at Stockholm and other ports in Sweden, whose former immunity had been attributed to the stringent precautions of defence which had been taken; that, two years subsequently, Genoa, with its well appointed lazaretto and numerous quarantine staff, failed in its attempt at exclusion; and that Naples and Rome were equally forced to acknowledge the impotence of all their efforts. Nor was Malta more fortunate. Hitherto it had escaped, in consequence, many persons believed, of its insular position, and the strictness and efficiency of its quarantine establishment; and its exemption at a time when the pestilence was in Egypt on its one hand, and in Gibraltar and the south of Spain on its other, might certainly, with some show of reason, lead those, who form their opinions of epidemic diseases from the observation of what is going on in one or two limited localities, to this conclusion. But dismal experience now baffled the fond expectation, and proved the insecurity of the trusted means of defence.

Such were the lessons taught by the first world-wide migration of Asiatic cholera. After 1837, the pestilence ceased from the face of Europe for the next ten or eleven years—although scattered cases occurred every now and then in the various countries which had been affected, and a certain choleraic impress, so to speak, on the character of febrile and other diseases continued to be frequently observed.

The dark cloud once more appeared in the eastern horizon in 1845. Ere long, it became larger and more threatening, and steadily advanced in its march of destruction westward, following pretty nearly the track of its former career, and setting at defiance all mechanical attempts at exclusion where these were again attempted. Again did the quarantine authorities of this country issue some detentive regulations against vessels arriving from infected or suspected parts on the continent; but these, as you will probably all remember, were promptly abrogated, upon the recommendation of the General Board of Health, then recently instituted. The policy of this step was fully recognised by the London College of Physicians, whose well considered opinion stands in the following words:—"Cholera appears to have been very rarely communicated by personal intercourse; and all attempts to stay its progress by cordons or quarantine have failed. From these circumstances, the committee, without expressing any positive opinion with respect to its contagious or non-contagious nature, agree in drawing this practical conclusion, that in a district where cholera prevails, no appreciable increase of danger is incurred by ministering to persons affected with it, and no safety afforded to the community by the isolation of the sick." The Report of the Commissioners of Health in Ireland on the cholera epidemic of 1849-50 proclaims the same very important practical conclusions; and the medical authorities in Scotland have, I believe, emphatically recorded their opinions to a like effect.

* Besides the precautionary measures alluded to above, it has been stated in the public prints that an order was issued by the Admiralty, prohibiting the reception on board of any of the West India mail steamers, on their homeward bound voyage, of yellow fever invalids, or of any distressed British subjects supposed to be labouring under, or recovering from, attacks of the disease. The cruelty of such an order is strongly commented on by Dr. Cummins, surgeon of the *Medway*, in the *Lancet* of May 28, 1853. If such an order has really been issued, it has not, I am assured by Sir William Burnett, proceeded from the Admiralty.

After such concurrence of judgment among the medical profession in this country, it is unnecessary to allude to that of our brethren abroad. It is all but unanimous; except, perhaps, in Spain and the Italian States, where other motives, besides those of truth and conviction, are well known to influence the judgment of officials upon such matters. Nor is it undeserving of notice that, although these countries profess to place the greatest reliance on quarantine measures, and certainly carry them out with the greatest rigour, the experience of the recent epidemic has again shown their inefficacy against its invasion.* Malta, which, although a British island, may be regarded as truly Italian as regards her quarantine establishment, was again visited with cholera in 1850.

As far as I am aware, it has not been alleged by any person that it was then imported by shipping. Nor have the endeavours of the Spanish *guardas* to keep out the pestilence from Cuba, where the quarantine regulations are of the utmost stringency, been more successful. This was the only island in the West Indies that suffered during the first epidemic in 1834. In 1850, the enemy again found its way in by some channel that has never been discovered; and you will perhaps remember that, in the paper which I had the honour of reading before this society last year, I showed that the development of the pestilence in Jamaica towards the end of the same year could certainly not be traced to any neglect or violation of the quarantine, to whose agency the immunity of the island during the former epidemic had been ascribed.

Notwithstanding these facts, such is the dread of this plague in countries which have hitherto escaped its visitation, and such has hitherto, from long habit, been the vague and general belief that new diseases may be kept out by a system of rigorous medical police, just as interdicted articles of merchandise may be excluded by custom-house officers and coast guards, if these men will but do their duty, that the most extraordinary measures have been resorted to, in different places, within the last year or two for the purpose of presumed self defence. For example, two years ago, at Demarara, a quarantine of forty days was imposed upon one of our ships of war, crowded with troops too at the time, simply on the ground that she had come from Kingston in Jamaica, although no disease existed in that town at the date of her departure, nor had a single case of sickness occurred on board during the voyage. This was, certainly, a precaution with a vengeance; and might, I need not say, have led to the most disastrous consequences to the unfortunate *detenus*, had not the captain wisely determined to go to another colony, where he might communicate with the shore, until the appointed time had expired for the landing of the troops at Demarara.

Something of the same sort recently occurred also at the island of Mauritius; so that you see what views are being still entertained, and acted upon too, by some of our own countrymen abroad. Let us not, therefore, boast too much of our superior enlightenment in matters such as that now under consideration, or be so prompt, as we are apt to be, to rail at the ignorant obstinacy and blind prejudices of foreign states, in refusing to go along with us in effecting the reform of various practices, however opposed these practices may be to the conclusions of scientific research and the acknowledged results of experience. Let it be remembered that the inconsistencies of our own Government have been often so flagrant, that foreigners may well call upon us to look at home, instead of setting ourselves up as their guides and instructors. They may remind us that, after two formal declarations of the inefficacy of quarantine to avert the cholera, an order was issued, no farther back than last September, from our Council office, reimposing what was called a "Quarantine of Observation" in our own harbours on vessels, on board which was "any person or persons actually suffering from cholera, or who had been

suffering from that disease within the five days previous to the arrival of the vessel in port";—such persons to be detained on board the vessel, and the vessel to be kept in quarantine "for such period as the medical officer employed to visit the sick might judge necessary for the security or preservation of the health of the community on shore."

In drawing these remarks to a close, I cannot but again strongly commend the subject of quarantine to the searching inquiry of the medical profession. That the system hitherto pursued stands in need of a thorough revision, and of some important changes, cannot, I think, be questioned by any one. I have already occupied too much of the time of the society to dwell upon these points at present; and it is the less necessary to do so, as I have explained my views at some length in the Report on the Cholera in Jamaica and on the sanitary condition and wants of that island, addressed by me in the course of last year to the Colonial Minister.

Fitzroy Square, June 1853.

CASE OF PULMONARY DISEASE: EXUDATION DEPOSIT BETWEEN THE LUNG AND PLEURA.

By P. MARTIN DUNCAN, M.B.Lond., Physician to the Essex and Colchester Hospital.

(Read before the Suffolk Branch of the Provincial Medical and Surgical Association, June 24, 1853.)

THE following case excited much attention amongst the medical men in and about Colchester, on account of its interesting and somewhat anomalous character.

A tall and thin, red-haired labourer, aged 22, the son of unhealthy parents, and the brother of some very phthisically disposed individuals, came under my care as an in-patient at the Essex and Colchester Hospital, in March 1850. He had never had very good health, and for some weeks had suffered, from cough, a sensation of uneasiness, never amounting to actual pain, in his right side, and from gradually increasing dyspnoea. The cough was occasional, and not very severe in its duration; but, from its being induced by the slightest exertion, it was very inconvenient to him; the expectoration was small in quantity, saline to his taste, and mucoid. He had become emaciated to a considerable extent before his admission into hospital, and was troubled with a harsh, hot skin. On examination, I found that his countenance denoted a depressed state of his general powers; his eyes were sunken, and the pupils dilated; his hair was harsh and dry; and the *ala nasi* were in constant action. He never complained of headache, or of any nervous symptoms. The general muscular development was very low, and he had large ends to his long bones, clumsy joints and clubbed ends to his fingers, and a narrow chest. Any unusual exertion fatigued him, and greatly increased the number of the respiratory efforts, and the pulsation of his heart. The thorax expanded very unequally during inspiration, and the abdominal muscles assisted in an abnormal manner. The right side of the thorax was seen to expand less than the left during inspiration; and this expansion was sudden, and not progressive: still, there was no very great difference between the two sides. The measuring tape determined that the right was half an inch larger than the left side of the thorax. Measured by Quain's stethometer, the infraclavicular region of the right expanded only five degrees less than the corresponding region of the left side. Hutchinson's spirometer proved that the patient's capacity for respiration was forty-five per cent. below the average. There was no bulging of the intercostal spaces on the right side; and the care which was taken in this physical examination was determined by the peculiarity of the results of percussion and auscultation. The whole of the right side of the thorax was dull on percussion—very dull; in fact, the upper margin of the liver could not be distinguished from the adjacent lung; the left side was resonant, and had none of the

* Professor Sigmund informs us that, in 1849, the disease made its appearance in Naples, Brindisi, Leghorn, and Genoa, in all of which places quarantine was maintained against its introduction; while Civita Vecchia, where no quarantine existed, escaped altogether.

sense of resistance to the finger possessed by the right side of the chest. The dullness was less over the track of the larger bronchi, but the clavicle, on percussion, yielded a dull sound. The vesicular murmur was rude and puerile over the whole of the left side, and feeble and yet perfectly audible over the whole of the right. There was slight excess of bronchial breathing in the infraclavicular region of the left side towards the median line, but on the dull right side there was no such excess. The only stethoscopic sign was a marked diminution in the intensity of the vesicular murmur. On coughing, wheezing sounds were occasionally heard in the scapular region of the left, but not on the right side. The vocal fremitus was well marked on the left side, and could be satisfactorily distinguished over the whole of the right side: it was not more intense in one spot than in another. There was no ægophony, bronchophony, or any vocal evidence of condensed lung. There was no creaking or friction sound on the right side, and the heart appeared to be healthy and *in situ*. The pulse, however, was 120, and increased rapidly whilst the examination proceeded. The respirations were from 38 to 45 in a minute. The liver and spleen were within their regional limits; and the abdominal viscera appeared to be in a normal condition. The tongue was rather glazed, and the gums spongy; the appetite was tolerable; there was no great amount of thirst; the bowels were constipated; the urine was said to be scanty and high coloured. As regards the superficial parts, there were no enlarged veins; and the sallowness of the skin appeared to be congenital.

The left lung was evidently performing the office of the right; and the supplementary character of the breathing was indicated by the rude and puerile vesicular murmur. There was no prolonged expiration, or irregular inspiratory sound; but, on the right side, there were the following physical signs, common enough in any other aggregation than the present: dullness on percussion; little loss of mobility; no increase in dimension; faint vesicular murmur; no tubular or bronchial breathing; diminished intensity of vocal fremitus; no ægophony nor rubbing sound.

What was the state of the right lung? That it was grievously affected, there was no doubt. The dullness on percussion and the loss of mobility would indicate pleuritic effusion; but the vocal fremitus was to be felt distinctly enough, and the vesicular murmur was to be heard, contra-indicating that disease. Might not there be thick false membranes between the layers of the pleura? The amount of mobility and the history of the case, the absence of pain and the lack of creaking or rubbing sounds, militated against this opinion.

Condensation of the lung, from tubercle, pneumonia, or any deposit in the parenchyma, was contraindicated by the absence of excess of bronchial breathing, and the diminished character of the vocal fremitus, although the dullness on percussion favoured this view.

For some time after this examination, under the influence of diet and moderate purgation, his intestinal canal became more healthy, his skin altered in its harshness, and his urine less lithic; still, for some weeks, the severity of the chest symptoms increased. Counter-irritation decidedly made him worse; still, there was no enlargement of the right ribs, or tenderness on pressure. He took the iodide of iron and occasional doses of compound rhubarb pill for three months, and improved both as regards his general health and his chest symptoms. The dullness on the right side was as great as ever; but the movement of the side was considerably increased. The vesicular murmur was still faint, and the vocal fremitus a little more distinct.

At this time, I conjectured that the physical signs intimated that there was disease of the pleura covering the lung, not of that lining the side of the chest; and that this disease did not affect the proper pleural membrane, but the cellular tissue between it and the lung—that tissue which is permeated by the blood-vessels which supply the pleural membrane proper.

A general deposit of exudation substance, of lymph, most probably of strumous origin, in this subpleural layer, would account for all the physical signs. Being impervious to air, of less density than the parenchyma of the lung, and general in its distribution, it would produce a dull sound on percussion, and a sense of resistance. For the same reasons, it would allow of a partial transmission of the vocal fremitus; and, as there need not necessarily be false membranes and adhesions between the pleura, the mobility of the side of the chest would only be diminished to a certain extent. The density of the deposit could not be enough to increase the sound of the voice, transmitted through the stethoscope; and it must have been sufficiently dense to prevent the occurrence of the bleating sound. It is most curious, that the right lung should not have suffered from bronchitic or pneumonic attacks. My opinion as to the existence of deposit beneath the pleura was founded on the acoustic phenomena presented by the patient; and, as my interpretation of these might be incorrect, I rarely passed a day without examining him.

The man remained nearly four months in hospital, and then went home, and remained tolerably well for two months. At the expiration of that time, I again saw him. The dullness still persisted, but the mobility of the side was gone, and the dimensions of the right half of the thorax were decreased. The mammary region was drawn in, and the shoulder pulled down. The vesicular murmur of the right side was very faint, and there was slightly tubular breathing. The vocal fremitus was more distinct. He complained of increasing dyspnoea. The left lung appeared to be working well, although there were large *radles* to be heard. The heart was decidedly displaced, its apex beating more than two inches to the right of the left nipple. He had suffered from slight pain in his right side, but there were no evidences of pleuritic effusion. He again left the hospital, caught cold, and became rapidly very ill; his cold led to a bronchitic attack, and his cough never after left him; dullness in the upper part of the left side of the chest, with tubular breathing and increased vocal resonance, supervened, and he died somewhat suddenly, from the bursting of a vomica in the upper part of the left lung.

EXAMINATION OF THE BODY. This was performed with the assistance of Dr. Clark of Colchester.

The chest alone was opened. The right side was greatly contracted; the left much bulged out. On opening the thorax, the right lung was found to be adherent by its pleural surface to the side and to the pericardium; but this adhesion was by no means strong, and it was easily destroyed. The lung was found close to the spine, huddled up in a corner, and no larger than a good sized orange. It was hard and dense, and a section showed carnification, the cirrhosis of Corrigan, with narrowing of the larger, and perfect absorption of the secondary bronchi; and, what was most interesting, there was a layer of semi-organised exudation, external to the altered lung, and internal to the pleura; in fact, between the lung and the pleura covering it. The left lung was studded with tubercles, and a large cavity existed in the apex.

I believe that the loss of mobility, and the subsequent contraction of the side of the chest, were induced by the natural contraction of the deposit of lymph beneath the pulmonary pleura; and that the absorption and condensation of the lung were also produced by the same mechanical causes.

Colchester, July 1853.

TESTIMONIAL. At a Board of Inquiry into the cause of the great sickness and mortality on board the *Ticonderoga* emigrant ship, which sailed from Liverpool, in August 1853, and arrived at Melbourne the following November, the first Surgeon-Superintendent, J. C. Sanger, M.D., was presented of £50, in addition to his pay, in consideration of extra services.

BIBLIOGRAPHICAL NOTICES.

TEXT BOOK OF PHYSIOLOGY. By Dr. G. VALENTIN. Translated and edited from the third German edition by WILLIAM BRINTON, M.D., Physician to the Royal Free Hospital; and Medical Tutor in King's College. [With upwards of five hundred illustrations on wood, copper, and stone.] Part I, p. 1 to p. 320. 8vo. London: 1853.

We regret that the great and accumulating demands upon our space oblige us to abandon our original intention of giving an extended review of this valuable addition to our scientific literature. It is, as we are told in the preface, a faithful translation of "an abridgement, by Professor VALENTIN, of the last edition of his larger systematic treatise, the *Lehrbuch der Physiologie*." The descriptions are clear and complete, and are, moreover, simplified by a profusion of beautiful pictorial illustrations. Whenever it is necessary, the collateral sciences are brought forward to illuminate explanations and reasonings: and so well is this done, that we conceive it to be a feature which demands particular praise.

When the concluding portion of this volume is published, we may return to this work: but, in the mean time, it is incumbent upon us to mention it as a Text Book of Physiology of the highest merit. Though it is peculiarly suited to medical practitioners and medical students, it is also adapted to other educated members of the community, who wish to get more than a smattering of physiological science. Dr. BRINTON has well performed the duties of editor and translator.

HARMONIES OF PHYSICAL SCIENCE IN RELATION TO THE HIGHER SENTIMENTS; with Observations on the Study of Medical Science, and the Moral and Scientific Relations of Medical Life. By WM. HINDS, M.D. pp. 195. London: 1853.

THIS is a well written little volume, abounding in excellent illustrations of sound principles. We quote the following judicious remarks upon a subject which is now engaging the earnest attention of a large number of our readers.

"GRATUITOUS MEDICAL SERVICES.

"The boon of gratuitous service which our profession with so liberal a hand and under a sense of duty, affords, and has almost from the beginning of its existence afforded to the public, has become converted into so familiar a notion with many, as to blind them to a just sense of our relation. Hence, we are sometimes called upon by public bodies to become gratuitous officers of health, and in various other ways gratuitously to exercise our calling in relation to the general community, and *not to the poor*, without other reward than what may be supposed incidentally or honourably connected with the position and functions; such indirect personal advantage, or distinction, being pointed at as our reward. Now this is a principle we would condemn; and we do it on the highest ground that can be assumed. It is surely far from legitimate, useful, and expedient, to place before the medical body at all times indirect and positive personal rewards for these gratuitous services to the public in general and to the poor. Our profession might say to these public bodies who have occasion to use our exertions and services for legitimate charity, and for the relief of suffering and disease among the poor, that if you thus successfully appeal to our personal advancement, and mere personal interests, as the ground on which we should render those services, you destroy not only our independent and fair claims, but our principle of good. You debase our motives and freeze up our good feelings and our charity. You make us the mere tools of a sordid sense of personal interest, and the slaves of our own selfishness. In fact, the very charities which we wish to exercise, you convert into debasements, because those charities do not deserve the name. You, in fact, convert us to what is little better than a mere hypocrisy, and that is not the character we desire to sustain; nor is it that which is most useful to the community. If then you desire not to lessen our value to the poor, and to society in general—if you would see our principles of charity fostered, preserved,

and elevated—appeal alone to our higher feelings and principles. Show us that our humble services can be usefully employed in supplying the wants of the poor and needy, and the appeal you make to us shall never be made in vain; but we will strive to preserve our principles from debasement, and use our powers to prevent the conversion of our very virtues and charities into instruments for our own deterioration and the impairment of our usefulness." (pp. 177-9.)

PRACTICAL TREATISE ON INFLAMMATION OF THE UTERUS, ITS CERVIX AND APPENDAGES. By JAMES HENRY BENNET, M.D. Third edition. 8vo. pp. 532. London: 1853.

THE past and present editions of this work of Dr. HENRY BENNET have tended in a very high degree to advance the pathology and practice of uterine diseases. This treatise is written with so much ability, enthusiasm, and clinical inspiration, that a great impression in favour of the author's principles of practice is generally left upon those who peruse it with unbiassed minds. We do not mean these remarks to imply that we assent to everything which we find in Dr. Bennet's treatise; on the contrary, we think that in the treatment of inflammation, ulceration, and hypertrophy of the cervix uteri, he does not attach sufficient importance to the curative powers of rest, assisted by variously modified constitutional treatment; and that he insists too much upon leeching, cupping, scarifying, and cauterizing. All of these remedies are valuable in particular circumstances; and we admit that some cases which cannot be cured without their assistance, become with it amenable to treatment. The advantages of local treatment, and the necessity of an accurate diagnosis of uterine diseases, are the great lessons which have been taught by Dr. Bennet's writings during the last twelve years, and they are likewise the lessons which are so well presented to the profession in the volume before us. They require, however, to be accepted with that amount of reservation which we have suggested. As this is a third edition, the work of Dr. Bennet is doubtless familiar to the majority of our readers, and does not therefore require any analysis by us. We shall therefore only remark that this edition is of far higher value than its predecessors, as it contains not only many new chapters, but also the result of the author's recent and enlarged experience upon all the varieties of uterine diseases which he discusses.

CHANGE OF CLIMATE IN DYSPEPTIC, PULMONARY, AND OTHER CHRONIC AFFECTIONS; with an account of the most eligible places of residence for Invalids in Spain, Portugal, Algeria, etc., at different seasons of the year. And an Appendix of the Mineral Springs of the Pyrenees, Vichy, and Aix les Bains. By D. J. T. FRANCIS, M.D. pp. 339. London: 1853.

THE amplitude of the title-page (which we have transcribed in full) gives a tolerable idea of the contents of the work. The information given is considerable in amount, and the materials are skilfully cemented by the judicious observations of the author, who has visited the parts which he describes. We feel, however, when we read such volumes as that now before us, that they have, unless wisely read, a dangerous tendency, as they are apt to lead to the pursuit of that health in foreign climates which might have been found as easily at home, if to be found at all. Travelling in foreign countries, when properly conducted, is a delightful pastime, and often the best means which can be devised for improving the health: but a prolonged residence abroad is another affair; and when mental change is not the main object, we believe that more suitable head-quarters may, in the majority of cases, be selected within our own island than in any of the lauded climes of the south or other more distant lands of hygienic celebrity. The south of Spain is preferred by the author to Italy as a residence for invalids; and in this opinion we cordially concur. We have pretty minutely explored Southern Spain; we have subsequently,

from time to time, sent patients to Seville and to Malaga ; and we are prepared to admit, with Dr. Francis, that,

"When judiciously selected cases of disease are sent to Spain each one to the locality best adapted to its treatment, the climate of that country in its good results will rarely disappoint any reasonable expectation." (p. 6.)

But then we would be quite as willing to allow that the truth of the quotation would not be much lessened by erasing "Spain" in the first line, and substituting for it the words "localities in the United Kingdom". All this we say without disparaging Malaga as an excellent wintering place for the consumptive invalid.

With reference to the hygienic influence of climate, it is important to remember, that that which might, *a priori*, be considered likely to prove beneficial, often turns out hurtful—a strong argument against the rash expatriation of invalids. Guernsey, Bath, Clifton, or Bournemouth, are more accessible, and are often as suitable as Malaga or Madeira. In numerous cases, skilful climate-doctors have sent patients abroad for advantages inferior to those which they might easily have commanded at home ; while others are constantly shifting families from one suburb of London to another in quest of health, only to render them more delicate and more unhealthy.

"Spasmodic asthma," says Dr. Francis, very truly, "is generally benefited in a most signal way by change of air ; but no rules can be laid down for the choice of a locality. Each case of this capricious disease must be considered by itself, and the rule of treatment by climate founded, where it is possible to do so, on the previous experience of the patient." (p. 51.)

This remark, we think, has a much wider range of application than that awarded to it by the author.

There are three fundamental truths connected with change of climate, which are too lightly regarded by physicians ; viz., that, as a general rule, the persons who reach the most advanced years, are those who never change their native air ; that families and individuals very often, when they remove from one locality to another, lose health for a time, but regain it after becoming acclimated ; and that, as a general rule, any change of climate—especially a sudden and great change—often commences a break up of health in elderly persons.

CHEMISTRY OF THE FOUR SEASONS, etc. By THOMAS GRIFFITHS, late Professor of Chemistry in the Medical College of St. Bartholomew's Hospital, etc., etc. London : 1853.

It may be lazy criticism, but unjust neither to author nor reader, to extract from a book under review either an episode, a description of place or character, or a series of paragraphs capable of being disjoined from the text without injuring it. The possible purchaser can thus view the article through his own spectacles, and allow his own palate to pronounce upon it, instead of surrendering his vision, taste, and judgment, to a professional taster. We select for the delectation of our readers the first passages we meet with in this book capable of isolation—passages, moreover, which we cannot but suspect are special pets of our author, who is thus allowed to speak for himself.

"Behold the wondrous phenomena of the four seasons !

"In spring, first verdure clothes the earth, fair flowers adorn its surface ; rippling streams wind throughout the fields ; fragile buds, tender leaves, and sweet blossoms, bedeck the trees ; delicious odours float upon the air ; soft showers descend to fertilise the soil ; the glorious sun shines forth to cherish all nascent forms with its genial warmth ; the gorgeous rainbow spans the heaven to enhance the loveliness of the unfolding scene ; whilst ethereal light and heat augment in power unto the glow of summer.

"Then limpid waters teem with countless forms of life ; luxuriant foliage crests each waving bough, and proffers cool shadow from the scorching sun ; clustering flowers vie in display of beauty and emission of perfume to the dazzling sky ; exuberant productions of smooth meadows and furrowed land bend gracefully to the balmy gale, and ripen speedily for the scythe and sickle ; anon, the sultry noontide heat, the cool night-dew, the

lowering thunder-cloud, and the vivid lightning, herald the advent of autumn.

"It comes, crowned with azure and arrayed in russet robe, wreathed with brilliant flowers, and sparkling with aqueous gems, laden with purple fruit and golden grain ; it pours the abundant produce of the cultivated earth into the wide storehouses of the provident, to reward arduous labours, to realise anxious hopes, to afford generous support in time of need, and having thus fulfilled its beneficial purpose, slowly departs with declining radiance upon its destined course.

"Humid mists appear ; portentous clouds accumulate ; impetuous winds blow ; bright flowers fade, droop, and die ; rustling leaves wither, fall, and decay, whilst glittering hoar frost invests their parent branches ; flowing waters are arrested in their rapid course, and fettered with hard transparent ice ; fierce tempests rush throughout the darkened air, and spotless snow flakes form the winter mantle of the earth."

Any commendation of ours would, after this extract rightly expose us to the charges of that wasteful and ridiculous excess, which our great poet lays at the door of those who dare "to throw a perfume on the violet". We therefore, content ourselves with earnestly recommending this portable volume to all who are capable of appreciating the beauties of a style, seldom met with since the days of Della Crusca. Some men are said, oddly enough, to live before their time ; if so, the converse certainly happens, for it requires no stretch of the imagination to listen to the little scream of delight with which Rosa Matilda would have welcomed this scientific writer, or how quickly she, with her attendant nymphs and swains, would have been deep in *The Chemistry of the Four Seasons*.

The book contains numerous religious reflections, some of which are not always seasonably introduced. It is, moreover, furnished with an appendix of the names of the discoverers, etc., of the principal facts embodied in the work ; a list in which the discoveries of the four chemists Berzelius, Graham, Wöhler, and Wollaston, are comprised in as many lines, while those of the author occupy half a page.

EXAMINATION OF DRUGS, MEDICINES, CHEMICALS, ETC., as to their Purity and Adulterations. By C. H. PEIRCE, M.D., etc. Philadelphia : 1853.

The adulteration of medicines imported by the United States was a short time since made the subject of special investigation by a most competent committee, whose reports, as they reached this country, we read with the pleasure arising from the spectacle of knavery searchingly exposed, and rascality detected by the judgment, skill, and science of honest and able men. The result of this examination was that the adulteration was found to be the rule, purity the exception, with the imported preparations ; an evil for which, when ascertained, Congress was not slow in providing a remedy, in the appointment of examiners at the principal ports of the Confederation,—an act which Dr. PEIRCE states "has excited a most beneficial influence, not only by causing the rejection of such spurious medicines, but by preventing the importation of them from foreign countries." We would that this crying evil of the sale of spurious, adulterated, or effete medicines could be "put down" in this country, where it prevails to a fearful extent, to the injury of hosts of people, attended even with death to many, and to the constant vexation, perplexity, and discredit of the physician.

We read this book with a prejudice against it, from the identity of its plan and treatment with that of the *Handbook of Chemical Analysis*, published by Dr. Normandy in 1850, and the absence of any tribute in the preface to the labours of Normandy, of which Dr. Peirce has largely availed himself, and of Mitchell in England, or of Guibourt, Garnier, Hard, Busby, Boutron, and Charland, whose works have directly or indirectly contributed to this compilation. This undervaluation of the labours of his predecessors in this department of chemistry, especially in respect to Dr. Normandy, is deserving of censure ; yet we are desirous of adding that the book is a mere transcript of the *Handbook*, and that the names and directions are concisely and generally copied, so that the work is likely to be serviceable to those who

of drugs in the ports of the United States, for whose use we presume it was compiled.

For the use of our own countrymen we cannot recommend it; not because the book itself is a bad book, but merely because in the British and continental authors we have named, we have better books on this subject within our reach than this by Dr. Peirce. Of these two books, Peirce's *Examination, etc.*, and Normandy's *Handbook*, similar in subject, in plan, and in treatment, we greatly prefer the latter, and should recommend it to our readers who may be desirous of determining for themselves the purity of the drugs supplied to them.

EVENING THOUGHTS. By a Physician. 12mo. pp. 143. Second Edition. London: 1852.

This volume contains fifty-four fragmentary pieces—the contemplations of an accomplished, genial, and pious mind. Like Coleridge's *Aids to Reflection*, they open up rich veins of profitable musing; and, unlike the majority of emanations from the modern press, they invite to reperusal.

THE SEA-WEED COLLECTOR'S GUIDE: containing Plain Instructions for Collecting and Preserving, and a List of all the known Species and Localities in Great Britain. By J. Cocks, M.D. 12mo. pp. 87. London: 1853.

THIS little work admirably supplies a want which has been long felt and acknowledged by algologists.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

GLANDERS IN THE HUMAN SUBJECT: TREATMENT BY LARGE DOSES OF SESQUICARBONATE OF AMMONIA.

Several cases of glanders occurring in the human subject have from time to time been recorded in the various medical periodicals. We subjoin an abstract of the histories of such of those as have been related from 1849 to the present time. We wish to call particular attention to Dr. Mackenzie's treatment by large doses of sesquicarbonate of ammonia.

The *Revue Médicale* for January 1850 quotes from the *Journal de Médecine de Bordeaux* for October 1849, the following case, related by Dr. H. GINTRAC.

CASE I. The patient was brought into hospital in a state of febrile delirium, apparently referrible to cerebral irritation or inflammation. On inquiry, nothing could be elicited but that the man was a waggoner, and had complained for a week of fever and *malaise*, and of wandering pains in the limbs; and that, since the preceding day, he had had violent agitation, convulsions, and delirium. A severe pain which he felt in the left shoulder was believed to be rheumatic; but, after death, a collection of pus was found in the left scapulo-humeral articulation. It was not till the fifth day that a rigor appeared: on the next day, the nose presented considerable swelling, with purulent and fetid exudation; and slightly prominent red patches were seen on the limbs. It was then discovered that the man had for some time attended to a glandered horse.

After death, the usual appearances of glanders were found.

The following case is related by M. HAIRION, in the *Archives de la Médecine Belge* for 1849; and is quoted in the *Gazette Médicale de Paris* for June 8th, 1850.

CASE II. D., a labourer, aged 23, usually strong and of good health, had to attend to three glandered horses during six months of 1845 and 1846. He lay in a stable occupied by these animals. In the course of this winter, he felt a violent pain below the right breast, and was obliged to keep his bed for some days. Two or three months later, towards May, he complained of catarrh, which impeded respiration, and caused the escape from the nostrils of a thick inodorous matter, occasionally pretty abundant. This gradually diminished; but the patient did not become quite free from it.

In the early part of January 1847, D. entered a regiment of *chasseurs*. Towards the middle of March, there appeared on

the left arm, a little below the insertion of the deltoid, a small indolent tumour, of the size of a walnut, without change in the colour of the skin. The tumour increased slowly; but the patient did not apply for medical aid until he found himself unable to work. The abscess opened spontaneously, and gave exit to a large quantity of pus: it did not heal under three months. During his stay in hospital, the catarrh increased. At the same time, a slightly painful hardness was felt towards the lachrymal sac, on the left side. The patient left the hospital on December 11th, 1847, but was readmitted a fortnight afterwards. The tumour near the eye enlarged to the size of a pigeon's egg, then discharged a tolerably large quantity of pus. It cicatrised incompletely, leaving a fistulous opening. At the same time, a similar tumour appeared at the internal angle of the right eye: it went through the same course. There was now also pain in the nasal cavity, with an escape of inodorous pus, sometimes very abundant. The patient was treated with hydriodate of potash, and a liberal tonic diet.

D. left the hospital after he had been in it about a year and some days. He was then tolerably stout, and looked healthy; but he soon began to grow thin, and became weaker daily; the discharge from the nostrils became fetid. The patient extracted some portions of bone and fragments of mucous membrane from his nose. He was admitted into the hospital at Louvain, on January 27th, 1849, in the following condition.

He was greatly emaciated: the skin was yellowish. At the inner angle of each eye, in the centre of the cicatrices to which reference has been made, there was a small fistulous opening, from which sero-purulent matter escaped. The cicatrices were adherent to the bones, and completely impeded the lachrymal ducts. The patient felt a sensation of cold in the nose. The whole of the septum narium was destroyed, except the lower part. The inferior and middle turbinated bones had entirely disappeared. The mucous membrane of the whole nasal cavity was red, fungous, and livid, covered at some points with brownish crusts, and secreting a very fetid pus. The arch of the palate was the seat of a deep oblong ulcer: its edges were indented, and its base was greyish: the corresponding osseous surface was in a carious condition. Posteriorly to this, there was the cicatrix of an ulcer which had previously existed on the palate. The appetite was bad, digestion was difficult, and there was occasional diarrhoea. The pulse was small, feeble, 100: there was fever in the evening. Nothing important could be discovered in percussion or auscultation.

M. Hairion, thinking the case one of syphilis, treated it accordingly, but without any result except that of rapidly weakening the patient. A week after the admission of D., M. Hairion learned that he had had the care of glandered horses. Tonics were then prescribed; but they could not be borne. The patient grew worse daily, and died on March 9th.

No examination of the body was made.

The following case is related by Dr. BALLARD, in the *Lancet* for January 12th, 1851.

CASE III. J. G., aged 28, a strongly built man, who had always enjoyed good health, had been engaged for fourteen months in attending to a number of glandered horses. When attending to the horses, he generally, but not always, wore gloves. He had often been present at the *post mortem* examinations, but had never assisted in any. Some days after Dr. Ballard first saw him (which was on August 9th), he discovered, behind the right arm, a bloody crust, which the patient admitted to have been a pimple which he had scratched. He had, for three months before the attack, complained of dyspeptic symptoms; and there had been some unnatural puffiness about the forehead, eyelids, and upper part of the nose.

On July 21st, there was pain in the right hypochondrium, and in the forehead, and a tender swelling, apparently muscular, above the left shoulder. The swelling subsequently disappeared.

On August 3rd, a circumscribed swelling was noticed about an inch and a half above the right external angular process of the frontal bone.

On August 6th, pustules were seen on the last named swelling, and in its neighbourhood. The next day, they had become confluent, and had burst, giving place to ulceration; simultaneously with which, the integument higher on the forehead became purple, and was covered with blebs.

On August 9th, when Dr. Ballard first saw the patient, the ulcerations left by the bursting of the pustules presented a surface about as large as a crown-piece, very irregular in outline, and worm-eaten in appearance, crossed by ridges of sloughing tissue: there was no bad odour. There were also,

towards the middle line of the forehead, flatish pustules, about a line and a half in diameter, with a tendency to form in circular groups or in rings. More to the left, there was erythematous redness, with swelling, pitting slightly on pressure, and terminating on the left side of the forehead by a circumscribed border, giving it the appearance of erythema nodosum. The right eyelid was swollen, and the eye was closed by the gumming of the discharge. There was no affection of the throat or mouth; and the nose was free from discharge, stuffing, or fulness. There was a red circumscribed swelling over the right external malleolus, and another on the external border of the foot: they were not painful, but were hot to the touch, and tender. There was remarkable tremulousness of manner; the patient felt weak, but could sit up in bed; there had been some delirium at night; the skin was hot and moist; the pulse was 104, strong and firm: there was some thirst and clamminess of the mouth, and the tongue looked congested, with a dirty white fur at the back part. During the fortnight preceding the outbreak of the eruption, there had been frequent very sour sweats; the patient had felt confused in his head, and suffered from much languor and debility. He was ordered to take gr. ij of opium at night, and a colchicum mixture during the day.

August 11th. The patient passed a tolerable night, during which there were abundant sour perspirations. His wife stated that she had in the morning wiped a trifling discharge, tinged with blood, from his nostrils. He occasionally hawked up some pearly mucus, with milk-white streaks.

August 10th. He was delirious in the morning. Both eyes were closed by the swelling of the lids; the pustules in the forehead had formed ulcers; and there was a fresh group on the root of the nose. There was general swelling of the right ankle and foot, besides the swellings already described. Some bloody discharge was again stated to have been wiped from the nose. The mouth was drier, and the tongue browner; the pulse more atonic. The opium and the colchicum mixture were continued; and dilute solution of chloride of lime was added to the poultices with which his forehead was dressed.

August 13th. Some pustules had appeared on the thighs and arms; and there was a trifling discharge from the right nostril.

August 14th. The pustulation and ulceration went on increasing. There were low delirium, sordes on the teeth, and other symptoms of a low condition.

August 15th. There were more depression and tremor, and constant muttering delirium. The forehead presented, over its whole surface, a slough mixed with irregular ulceration. There was a large patch of phlyzaceous pustules, of the size of a half-crown piece, on the lower lid of the right eye; the whole upper part of the face and nose was greatly swollen; and a purulent discharge issued from between the lids of the right eye. There were more pustules on the limbs. There was noisy expiration through the nose, and the discharge from both nostrils was abundant, thick, and rather sanguinolent, drying upon the upper lip. There was swelling of the right wrist metacarpus. There was evident difficulty of swallowing. The patient was not violent during the night, but sweated abundantly, the sweat not being sour: his aspect was that of a man dying of typhus; he lay low in bed, on his back; his attention could with difficulty be roused; there were abundant sudamina on the abdomen; he passed his urine under him.

August 16th. The patient became unconscious at two o'clock in the morning, and died at 10 p.m.

M. GRASLEPOIS relates the following case in the *Journal de Médecine et de Chirurgie Pratiques* for August 1851. An abstract appeared in the *Monthly Journal of Medical Science* for October 1851.

CASE IV. On June 12th, 1851, a veterinary surgeon in the commune of Vars, aged 64, of bilio-nervous temperament, generally healthy, but who had for some years suffered from slight epiphora, was called to attend a glandered mare. While he was examining the nostrils of the animal, it sneezed, and threw into his face a jet of yellowish green mucus. He immediately endeavoured to remove it, by washing with cold water; and returned home.

On June 17th, the patient (who was travelling) felt acute smarting pain at the internal angle of the right eye, followed by tumefaction and redness. These symptoms increased up to June 20th, when M. Graslepois was consulted.

There was now considerable swelling and vivid redness of the eyelids, and of the ocular and palpebral conjunctiva, complete immobility of the iris, loss of vision in the right eye, intense headache, a full, sharp, and strong, but regular pulse, a hot and

dry skin, and excessive thirst. Believing the symptoms to be those of an ordinary inflammatory attack, he had the patient bled to 3viij, and ordered linseed poultices, etc. In the evening, there was general prostration, a more feeble and excited pulse, lividity of the eyelids and conjunctiva, a pustular swelling below the greater angle of the eye, oedema of the cheeks and of the sides of the neck, incipient delirium, spasmodic agitation of the limbs, pain in the large joints, with swelling and livid discoloration, abundant discharge of a yellowish green matter from the right nostril, and, shortly afterwards, from the sore on the eyelids. A blister was applied to the nape of the neck.

Next day, M. Graslepois, in consultation with another practitioner, attributed the symptoms to the bite of an insect. A tonic mixture, a lotion, and blisters to the legs, were ordered. The blistered surface on the neck was livid, and the pus unhealthy. In the evening, a pustule had appeared on the right wrist and back of the right hand, surrounded with diffused livid redness. There was doughiness of the neighbouring cellular tissue. The delirium was more marked; and all the symptoms of general infection were present. Engorgement of the glands and lymphatic ganglia are not mentioned.

The disease continued to make progress; the respiration became embarrassed; deglutition was impossible; and the patient died.

No examination of the body is recorded.

In the *London Journal of Medicine* for September 1851, Dr. F. W. MACKENZIE relates a case of acute glanders, in which the patient recovered.

CASE V. W. W., a horsekeeper, aged 58, was admitted into the Paddington Infirmary, late in the evening of the 19th July. He was seen by Dr. Mackenzie the next day, and appeared very dangerously ill. His face generally was swollen and suffused, but more especially in the submaxillary region. A large quantity of saliva was pouring from his mouth, his breath was extremely fetid and sickening, his gums were swollen, and his teeth loose—some indeed were merely hanging from the gums. The tongue was much enlarged, and could not be protruded beyond the margin of the teeth, and it was forced upwards against the roof of the mouth by the swelling of the salivary glands below; the throat was constricted, and consequently both breathing and swallowing were difficult. His nostrils were filled with a thick glutinous secretion of an offensive odour, which was with difficulty dislodged. The patient had been very restless all night, had been constantly throwing his arms about, was alternately chilly and hot, and at times sweated profusely; he had a quick pulse, and was in a state of extreme prostration. Looking to the profuse salivation, the condition of the salivary glands, the extreme fetor of the breath, and the state of the gums and teeth, the first impression was that he had been severely salivated with mercury. It appeared, however, that he had not taken a particle of this medicine for some time, and his general symptoms were, moreover, inconsistent with this view. He had begun attending to some glandered horses on June 18th; and, in grooming them, frequently had the secretions blown on his face; and the stench of the stable was very great. In a few days, he began to feel feverish and ill, with loss of appetite, and disorder of the stomach.

On July 13th, while cleaning the horses, he felt completely overpowered by the stench; and he became so ill, that he was obliged to leave the stable abruptly. He was now seized with severe headache and giddiness, and swelling of the face. Lachrymation and profuse salivation soon followed. He said that half a pint of fluid ran from his mouth in the course of an hour; his teeth became loose, and the gums painful and tumid. His tongue began to swell, his throat felt constricted, and his nostrils became filled with a thick yellow, fetid, glutinous secretion. He had frequent rigors, succeeded by heats and cold sweats, and he felt very low and weak. He was now obliged to give up his work, and was advised to take some gin, which, together with beer, he drank from time to time; but his stomach was so irritable that very little would stay upon it.

When admitted into the Paddington Infirmary, he was in a very exhausted state; he breathed with difficulty, and could scarcely swallow some wine which was given him. The fetor from his mouth was most intolerable; he was restless, passed the night without any sleep, and was observed to throw his arms continually about.

On the following day, his breathing was more difficult, and the swelling of his face had increased; this was most marked under the lower jaw, where it formed an enormous tumour. There was a profuse discharge of saliva running from his mouth; the tongue was tumid, and its surface was covered with

white, moist fur; the gums were soft and swollen, and his teeth loose. On passing the finger under the tongue, a large elastic tumour was felt on each side of the frænum linguae, apparently consisting of the enlarged sublingual and submaxillary glands, and the distended ducts of the latter. Dr. Mackenzie made a free incision in each of these; and a great quantity of clear glairy mucus poured out, which gave the patient much relief. Dr. Mackenzie was unable to examine the throat, on account of the general swelling of the parts; but from the character of the breathing and the difficulty of swallowing, it was evidently swollen, and the isthmus faucium contracted. He could not, however, see any erosion, ulceration, or pustules. The nostrils were filled with a viscid, yellow, opaque secretion, which was with difficulty dislodged, on account of its tenacity. The conjunctivæ were injected, and the eyes watered profusely. The patient complained of severe headache, which was greatest over the eyes and frontal sinuses, but at times it was felt over the greater part of the head. He was very sick, could not retain food upon his stomach, and was very restless and uneasy. He stated that he had not slept for a week. He was alternately chilly and hot, and, at times, broke out into cold sweats. His pulse was quick and weak, and he complained of great lassitude. He had no rheumatic pains, or any perceptible eruption on the skin or mucous membrane; the blister which had been applied had risen, and had a greenish, sloughy, unhealthy appearance. His bowels had twice acted during the morning, and he had passed water freely.

He was directed to take immediately an emetic, consisting of half a drachm of ipecacuanha; and, as soon as vomiting had ceased, to take five grains of the sesquicarbonate of ammonia in water every hour, using as little water as possible; to use frequently a gargle of the chloride of lime, and to have wine and such nourishment as he could swallow given freely, and to take at night an opiate, consisting of twenty drops of the tincture.

July 21st. On visiting him in the afternoon, his appearance was in every respect improved; his face was less swollen, as was also the tongue and salivary glands. He spoke, breathed, and swallowed better. His tongue was reduced in size; he had slept comfortably during the night, and taken nourishment, such as beef-tea, freely. His pulse had fallen to 80; the skin was cool, and he had experienced no rigors during the day. He said that the emetic occasioned copious vomiting of green unhealthy matter; and that as soon as this had taken place, he felt relieved, and as if a load had been taken off him. He subsequently took the ammonia as directed. He was ordered to continue this, and to take five grains of blue pill at bedtime, as the tongue was still rather white.

He continued to improve under this treatment. The ammonia was discontinued on July 25th, and he then took nourishing diet, with a pint of porter daily. He was discharged cured on July 28th.

The following case is related by Dr. TESSIER, of Lyons, in the *Union Médicale* for July 22nd, 1852. An abstract was given in the *London Journal of Medicine* for October 1852.

CASE VI. On June 8th, 1852, a woman, named A. J., aged 47, was brought to the Hôtel Dieu at Lyons. She was married and worked in silk. Her lodging and food were healthy and sufficient. She had led a very sedentary life. It appeared that she had not been in contact with horses, had had no transactions with coachmen, grooms, or cavalry soldiers, and had touched no object which could have been charged with the virus of glanders. There was a butcher's shop in her house, but not a slaughter-house; good meat alone was sold there. In 1849, she had syphilis.

On May 30th, being exposed to a draught of air while her body was covered with sweat, she experienced a feeling of intense chill, which lasted four days, and was accompanied with debility, headache, anorexia, and pains in the joints. On the fourth day, when reaction was established, there appeared, on the middle of the front of the right leg, a white pustule, surrounded by a red areola.

On the fifth day, the dorsal surface of each foot was covered with oedematous erysipelas; and on the aspect of extension of the four limbs, there suddenly appeared, with or without discoloration of the skin, more or less painful hard nodosities. On the succeeding days, the symptoms continued; an abscess formed under the pustule in the right leg, and was opened on the day before the admission of the patient into hospital.

On admission, her countenance was anxious; the skin hot; the pulse quick; the tongue whitish and dry; she had headache, and general pain; there was much thirst; she answered questions with some difficulty. She was much agitated; and complained

of not being able to sleep, or rather that her sleep was broken by painful startings. The legs were oedematous, and presented diffused erythematous patches on their anterior part, and on the dorsal surface of the feet. She could not bear the least pressure on the great and second toes of the left foot. Eight or ten tumours or nodosities, some tender, with or without inflammation of the skin, others fluctuating, and evidently formed by abscesses, existed on both upper and lower limbs. A sanious pus escaped from the abscess in the leg; two pustules resembling æthyma were observed, one on the styloid process of the right ulna, and the other on the summit of an abscess on the thigh. She was ordered to have diaphoretic ptisan, a calmative mixture, ointment, and a poultice to the abscess.

Up to June 14th, the symptoms went on increasing; and she was ordered to take tincture of aconite, and to have the sores dressed with powder of cinchona and charcoal. Under this treatment, gangrene of the leg, which had set in, was arrested. At this time, there appeared two new pustules, like those of variola at the stage of suppuration, and an abscess with violet coloured skin, over the left malar bone. Up to this time, Dr. Tessier had treated the case as one of fever, with a tendency to the formation of abscesses and to erysipelas; but the appearance of the varioloid pustules on the face led him to suspect that the case had some resemblance to one of glanders. As, however, there was as yet no purulent discharge from the nostrils, he did not arrive at any conclusion.

On June 16 and 17, the varioloid pustules increased in number. The face expressed stupor, the tongue was dry, the abdomen in a state of meteorismus. M. Lecoq, director of the Veterinary School, examined the patient, but could not decide whether she had glanders. The abscesses and pustules increased in number; there was extreme prostration, with subsultus tendinum, and some petechiæ on the thorax.

On June 20, there appeared erysipelas on the face, below the internal angle of the eyebrows: it spread rapidly, and on the next day assumed a blackish tint, and became covered with phlyctenæ. The pustules and abscesses became more and more numerous. The pulse was 130; the tongue appeared as if roasted, and some small blackish crusts were observed in the interior of the nares, but there was no discharge.

On June 21st, diarrhœa set in, and phlyctenæ appeared on some of the abscesses on the limbs. The patient died in the morning of the 22nd.

EXAMINATION OF THE BODY, twenty-four hours after death. There were six or seven bullæ on the limbs, containing a sero-purulent liquid, and two gangrenous phlyctenæ, one at the root of the nose, the other on an abscess in the thigh. There were twenty-nine opaque pustules, resembling those of small-pox at the period of suppuration, but without the central depression. Traces of erysipelas were seen only in the face. Where it had been present on the feet and hands, thick pus was found beneath the skin. There were twenty-seven abscesses, two of which were gangrenous. Some were subcutaneous: others were deeper seated among the muscles; while some were within the joints. Pus was found in both knees and elbows, and in some of the joints of the toes. The pulse was generally thick, unhealthy, and mixed with grumous clots. In some of the abscesses it was sanious.

The brain was healthy; there was slight arborescent injection of the arachnoid. The sinuses of the dura mater were filled with dark blood.

In the nasal fossæ, the mucous membrane was thick, softened, of a very deep red, and was easily detached from the bones. It was infiltrated with a sanguinolent serosity through nearly its whole extent. At some points, it presented granular erosions, infiltrated with pus (an essential character of glanders). The turbinate bones were of a blackish aspect: they were filled with sanguinolent and purulent mucosity; so that, if the patient had lived two or three days longer, there would have been a discharge from the nostrils. The mucous membrane of the fauces presented the same appearances as the pituitary membrane, but in a less degree. There was no abscess in the lungs; but they were infiltrated with dark blood, and the left lung presented, especially posteriorly, marked lobular engorgement. The heart was healthy; as were also the liver, spleen, pancreas, and kidneys. The sexual organs presented no trace of syphilis.

In the stomach, there was an ecchymotic patch of the size of a five-franc piece; and the mucous membrane here was softened. Throughout the intestines, there were only some red arborescent patches of cadaveric injection. Peyer's and Brunner's glands were healthy. The absence of pathological changes in the intestines is one of the most important points in the anatomical

history of glanders. The lymphatic glands were not visibly enlarged.

The following case, which occurred in the Hôpital de la Pitié, under M. VALLÉIX, is related in the *Gazette des Hôpitaux* for 14th December, 1892.

CASE VII. A carpenter, aged 25, was admitted on November 25th, 1852. Up to May 1852, he had enjoyed good health; he then had headache, *courbature*, and dyspepsia; which disappeared on resting a few days.

On October 12th, he was seized with great weakness, fever, insomnia, and bilious vomiting. He became an inmate of the Hôtel Dieu, for a fortnight, and left much improved.

On November 20th, he felt very ill; and on the 25th, was admitted into the hospital. On being questioned, he at first denied having entered a stable, or having had any communication with horses or persons engaged in their care. It was, however, learned that he had lain in a room over a stable, and that he had frequent communication with a carter in the house where he dwelt. Six months before his last attack, he had heard that one of the horses had glanders; but he did not believe it.

On November 26th, the following was his condition. The face was red and anxious; the nose was swollen and tender. From time to time a peculiar expiratory movement was observed, which caused a sanious aspect of peculiar appearance to escape from the nostrils. The nasal fossa were of a blackish colour. The tongue was white and soft. The base of the tongue was much swollen; and as often as attempts were made to depress it, convulsive movements were excited, giving rise to the expulsion of abundant viscid mucus. The uvula was red and much thickened; and these conditions apparently extended to the neighbouring parts. Deglutition was difficult. The appetite was lost; and there was pretty severe thirst. There was nothing remarkable in the abdomen, except some pain in the epigastrium and right hypochondrium. No urine had been passed for twenty-four hours; the bladder was empty. The respiration was noisy, but regular, from twenty-four to twenty-eight in a minute. The stroke-sound of the chest was healthy; and no abnormal breath-sounds could be perceived. There was no heart-disease. The general symptoms indicated high febrile reaction.

At the most dependent part of the lower eyelid, near the cheek, there was an irregular projecting white pustule, resting on a tumefied base; the light rose colour and the oedematous swelling of which were gradually lost towards the face and the temple. A second similar pustule was present on the upper eyelid; and a third, larger and more irregular, was situated on the ulnar side of the left arm.

The patient's intellect was affected; he replied slowly to questions put to him; he seemed to recollect events of a remote date better than those which were more recent. He was in a state of prostration, from which he could momentarily recover.

He was bled to a little more than six ounces; and a pill of opium, and fifteen grains of sulphate of quinine, were prescribed. In the evening, the pain in the epigastrium and hypochondrium, and the debility, had increased.

On November 27th, he was worse. In the course of the day, about 4 P.M., he was suddenly seized with epilepsy. No cry was heard by those around him; he had violent contraction and flexion of the arm and thumb; a sanguinolent froth escaped from the mouth. Sinapisms were applied. The convulsions continued to recur at intervals, until 5 A.M. next day, when he died.

EXAMINATION OF THE BODY, November 29th. There was no putrefaction. Over the whole extent of the upper surface of the nasal fossae, the membrane was soft and puffy, and of a bluish colour. It was covered with anfractuous depressions. Its consistence was much altered; it being in some parts softened, and of a greyish tint. On maceration, ulceration was not detected; but a number of small points, of about the size of a pin's head, were discovered, in which the Schneiderian membrane appeared as if punched out; these were evidently commencing ulcerations. The mucous membrane of the nasal fossae was red, soft, and puffy, and covered with a very adherent ropy, greyish mucus. The mucous membrane of the pharynx was in the same condition. The other organs, especially the liver, were much congested.

The following case is related by Dr. JAMES WALLACE, of Glasgow, in the *Medical Times and Gazette* for December 18th, 1852.

CASE VIII. April 16th, 1852. J. M., a farmer, about 40 years of age, of rather intemperate habits, of a spare figure, and, although he had always enjoyed good health, apparently of a weak

constitution, was seized ten days previously with rigor, followed by pyrexia and general uneasiness. Three days afterwards, he had swelling, pain, and redness of the middle of the outer side of the left thigh, accompanied in three days by a similar condition of the posterior portion of the right. When seen by Dr. Wallace, there was a subcutaneous abscess in the former situation, and nearly the whole of the latter was red, swollen, tense, and pained. The patient had urgent thirst, and complained of pain in the right shoulder; the skin was hot and dry; the tongue white but moist; the bowels were regular, though, at the commencement of his illness, rather loose; the pulse was 92, soft. The abscess had been opened, and exit had been given to about one-twelfth of an ounce of sanio-purulent matter; and a free incision had been made through the skin and fascia of the posterior portion of the right thigh.

Linseed meal poultices were applied; and a mixture, containing nitrate of potash, tartar emetic, and compound tincture of camphor, was given every three hours.

April 17th. He had slept well, but complained much of pain on the dorsum of the right foot, which was swollen and red in streaks. Two pustules had appeared, one on the inner side of the left thigh, and the other on the back; they were about the sixth of an inch in diameter, convex on the surface, and very hard; the surrounding integument, for the space of an inch and a half, had an erysipelatous blush, which gradually faded towards the circumference.

April 19th. He complained much of pain in the foot, which was more swollen and red; he had pain in right wrist and elbow, but none in the shoulder. The redness and swelling had left the right thigh, and the discharge from the abscess on the left was very copious and thin. A considerable number of pustules, like those above mentioned, had appeared on the extremities and trunk, and one also over each malar eminence. The tongue was rather dry; the thirst urgent; the skin hot and dry; the bowels open; pulse 100, soft. Ten grains of Dover's powder were given at night. Beef-tea was ordered to be used as drink.

April 20th. The pain, redness, and swelling in the lower limbs were abating; but the swelling and redness surrounding the pustules were spreading, giving the face an appearance of erysipelas. Dr. Wallace now prescribed twenty minims of tincture of sesquichloride of iron, to be taken every two hours; and some muriate of morphia at night.

April 21st. The development of pustules had continued, and their areolae were becoming livid; a few had burst, and were discharging unhealthy sero-purulent matter. The glands in the groin were much enlarged; the urine deposited an abundance of ammoniaco-magnesian phosphates. The tincture of sesquichloride of iron was omitted, and morphia was given. On this and the preceding day, whiskey was ordered.

April 22nd. The patient's breathing became hurried; rhonchi were audible over both lungs; and on the next day he died.

No examination of the body is recorded.

A case is related by Dr. MILTENBERGER, in the *Gazette Médicale* for January 22nd, 1853. It was observed by him in Algeria in 1847.

CASE IX. On October 5th, 1847, *Morand, a soldier in the line*, who had been ill four days, was received into the military hospital of Mustapha, with the following symptoms: lassitude, fever, difficulty of respiration, cough, mucous and subcrepitant rhonchi, and pains in the left arm and knee joint, without swelling or redness.

October 6th and 7th. He was weaker, and had pain in both legs.

October 8th. There was erysipelatous redness and swelling of the right side of the face. Pain was felt in other parts of the limbs; there was redness and slight swelling of the right knee-joint, and of the middle and external part of the left arm.

October 9th. The erysipelas had extended nearly over the whole face.

October 10th. Small acuminate pustules appeared on the limbs.

October 11th. The patient expectorated some gray sputa, without coughing; the cough, which was at first present, had disappeared; the orifice of the nasal fossae was plugged with dry mucus; the nasal mucous membrane was slightly tumefied.

October 13th. The pustules were increased, and resembled those of small-pox. They were twice in number, and were principally over the upper limbs. The patient continued to have swelling and fluctuation of the left arm.

October 14th. The patient was delirious, and died on the following day he died.

EXAMINATION OF THE BODY. There was an abscess under the skin in the left arm; and so many in the muscular tissues, that they were opened by every random incision. The pus was scanty and reddish: it appeared healthy in the right knee and hip-joint. The mucous membrane of the nasal fossæ was of a deep red colour, and was covered with thick mucus, like the sputa which had been expectorated during life, and which were, in fact, mucus from the nasal fossæ, which had fallen into the fauces while the patient lay on his back. The lungs were hard and friable; there was a small purulent collection in the right lung; nothing of note was found on their surface. When the lung was removed, a tumour of the size of a hen's egg was found under the left pleura, at the posterior and inferior part; it contained creamy pus, and communicated with a host of small purulent collections in the muscles of the back, which indeed appeared infiltrated with pus. The last three cervical vertebrae were softened, and pus could be pressed from them.

Dr. Miltenberger made most careful inquiries to ascertain whether the man had come into contact with a glandered horse; but neither questions directly addressed to the patient, nor inquiries of those who were habitually about him, afforded any information. He thinks the case worthy of being recorded along with that of M. Tessier, although he is not satisfied in his own mind that it did not arise from contagion.

In the *London Journal of Medicine* for September 1852, Dr. MACKENZIE gives an account of a case of farcy successfully treated with the sesquicarbonate of ammonia.

CASE X. C. K., a stableman, aged 47, of temperate and regular habits, was admitted into the Paddington Infirmary on the 24th October 1851, suffering from extensive gangrenous inflammation of the left foot. It was extremely swollen, was of a dark livid colour, and very painful and hot; the pain was aggravated by the slightest touch. At the outer ankle, extensive sloughing and vesication had taken place, attended with an offensive sanious discharge. The patient had for some days previously suffered from frequent rigors, and at the time of his admission was labouring under a low typhoid form of fever, was at times delirious, complained much of nausea and sickness, and had not slept for many days or nights. His tongue was coated, his pulse feeble, and there were numerous pustules on his face, neck, and shoulders.

The case was considered to be one of gangrenous erysipelas, attended with much constitutional prostration. He was ordered immediately an emetic of ipecacuanha; after vomiting had taken place, three alterative doses of blue pill, at intervals of four hours between each; and the sesquicarbonate of ammonia, in five-grain doses, every two hours, as concentrated as he could swallow it, and to be supplied frequently with cordials and light nutriment. The foot was kept elevated, and covered with warm bread poultices, saturated with carrot-juice. This treatment was continued for five days, with very satisfactory results. The general condition of the patient had much improved; the prostration had lessened, and he felt altogether better. It had been necessary, however, to give him opiates at bed-time, on account of his restlessness and inability to sleep.

On the fifth day after admission, two dusky patches of inflammation appeared, the one on the inside of the knee, the other a little below it; and on each of these patches a small circumscribed tumour arose, about the size of a walnut. These were painful and tender, and in the course of a day or two suppurated. The character of these tumours led to further inquiries, and the information obtained tended to connect the disease with infection received from a horse. The patient had nearly all his life been engaged in stables, and accustomed to the care of horses; about three months previously to his admission, he had given a ball to a horse, which had a profuse, unhealthy discharge from the nostrils, of a thick, yellow, tenacious character. In giving the ball, the little finger of the patient's right hand was scratched and abraded by the teeth of the horse; and, on withdrawing it, the discharge from the nostrils fell upon this abrasion. The same night the finger became extremely painful and swollen; and, shortly afterwards, the swelling extended to the whole of the arm, which became also very painful. On the following day, he applied at St. George's Hospital, where three incisions, etc., were made in the affected parts, and, by dint of these and other appropriate measures, the severity of the local affection was subdued. Three weeks after the accident, the left foot was attacked with inflammation of a dark purplish colour, which, after subsiding, in the course of two or three days returned, and continued to do so at intervals. Dr. Mackenzie was led to suspect that the disease of the foot and leg was connected with the morbid secretion which had

been received from the horse; and a patient in the ward, who was well acquainted with the phenomena of farcy and glanders in the horse, examined carefully the swellings about the knee, and remarked, that they had very much the character of "farcy buds".

From this time, small circumscribed tumours or swellings of the same description began to appear upon the dorsum of the affected foot; at first they were hard and tubercular, and about the size of a pea; but, in the course of a day or two, they became as large as a walnut, then suppurated, and discharged their contents into the subcutaneous cellular tissue of the foot, whence they formed a passage to the ulceration around the ankle, and there escaped. Swellings, or rather abscesses, of this description continued to form, in succession, upon the foot; so that, in the course of a month, as many as fourteen had appeared. At first they had the character of small tubercles, which softened, and became abscesses; but, after a time, their contents became more and more serous, and at last consisted of a small quantity of watery fluid only.

Ammonia was given, in a concentrated form, every two hours; opiates and alteratives were occasionally given at bed-time, and throughout the patient was kept up by a liberal allowance of wine, cordials, and nourishing food. These measures were urgently required, as the amount of sphacelation and sloughing on the foot during this period, as also the constitutional prostration, were very great. At the end of the month, however, matters had greatly improved; the febrile symptoms had lessened, as well as the prostration; the appetite had returned, the tongue was clean, and the patient slept well at night; the sloughing of the foot had also ceased, and the ulceration left by it had assumed a healthy character; the disposition to the formation of abscesses, or "buds", on the dorsum, however, still continued, and, to meet this, the liquor arsenicalis, in five minim doses, three times a day, was substituted for the sesquicarbonate of ammonia. In the course of a week from this alteration in the treatment, the disposition to the formation of these abscesses ceased, the ulceration of the foot continued to heal favourably, and the patient's recovery was steady and satisfactory from this date. The foot, however, remained for some time cedematous and tender, after all other morbid appearances had ceased.

TREATMENT. It will have been observed from the cases related, that the majority of cases of glanders occurring in the human subject have been fatal; and that scarcely any plan of treatment which has been pursued has been able even to arrest the progress of the disease. Dr. Mackenzie, however, has succeeded in curing two cases by the administration of large and repeated doses of carbonate of ammonia (vide cases v and x).

The treatment which Dr. Mackenzie pursued in case v, may be arranged under the following heads: 1. An incision in each of the Whartonian ducts; 2. An emetic of ipecacuanha; 3. Sesquicarbonate of ammonia in water hourly, as concentrated as it could be swallowed; 4. An opiate at bedtime, with wine and nourishment in such quantities as the patient could be prevailed on to take.

The principal reliance was placed on the administration of sesquicarbonate of ammonia in a concentrated form. Dr. Mackenzie was led to exhibit it in this way, by the good effects he had seen it produce when so given in the severe affections of the throat, met with in malignant scarlet fever. It was an essential part of Dr. Peart's treatment of scarlatina anginosa and maligna; and he gave it in a strongly stimulating form. The following was his mode of prescribing it, as described by Dr. Willan.

"He dissolves two drachms of the carbonate of ammonia in five ounces of water, and directs the patient to take two teaspoonfuls every two, three, or four hours, according to the urgency of the symptoms. If the difficulty of swallowing abate, and the patient wish for it, a little cold water may be added to each dose. Cold water, or toast and water, may be drank at pleasure. . . . In all variations of the disease, the volatile alkali was my specific, which I administered to between two and three hundred patients *successively and successfully*."

Similar testimony is afforded by Mr. Wilkinson, and by Mr. Ricardo, of Bow.

Dr. Mackenzie says: "I cannot doubt of the utility of this particular mode of treatment, in this and the other diseases in which I have tried it. . . . I would observe, that there is much in the history of glanders which assimilates it to the more malignant forms of scarlet fever. Both, for instance, arise from a specific contagion; in both there is a similarity in the parts which are more especially implicated, viz., the throat, the respiratory mucous membrane, and the salivary glands; and in

each there is a tendency to ulceration, sloughing, and destruction of the tissue of these parts. These circumstances furnish ground for believing, *a priori*, that the medicine which would be best adapted for one disease, would be most curative of the other; and this conclusion, which is suggested by careful reflexion, is confirmed by personal observation, so far at least as the issue of the present case is concerned." (*London Journal of Medicine*, 1851, p. 798.)

CASE OF HÆMATEMESIS RAPIDLY FATAL.

In the *Lancet* for July 16th, 1853, the following case is related as having occurred in the practice of Dr. BENGE JONES, at St. George's Hospital:—

CASE. Charles D——, aged thirty-seven years, was admitted, May 17, 1853, under the care of Dr. Jones. He stated that, between six and seven on the morning of his admission, he had been seized with vomiting of blood, and that he had felt "bilious" during the previous week. He had vomited frequently during this lapse of time, but had no pain in the stomach; he had, however, a sensation as if there was a gathering at the top of his throat, and from thence the blood seemed to come. The patient brought up a great deal of blood directly after admission, and the nurse stated that there was not much the appearance of sickness, the blood seeming to rise in his throat. The man's aspect was pale, and his movements tremulous; but he had no cough, and complained of no pain whatever. Dr. Jones ordered a scruple of gallic acid three times a day, and some ice.

He continued to bring up blood during the afternoon, and at night Ruspini's styptic was given without benefit. Altogether, there were about seven pints of blood brought up whilst the patient was in the hospital, at nine or ten different times. He brought up none during the last four hours, but fell into a state of exhaustion, during which he died, at eight in the morning, the day after his admission.

POST MORTEM EXAMINATION. The body was well formed, and in good condition; a large scrotal hernia existed on the left side. On the right half of the thorax, some old pleural adhesions were found; the lungs and bronchial tubes were congested, and the latter contained a certain amount of mucous tinged with blood. Nothing further was observed in the lungs. The heart was natural, excepting some slight amount of blood extravasated beneath the endocardium of the right ventricle. The mucous membrane at the lower part of the œsophagus was opaque and thickened, and terminated by a definite prominent outline at the cardiac extremity of the stomach. This seemed at first to be a layer of fibrin or some additional substance, but was seen under the microscope to be thickened scaly epithelium, the lower prominent line being the one where the two kinds of mucous membrane meet. The stomach and intestines were to all appearance quite natural; no vascularity nor abrasion were observed; but in the stomach a pretty large clot of dark blood was found, which had, by contact, much stained the lining membrane in one place. The liver was very large, with a rough, granular appearance, and a very firm, knotted, sectional surface, of a yellow and brown parti-colour. The gall-bladder contained much tar coloured bile. The kidneys were slightly indented on their surface, and the marks corresponded to cicatrix-like seams in their cortical part, the latter being in some places diminished. The capsule of the spleen was slightly thickened, and small amounts of fibrine were collected in the divisions and lines on its surface, in some places becoming changed into firm, opaque patches. The substance of the organ was, however, natural, and no morbid alteration was observed in any of the other abdominal viscera. The muscular system generally looked very pale.

It may here be inferred that the portal circulation was greatly impeded through the "large, rough, and granular liver"; and hence the congestion of the vessels of the stomach, and the eventual unloading of the same by hæmorrhage. At first sight the case looked very much like a *bond fide* instance of idiopathic hæmatemesis, but the *post mortem* examination has shown on which visceral condition the hæmorrhage depended, and one remains still more convinced that strictly idiopathic vomiting of blood is extremely rare.

[This case recalls to our recollection some similar instances. A woman, who had for sometime been an out-patient of an hospital, for jaundice, of which she presented most visible signs, was, while attending one morning, suddenly seized with profuse hæmatemesis, of which she died in a very few hours. No *post mortem* examination was made; but we have no doubt that the struc-

tural disease of the liver stood in a causative relation to the hæmorrhage. Hæmatemesis is indeed commonly connected with congested liver, and some of the means for its relief must be such as relieve this organ: but when there is permanent structural disease, any attempt at stimulating the functions of the liver will be probably at least ineffectual, if not injurious; and the prognosis, in hæmatemesis occurring under such circumstances, must be most unfavourable.]

PHOSPHATE OF LIME IN OXALURIA.

The *Medical Times and Gazette*, for April 16th, publishes an abstract of an article in Nos. 42 and 43 of the *Medicinische Zeitung* for 1852, by Dr. KUCHENMEISTER, on the use of phosphate of lime in cases attended with the presence of oxalates in the urine. The patient was Dr. Kuchenmeister himself, who had suffered for four years from chronic diarrhœa, and other disorders of the digestive organs, accompanied with marked emaciation and hypochondriasis. The urine was acid, and very rich in crystals of oxalate of lime; specific gravity, 4.5—5.0. There was no apparent cause for the symptoms. Upon Beneke's advice, the author took daily lactate of iron, gr. ss.; phosphate of lime, grs. ii. to iii.; carbonate of lime, grs. iv. to vi. After eighty powders, the evacuations became regular, the appetite and the general aspect improved, the oxalic crystals disappeared, and the specific gravity became 2.0, 2.5.

REPORTS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

JUNE 1, 1853.

JAMES Y. SIMPSON, M.D., F.R.S.E., in the Chair.

BREECH PRESENTATIONS. BY CHARLES BELL, M.D.

AFTER some remarks on the great importance attributed to all malpresentations of the child by women in general, Dr. CHARLES BELL proceeded to point out the comparatively great frequency of the form of malpresentation under consideration, and its importance, scientifically and practically. He specially dwelt upon the physiological errors entertained by old authors in regard to these cases, and the bad practical rules based on them; giving also a short historical sketch of the various plans of treatment recommended.

It was to Dr. Wm. Hunter that the profession was indebted for the great modern improvement in the treatment of these cases; this improvement consisting chiefly in leaving the cases entirely to nature. But Dr. Bell thought that modern experience of the great (one in every three or four born) number of still-births, in these cases, shewed that much improvement on the recognized modern practice was possible.

Dr. Bell then proceeded to discuss the subject of the causation of breech cases; and, referring to the opinion of Lachapelle and Chailly on this subject, said, that it was an error to suppose that, in the last months of pregnancy, the fœtus became so much developed, that it could not regain its normal position if it were lying with the breech lowest. This was shewn by a reference to a point in the anatomy of the gravid uterus, at the full time, stated by Dr. Hunter, viz.: that it was never on the stretch, and that the child had always some freedom of motion. It was further known, that the presentation of the child might be changed, even after labour had commenced. Dr. Bell then referred to Dr. Simpson's researches in regard to the position of the fœtus, and added that breech cases often existed, where there was no cause but the excessive movement of the fœtus. When the child was subjected to any external irritation, it quivered in its limbs, and assumed the smallest possible dimensions, so as easily to turn. This turning was illustrated by a case in which it occurred while labour was being induced.

Dr. Bell then referred to the great importance of these cases before labour. This was illustrated by a case of great importance, as he thought that

led early in labour in some cases. In regard to treatment after labour has commenced, Dr. Bell would recommend that, as soon as the breech passes the vulva, we should proceed to deliver the head,—not so much to avoid the risk from pressure on the cord, as from separation of the placenta before the head is born.

Dr. MATTHEWS DUNCAN said, that the paper which had just been read went over such a large subject, including the discussion of the causes, treatment, etc., of pelvic presentations, that he would not take up the Society's time in following the author through it. He might state, in starting, that the peculiar views and recommendations in the paper were such, that he was constrained in regard to them to differ entirely from Dr. Bell.

And, first of all, an attempt was apparently made to show that, under ordinary circumstances, the fetus *in utero*, even at the full time, moved in the uterine cavity so freely, as to enable it to change its presentation from being one of the breech to one of the head. This was contrary to all that was ascertained and held by obstetricians to be settled, in regard to the fixedness of the presentation of either end of the ovoid of the fetus at the full time. As the fetus approached the full time, it became in size and form more and more adapted to the cavity in which it was contained; so that at last the containing cavity and the fetus were, as a general rule, so fitted to one another, that any such extensive motion as was involved in the change from a breech to a head presentation was impossible. No doubt, if the fetus were premature (as was the case in the operative examples referred to by Dr. Bell), or very small, or if the quantity of liquor amnii were excessive, such extensive movements might in these circumstances take place. But these were exceptions to the general rule.

Dr. Bell had alluded to a fact, noted by Dr. Hunter, namely, that the uterine walls were not distended to the utmost, but that they appeared loose, and as if the cavity could easily contain more than was in it. This resulted chiefly from the quiescent or relaxed state of the fibres of the gravid uterus, and was no reason for thinking that the capability of further distension could be very great at the full time. Dr. Hunter's authority, so far from supporting Dr. Bell's view, as he seemed to think, was entirely and decidedly against it; for, in his admirable lectures on the anatomy of the gravid uterus, he stated his opinion that, in the latter months of gestation, the fetus had commonly so little room, and was so closely fitted to the uterus, that it could not change its general position by its own motions, or even by accidents to the mother.

There was no doubt that, although the child could not move to any extent on its transverse axis at the full time, it could move upon its long axis. And the movements or circumvolutions upon its long axis afforded the general explanation of the rollings of the cord around the neck to which Dr. Bell had alluded. Dr. Bell had referred to the researches of Dr. Simpson, in regard to the positions of the fetus *in utero*. But, while he professed his accordance with the views of that author, he evidently discarded the various explanations given by him of the causes of malpresentation, and resorted in the cases he had quoted to the antiquated notion that breech presentations were produced by frights, succussions, accidents, etc., at or near the full time.

The recommendation to interfere with the labour as soon as some part of the body of the child was born, must be altogether condemned. The beautiful mechanism of natural parturition in breech cases would be inevitably deranged, the chin would be liable to be displaced upwards by extension of the foetal head, and elevation of the arms would be also liable to be produced, both of which changes would be very injurious and dangerous to the mother and child.

There was very little cause why an uncomplicated breech presentation in a healthy female should be more dangerous than a head presentation. The researches of Dr. Simpson and of others to which Dr. Bell attended, showed that the existence of breech presentation was frequently dependent on morbid states in the mother and fetus; and Dr. Duncan believed that the greater danger to the mother of labour in breech presentations, arose either from these morbid causes simply, or from their effects in perverting the mechanism of the labour, and complicating it, not from the fact alone of the breech presenting.

Dr. BELL replied that he was sorry that Dr. Duncan had misunderstood his paper. He had not thrown aside all Professor Simpson's views; on the contrary, he considered that they give the most rational explanation of the natural position of the fetus, and enable us to account for the preternatural. It is quite clear that it is the impression made by the uterus on the fetus, inducing it to exert stronger reflex movements, which in many cases produces the change in its position; and in others

the change is the result of concussion. Hence we have malpresentation induced by the injecting of tepid water into the vagina. With regard to the opinion of Dr. Hunter, he had quoted his own words, to show that the uterus is an elastic body, which is never so full as to be on the stretch. He could not see, therefore, how it could in any way prevent the change in the position of the fetus, unless some unusual circumstance occurred. He believed that at no time of gestation was the fetus immovably fixed, before the escape of the liquor amnii, or the uterine contractions, had commenced. This was proved by the case quoted by Baudelocque, in which the child changed its position several times during parturition. He had also frequently felt the head of the child roll under his hand, when put on the abdomen of the mother, in cases of spurious pains in the latter end of gestation. On such occasions, he has observed the head to be raised as high as the navel during the spasm, and to again subside into the pelvis when the pains went off.

Dr. SIMPSON said, that he had seen a case where the presentation of the child changed after labour was begun, as Dr. C. Bell had described. He thought Dr. Bell had omitted to consider that, in cases of induction of labour by the douche or otherwise, the child was premature and small, and the motions consequently much fewer than at the full time. The statement of Dr. Bell in regard to the danger to the child from separation of the placenta, he believed to be new and important.

PARALYSIS OF THE COMMON MOTOR OCULI NERVE.

BY JOHN STRUTHERS, M.D.

Dr. JOHN STRUTHERS read an interesting case of this affection, supervening on exposure to cold, with an account of the *post mortem* examination.

The muscles supplied by the nerve were completely paralysed. The eye could be easily moved outwards. The pupil was much enlarged, and did not contract under the strongest light. Vision with the affected eye was entire, as also common sensibility. Under treatment, the paralysis of the voluntary muscles gradually diminished; but the fixed dilatation of the pupil was much slower of disappearance. The man, not long afterwards, died of apoplexy. On the *post mortem* examination, it was found that the motor oculi nerve on the affected side was about one-third smaller than on the other side, and was of a browner tint than the other nerves. Under the microscope, the nerve-tubes were observed to be about half the size of those of the nerve of the side not affected, and also less distinct. The muscles supplied by the affected nerve were also somewhat atrophied.

In his attendance on this case, Dr. Struthers had made an interesting physiological observation; namely, that although the third nerve and iris were paralysed, yet belladonna exerted its usual dilating power over the affected iris.

ASSOCIATION INTELLIGENCE.

ANNIVERSARY BRANCH MEETINGS ALREADY ANNOUNCED.

BRANCH.	DAY AND HOUR.	PLACE.
Shropshire Branch.	Tuesday, 26th inst. Noon.	George Hotel, Shrewsbury.
South-Western Branch.	Wednesday, 27th inst., 1 P.M.	Webb's Royal Hotel, Torquay.

MONMOUTHSHIRE AND SOUTH WALES BRANCH: ANNUAL MEETING.

[Report continued from p. 626 of last number.]

Mr. MICHAEL, the Hon. Secretary, then read the following report, which had been agreed upon by the Council:—

REPORT OF THE COUNCIL.

"Your Council, in presenting its First Annual Report to the Members of the Monmouthshire and South Wales Branch of the Association, beg to congratulate them upon the satisfactory condition of the Branch.

"At the commencement of the year, there were seventy-five members; since that time, one member, Dr. Price, of Monmouth, has, for the present, declined membership; one gentleman, Mr. Robertson, has left South Wales; and nine gentlemen have enrolled their names as members, viz.: Mr. Anthony (Tredegar); Mr. King (Chepstow); Mr. Roberts (Aberdare);

Mr. T. Evans (Cardiff); Mr. D. Lawrence (Pontypool); Mr. G. Watkins (Chepstow); Mr. E. Robathan (Risca); Mr. W. W. Morgan (Newport); and Mr. Audland (Tintern)—making the present total number of members eighty-two.

"The expenses during the year ending April 9th, 1883, have amounted to £9:12, of which the following are the particulars:

Books, stationery, printing, etc.	£2	16	0
Postages		1	10 0
Expenses of meetings	£0	3	6
Ditto ditto	0	2	6—0 0 0
Share of Autographic Press		5	0 0
	£9	12	0

"Much of the expenses of printing, etc., will be, in future, spared, by the autographic press, which is the joint property of the Branch and the Medico-Ethical Society. But, with eighty-two members, there must still be expenses which cannot be estimated at less than £5 per annum, for postages, stationery, books, attendance, etc.

"Your Council, feeling desirous of affording as much aid as possible to the Parent Society, suggest, especially as they would wish by all means in their power to support the Journal in its present greatly improved form, that it may be desirable for the members of the Branch Association in future to contribute 2s. 6d. per annum each to a fund, which will thus bring in £10 per annum—£5 of which, they suggest, should be voted annually to the hon. secretary, to cover all expenses of conducting the business of the Branch; and £5 to the Medical Benevolent Fund—a society to which, the Council much regret, they have had no power of lending assistance during the past year, and which they believe, in a humble and unostentatious manner, is effecting much good, by relieving sufferings and distresses greater than should ever fall to the lot of the fatherless and widows of a profession devoted to the relief of suffering humanity.

"Your Council would wish to refer to the fact of the annual meeting of the Association being this year fixed for Swansea, and trust that their successors in office may receive that kindness and support from their fellow members, and the profession generally, which has been manifested towards themselves during the past year, in preparing for the reception of the Association in a manner creditable alike to the Principality, the profession, and the Monmouthshire and the South Wales Branch of the Provincial Medical and Surgical Association.

"Your Council have had brought under their notice both the Medical Reform and Vaccination Bills, but have thought it right to defer action in the matter until the opinion of the medical brethren assembled at the annual meeting could be learned.

"In resigning their trust, your Council would recommend, as more likely to be generally acceptable, that the members of the Branch should have the power of naming the Council for their own district; and that, with a view to such nomination, the hon. secretary be requested in future to send round to the Branch, one month before the annual meeting, a list of the members; and that each be entitled to vote for twelve councillors, in the following order:—Pembrokeshire, 1; Carmarthenshire, 2; Swansea and neighbourhood, up to Cowbridge, 3; and Merthyr, Chepstow, Newport, Abergavenny, Pontypool, and Cardiff, 1 each.

"In conclusion, your Council wish to thank the members for the kind consideration they have received from them during their year of office, and to express the gratification they feel in witnessing the prosperity of an Association which they believe calculated to benefit both the profession and the public."

Dr. STEELE moved, Dr. BIRD seconded, and it was resolved,

"That the Report of the Council now read be received and adopted."

OFFICERS AND PLACE OF MEETING FOR ENSUING YEAR.

Mr. F. C. BATT moved, Mr. E. DAVIES seconded, and it was resolved,—

"That Mr. J. L. WHITE be the President-elect for the ensuing year; and that the next annual meeting of the Branch be held at Merthyr, at such time as local circumstances may render most convenient."

[Mr. E. Davies was solicited, previously to the adoption of this resolution, to accept the office of President, but declined, from a pressure of engagements.]

It was moved by Mr. CHERRY, seconded by Mr. BATT, and resolved,—

"That the following gentlemen be nominated as the Council for the ensuing year: EX-OFFICIO MEMBERS: the President-elect,

President, and Ex-President: Mr. J. D. Brown (Pembrokeshire); Dr. Lawrence, Mr. B. Thomas (Carmarthenshire); Mr. H. L. Prichard, Mr. J. French, Mr. W. Rowland (Swansea); Mr. T. J. Dyke (Merthyr); Mr. T. King (Chepstow); Mr. Jehoiada Brewer (Newport); Mr. E. Y. Steele (Abergavenny); Mr. J. Essex (Pontypool); Mr. J. Lewis (Cardiff)."

THE SWANSEA MEETING.

Mr. E. DAVIES moved, Mr. WILLIAMS seconded, and it was resolved,—

"That this Branch express their gratification at the prospect of meeting their professional brethren at Swansea, at the annual meeting of the Association; and that the members of the Association be invited by this Branch to a *soirée*, to be held at the National School Rooms, Swansea, on Wednesday evening, August 11th, at eight o'clock.

LORD LYTTELTON'S VACCINATION BILL.

Mr. E. EVANS proposed, Dr. BIRD seconded, and it was unanimously resolved,—

"That a petition be presented to the House of Commons against certain clauses in the Vaccination Extension Bill of Lord Lyttelton; and that a clause be added, nominating all duly qualified medical men public vaccinators; that the fee allowed be 2s. 6d. (instead of 1s. 6d., the present fee), in consideration of the additional duties to be imposed by the proposed measure."

This motion gave rise to an animated discussion, in which Mr. Evans, Mr. Michael, Dr. Bird, Mr. Williams, Mr. Morgan, Mr. Audland, and Dr. Steele, contended that vaccination ought to be made compulsory. Dr. Edwards had grave doubts as to the propriety of adopting the principle of compulsion. All of the speakers adverted to the necessity of impressing upon the legislature the claims of the medical profession to be justly dealt with in any such measure as that of Lord Lyttelton.

MEDICAL REFORM.

It was moved by Mr. WATKINS, seconded by Mr. ESSEX, and resolved,—

"That the Secretary be requested to prepare a petition to the House of Commons in favour of the Medical Reform Bill, to be signed by the President on behalf of the members of the Monmouthshire and South Wales Branch of the Provincial Medical and Surgical Association."

THANKS TO RETIRING OFFICERS, ETC., ETC.

Dr. STACK moved, Mr. ROGERS seconded, and it was unanimously resolved,—

"That the thanks of this meeting be given to the Council, for their services during the past year."

Dr. EDWARDS moved, Mr. EVANS seconded, and it was resolved,—

"That the thanks of this meeting be given to Mr. Michael, for his excellent services as Secretary; and that he be appointed Secretary for the ensuing year."

Mr. EVANS moved, Dr. SYLVESTER seconded, and it was resolved,—

"That, in future, the charge for the annual dinner (now one guinea) be 10s. 6d."

Dr. SYLVESTER moved, Mr. MICHAEL seconded, and it was resolved,—

"That the thanks of this meeting be given to Dr. Morris, for his able and impartial conduct in the chair."

The PRESIDENT having briefly acknowledged the vote, the meeting separated, and met, at half-past five o'clock, at the Beaufort Hotel, at

THE DINNER,

which had been provided, in the accustomed excellent style of that famed hostelry, for the members and their friends.

Dr. MORRIS presided; and Mr. MICHAEL occupied the vice-chair. After dinner the chairman gave "The Queen," "Prince Albert, and the rest of the Royal Family"; "the Bishops and Clergy of the Diocese" (acknowledged by the Rev. J. R. Gurnall); "the Army and Navy"; "the Lord Lieutenant of the County" (acknowledged by J. L. Baldwin, Esq.). Other toasts named, viz.: "the President", by Dr. Bird; "the Hon. Secretary", by Dr. Morris; "the President-elect", by Dr. Morris; "the Council, Sir Charles Hastings"; "the Hon. Secretary"; "Kindred Associations in Ireland, and Scotland, having for their object the advancement of sound medical knowledge, and the elevation of the medical profession", by Mr. King.

SOUTH EASTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of the South Eastern Branch took place at Tunbridge Wells, on Wednesday, June 29th, under the presidency of Isaac Hargraves, Esq.

The following members were present:—Joseph H. Baller, Esq. (Penshurst); J. M. Barry, M.D. (Tunbridge Wells); William Bayes, M.D. (Brighton); G. Bottomley, Esq. (Croydon); J. Cordy Burrows, Esq. (Brighton); Joseph Delves, Esq. (Tunbridge Wells); Robert Duncan, Esq. (Tunbridge Wells); H. M. Gould, Esq. (Watlington); Richard Gravely, Esq. (Newick); William A. Greenhill, M.D. (Hastings); Isaac Hargraves, Esq. (Tunbridge Wells), President; Constantine Holman, M.D. (Reigate); Thomas Hunt, Esq. (London); G. Bell Irving, Esq. (Lamberhurst); Robert M. Rathill, Esq. (Westerham); Edward Ray, Esq. (Dulwich); Peter Roscoe, Esq. (Folkestone); Frederick Sankey, Esq. (Wingham); W. C. Satchell, Esq. (Tunbridge Wells); Amelius Sicard, Esq. (Bridge, near Canterbury); Thomas H. Silvester, M.D. (Clapham); James Stedman, Esq. (Guildford); Charles M. Thompson, Esq. (Westerham); Charles Trustram, Esq. (Tunbridge Wells); Richard Turner, Esq. (Tunbridge Wells); Henry B. Tuttiell, Esq. (Ventnor); William Wallis, Esq. (Hartfield); Henry Whitfield, Esq. (Ashford); J. L. Worship, Esq. (Riverhead).

The chair having been vacated by FREDERICK SANKEY, Esq., was taken by ISAAC HARGRAVES, Esq.

PRESIDENT'S ADDRESS.

After an exordium referring to matters local and personal, to the Income Tax question, and to other topics of interest, the President thus proceeded:—

MEDICAL REFORM is now under parliamentary consideration, and will probably occupy your attention to-day. I must confess that I think the medical corporate bodies might do the thing better than the legislature; the Colleges of Physicians and Surgeons have already advanced some steps in the right direction. Lawyers regulate themselves; and if we had the same *esprit de corps* which they have, we might do the same. This Association has done great good in bringing us together in social contact, and diffusing amongst us a more harmonious feeling, which must ultimately lead to happy results.

THE VACCINATION BILL deserves your anxious attention. A petition concerning it will be laid before you.

THE JOURNAL. The very improved state of our Journal is highly satisfactory; and I trust that your general approval of it will stimulate continued exertions.

MEDICAL BENEVOLENT COLLEGE. The success which has attended Mr. Probert's exertions in the cause of the Medical Benevolent College is highly gratifying; and doubtless it will become a valuable acquisition, an ornament and a honour to our profession, out of which nothing but good can come. To the kind sympathy of a generous public in this great work, we owe much gratitude for the extensive support they have given it.

PHOTOGRAPHY, from the rapidity and truthfulness with which it pictures objects of deep interest which run into too rapid decomposition for the draughtsman, is a great acquisition to pathology; and in connexion with the microscope, produces wonderful results. Some beautiful specimens of the art of photography, through the kindness of my friend Mr. DELVES, I am enabled to exhibit to this meeting.

After expressing regret at the necessary absence of the secretary, Mr. Hargraves concluded by calling upon his substitute, Dr. HOLMAN, to read the Report of the Council.

REPORT OF THE COUNCIL.

Dr. SOULBY. In reporting the proceedings of the past year, the Council desire to commence by giving expression to the regret which has been universally felt by the members, at the death of their lamented president, Dr. Soulby. Although the advancing progress of the malady which eventually proved fatal, prevented Dr. Soulby from presiding over the meeting at Folkestone, yet the members of the South Eastern Branch were too well acquainted with the honest, open, and friendly character of their late associate—not to speak of his high professional attainments, which were well known to all those who had the advantage of his friendship—not to feel much sorrow at the loss which has been sustained by the Branch and by the Association.

THE JOURNAL. At the Folkestone meeting, it will be recollected that a motion was carried, calling the attention of the general meeting at Oxford to the condition of the Journal. The proceedings at that meeting are matter of notoriety; and the committee think they may congratulate the members on the improvement which has taken place in the character of the Journal. They trust that it will always be borne in mind that the func-

tions of a Journal, the organ of an Association like ours, can never be entirely similar to those of a publication emanating from a single mind, and owning no responsibility to any but a single proprietor. The special mission of our Journal should be the announcement of the proceedings of the Association, and the publication of facts connected with the progress of medical science to the remote points in which members reside.

MEDICAL REFORM. With regard to Medical Reform, the Bill of the Association is now before the members. It will be for this meeting to decide whether it should now express any opinion on the Bill. The committee believe that the chief difficulty will reside in the formation of the governing council; for the framers of the bill have not been able, in the formation of the council, to carry out the representative principle, which has hitherto been one of the main points on which the Association has rested.

The Colleges of Physicians and Surgeons will be represented in the council by members chosen by those colleges; but the great body of general practitioners not enjoying the franchise in either of those colleges will be represented only by gentlemen delegated *ad hoc* by the Secretary of State. This may work well in practice; but undoubtedly it is a derogation from one of the leading principles of the Association, and shows forcibly the want of an organisation in that class of the profession whose interests are thus taken out of their own hands, and vicariously cared for.

INCOME TAX. The adjustment of the income tax as affecting precarious incomes has been a leading topic during the last year. The committee did not deem it advisable to call a special meeting of the Branch on the subject; and, since the appearance of the Budget of the Chancellor of the Exchequer, they have not, whilst still maintaining the unfairness of the present amount of assessment on the medical profession, felt that there was much ground for expecting relief from the legislature. The consideration also, that there is a prospect of the final abolition of the tax in 1860, induces your committee not to recommend any further agitation on the subject.

THE VACCINATION BILL carried through the House of Lords by Lord Lyttelton now rests in the House of Commons. That more effective means of extending vaccination are desirable there cannot be a doubt; but the present bill, besides being really impracticable in its enactments, imposes too much on the already overburdened readiness of the medical profession to work for the public good. Your committee strongly recommend the adoption by the Branch of a petition against the bill.

Considerable discussion followed the reading of the report upon the different topics mentioned in it.

It was moved by Mr. CORDY BURROWS, of Brighton, seconded by Dr. BAYES, of Brighton, and carried—

"That the Report now read be received by the members, and entered on the minutes."

MEDICAL REFORM.

It was moved by Mr. TRUSTRAM, of Tunbridge Wells, seconded by Mr. CORDY BURROWS, and carried:

"That this meeting considers that the want of a direct representation of the general body of the profession in the council, as proposed in the Reform Bill of the Association, prevents the Bill from receiving the support and approval of this meeting; and that a copy of this resolution be forwarded to the parties in charge of the Bill."

[Mr. BOTTOMLEY, upon arriving after this resolution had passed, expressed regret at his absence, as he was prepared to have opposed it.]

THANKS TO RETIRING OFFICERS.

It was moved by THOMAS HUNT, Esq., of London, seconded by HENRY WHITFIELD, Esq., of Ashford, and carried:

"That the thanks of this Branch are due, and are hereby offered to Mr. SANKEY, the acting President for the last year, and to the other officers of the Branch."

PLACE OF MEETING IN 1854: ELECTION OF OFFICERS.

A requisition, numerously signed by the medical practitioners in Chichester and its neighbourhood, inviting the Branch to hold its annual meeting in that city in June 1854, was presented.

Mr. TRUSTRAM moved, and Mr. SANKEY, of Wingham, seconded:

"That the General Meeting for 1854 be held at Chichester; and that the following gentlemen be requested to act as officers for the year.

"President: J. M'Carogher, M.D. Vice-Presidents: N. Tyacke, M.D.; Allen Duke, Esq. Council: R. Elliott, Esq., Chichester; C. Hurlstone, Esq., Chichester; W. Caffin, Esq., Chichester; G. Bottomley, Esq., Croydon; J. C. Burrows, Esq.,

Brighton; Wm. Newnham, Esq., Farnham; W. Bayes, M.D., Brighton; W. A. Greenhill, M.D., Hastings; P. Blakiston, M.D., St. Leonard's-on-Sea."

DESIGNATION OF THE PARENT ASSOCIATION.

It was moved by J. C. BURROWS, Esq., seconded by CHARLES TRUSTRAM, Esq., and carried:

"That the General Council of the Association be requested to consider the desirability of altering the name of the Parent Association to that of the 'British Medical and Surgical Association.'"

LORD LYTTELTON'S VACCINATION BILL.

The following resolution was adopted:—

"That, in the opinion of this Meeting, the Bill for the extension of Vaccination, now before the House of Commons, is in many respects objectionable; and that a petition against the Bill in its present shape be adopted; that it be signed by the Chairman on behalf of the Meeting; and that Thomas Alcock, Esq., M.P. for East Surrey, be requested to present it to the House of Commons."

The following is the petition which was adopted:—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The humble petition of the Members of the South-Eastern Branch of the Provincial Medical and Surgical Association, sheweth—

That there is now before your Honourable House a Bill for the promotion of Vaccination, and for rendering Vaccination compulsory among all classes of Her Majesty's subjects.

That your petitioners are most anxious for the adoption of all well considered means for the extension of vaccination, but that some of the provisions of the Bill in question are objectionable, and will tend to interfere with the success of the measure.

That the clause compelling vaccinators to vaccinate in all cases directly from the arm is unnecessary, in remote places very frequently impracticable, and could not be enforced.

That the Bill does not contain any enactment compelling the parents of vaccinated children to bring their children for inspection, without which registration would be very imperfectly carried out.

That the Bill does not contain any sufficient provision for the remuneration of vaccinators; that the payment made to them under the present system is for the most part insufficient; and that the Bill in question imposes new duties on them, in one instance of an objectionable character, without providing any remuneration—thus injuriously affecting the medical profession.

Your petitioners therefore pray that your Honourable House will not pass the Bill in its present form, but will refer it to a select committee, who may take evidence of competent persons, and your petitioners believe that a Bill may thus be framed which will be acceptable to the public and to the medical profession, and will be successful in the object proposed, viz., the extension of vaccination, and thereby the diminution, and it is hoped, under Providence, the eventual extinction of small-pox.

And your petitioners, as in duty bound, shall ever pray.

(Signed) ISAAC HARGRAVES, *Chairman*.

PHTHISIS IN HASTINGS. BY W. A. GREENHILL, M.D.

Dr. GREENHILL made some remarks on the ratio of mortality from phthisis in Hastings, as influenced by the number of strangers who die there. Dr. Greenhill's communication was followed by an interesting and lengthened discussion.

MEDICAL ATTENDANCE ON SICK CLUBS. BY J. REID, ESQ.

Mr. REID, of Canterbury, made the following communication: When the South-Eastern Branch of the Association met at Tunbridge Wells in 1848, Mr. Thompson, of Westerham, introduced the subject of medical clubs to the meeting, and in a forcible and eloquent speech pointed out many of the evils arising from them; laying particular stress upon the unnatural and injurious rivalry and jealousy that was frequently created on their account, and the gross imposition that was practised upon the profession. The general feeling of the meeting agreed with Mr. Thompson's observations, and certain resolutions were unanimously passed. A subcommittee was formed to carry out these resolutions, and to make a report at the next meeting. I was not present at the meeting at Brighton in the following year, but from the printed report it appears that the subject was again brought before the Association, and the report of the progress which had been effected during the year was made by Mr. Thompson. No specific result had been obtained; but the feeling of the members present seemed again in favour of seeking and applying some remedy. No further allusion to the

subject appears in the printed reports, nor do I remember to have heard any further remarks upon the subject at the subsequent meetings that I have attended.

The remarks made at the meeting at Tunbridge Wells in 1848, impressed me strongly with some of the evils of the existing club system; and I have been anxious ever since to see a fairer and more equitable plan adopted, by which the real benefit of medical aid might be ensured to the industrious and prudent labourer alone. It was, therefore, very satisfactory to find that, in the latter part of last year, circumstances existed which made it probable that something might be definitely effected on this point in Canterbury.

The evils of the system had been long acknowledged and felt by most of the profession, to the extent with some of many condemning the entire system of the connexion of medical men with clubs and friendly societies, etc. Although this feeling was strong, yet the degree of mutual confidence and reliance was not such as to insure a uniform mode of action. In September 1852, a better prospect appeared, and it seemed likely that mutual understanding might be come to.

The members of the profession particularly interested in the subject met, and adopted the following agreement, which had been drawn up in accordance with the spirit of what had been urged at the meetings of the South-Eastern Branch of the Association. It was signed by all present, and other members of the profession subsequently added their names, as wishing to sanction the agreement.

COPY OF THE AGREEMENT

relating to Medical Clubs and Friendly Societies, signed by members of the medical profession in Canterbury.

Canterbury, Oct. 8th, 1852.

It having fallen within our knowledge and experience that the professional services rendered by medical men, in this city and neighbourhood, to friendly societies and medical clubs, are received, under cover of membership, by persons whose pecuniary circumstances and position in society place them above the necessity of using privileges intended for a more needy class, we agree that it is advisable to adopt means for modifying a system which so materially injures the interests of the profession, and induces many, covertly and unjustly, to avail themselves of its charitable tendency.

Whilst we approve of the present system of medical attendance by the surgeons of friendly societies and medical clubs, so far as it is the means of adding to the independent character of the mechanic and farm labourer, and of aiding them in the time of sickness, we are strongly of opinion that the benefit of such assistance should be strictly limited to the working classes, and that master tradesmen, and persons above the rank and means of the day labourer, ought not to receive or avail themselves of such privileges.

We, therefore, agree and pledge ourselves, for the future, not to hold any professional appointment to, or engage with any friendly society or medical club, etc., unless the society or club guarantees that the services required of us shall be limited to the class of persons before specified as the proper recipients of such services.

In order distinctly to define the class we indicate by the term mechanic, farm labourer, day labourer, etc., we agree to include in it all those whose wages and means are equivalent to twenty shillings a week and under.

It may be well to add, that beyond the confidence and honourable trust we hereby place in one another, we consider it incumbent on each of us, in order to carry out an agreement like the present, to cultivate a mutual respect and forbearance as regards each other's interests.

(Signed) THOMAS ANDREWS.
THOMAS SANKEY COOPER.
CHAS. HOLTTUM.
GEORGE RIGDEN.
ALFRED B. ANDREWS.

JAMES REID.
WILLIAM JAMESON.
CHARLES HOWELL.
HENRY DEKKE.
WM. EVANS.

With regard to the sum of 20s., fixed upon in the agreement, it should be observed, that it was decided upon as giving a wide margin to the class of persons indicated. It was known that many, receiving only 12s. or 15s. a week, were not content with the customary charges of their medical attendance, which, of course, much exceeded the payment made by the member. It was felt that, in the absence of any satisfactory information on the point, whatever the limit might be more or less arbitrary; and there would be no just above the limit, that would consider it a duty to attend their own case.

The result of this agreement, up to the present time, has been very satisfactory. There were four societies in Canterbury, which had surgeons attached to them upon the usual plan of payment. Three of these have modified their rules, in accordance with the requirement of the profession; the fourth is only waiting for the appointed time to consider the matter; for it was resolved, at the meeting of medical men, that sufficient time should be allowed the clubs to modify their rules, if they were so disposed, as many could only do so at their annual meeting. Some difficulty occurred with the Manchester Unity, but it was finally settled, as the accompanying printed paper will show. As the society is one that is widely spread through the kingdom, and one in which the evil sought to be remedied exists to a great degree, and as the alteration made in its by-law has been confirmed by Mr. Tidd Pratt, the decision may be considered as an important one, and one that will materially assist in forming a precedent in any district where it may be desired to take a similar step to that made at Canterbury. Should the fourth society, before alluded to, not think fit to alter its regulations, the surgeon who at present acts for them will leave them, and they will be unable to obtain a surgeon in the neighbourhood.

The step which has been taken relates principally to one of the evils only of the club system, namely, the abuse that is made of the services of medical men; but in that step I think a remedy, to some extent, is implied against the other evils which involve, and are injurious to, the proper harmonious feeling that should exist amongst members of the profession in every district. I would especially point to the last sentence of the agreement, as the basis upon which every similar plan should be placed, in order to be effectually carried out; and would add, that, in carrying out that principle to its full extent, less of the mercenary, and more of the charitable view, will be entertained, as regards the benefit accruing from club appointments.

Mr. THOMPSON (of Westerham) stated that as chairman of a committee appointed by the Branch in 1848 to consider the subject of medical attendance on clubs, he was well aware of the very great abuses which arose from this system of attendance upon the classes just above pauperism.

MALIGNANT DISEASE.

Mr. DELVES read a report of two cases of malignant disease, which had been under the care of Mr. Hargraves in the Tunbridge Wells Infirmary, and which were interesting on account of their rapid progress.

THE DINNER: PRESENTATION OF A TESTIMONIAL TO THOMAS MARTIN, ESQ.

The business of the day being concluded, the members sat down to dinner—at the conclusion of which, after the usual loyal toasts—Mr. Hargraves proposed in terms of handsome eulogy the health of the late secretary of the South Eastern Branch, Thomas Martin, Esq., of Reigate, who attended the meeting this day at his request. He called upon Mr. Bottomley, of Croydon, to present to Mr. Martin in the name of the subscribers, a very handsome offering in the shape of an ornamental timepiece.

Mr. BOTTOMLEY recalled to the recollection of the meeting, that, at the last annual meeting at Folkestone, it had been determined to present to Mr. Martin a testimonial of the regard of the members, on the occasion of his retirement from the office of Secretary; and the timepiece now before them was the result of the subscription then commenced. Mr. Bottomley alluded to the various services rendered by Mr. Martin to the profession, in founding the Surrey Medical Benevolent Society, in 1812,—a society which had been very useful, not only in relieving the wants of the widows and children of its members, but in keeping up an improved social feeling among the practitioners of the county. This society had greatly added to the scope of its usefulness, by having recently subscribed the sum of two thousand five hundred pounds towards the building and endowment of the Medical Benevolent College, which he trusted would have the support of every medical practitioner in England. Mr. Martin had also been the founder of the South-Eastern Branch of the Provincial Medical and Surgical Association, which again brought together a larger number of medical practitioners, who, by their united efforts, maintained the dignity, prosperity, and usefulness of the healing art. For these, and many other acts, so laudable in their objects, and emanating from one who had all his life addicted himself to acts of benevolence, and done so much for the support and dignity of the medical profession, in the name of the South-Eastern Branch, he begged Mr. Martin to accept a timepiece, as a small token of regard and esteem, trusting that he would live long to look upon it, and, whenever he did so, he would feel that he was esteemed and respected by the members of this Branch.

Mr. MARTIN, in rising to express his best thanks for the handsome present, and the terms of honourable distinction which had been conferred upon him, observed, that most of the gentlemen then assembled were not aware that he was the oldest Tunbridge Wells practitioner then present, having officiated as assistant to the late Mr. Prince for fifteen months, in the years 1798 and 1799; of which period of time, and the events which occurred to him, both professional and social, he entertained a pleasing recollection. Having been engaged in the practice of medicine for such a long series of years, he felt it a duty to retire from its active pursuit, and, at the same time, to decline a re-election to the office of Secretary and Treasurer to the South-Eastern Branch of the Association,—a position which had brought him more particularly acquainted with the gentlemen then present, and others who were absent; for all of whom he entertained sentiments of the greatest respect. In co-operating with his brother members of the South-Eastern Branch to carry out the objects of the Association, he had always experienced the highest gratification: and, in retiring from his official connexion with them, he had his great reward, in the cordial expression of their kindly feelings of friendship; for which he desired permission most respectfully and gratefully to thank the gentlemen who had been instrumental in presenting to him so handsome and complimentary a testimonial.

METROPOLITAN COUNTIES BRANCH. ANNUAL MEETING.

The First Annual Meeting was held on Tuesday, the 19th instant, at the Brunswick Hotel, Blackwall. The following gentlemen were present:—

E. B. Bowman, M.D. (Dalston); W. J. Bryant, Esq. (Bathurst Street, Sussex Square); Charles T. Carter, Esq. (Hadley); Thomas Charles, Esq. (Lower Belgrave Place, Pimlico); W. Collyns, Esq. (Harlow); John Rose Cormack, M.D. (Putney); John Davies, M.D. (Hertford); Robert Elliot, Esq. (Denmark Hill, Camberwell); John Forbes, M.D. (Old Burlington Street), President; John Grabham, M.D. (Islington); George Grant, M.D. (Richmond); Alexander Halley, M.D. (Queen Anne Street, Cavendish Square); Alexander Henry, M.D. (Alfred Street, Bedford Square); Edwin Howard, M.D. (Harley Street, Cavendish Square); Thomas Hunt, Esq. (Alfred Place, Bedford Square); Charles F. J. Lord, Esq. (Hampstead); William O'Connor, M.D., (George Street, Portman Square); J. Propert, Esq. (Old Cavendish Street); John Pursell, M.D. (Harleyford Place, Kennington Common); Edgar Sheppard, Esq. (Enfield); F. Sibson, M.D. (Lower Brook Street); W. Tyler Smith, M.D. (Upper Grosvenor Street); Joseph Toynbee, Esq. (Saville Row); T. Ogier Ward, M.D. (Kensington); George Webster, M.D. (Dulwich); Thomas Workman, Esq. (Bayswater).

At four o'clock Dr. Forbes took the Chair, and after a few gratulatory remarks upon the progress and prosperity of the Association, called upon Dr. T. O. Ward, the *Honorary Secretary*, to read the Report of the Council.

* "No. 982, a. INDEPENDENT ORDER OF ODD FELLOWS, MANCHESTER UNITY, CITY OF CANTERBURY LODGE. At a summoned committee of the whole of the members of the above Lodge, on Monday, Nov. 29th, 1852, the following propositions were unanimously agreed to: That the 16th bye law be erased, and the following substituted:—

"That Thomas Sankey Cooper, Esq., be the surgeon of this Lodge, and remain in office during the pleasure of the Lodge; and whose duty it shall be to examine all candidates for admission, to attend, prescribe, and supply medicines, leeches, etc., to the sick members, whose average earnings do not exceed £1 per week, and who are clear on the books of the Lodge, whether they claim the sick gift or not; and that for the above, he shall receive 4s. 4d. per annum each member, payable quarterly: the said surgeon shall also attend, prescribe, and supply medicines, leeches, etc., to those members whose incomes exceed £1 per week; and that his charges for the same be paid from the Incidental Expenses Fund. (Members engaging other than the Lodge surgeon, to be deprived of the said provision.)

"Any member requiring the advice of the surgeon, shall produce to him his contribution card, at the time of applying for the same. Members to return or pay for all bottles, etc.

"That the surgeon's circle comprise a distance of two miles from the city, and that he be paid 1s. per mile each visit beyond that distance; the mileage of members beyond two miles and under five miles, to be paid from the Incidental Expenses Fund; but members beyond the distance of five miles requiring his assistance, to pay 1s. per mile each visit over the aforesaid five miles. Fractures, dislocations, etc., to be paid for extra.

"William Pilch, G.M., George Norton, N.G., James Nightingale, V.G., John W. Thomas, Permanent Secretary.

"REGISTRAR'S CERTIFICATE. I hereby certify, that these alterations of rules are in conformity to law, and to the provisions of the statute in force relating to registered friendly societies.

JOHN TIDD PRATT,
The Registrar of Friendly Societies in England.

"Copy kept, J. TIDD PRATT.

18th day of Feb. 1853."

REPORT OF THE COUNCIL.

In presenting their first Annual Report, the Council of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association think it desirable that the attention of the members of the Branch should be recalled to the circumstances under which it was established, in order that they may be enabled to judge how far the hopes entertained with regard to its usefulness have been realized.

At the last anniversary meeting of the parent Association in Oxford, the number of members resident in and around the metropolis was fifty-seven. It was then thought by some of them, that the medico-political objects of the Association, such as Medical Reform, the suppression of quackery, etc., might be promoted by the formation of a Metropolitan District Branch, which, by holding frequent meetings, and taking advantage of the facilities for communication, might exercise greater influence than could be exercised by any of its individual members, however eminent and respected. It was also believed that, by the formation of an active Branch in their immediate vicinity, the great body of metropolitan practitioners might soon be led to take an interest in the Association and to join its ranks, and thus co-operate with the provincial medical men for the furtherance of the interests of the profession throughout the kingdom.

It having been found that a considerable number of the members of the Association participated in this view, and that it also met with the concurrence of Sir Charles Hastings, the founder of the Association and president of the General Council, a preliminary meeting was held on Nov. 26, 1852, when Dr. Forbes took the chair. It was then resolved to call a General Meeting of the members of the Association, residing within thirty miles of London.

The first general meeting was held on January 11, 1853, when it was determined to establish a Branch, including the metropolis and such parts of the adjoining counties as are not included in any other Branch, under the name of the Metropolitan Counties Branch; laws were adopted, and a President, President-elect, Treasurer, Secretary, and Council, were appointed in accordance with the rules for the regulation of district Branches.

The first meeting of council was held February 8th, 1853, when a series of bye-laws was enacted for its guidance. At the same meeting, rules for the regulation of the Branch were revised, and transmitted to the Central Council at Worcester for approval. This consent was obtained, and the rules were then published.

The Metropolitan Counties Branch, immediately on its establishment, began to turn its attention to the relief of the medical profession from some of the disadvantages which seemed peculiarly to oppress it.

On March 1st, a committee was appointed to prepare a petition to Parliament against the unequal pressure of the Income-Tax on medical men. The petition was presented to the House of Commons by Lord Dudley Stuart, after it had received the approval of a special general meeting of the Branch, held on March 16th.

At the same general meeting, a petition to the Houses of Parliament in favour of giving the parliamentary franchise to the University of London, was proposed and adopted.

At a special general meeting, held May 10th, 1853, it was proposed to form a committee to watch the progress of the Medical Reform Bill in Parliament, to communicate with the Medical Reform Committee of the Parent Association, and with other Medical Reform Committees; and to report its proceedings to the Branch. No report has as yet been received from the Committee; but an account of its proceedings appeared in the JOURNAL for June 3rd.

A petition against Lord Lyttelton's Vaccination Extension Bill has also been adopted; and a deputation has been appointed to wait upon the Secretary of State for the Home Department, to request him to refuse his assent and support to any Vaccination Bill, until the profession has been consulted regarding its provisions, and until more information on the subject has been laid before the public.

A petition to Parliament in support of the Lord Advocate's (Moncrieff) Bill, for regulating the admission of professors to the lay chairs in the universities of Scotland, was adopted, and entrusted to Mr. Cowan, the member for Edinburgh, for presentation. The council is glad to perceive that the Bill has passed through the second reading in the House of Commons by a large majority.

The number of members who have paid their subscriptions to the Branch is seventy: but the Council have reason to believe that all, or at least the majority, of the members of the Parent Association, residing within the limits of the Branch, are likely to enrol themselves among its numbers. It does not appear to be generally understood that members of the Association may become members of the Branch, merely by the payment of half-a-crown annually; and this will account for the much smaller number of members belonging to the Branch, as compared with the great number of medical men residing within its limits, who have joined the Association.

From the Treasurer's Report, it will be seen that the expenditure of the Branch has exceeded its income by a small sum. This deficiency has been caused by the heavy expenses for advertisements, postage, circulars, etc., unavoidably connected with its first establishment. These extra disbursements will be entirely avoided in future: and the Council have every reason to expect, not only that the Branch will pay its expenses from the half-crown subscribed by each member, but have a good balance in hand at the next annual meeting.

On the motion of Mr. COLLYNS, seconded by Mr. LORD, the report was unanimously adopted, and ordered to be printed.

THE VACCINATION BILL.

Dr. CORMACK stated (in reply to a question) that he, Dr. Fraser, and Dr. Semple, had not been forgetful of the trust confided to them as a deputation to wait upon the Home Secretary, Lord Palmerston, to remonstrate against any general measure of Vaccination Extension being carried through Parliament, without ample time being afforded to the profession to consider its provisions. Understanding, however, that Sir J. Pakington, who had charge of the Bill in the House of Commons, in deference to the opposition of the medical profession, had agreed not to urge the Bill during this session, they had not as yet fulfilled their mission. In these circumstances, it would have only have been subjecting Lord Palmerston to unnecessary trouble had the deputation waited upon him. They could, of course, still do so, if circumstances emerged which rendered such a step necessary. This was not anticipated; and, indeed, he (Dr. Cormack) might almost venture to congratulate the profession upon obtaining what they wanted—time to deliberate on the Bill of Lord Lyttelton, and the valuable information which had recently been published on the subject of small-pox and vaccination.

GRATUITOUS ADVICE.

Mr. CHARLES moved that a committee be appointed to inquire into the practice of giving gratuitous advice. He said that it was far from his wish to lessen, in the least degree, the liberal and charitable conduct of the profession toward the necessitous poor; but the present "advice gratis" system was so indiscriminate and so extensively adopted in objectionable forms, through every grade of the profession—from top to toe—that inquiry was necessary. The system, he (Mr. Charles) believed to be fraught with many evil consequences, not only to the profession, but to the parties who receive such advice, and to society generally. Instead of being disinterested kindness on the one side, and a grateful boon on the other, it is, in very many instances, a collusion of selfishness and hypocrisy. The question has been prominently taken up by the ASSOCIATION JOURNAL, and it is evidently deeply agitating the profession at the present time. The terms of the motion do not prejudice the question; but if one half of the current rumours be true, an investigation cannot fail to elicit some startling revelations. Mr. Charles then concluded by moving:—

"That a committee be appointed, to inquire into the evils which are said to flow to society and to the medical profession from the practice of giving gratuitous advice indiscriminately and unnecessarily."

Mr. LORD had great pleasure in seconding the motion. There were great evils connected with the present system of club medical relief, benefit societies, and advice gratis at hospitals and dispensaries. It was undoubtedly the duty of the medical profession to be charitable; but it was likewise necessary that the members of the profession should be just to each other. The circumstances which rendered Mr. Proctor's Medical Benevolent College so necessary, might readily be traced to the reckless manner in which unpaid labour was gratuitously given by the profession.

Dr. OGBURN WARD said, that it was very difficult for the young

physician to make himself known in these times, except through the system of gratuitous advice, given either at his own house, or at some hospital or dispensary with which he might become connected. He asked if there was any other way in which a young physician, settling down in a neighbourhood, could make himself known. Through gratuitous cases, he obtains his experience, which may be the basis of introduction to remunerative patients. No young physician can get fees till he be recognised by the public as a man of experience: and how is he to get his experience, except by giving gratuitous advice?

Dr. O'CONNOR, in supporting the resolution, said, that no one could have damaged the position of the young physicians more than Dr. Ogier Ward, by his attempt at a defence of any of their class who resorted to the practices complained of in the resolution. He thought, though he gave his hearty support to the resolution, that to carry it out effectually would be attended with much difficulty. The practices existing at present in London require some check; they are not alone confined to young physicians. We constantly see dispensaries, for special diseases, springing into existence, not to meet the exigencies of the poor, but to bring before the public gaze the name of some individual, whose education, professional or general, does not justify his presumption. He is generally found to be *merely* a member of the College of Surgeons of England, or an honorary fellow under the charter of 1843. Reports of those institutions, whose very existences are so many frauds, are frequently to be seen in the daily papers, and in some of the medical journals. Dr. O'Connor regretted to be compelled to say, that the unprofessional practices complained of in the resolution are not peculiar to young physicians and surgeons. Men of no mean distinction are at the present day, in London, associated with chemists and druggists, in a system of secret formularies, when prescribing for patients, which is disgraceful to the profession; and it is notorious that some who have lately put themselves forward as the champions of the professional morality of the pharmaceutical body—men high in the councils of the Pharmaceutical Society—are parties to such practices. He knew of men who now, to use the words of Mr. Charles, and to adopt them, enter into collusions with chemists, and, though they give advice gratis, receive a per centage on every prescription. It is currently reported, that there is in London at present a Fellow of the College of Physicians, who is the proprietor of a chemist's shop, and who constantly attends there to audit his accounts. It is melancholy to state that, in this metropolis, the system complained of is more common than in the provinces, where the professional character of medical men is far more honourably upheld. He would recommend Dr. Ward's young physician to pursue the toilsome career of the respectable general practitioner, rather than lower his character and that of his profession.

Dr. OGIER WARD explained. He said that he had no wish to oppose the appointment of a committee in terms of the motion of Mr. Charles; for he knew well the great abuses of the advice gratis system. At the same time he had felt that it was right to remember that the question had two sides. He would like Mr. Charles to state how a young physician was to get into practice.

Mr. CHARLES said that it would be for the interests of society and of the profession, if all young physicians would commence as general practitioners. They would then obtain a honourable field in which they could simultaneously gather both fees and experience. There would then be less jostling, and less penury in the profession.

Dr. DAVIES admitted the evils of giving indiscriminate gratuitous advice; but he was doubtful if any abatement of those evils was to be gained by the appointment of the committee.

Dr. BOWMAN mentioned some flagrant violations of professional propriety which had occurred at Dalston, in connexion with the giving of gratis advice by the staff of the German Hospital at that place.

Mr. CARTER mentioned that a gentleman in his neighbourhood, by calling himself a "retired practitioner" and giving "gratis advice," had soon formed a very large connexion. He then gradually made his patients pay, in the first instance upon pretence that the medicines could only be compounded at his own house. At last no one was allowed to leave the house with medicine unless it was paid for; and now he took as much as he could get from those who consulted him. Such cases were very bad; and the other abuses of the gratis system were manifold; but he thought with Dr. Davies that it was hardly to be hoped that the proposed committee could do any good.

Dr. CORMACK doubted very much whether, at the present stage, good would result from a public discussion of special

cases of abuse. He was convinced, however, that if a committee set to work in a conciliatory spirit, some of the enormous evils now prevailing in London from the exercise of a spurious medical philanthropy, might be mitigated. The committee asked for was simply a committee of inquiry: and he therefore hoped that the motion would be carried without opposition.

The PRESIDENT said that it was now his duty to put the question. Before doing so, however, he would wish to say that he hoped it would never be forgotten that our profession is essentially a generous profession; and that, in fact, the physician lies under a moral obligation to give unpaid advice, not merely to the very poorest of the community, but to many gentlemen and gentlewomen of restricted means, such as artists, governesses, and others. He had heard of cases in which some unworthy medical men had treated such persons very harshly, by sending in bills and threatening legal proceedings. The members of the medical profession must not descend to the level of attorneys, who do nothing for nothing. Unless we do much for nothing, we cannot do what is right. (Applause.)

The motion was then put, and carried unanimously.

It was then moved by Mr. CHARLES, and seconded by Mr. TOYNBEE,

That the Committee consist of the following gentlemen:
 Henry Ancell, Esq. Charles F. J. Lord, Esq.
 Thomas Charles, Esq. William O'Connor, M.D.
 John Rose Cormack, M.D. T. Ogier Ward, M.D.
 Patrick Fraser, M.D. George Webster, M.D.;
 with power to add to their number.

CONSTITUTION OF THE COUNCIL OF THE BRANCH.

Some conversation took place regarding the manner in which the members of Council of the Branch should be in future elected. By Rule VII, one-third go out annually, viz., those who have attended the smallest number of meetings. Dr. Davies complained of this as pressing hard on country members, who had twenty or thirty miles to travel to town. Upon the suggestion of the President, Dr. Davies promised to bring the subject before the Council at its next meeting.

VOTE OF THANKS TO THE EDITOR.

Mr. CARTER said that he had a motion to propose, which, though not upon the paper, might be introduced without a long preface. At the annual meeting of the Association, held last year at Oxford, he had strenuously opposed the project of publishing the JOURNAL in London; but he was now ready to admit that the system had worked well, and that the present weekly publication had been commenced and maintained with great energy and ability by Dr. Cormack, who, for his labours, merited the best thanks of this meeting. He (Mr. Carter) had observed that a similar motion had been lost at the annual meeting of the Lancashire and Cheshire Branch, apparently because some members thought that approval of the present implied a censure of the past. He disclaimed any such intention in bringing forward this motion. He admired the manner in which the JOURNAL was now conducted; and he simply asked the meeting to concur with him in expressing its approval. He therefore moved—

"That the best thanks of this meeting be given to Dr. Cormack, for the able and satisfactory manner in which he has discharged the important office of editor of the ASSOCIATION JOURNAL."

Dr. SIBSON had great pleasure in seconding this motion. Perhaps he might be allowed to say, that in some recent numbers he had thought that topics not purely medical had occupied too prominent a position; and that the letters of some correspondents ought to have been pruned by the editor before they were published. As regarded the policy of transferring the JOURNAL to London, he entertained such grave doubts at the Oxford meeting, that he had not then voted. He then felt that they had an excellent journal; and he was not anxious to risk the prosperity of the Association by trying to get a better. In conclusion, he would only say, that he cordially seconded the motion, because he was well satisfied with the JOURNAL, and because he knew that the present editor would truckle to no one, that he was an honourable man, and one who was well qualified to maintain the character of the profession.

Dr. WEBSTER could not give a silent vote in support of Mr. Carter's motion. Upon him, along with a few others, had devolved the great responsibility of selecting an editor; and it was with feelings of the deepest pleasure that he heard from every one with whom he had professional communication, that the manner in which the JOURNAL was conducted gave universal satisfaction. His own opinion coincided with that of an eminent physician, whom he had that day met, viz., that the ASSOCIATION

JOURNAL was not only an excellent medical journal, but the best medical journal. The gentleman to whom he referred had requested to be proposed as a member of the Association, entirely from his admiration of the JOURNAL; and he (Dr. Webster) knew that the vast majority of the four hundred and odd members who had recently joined the Association, had been attracted chiefly by its excellence; and many old members had remained members, who would have resigned, had the Oxford decision not been carried out.

The motion was then put, and carried by acclamation.

The PRESIDENT, addressing Dr. Cormack, said that he had much pleasure in communicating to him the vote which had just been unanimously passed.

Dr. CORMACK said, that the kindness of the meeting had entirely taken him by surprise; and he was therefore not prepared to speak on various topics which the subject naturally suggested. There was one point, however, to which he felt happy in having afforded to him this opportunity of alluding. He knew that it was correct to ascribe much of the present and increasing prosperity of the Association to the great acceptance which the Journal had received from the profession; but then he could not claim more than a fraction of the merit of this result. At Oxford, there had been an anxious contest as to the continuance of the Journal at Worcester, or its removal to London. There was a division of opinion among the best friends of the Association. Many, after the decision, believed and stated, that the chagrin and disappointment of the vanquished party was so great, that they would not co-operate with the other side in supporting the new arrangements, and that they would keep together as a party, that they might ultimately gain the mastery. Now, a very different and a more generous course of action had been adopted. When it was seen that the Journal Committee was really empowered to make the changes which it had made, a cordial union was speedily established among all parties; and, indeed, the very dread of disruption had become a prolific source of strength, as it had roused the energies of all the true friends of the Association. The present prosperity was, therefore, mainly due to this noble and generous conduct; and it was by it that he (Dr. C.) had been placed in so peculiarly advantageous a position—a better position than any of his predecessors had ever enjoyed. To the kindness, courtesy, and confidence which had been bestowed upon him by Sir Charles Hastings, the President of the Council, and Mr. Sheppard, the General Secretary, he owed much; and he was quite sure that there was no man more delighted at the success of the Journal than Sir Charles Hastings, whose conduct in this, as in all other Association affairs, was simply regulated by a desire to promote the good of the profession. (Applause.) Sincerely thanking the meeting for the vote of encouragement and confidence which they had passed, Dr. Cormack concluded by saying that he hoped, by industry and integrity, to continue to merit their approbation.

VOTES OF THANKS TO THE OFFICERS.

It was proposed by Dr. DAVIES, seconded by Dr. BOWMAN, and unanimously carried—

"That the thanks of the meeting be given to the President, President elect, Treasurer, Secretary, and Council, for their labours since the establishment of the Branch."

It being now past six o'clock, the meeting adjourned.

THE DINNER.

The party reassembled at half-past six o'clock, in the large dining-room of the Brunswick Hotel, which so pleasantly looks down upon one of the most interesting and ever varying scenes of the busy Thames. The entertainment, both for body and mind, was excellent; and all seemed to feel that such festive occasions ought to be looked upon as contributing in a very important degree to promote the brotherly communion, unity, and usefulness of the profession. The President, Dr. FORBES, occupied the chair; and the President-elect, JOHN PROPERT, Esq., officiated as vice-chairman.

After the cloth was removed, the following toasts were given in succession:—

1. "The Queen", by the Chairman; who, after passing a high eulogy on Her Majesty, said that she had a peculiar claim at present upon doctors, as she was a patient, having measles. This toast was most loyally responded to; and the company, upstanding, sang "God save the Queen", the lead being very effectively taken by Dr. Ogier Ward.

2. "The Prince Albert, the Prince of Wales, and the Royal Princes and Princesses", by the Chairman. After the toast had been drunk, the Chairman having asked if any one would give

an appropriate song, Mr. Collins volunteered, and sang some verses in honour of the Royal family, composed by himself.

3. The Chairman next gave "The Provincial Medical and Surgical Association—continued and increased prosperity to it; and with it the health of Sir Charles Hastings", whom to name is to praise, a true, honest, and good man, whose single minded ambition is to benefit the profession. (Loud applause.) This toast was drunk with three times three, upstanding.

4. "The Metropolitan Counties Branch of the Provincial Medical and Surgical Association"; which, though not yet one year old, is already a strong and flourishing member of the parent trunk.

5. Mr. PROPERT, the Vice-chairman, proposed the health of "The President", in a very eloquent speech, which was received with great applause. Dr. FORBES, in returning thanks, said that, although he felt that he was not now the man he had been, and although old age had caught him in its clutch, he trusted he might yet have strength left for some time to come, to co-operate with his friends in promoting the great objects of the Association.

"The Fine Old English Gentleman" was then sung by Mr. Carter of Hadley.

6. Dr. WEBSTER, of Dulwich, gave "John Propert, Esq., the President-elect". He expatiated upon the philanthropic and successful exertions of Mr. Propert in the cause of the Medical Benevolent College. It was indeed wonderful to contemplate what Mr. Propert had achieved. It would be remarkable under any circumstances; but when it was known that Mr. Propert was immersed in one of the largest London practices, the results which he had obtained were truly astonishing. The name of John Propert would go down to future generations, inseparably connected with the history of the medical profession.

7. "The Irish Medical Association and its President", by the CHAIRMAN.

8. "The Honorary Secretary, the Treasurer, and the Council", by Mr. COLLYNS. Dr. Ogier Ward and Mr. Toynbee returned thanks.

9. "Dr. Cormack, the Editor of the Association Journal", by Mr. HUNT. Dr. Cormack returned thanks.

The CHAIRMAN then gave "Good Night"; and the party broke up about 10 o'clock.

EDITOR'S LETTER BOX.

THE ALLIANCE BETWEEN RELIGION AND MEDICINE.

LETTER TO THE EDITOR FROM ΠΡΕΣΒΥΤΕΡΟΣ.

SIR,—I have before me the numbers of the ASSOCIATION MEDICAL JOURNAL for the present year. I have carefully perused these numbers as they issued from the press; and I am anxious to bear my testimony that they contain an efficient supply of valuable practical information, and a powerful advocacy of the rights and privileges of the medical practitioner.

I am now an ex-member of the practising body of medical men, in the ordinary meaning of the term, having been for a few years past engaged in a profession of a still more sacred kind; and it may not be conceded to me to judge of practical matters in medicine. But, having spent twenty-seven of the best years of my life in medicine, and taking as warm an interest now as I ever did in watching and relieving the sufferings of those around me, who cannot pay for a doctor, may I not still be allowed an opinion in matters of this kind? It shall, however, be expressed at present in very few words. I feel, then, the greatest possible satisfaction in giving it as my humble conclusion, that the practical department of the Journal has become more valuable, and I heartily concur in what may be called the spirit of the statements made at the recent Branch meetings, that if members continue to support you as they have hitherto done, we shall have a treasury of knowledge of the greatest value.

But my great object at present, is to bear my humble testimony to the bold, energetic way in which you have advocated the rights and privileges, while you have not sought to hide the responsibilities of your noble profession. In the cause of Medical Reform, you have been vigilant in keeping before the Association the necessity of action at the proper periods; and this assisted to keep alive, I trust, that *esprit de corps* which is necessary, and which is indeed alone able to secure this all important object. May the flame thus excited not be quenched till quackery, with its innumerable evils, be finally rooted out.

To me, it has always been a painful subject; and, when so placed that it cannot be said I am interested peculiarly (for I have often had it rung in my ears that "the doctors fear quackery, lest their own gains should suffer from it"), I can venture to assure you, that the *expression* of my honest indignation daily increases, when I see how my parishioners and others are deluded by quacks. That which has always been to me a source of disquiet, is the little hope that the mass of people can ever be sufficiently well informed on those points, a knowledge of which is necessary to enable them to judge of the *dangers* of quackery, and of the inestimable value of scientific practice. My feelings have been put to the most painful trial, again and again, when, going my rounds as a spiritual adviser of those committed to my charge, I have seen persons committing their lives unreservedly to the uneducated charlatan. Would that the members generally of the sacred profession, to which I now more particularly belong, had the means of acquiring a sufficient amount of anatomical and physiological knowledge, to enable them to discern what constitutes sound medical treatment; and then there would be no necessity for your bringing any of them before the public as abettors of any species of quackery. I was in the company of an aged clergyman and two or three ladies, a very short time ago. One of the latter spoke in favour of "homeopathy", not knowing that I was an M.D. I proceeded to dispute the accuracy of her statements, when, to my surprise, my clerical friend rushed to her aid! He is, perhaps, better informed in divinity and literature than most of the clergy, and is a good specimen, therefore, of his profession; but he is totally ignorant of the theory of medicine, and consequently of its right practice. I mention this case, to show you that it is absolutely necessary, either to educate gentlemen in the science of medicine, to a certain extent, or to enact laws to protect them from the quack. The latter might readily be done: the former, only to a very partial extent, I fear. If the population at large of this country could but for one moment see into the depths of danger, on the one hand, from quackery, and of safety, on the other, from educated practice, what a rush there would be made to petition to Parliament for a "Medical Reform Bill". Lord Palmerston would then have no difficulty in his way, save one, and that would be to get their earnest cravings sufficiently soon satisfied. Go on then, sir, in your denunciations of quackery; and my earnest wish is, that the medical men of the provinces may rally round you, and show to the world that our Association is in earnest, and that the cause it has in hand is not individual, but general,—is not only worldly, but also heavenly in its tendencies; and that, while they desire for themselves and their families an honest livelihood, and a respectable position in this world, their grand aim and end is the relief of their fellow men from pain and suffering of body and mind.

Thus far have we *implied* the dangers that follow to the body from ignorant practice, but there is a moral evil which we cannot any longer with safety overlook. I mean that resulting from quack advertisements. You have brought this matter forward in a manner that cannot be gainsaid, in the number for 17th June, and I hope these and other papers may do much good in drawing special attention to this most glaring evil. You do not allude to the fact that a society has been formed for the suppression of "vicious advertisements". Last year, I laid hold of a tract (which I now enclose), published by an union established for this purpose.* If it still exist, it should certainly be aided by medical men and clergymen, and indeed, by all right minded persons.

I admire the Christian spirit with which you embue your remarks. Be assured the time has gone past when medical men shall hesitate to mix up with their godlike profession a Christian confession. Glad am I to know (although I never favoured the too prevalent notion that they were, as a body, contemptuous on the point) that there are vast numbers of "good men and true" in the medical profession who "earnestly contend for the faith once delivered to the saints", and that they are not ashamed to acknowledge Him who set them the noble example of going about doing good. The petition to Parliament against the opening of the Crystal Palace on Sunday, by so many medical men, speaks loudly in favour of my opinion. The letter in opposition to this movement, in the number for 1st July, you have convincingly combated.

It is a very easy matter, for any one who chooses, to say: "You cannot get the people who would visit the Crystal Palace to go to church, and they had better be at the former than in a worse place." To deny the latter clause of this assertion, would be simply absurd. But, I would just ask this simple question:

* This Society may now be revived.—EDITOR.

"Is it not our business *rather* to devise means to induce people to serve God, than to indulge their senses?" To say that because people won't go to church, we are to prepare places of amusement for them on Sunday, is, indeed, a palpable absurdity on the part of a Christian—nay, may I not say, a positive act of sin. If we cannot lead them to the house of God, shall we set up a "temple of pleasure" in opposition to it? The spirit that actuates man in this direction, benevolent though it be, has *caused*, and, I fear, will *cause*, much evil. Moreover, it cannot be insured to us that *the mass* who indulge in vicious habits on Sunday will go to the Crystal Palace, if it were open to them. On the contrary, they are the persons who could not afford to do so. This sinful indulgence must be paid for, and would be the privilege of those who could do so, and would lead to the desecration of the Lord's Day to a fearful extent, and, as you justly observe, be the means of bringing upon a *certain* class *extra* toil. In a word, it would become a national and individual sin, the consequences of which would be incalculable.

But, to conclude a letter, which some may perhaps call a "sermon", already too long. A love for *scientific medicine* induced me to continue a member of the Association after I had entered the sacred office which I now occupy; and it gladdens my heart to find, that my wish to continue a *faithful alliance* between divinity and medicine, was not setting up a false theory, for it is daily shown to me that medical men are now more strongly inclined than ever, to consider them "compatibles"; and as it was meat and drink to Him, in whom is all our hope of good, for time and eternity, to join bodily with spiritual relief, so are we content to do His will. In letter No. 4, in the last number of the JOURNAL, on this Sabbath question, I read the workings of the heart and mind of a man, at whose feet I should feel it an honour to sit and learn wisdom. He evidently feels his advocacy is on the right side of the question.

I trust, sir, none of my medical brethren will set down this expression of my feelings as a piece of clerical "cant" so called, for I have not the slightest disposition to indulge in it. The *educated, manly, straightforward, honest hearted, humble minded*, Christian is the person I admire; and I would always endeavour to work through the *understanding* as well as the heart, in engaging my people to follow in the steps of Him who "is the way, the truth, and the life". I am, etc.,

Peter Burgess, M.D.

July 18th, 1853.

[We are again obliged to defer the letters which were in type last week; they shall soon appear, together with the Petitions on the Sunday Question from Edinburgh, and from the Macclesfield Medico-Ethical Association. Many letters on Anæsthesia in Parturition, on Life Insurance Companies, and other topics of interest, have been received.]

NEWS AND TOPICS OF THE DAY.

THE AZTECS IN LONDON.

The *Times* has created an extraordinary interest in two children, now exhibiting in London under the name of Aztecs; but which, according to Mr. Owen's statements at the Ethnological Society, are more probably the dwarfed offspring of a cross between the Spanish inhabitants of Mexico, and a mongrel breed containing a slight admixture of Indian blood. Premising that we incline to the theory of Professor Owen, we subjoin the greater part of the circumstantial statement on the other side which was published by the *Times*. It is eminently calculated to captivate the wonder loving multitude, and to make the Aztecs a lucrative speculation.

"The scientific public has lately been much interested by the arrival of two children, of a race hitherto strange to London, from a mysterious region of Central America. That they were introduced to the Queen on Monday last is one of the facts of the *Court Circular*.

"Professor Anderson, by whom the children are accompanied, has arrived at the conclusion that the boy is 17 years of age and the girl 11.

"The boy is the type of the pair. His forehead is retreating; and this, with the size of his nose, which is strongly marked aquiline, gives the face a birdlike appearance. The upper jaw projects, while the lower jaw recedes, so that when the mouth is closed the under teeth do not touch the upper, but approach the middle of the palate. The countenance produced by this

strange combination of features is at the first glance idiotic, but the impression of idiocy is soon removed by the bright intelligence which sparkles in the large eyes, and by a restless curiosity, which is visible in every gesture of the little creatures.

"The sight of a new type of humanity only three feet high, without the deformities of ordinary dwarfs, is of itself highly curious; but these children are rendered still more remarkable by an historical theory which is connected with them. The region whence they are brought is said to have been the place of refuge chosen by the Aztecs when driven from Mexico by the conquering sword of Cortes, and it is supposed that they are among the last surviving relics of that ill-starred race, with whom we have recently been made familiar by the researches of Mr. Prescott and Mr. Stevens. The children bear the strongest resemblance to sculptured figures unquestionably of Aztec origin; and on one occasion, when an ancient Mexican idol was brought to them, they recognised it, and embraced it at once. It seems that while they were at New York (where they created a great sensation) this idol was accidentally broken, and that the boy burst into an agony of grief at the calamity. The smallness of the children's stature is accounted for by a well known cause of degeneracy—namely, a prohibition against marriage with strangers or members of an inferior caste. It is to the sacerdotal caste, which would rank like that of the Brahmins in India, that the children are assigned; and so rare have the individuals of this race become, that it is said they have been advanced from the position of priests to that of gods—no very difficult advance under a system of theocracy. The fact that when the children sit down they fall into a posture which is general among Mexican idols, and which would be extremely difficult if it were not the result of early training, is in favour of this supposition.

"Having given the chief particulars of internal evidence that the children are really Aztecs, we now subjoin the external evidence in the shape of a statement furnished by the exhibitors:—

"In 1848 Mr. Huertis, of Baltimore, and Mr. Hammond, of Canada, attempted to explore Central America. They had read Stevens's account in his *Central America* of a conversation between himself and a priest residing at Santa Cruz del Quiche, relative to an unexplored city on the other side of the Great Sierra range, the glittering domes and minarets of which the priest averred having seen from the summit of the Sierra. The people, manners, and customs of this city were supposed to be precisely the same as in the days of Montezuma. Messrs. Huertis and Hammond arrived at Belize in the autumn of 1848, and, turning south-west, arrived at Coban on Christmas Day. They were there joined by Pedro Velasquez of San Salvador, a Spaniard. From Coban they proceeded in search of the mysterious city. From Velasquez alone is any account of their travels to be obtained. Huertis and Hammond have never returned to tell their tale. According to the statement of Velasquez, on the 19th of May they reached the summit of the Sierra, at an altitude of 9,500 feet in lat. 15° 48' N., and beheld in the distance the domes and minarets of a large city, apparently of an Egyptian character, and about 25 leagues from Ocosingo, in the same latitude, and in the direct course of the River Usumacinta. This city they eventually reached. Velasquez describes it to be of vast proportions, with heavy walls and battlements, full of temples, gigantic statues, and pagan paraphernalia; the people having Peruvian manners combined with Assyrian magnificence, and bound to remain within the walls, seeking no intercourse with the world around. The name of the city is Iximaya. The travellers were informed that white men had previously entered it, but that no white man had ever returned. Hammond and Huertis were both slain—the former in entering the city, the latter in endeavouring to make his escape.

"Velasquez being more wary, lulled his captors into security, and not only escaped himself, but brought with him two children belonging to the priests—the two now in England."

THE ABORTION CASE, to which we referred at p. 410 of the number for May 13th, was tried on Wednesday, 6th July. Cunningham, the principal party implicated, was convicted and sentenced to fifteen years transportation. In the indictment he was designated "a surgeon"; but so far as we can learn he had no right to be so described. In the present state of the law, it appears that any miscreant may with impunity assume a medical or surgical title as a cloak for iniquitous practices.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

- GIBBON, Septimus, M.D., elected Assistant-Physician to the London Hospital.
GUTHRIE, G. J., Esq., F.R.S., elected Vice-President of the Royal College of Surgeons of England.
*HALLEY, Alexander, M.D., elected Physician to the Blenheim Street Dispensary.
LAWRENCE, William, Esq., F.R.S., elected Vice-President of the Royal College of Surgeons.
LUKE, James, Esq., Surgeon to the London Hospital, elected President of the Royal College of Surgeons.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

- DEARNS, R. P., Esq., Staff Assistant Surgeon of Her Majesty's Forces, at Antigua, of yellow fever, aged 27, in June last.
FORBES, William D., Esq., Surgeon, at Comrie, Perthshire, on June 28th.
GREEN, Henry, Esq., Surgeon, at the Oven Diggings, Melbourne, South Australia, aged 44, lately.
JERROLD, Thomas, M.D., at Greenhill Street, Manchester, aged 84, on June 24th.
LANE, J. HUNTER, M.D., of Brook Street, Grosvenor Square, at Brighton, on June 23rd. Dr. Lane was for some years a practitioner in Liverpool and Lancaster; and the author of many works on medical science.
O'FLAHERTY, Dennis, M.D., at Croom, County Limerick, Ireland, on June 20th.
*OUTLAW, A. M., Esq., Surgeon, at Wellesborough, Northamptonshire, aged 87, on June 4th.
WAINHOUSE, Alfred, Esq., Surgeon, at Halifax, on June 29.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

- *ALLEN, P., M.D. DEAFNESS AND DISEASES OF THE EAR ARISING FROM SMALL POX, SCARLET FEVER, AND MEASLES. 8vo. pp. 70. London: 1853.
*BALCOMBE, H. S., M.D. ESSAYS. [Printed for private circulation.] 12mo. pp. 52. York: 1853.
*BLACK, C., M.D. PATHOLOGY OF THE BRONCHIO-PULMONARY MUCOUS MEMBRANE. 8vo. Edinburgh: 1853.
*BRAITHWAITE, W. RETROSPECT OF MEDICINE. Vol. xxvii. January—June 1853. 12mo. pp. 464. London: 1853.
FAMILY ECONOMIST. Volume Fifth. 12mo. pp. 236. London: 1853.
*GOODSER, John, F.R.S.E., Professor of Anatomy in the University of Edinburgh. ANNALS OF ANATOMY AND PHYSIOLOGY. No. III. [This number is devoted to Bibliography. It embraces papers and separate works published from 1849 to the end of 1852.] Royal 8vo. pp. 146. Edinburgh: 1853.
LYONS, Robert D. RESEARCHES ON THE PRIMARY STAGES OF HISTOGENESIS AND HISTOLYSIS. Pamphlet, pp. 16. Dublin: 1853.
MARTIN, Wm., Esq. ON BRONCHOTOMY. 8vo. pp. 22. Calcutta: 1853.
*RANKING, Wm., M.D.; and *RADCLIFFE, C. B., M.D. HALF-YEARLY ABSTRACT OF THE MEDICAL SCIENCES. Vol. xvii. January—June 1853. 12mo. pp. 370. London: 1853.
VAN OVEN, Barnard, M.D. ON THE DECLINE OF LIFE IN HEALTH AND DISEASE. pp. 300. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ADVERTISEMENTS.

Just Published, Part I, with Engravings on Wood, Price 3s. 6d.

The Pathology of the Bronchio-PULMONARY MUCOUS MEMBRANE. By C. BLACK, M.D., Bachelor of Medicine, and formerly Medical Scholar in Physiology and Comparative Anatomy in the University of London; Fellow of the Royal College of Surgeons of England, &c.
London: SIMPKIN, MARSHALL, & Co. Edinburgh: SCOTT & KNOX.

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ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXX.

LONDON: FRIDAY EVENING, JULY 29, 1853.

NEW SERIES.

GENTLEMEN WISHING TO JOIN THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION ARE REQUESTED TO APPLY TO THE GENERAL SECRETARY, TO THE BRANCH SECRETARIES, OR TO THE EDITOR OF THE JOURNAL. The Annual Subscription is One Guinea. The Subscription runs from January to January; and members now joining will receive the Numbers of the JOURNAL from the commencement of the year. Members receive the JOURNAL free by post.

IRREGULAR DISTRIBUTION OF THE FEES OF PAROCHIAL MEDICAL OFFICERS.

A LETTER from Dr. PHILPOT BROOKES, which in February last appeared in the *Cheltenham Examiner*, on the subject of the fees of medical officers, lies now before us. It reminds us that an important fact ought to have been stated in our last week's leader on poor-law medical relief, viz., that the beggarly salaries which the law allows for medical attendance on the sick poor are distributed so irregularly, that the hardest worked practitioner is not uncommonly the worst remunerated.

Dr. Brookes's letter was written to the "Medical Committee of the Board of Guardians of the Cheltenham Union". Some complaints had been lodged against him by the Rev. C. B. TYRE, and he wrote to prove that they were utterly unfounded.

It seems that the number of cases that come annually under the care of Dr. Brookes are 856, amongst which are included several serious surgical cases. To these also may be added numerous others not returned in the weekly medical book. His own statement is: "I have upwards of 1,000 new cases yearly, and generally from eight to ten patients daily."

It will thus appear—our calculations of last week being remembered—that Dr. Brookes performs at least four times the average amount of parochial service, and he ought therefore, in common fairness, to receive four times the amount of salary, or £332 per annum. We do not know what the amount of Dr. Brookes's salary may be. That it does not reach the sum we name, we are fully convinced; and if it did, the miserable meanness of the poor-law authorities would stand out just as prominently as ever, inasmuch as Dr. Brookes either reduces the average sum of £83, which, as before stated, falls to the 3,233 parochial medical officers of this country, by receiving himself an unusual sum, or he suffers three or four times the penalty by receiving an amount that approaches only to the average share.

Dr. Brookes's case is not an exceptional one. We are acquainted with several instances in which a union practitioner, with six and eight hundred patients annually, receives no more pay than another with half that number. Still more painful is it to know the fact, that the extent of an union district scarcely affects the salary in an appreciable degree. Far down in the country, an union district often extends over many miles of dreary, dirty, broken

country, where no chaise can travel. On horseback, early in the morning, starts out the medical officer, and except that he has a saddle, that he dismounts occasionally, and that he possesses generally a *tame* horse, he is for the day as close an equestrian prisoner as was Mazeppa.

In the neighbourhood of London, on the contrary, the district practitioner has his patients very near to his own door; his travelling is attended with few difficulties, his time is saved, and his surgery necessities are obtained from town with little trouble or expense.

Still, as we said before, the two officers thus dissimilarly situated receive salaries exceedingly similar; nay, in some instances, that of the country practitioner is less than that of the suburban, or metropolitan. Nor is there any probability that this state of matters will end, until the Government removes the power of affording medical relief to the poor from boards of guardians, who, in all cases, purchase the services of the medical man on the same miserly scale as they purchase from the hay and corn dealer the constituents of that water gruel, with which they drench the miserable inmates of their gaol asylums.

In making these remarks, we wish particularly to state that it is no object of ours to draw painful distinctions betwixt the services and rewards of parochial medical officers. It is our object to benefit the whole class of parish doctors, than whom, no men more worthily deserve to be benefited. To equalize the wretched pittance at present given for their services would be impossible, since the endeavour to subtract from the salary of the best paid, would be well nigh equivalent to "taking the breeks off a Highlander".

THE MEDICAL SOCIETY OF LONDON AND THE SCIENCE OF PHYSIOLOGY.

SOME months since, on the 18th of February, we informed our readers that the Council of the Medical Society of London was projecting the establishment of a section, or sectional committee, for the cultivation of physiological science. We have now the gratification of stating that the project is in a great degree realised; that an active physiological committee has been elected; that this committee is open to receive papers written or communicated by any fellow of the Society; and that special evenings are to be appointed for the reading and discussion of such papers as may be approved of by the committee.

Few members of the profession will fail to approve of this movement of the London Medical Society. It was every day becoming more and more obvious that a physiological society in London was absolutely required; while side by side with this feeling, existed another, viz., that separate medical societies were already so numerous, that to belong to all of them, and to pay a yearly subscription to each, gave rise to an expense which many earnest scientific men were not able to meet without great self sacrifice. It was

also pretty well understood that such an expense was quite unnecessary; that it was simply absurd to allow a set of rooms to be filled one night in the week with a scientific throng, and to be allowed to remain dark and vacant all the other nights; and that it would be possible for one of the old and distinguished scientific societies to make the excellent precedent of establishing within itself a section, which should, at one and the same time, encourage the prosecution of an important special science, lessen the demands on the purse (often not the richest) of the truly scientific man, and add additional lustre to the parent body.

This precedent the Medical Society of London has established; and, with heart and soul, we wish the project every success. Moreover, we have every reason to believe that the experiment must be successful. The Fellows of the Society, with a few exceptions, have, as far as we can learn, entered warmly into it; the committee have already received promise of sufficient papers for the next session; and many physiologists, who have no connexion whatever with the Society, have expressed to us the interest they take in a movement so well calculated to lead to important results.

So long as the Physiological Committee of the Medical Society of London continues to carry out its functions in a spirit of earnest devotion to the advancement of science, it will be our desire to render to it all the support we are able to give.

PROPOSED SOCIETY FOR THE SUPPRESSION OF FRAUDULENT AND OBSCENE ADVERTISEMENTS.

THE organization of this Society proceeds favourably. Gentlemen who desire to become members are requested to communicate with Dr. Cormack, Putney, who has consented to act for a short time as Honorary Secretary. A list of the Provisional Committee will be published about the 1st of September, when the period of the first meeting of the Society will likewise be intimated.

We rejoice to find that we are certain to have some warm allies among the better class of newspapers. The *Scottish Guardian*, a Glasgow newspaper of very large circulation, thus refers to our labours.

"The ASSOCIATION MEDICAL JOURNAL which has done good service to the Sabbath cause, as our readers have lately seen, has commenced a vigorous attack upon the publishers of quack advertisements. Warmly approving of the views of this excellent periodical, we give a place to them in the first page, and recommend them to the serious attention not only of the publishers of quack advertisements, but of the heads of families who receive this pollution into their households."

THE HISTORY OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH TEACHES A LESSON TO OUR ASSOCIATION.

THE Royal Medical Society of Edinburgh is one of the most interesting, and one of the most useful medical institutions of this country. From the circumstance of its being a student's society, it necessarily experiences many vicissitudes, both in the number and the vigour of its members; but, nevertheless, at the end of one hundred and sixteen years,

it is truthfully declared to be in as palmy and prosperous a condition as it ever enjoyed. It has lately yielded to the pressure of migratory reform, and removed from Surgeon's Square, to a splendid new Hall in a modern and more favoured quarter. Alluding to this change, Dr. W. M. Dobie, the senior annual President, said in his valedictory address, recently printed at the expense of the Society:

"Gentlemen, I am sure you will agree with me in thinking that we have now brought to a conclusion one of the most remarkable and eventful sessions which it has been the lot of our Society to complete, during the whole period of its long and illustrious career. If we may be allowed to judge by the testimony of the older members, the Medical Society has now attained an eminence, equal to that of any period in its past history."

We must quote another extract from Dr. Dobie's address, because we think that it conveys a lesson to our own institution, which ought not to be neglected. It shows that a well nursed *reserved fund* forms the best hope of prosperity and perpetuity; and it painfully reminds the members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION that they have no such source of reliance.

"The easy transition we have made from the murky region of Surgeon's Square to this commodious building, makes one almost ready to fancy that some magic has been, in this instance, at work, and that, like an Aladdin's palace, our Hall has risen up by enchantment. But I would now remind you, gentlemen, that the case is far otherwise; these splendid results are the effects and fruits of the well directed labours, and the self-sacrificing liberality, of those who have immediately gone before you. Through the careful economy of our predecessors, and more especially from the prudent management of the finances of the Society by our esteemed Treasurer, Mr. Macfarlan, the Society has been able to lay aside a sum of money, which has gradually accumulated to £1,300. In the year 1850, when the members of this Society resolved to accept the offer of purchase of the Hall in Surgeon's Square, made by the managers of the Royal Infirmary, the Society reluctantly agreed to sacrifice, if necessary, a portion of this fund to assist in the building of a new Hall. But, that this encroachment on a sum that has more than once rescued the Society from destruction, might not be required, every attending member came forward in the most liberal manner to procure advantages, not to be enjoyed by themselves, but by you,—their successors."

Mark the words—and we know them to be true—"The reserve fund has more than once saved the Society from destruction." Now our Association has, it is true, no buildings and no library to maintain; but it has great expenses to meet, which cannot well be curtailed, and which perhaps ought to be increased. At present, all may be *couleur de rose*, and it may not be difficult to keep our expenditure within our income: yet evil days may come upon us; our best men may die, or become unpopular; and then, with funds enfeebled by resignations, where would the ASSOCIATION be, without the temporary aid of a reserve fund? In great difficulty and peril, we hesitate not to reply. In this, then, the time of our prosperity, let this momentous question of a reserve fund be fairly considered; and, if it be patiently and profoundly examined, we have no fears as to the result. Ere another anniversary come round, we trust that a good scheme for a reserve fund may be matured; and that perhaps even a nucleus may be formed by the donations of the generous and wealthy.

ORIGINAL COMMUNICATIONS.

INVERSION OF THE UTERUS AFTER PARTURITION, FATAL IN SIXTEEN WEEKS; WITH REMARKS.

By F. W. MACKENZIE, M.D.Lond., Physician to the Paddington Free Dispensary for Diseases of Women and Children.

FRANCES GRIFFITHS, aged 26, married three years, of short stature, but well proportioned, was admitted into the Paddington Infirmary, December 15th, 1852. She was suffering from anæmia in an intense degree. From her history, it appeared that it had followed a confinement, which had taken place rather more than two months previous to her admission. This had been attended by an unusual amount of hæmorrhage, which had frequently recurred subsequently; and her husband being out of work, she had since been in a very destitute state, and obliged to undergo much physical fatigue. On admission, the hæmorrhage had ceased; and, as she neither complained of any uterine symptoms, nor stated anything which led to a suspicion that any particular lesion had occurred during labour, no immediate examination of the uterus was made. She was ordered to be kept perfectly quiet in the recumbent position, and to have a light nutritive diet; and the mineral acids were prescribed, with occasional mild aperients. For three weeks, she continued progressively to improve, scarcely any hæmorrhage occurring during this period. She gained strength and colour; and the only alteration made in the treatment consisted in the addition to each dose of the mineral acids of ten minims, increased to fifteen, of the muriated tincture of iron.

Her favourable progress continued until January 4th, 1853, when menstruation began. This commenced normally, without pain, and without being excessive; but, in anticipation of its becoming profuse, she was ordered to take gallic acid in five grain doses every four hours. Everything went on favourably until the 6th, when a profuse and unexpected loss of blood took place.

In my absence, she was seen by Mr. Norway, who, finding her blanched and nearly pulseless, ordered her stimulants, and directed the dose of gallic acid to be increased from five to ten grains. In the course of the day, she had somewhat rallied; and, on visiting her, I directed the same treatment to be continued, with some unimportant additions. The next day, the hæmorrhage had considerably lessened. On the 19th, it returned, and several large coagula passed. After this, it again lessened, and on the 22nd she was removed to the lying-in ward, where an examination of the uterus was made.

On introducing the finger into the vagina, a somewhat elongated pyriform tumour was found to occupy the upper part of this organ. It was about the size of an egg, was firm and somewhat elastic to the touch, and its surface had a fine velvety character. On tracing it upwards, it became somewhat narrower, and was at length felt to be embraced by the uterus, which completely encircled it. Inferiorly, its transverse diameter might be about an inch and a half; superiorly, it was somewhat less. It was smaller in its antero-posterior than in its transverse diameter, and in length might be about two inches. On pressing it with the pulp of the finger, the patient stated that she felt no particular pain; and, as far as could be judged from repeated trials, the tumour was not very sensible to this kind of pressure. On introducing a speculum very cautiously, the surface of the tumour was found to be covered with a layer of coagulated blood, which gave it a dark purplish appearance. On wiping this away, a convex body was brought into view, of a pale red or salmon colour, and, on touching it with the blunt end of a probe, pain was distinctly felt; whilst, from the several points of the tumour touched, fine capillary streams of blood poured forth. There could thus be no doubt that the tumour was an inverted

uterus; and, on inquiring more particularly into the history of the case, the following particulars were elicited.

The patient had been married nearly three years, and had given birth to two children. The first was born on the 11th of February, 1851, about ten months after marriage; the second, on the 11th of October, 1852. The first labour was long and difficult; and the child, though born alive, died two days afterwards. The placenta was retained, and had to be separated manually from the uterus. She, however, did well, and recovered without any unfavourable symptom. Menstruation returned in due course, and she neither experienced any uterine pain nor leucorrhœa subsequently to this labour. In the beginning of January 1852, she again became pregnant, and went the full period of gestation without any unfavourable symptom. She was confined on the 11th of December, 1852. The labour was easy and expeditious, as far as the birth of the child was concerned. With regard to the placenta, the gentleman who attended her informs me that, in this labour, it was not adherent, and that it came away at the usual time, by simply pulling moderately, and without any force, upon the cord. After its removal, he made an examination of the uterus, and felt something protruding into the vagina, which he suspected to be an inverted uterus. He accordingly made several attempts to replace it, and after a time was led to believe that he had succeeded in doing so. These attempts, however, the patient appears to have considered to have been made for the purpose of removing the placenta; for she stated that it was adherent; that, half an hour after the birth of the child, an attempt was made to remove it, which failed; and that it was not brought away until an hour and a half after the child had been born. Soon after its supposed removal, she stated that she experienced, in the uterus, intense pain of a burning character, which was attended with profuse hæmorrhage. The pain was so severe, that it occasioned her to be delirious; and, although it was somewhat allayed by the remedies employed, it nevertheless continued for three days, with occasional intermissions, in a very severe form. The day after her confinement, she was visited by her medical attendant and another practitioner; and the latter attempted, she stated, some manipulations, but failed to give any relief. Matters thus continued for five days longer, when another consultation was held upon her case, and a third medical man attempted, but unsuccessfully, the reduction of the uterus. From this time, she continued to suffer more or less from uterine hæmorrhage for some weeks, and her stomach became so irritable, that she could scarcely retain any food. Under the treatment adopted, however, she eventually improved; and, as previously stated, on her admission into the infirmary, the hæmorrhage had ceased.

From the 22nd to the 27th of January, there was scarcely any return of hæmorrhage. The bowels had been regulated by castor oil; but, on account of the irritability of stomach, and the expressed wish of the patient, no other medicine was given. Her diet was light and nutritive, and she was allowed 6 oz. of port wine daily.

On the night of the 26th, she was seized with faintness, and profuse hæmorrhage again took place. This was attributed by the nurse to her having fretted about her child, who had been attacked with whooping-cough the preceding day. Gallic acid was again ordered in ten grain doses every four hours; and pledgets of lint, soaked in alum water, were applied to the uterus. As, however, it became evident that these hæmorrhages could not be prevented, and as it was equally certain that she would sink under their continuance, I determined to take steps for the removal of the inverted portion of the uterus.

On the 28th, the hæmorrhage had almost entirely ceased, and she was visited by Mr. Marshall, to whom I had communicated my intention of removing the inverted portion of the uterus by the electric cautery. He thought favourably of the operation, and I accordingly gave directions for the preparation of the necessary apparatus. In the mean time, the gallic acid was ordered to be continued, as well as the application of the solution of alum to the fundus uteri.

The propriety of attempting the forcible reduction of the uterus under chloroform was considered on this and other occasions: but it was abandoned, on the grounds, 1, that attempts had already been made at an earlier and consequently more favourable period, and had failed; 2, that the attempt had almost always been unsuccessful, when made at such a late period after the accident; and 3, that, if it were attempted without success, considerable injury might be done the patient in her then exhausted condition. I was not then aware that reduction had been effected under chloroform at an equally late period, or the attempt would certainly have been made.

January 29th. No particular hæmorrhage had occurred; but a large quantity of serous fluid was passing from the vagina; the countenance was extremely exsanguine, and the bowels were flatulent and confined. The patient was directed to take twenty drops of oleum terebinthinæ every four hours, in addition to the gallic acid.

January 30th. She was still suffering from a profuse serous discharge, and was excessively weak and anæmic. The face was swollen and cedematous, especially under the eyes, and she felt a disinclination to take food. The turpentine was not given on account of her excessive objection to it. She was ordered to have four ounces of brandy daily, in addition to six ounces of port wine, three eggs, beef-tea, and arrow-root. The gallic acid was continued; and, if restless or sleepless at night, she was to take ten drops of laudanum every half-hour, until sleep or quietude were obtained.

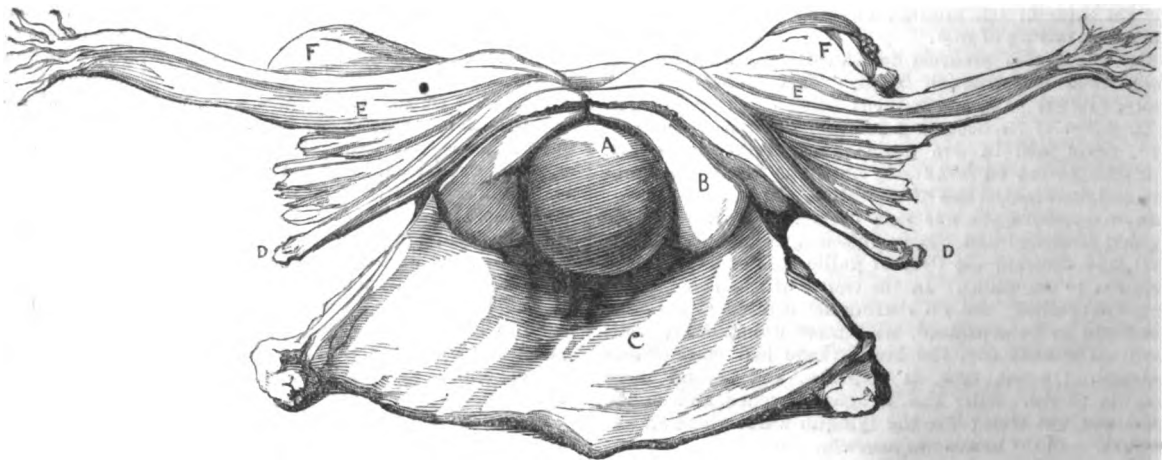
January 31st. She had passed a comfortable night, and felt somewhat better, although no opiate was given. There had been scarcely any hæmorrhage; and the serous discharge

from the vagina had very much lessened. Twenty drops of dilute nitro-muriatic acid were now ordered to be taken in water with each dose of the gallic acid.

February 1st. No hæmorrhage had yet returned; but a serous fluid still passed from the vagina. She was extremely prostrate and exsanguine; and her stomach was so irritable that she could with difficulty retain the gallic acid pills. They were accordingly discontinued, and she was directed to take the dilute nitro-muriatic acid alone in water, with an opiate at night if restless.

February 3rd. There had been no return of hæmorrhage; and the colourless discharge was now very slight; but the expression of the patient was one of extreme prostration, and her breathing was laboured and at times difficult. Her stomach was now so irritable, that she took food with reluctance. She was ordered to continue the dilute nitro-muriatic acid in water, and to take with each dose ten minims of tincture of opium. The symptoms of exhaustion continued to increase throughout the day, and she died at half-past eleven, P.M.

POST MORTEM EXAMINATION, made on 5th February. No abnormal appearances were met with, beyond those connected with the uterus, and the exsanguine state of the system to which it had given rise. The condition of the uterus is well shown in the accompanying woodcut, and therefore little need be added in explanation. It will be seen to be in a state of partial inversion. The relations of the fundus uteri to the cervix and vagina, and the entrance of the round ligaments and Fallopian tubes into the peritoneal *cul de sac* of the fundus are very clearly shown, as well as the form, size, and general characters of the inverted portion of the uterus.



A. Fundus uteri.
B. Cervix uteri.

C. Vagina.
D. D. Round ligaments.

E. Fallopian tubes.
F. F. Ovaries.

REMARKS. In reviewing the circumstances of this melancholy case, I will confine myself to a brief consideration of some of the more practical questions which arise in connexion with the causes, consequences, and treatment of inversion of the uterus.

CAUSES. At the present day, a difference of opinion appears to exist as to the nature of the causes which give rise to this displacement, in connexion with parturition. By some writers it is regarded as the consequence of improper mechanical interference or traction upon the cord; whilst by others it is supposed to occur independently of any such causes, and to be the consequence solely of a preternatural or perverted action of the uterus. I believe, however, that a careful consideration of the facts of various recorded cases will tend to shew that neither of these extreme views is correct; and that, whilst in a large number of cases it has been immediately occasioned by improper interference, in others it has occurred spontaneously, or at

least in the absence of any such cause. Smellie, for instance, relates a case in which it was occasioned "by the midwife's pulling at the placenta with too great force." (*Cases in Midwifery*, vol. iii, p. 494.) Mauriceau gives a case which was occasioned by "violent extraction of the placenta," and was followed by hæmorrhage during a period of eight months. (Tom. ii, obs. 355, p. 294.) Gifford reports a case, in which "the midwife, in attempting to bring away the placenta, inverted the uterus." (*Cases in Midwifery*, p. 421.) Chapman relates a case, of which the midwife told him "that the afterbirth stuck so fast in one part that she was not able, with all her strength, to take it from her, though she had gained the most of it." Upon this, the patient having died, he desired to see the corpse, and found, to his great surprise, "that the uterus was inverted, and entirely out of the body, with the placenta adhering to its fundus. The patient," he adds, "had a very good and easy delivery of the child; but that born, the midwife pulled hard at the string and so brought down the uterus."

as soon as she could take hold of she did, and then pulling with fresh violence, and not being deterred by the loud cries of the poor miserable woman, who, in a few minutes, fell into strong convulsions and deliquia, and so expired." Perfect relates two cases of inversion, which were caused by improper mechanical interference. In the first, the midwife, "after waiting some time in expectation of the secundines, was at length induced to pull with very great force at the funis, by which the accident was occasioned." In the second, "the patient had a severe labour of three days and nights, and lost her life by the hasty and violent manner in which the midwife pulled at the funis, and by which means an entire inversion of the womb was brought on." (*Cases in Midwifery*, vol. ii, pp. 6-9.) Mr. Barker reports a case which was occasioned from the interference on the part of a midwife. "At the end of half an hour after the birth of the child the placenta had not separated, and she accordingly proceeded to remove it, in doing which she employed so much force that she dragged out the after birth and uterus together." (*Med. Phys. Journ.*, vol. xxv, p. 210.) Other cases might be quoted to show that this accident has evidently arisen solely and entirely from undue traction upon the cord or some improper interference in the management of the placenta.

On the other hand, well authenticated cases may be adduced to show that inversion of the uterus has occurred spontaneously, or at least in the absence of any mechanical interference. Dr. Humphreys Storrer relates the following. "He was called to a woman in labour. In ten or fifteen minutes there came two smart pains, and the child was born. In five minutes the placenta was thrown off. The cord was not touched, except to divide it and remove the child. On putting his hand under the clothes, to take away, as he supposed, the placenta, he found that he had hold of the placenta with the uterus attached." (*Medical Gazette*, December 1842, p. 428.)

Two cases of spontaneous inversion of the uterus are referred to by Dr. Mitchell, in the *Dublin Medical Press* for September 23rd, 1846. The first occurred in the practice of Dr. Ashwell, who states, "that it was entirely spontaneous; for a friend, who was present during the labour, assured him that the midwife did not touch the cord. The child was expelled very quickly, and the patient felt a sudden pain, and said that something else was coming. On examination, Dr. A. found the uterus completely inverted, with the placenta adherent." In the second case, quoted from Dr. Lever, "the patient was delivered after a quick labour of a living child. In a few minutes, without any traction upon the cord, the patient complained of sudden pain, and said that something more had been expelled. The surgeon immediately passed his hand above the pubes, but could not detect the womb; and an attempt to make a vaginal examination satisfied him that the uterus was completely inverted." Mr. Clarkson reports the following. "He was called to a lady, aged 34, a short stout woman, then in labour of her eleventh child. He found her walking about the house apparently very comfortable, having had but few pains, and those at long intervals, during the day. Her former labours had been quick. On examination *per vaginam*, the head was found low down in the cavity of the pelvis, and the labia and perineum soft and dilatable. As yet, there had been no uterine contraction since he had entered the room; but just as she was getting off the bed, in order that it might be more comfortably prepared, a violent pain came on, and almost before he could apply his hand to the perineum the child was expelled, and the placenta brought to the os externum by the continuance of the same pain. Having hastily tied and divided the funis, and removed the placenta, which was perfectly loose, he found, on examination, that the uterus was partially inverted." (*Lancet*, vol. ii, p. 406.)

In the case I have related, I am informed by the gentleman who attended, that no undue traction was made upon the cord, that the placenta came away with ease, and that until he made a vaginal examination he had no reason to suspect that the uterus had become inverted. I think it

impossible to conclude from these facts otherwise than that inversion of the uterus may be both spontaneous and the result of improper mechanical interference; and from a knowledge of this circumstance, we may learn, not only the necessity of extreme caution in the management of the placenta, but also the possibility of inversion occurring even where no violence has been used.*

SYMPTOMS AND DIAGNOSIS. The symptoms of inversion vary very considerably in different cases, and in all are materially modified by the extent or degree of the displacement. When complete, the symptoms are for the most part of a marked and severe character. The constitution is profoundly impressed, and the immediate consequences are, in the words of Mr. Newnham, "hæmorrhage more or less considerable, accompanied with pain and expulsive efforts, and rapidly followed by syncope, convulsions, nausea, vomiting, hiccup, and sometimes death". When, on the other hand, the inversion is partial or incomplete, the character of the symptoms will mainly depend upon the extent of the displacement. In simple *depression* there may be little more than hæmorrhage, and an unusual prostration of the constitutional powers. In *introversion*, in addition to increased constitutional disturbance, as indicated by pallor, clammy skin, feeble pulse, and other symptoms of nervous depression, there is usually inordinate hæmorrhage accompanied by fulness, weight, uneasiness in the vagina, and constant expulsive efforts. In *perversion* the local and constitutional symptoms are of a still more aggravated character. There is great distress, alarming restlessness, clammy perspirations, cold extremities, a rapid feeble pulse, vomiting, with, in some cases, convulsions, delirium, and syncope. In the case I have reported, there was profuse hæmorrhage and uterine pain of such an agonising character as to render the patient delirious. I do not, however, feel it necessary to dwell at greater length upon this part of the subject, but will content myself with observing that, when in connexion with a rapid labour or any difficulty in the extraction of the placenta, a patient is attacked with either syncope, restlessness, hæmorrhage, inordinate uterine pain, or expulsive efforts, the possibility of the existence of inversion should be suspected, and a careful examination made of the hypogastrium, and of the uterus *per vaginam* and *per rectum*, which will inevitably lead to its discovery, if present.

In the chronic stage, inversion of the uterus may be confounded with either prolapsus or polypus. From the former, its diagnosis is comparatively easy; from the latter, more difficult. Much stress has been laid upon the sensibility of an inverted uterus on the one hand, and the insensibility of a polypus on the other; but this ground of diagnosis, so far as it rests upon mere tactile examination, appears to me to be of a very doubtful character. In the case which I have recorded, the sensibility of the uterus to the pressure of the finger was extremely questionable, and repeated trials left me uncertain as to whether any distinct pain was occasioned by pressure or not. I would suggest that the fact of the inverted portion of the uterus being in a state of strangulation, from the constriction of the surrounding cervix, must very materially modify, if not in many cases completely annihilate, its sensibility; and that a better test of the character of the tumour would be the cautious introduction of the speculum. This, at least, was attended with considerable advantage in the case I have recorded. As distinguished from a polypus, which was ob-

* It forms no part of the object of this paper to inquire into the mechanism of inversion; but in using the term spontaneous, I may be permitted to observe that it is intended to apply to cases which have occurred in the progress of labour, independently of any artificial assistance. In such, doubtless, the causes which tend to the displacement are of a complex character, and require not only that the placenta should be attached to the fundus uteri, but also that some undue pressure should be made externally upon this part of the organ, or some traction upon the funis below. This latter may occur, in the unassisted birth of the child, either from the funis being preternaturally short, or shortened by being coiled round some part of the child, or by the child being expelled with great force or otherwise, so as to produce a strain upon the cord. Inversion, thus commenced, will doubtless be increased and completed by the action of the uterus; but, being throughout independent of any extraneous force or assistance, may fairly be regarded as spontaneous, although both physical and vital causes co-operate and are necessary for its production.

served by Dr. Gooch to be of a pale flesh colour, mottled, or rather streaked with large blue veins, the inverted uterus was found to present an uniform pale red or salmon colour; and on touching it with the blunt end of a probe, not only was pain distinctly felt, but fine capillary streams of blood were seen to issue from the several points of the tumour touched by the instrument.

PROGRESS AND TERMINATIONS. The progress and termination of inversion of the uterus, when uninterfered with by art, is well illustrated in the case I have related; and it is more especially instructive, as showing not only how sudden and profuse are the hæmorrhages to which it may give rise, but also how little amenable they are to remedial measures, and consequently how uncertain is the tenure of life under such circumstances. Reverting to the occurrence of hæmorrhage in this case, it would appear that, for some weeks after labour, it had been more or less persistent and profuse. At the end of two months it had entirely ceased, and under the treatment adopted in the infirmary did not recur for three weeks. Then came a menstrual period, which for four days appeared to be normal; then followed a sudden and profuse loss of blood, so considerable as to endanger her life. Then came a cessation, followed again by hæmorrhage, equally profuse; and when red blood had ceased to flow, a drain of colourless fluid continued to escape from the inverted uterine surface, until the constitution of the patient was undermined and her vitality exhausted. With regard to the danger and fatality of inversion of the uterus, Mr. Crosse, in his memoir on the subject, states that, upon by far the most extensive data that have yet been furnished, he is prepared to affirm that above one-third, under whatever circumstances, or in whatever degree it may occur, prove fatal either very soon or within one month after its occurrence. Of one hundred and nine fatal *post partum* cases, collected from various authenticated sources, he found that seventy two, or two-thirds, proved fatal within a few hours after delivery, and most of them within half an hour or an hour. Eight proved fatal in from one to seven days; six in from one to four weeks; one in from four to five months. Of the remaining twenty-two, twelve proved fatal at the following periods; one at eight months, three at nine, one at twelve, two at twenty-two, one at two years, one at three, two at four, and one at five.

TREATMENT. Such being the natural course and tendency of inversion of the uterus, we have in the last place to consider what means can be adopted for its cure or mitigation. And first, it may be observed that all writers are agreed as to the extreme importance of promptly recognising it when present and immediately attempting its reduction; for the delay of even a few hours has sometimes rendered this impossible. Dr. Denman found it impossible to replace the organ after a lapse of four hours. Dr. Merriman was called to a case but a few hours after the accident had happened, and was unable to reduce it. Mr. Nelson relates a case, where reduction was impossible half an hour only after the inversion had taken place; and in the case I have reported, attempts were made to replace the uterus on the first and sixth days after delivery without the least success. The general experience, moreover, of the most eminent obstetricians, supports the observation that the most favourable period for effecting a reduction is that which immediately succeeds its occurrence.

But, at the same time, it may be observed, that cases are recorded in which the attempt was successfully made many days and weeks after the accident had occurred; and I am more particularly anxious to direct attention to the advantages likely to be derived from the induction of anæsthesia, when any difficulty arises in the reduction of the organ. I am the more led to do so, because I was not myself aware that this practice had been successfully adopted when the case I have reported was under treatment; and because, on suggesting it to various professional friends who visited the patient with me, I found that they were decidedly opposed to it, as being altogether futile. The following reference to cases where reduction was effected

under anæsthesia, at lengthened periods after the accident had happened, may therefore prove useful, and serve to induce a trial of it in others.

M. Valentin reports the following:—On the 8th of April, 1846, a female, aged 20, of good constitution, was delivered of her first child. Inversion followed, and was attended by leucorrhœa and syncope. The former continued during an entire month, and was then replaced by a persistent hæmorrhage. On the 15th of August, 1847, the reduction was attempted; but the screams of the patient caused the operation to be abandoned. On the 26th, another attempt was made with the aid of ether inhalation. The patient being rendered insensible, the same manipulations were gone through; but, as before, the uterus was altered in form, without the fundus yielding as was wished. The attempt was persisted in for ten minutes without progress, when etherisation was carried to the extent of relaxation of the sphincters. At this moment, the collapse of the system was complete; and the uterus partaking of the relaxation, the fundus allowed itself to be depressed under the finger, until it at length became suddenly restored to its normal state. In order to assure himself that the reduction was complete, the operator introduced his finger into the uterine cavity. (*Revue Médico-Chirurg.*, Nov. 1847.)

Dr. Merriman quotes a case in which reduction was successfully performed, long after its occurrence, by M. Barrier, at Lyons. The operation is thus described. The patient being placed on her back, the hips brought to the edge of the bed, the thighs separated, and etherisation effected, M. Barrier introduced his hand into the vagina. To give the uterus as much fixedness as possible, he placed it in the hollow of his four fingers; then, by pressing with the ball of the thumb applied directly to the fundus uteri—the most dependent part—he pushed it back in the direction of the axis of the outlet, with the intention of placing the neck of the uterus against the sacrum, and of supporting the extremity of the vagina by a resisting medium, in order to guard against its rupture. After a few minutes of gentle but sustained pressure, the fundus uteri had entered into itself from two to three centimètres. The same pressure was still kept up for an instant, when, feeling the organ gradually give way, the operator passed his index and ring fingers into the depression, where his thumb had begun to lodge itself, as he pressed back the fundus uteri. With these two fingers, he changed the direction of the force, without increasing its amount; he then pushed back the fundus uteri from below upwards, and from before backwards. Immediately the uterus yielded completely, and took again its natural position. (*Med. Times and Gazette*, Sept. 4th, 1852.)

Mr. Canney publishes a case of chronic inversion, in which reduction was successfully performed some months after the occurrence of the accident, under the following circumstances. The patient was laid on her right side diagonally across the bed, the nates projecting over the edge of the bed, and the knees being well drawn up, chloroform was administered to the extent of producing complete relaxation of the sphincters. The fingers of the right hand, formed into a cone, were now applied to the os externum; and, as soon as the chloroform had been inhaled for a short time, the entire hand passed almost without resistance into the vagina. The tumour was now grasped between the fore and ring fingers; it was supported in front by the thumb, and the point of the middle finger was applied to the apex of the tumour: the hand, with the wrist extended, was carried up, until the vagina was put fully on the stretch; and then, by slightly flexing the wrist, the tumour was gently pushed forwards and upwards, in the direction of the axis of the brim of the pelvis. As soon as the patient came under the full anæsthetic influence of chloroform, the tumour gradually receded, and the inversion was successfully reduced; the whole operation, from the first inhalation of chloroform, not occupying more than five or six minutes, and the force used being almost trifling. (*Med. Times and Gazette*, Sept. 18th, 1852.)

In a fourth case, Dr. Ayer succeeded in reducing an

version, thirty hours after it had taken place. He observes, "Having reflected on the relaxing effects of ether on the tissues, I determined to give it a trial, and, accordingly, while the inhalation was gradually conducted by an assistant, I grasped the fundus uteri, and made gentle pressure. As the system became relaxed, the tumour gradually diminished. In thirty minutes, the vulva became perfectly flabby, and the tumour soft and compressible. I made firmer pressure, and it was reduced to the size of a hen's egg; the finger could circumscribe it. It remained from twenty to thirty minutes of this size, uncertain whether further ground could be gained, and then disappeared *per saltum*, with the peculiar feel of a receding hernial tumour." (*Canada Med. Jour.*, July 1852.)

The success attending the reduction of the uterus in these cases, in a state of anæsthesia, appears to have been of an unequivocal character, and such as to justify our having recourse to it in others, before deciding upon the impracticability of reducing the organ.

But, should such attempts fail, and the patient's life be endangered by hæmorrhages or other exhausting discharges, we have then to consider the propriety of removing the inverted portion of the uterus. For this purpose, two methods have been employed, viz., excision and ligature; but the results of neither, it must be added, have been of a very encouraging character. The dangers attending excision are so great, that we are told, with reference to a case in which it was successfully performed by Velpeau, that the jeopardy of the patient was such, that it will doubtless not be often repeated; and, with regard to ligature, although many successful cases are reported, there is yet a formidable array of others in which it has proved fatal. Under these circumstances, I was led to believe that the electric cautery might be more successfully employed for the extirpation of the organ; and in this opinion I was supported by Mr. Marshall, who, after visiting and examining the case, expressed himself favourably of the operation. Unfortunately, unforeseen difficulties arose in the preparation of the necessary instruments; and, before their completion, the patient had sunk under the influence of sudden and profuse losses of blood. As, however, these difficulties have now been overcome, I will, before concluding, describe the nature of the apparatus by which the operation was proposed to be performed.

The battery intended to be used was necessarily one of considerable power; and to its terminal poles a modification of Gooch's canula instrument for the removal of uterine polypi was to be affixed. As now completed, this consists of two rods, one of which is solid, the other hollow, and covered with a wave flax surface, coated with solution, to insulate the platinum wire or chain which passes through it. One end of this wire or chain, of proper thickness, is soldered to the extremity of the solid rod; the other, having passed through the interior of the tubular one, is attached to a rack and windlass, affixed to the lower part of it. In using the instrument, the two rods are introduced together parallel to each other, and, having reached the neck of the inverted portion of the uterus, are then separated, and passed round it, as in the ordinary operation for removing a polypus: their upper extremities are fixed together by means of a silver sliding rod, having rings at its superior extremity. The platinum wire having been now tightened by means of the rack and windlass, the two rods are respectively affixed to the poles of the battery; and the platinum wire being heated by closing the circuit of electricity, it is gradually tightened by turning the windlass until the division of the organ is accomplished.* I am unable to speak from experience of the practical working of this contrivance; but I am disposed to think that it, or some modification of it, may be usefully employed for the operation in question.

Reviewing, then, the chief circumstances of the case I have reported, I would more particularly wish to direct

attention to the importance of the following considerations:—

1st. A due appreciation of the circumstances under which inversion of the uterus is most liable to occur in connexion with parturition, viz., rapid labours on the one hand, and those attended with any difficulty in the extraction of the placenta on the other.

2nd. The necessity of immediately effecting the reposition of the organ. Should any difficulty arise, we may either have recourse to anæsthesia, or adopt the suggestion of Millot, of incising or dividing the cervix, so as to take off the constriction thereby exercised upon the fundus uteri.

3rd. In cases of chronic inversion, where serious symptoms arise, the possibility of effecting the reduction of the organ whilst the patient is in a state of anæsthesia.

4th. The futility of any local or constitutional treatment in arresting the hæmorrhages which occur in these cases, and consequently the expediency of attempting the removal of the inverted portion of the uterus where reduction is impossible, and where these evince a tendency to recurrence.

5th. The dangers attending removal of the uterus both by ligature and excision being considerable, the propriety of attempting its extirpation by means of the electric cautery, aided by the apparatus I have proposed, or some modification of it.

Chester Place, Hyde Park Gardens, July 1853.

STATISTICAL ACCOUNT OF OBSTETRIC CASES, IN PRIVATE COUNTRY PRACTICE.

By R. U. WEST, Esq.

THE following statistics may perhaps interest some of the readers of this Journal. They give the history of about nineteen years of a private midwifery practice. In arranging my materials, I have found considerable pleasure in looking back upon a vast number of troubles, doubts, anxieties, and difficulties. I hope that they will not be looked upon as interesting to myself alone. Without further preface I subjoin my statement.

NUMBER OF CASES.

2,083 labour produced 2,106 children, viz.: 1,060 boys and 1,046 girls. 364 cases were primiparous, or 1 in 5½.

These 2,106 children were born with the following

PRESENTATIONS:

2,042 children presented some part of the head. Of these, 1,962 were expelled with the *occiput under the arch of the pubes*: In

3 cases where the head was so expelled, a *hand was down by the side of the head*.

3 were cases where the head was expelled with the *occiput turned to the left acetabulum*.

59 were cases where the *face or forehead came round to the symphysis pubis*, or 1 in about 35½: In

49 of these cases the head was so expelled: In 1 case where the head was so expelled, a *hand was down by the side of the head*. In

1 case where the face had come round to the pubes, the pains forced the chin under the arch, and the *face disengaged itself first*. In

1 other case, feeling the nose arrested at the symphysis, I pulled at the orbits till the chin came under the arch, and the child was born with the face first.* In

* In both these instances the labour was completed almost immediately after the alteration of position. They were both conversions of the worst form of cranial position into the easiest form of face-position. Madame Hoin says: "Nous avons vu un exemple de cette manière de dégager la tête. Feu Bédard, professeur à la Faculté de Médecine, nous en a cité un cas semblable."—*Mémoires de l'Art des Accouchemens*, tom. i, page 230.

* The apparatus in question has been constructed by Mr. Coxeter, who will give any further information that may be required respecting it.

- 8 other cases, after the face had come round to the pubes, I rectified the position of the head by pressing the temple, and bringing the occiput to the arch of the pubes.
- 3 were cases where the head was expelled with the face turned to the acetabulum. In
- 2 cases, the ear remaining at the symphysis, with the anterior fontanelle presenting, I turned the head round till the occiput came to the arch.
- 10 children presented the face, or 1 in 210, in addition to the two cases of secondary face-position mentioned above. In
- 6 of these cases the labour was marvellously quick and easy, although in four out of those six the chin was at first turned backwards towards the sacro-iliac synchondrosis. In
- 4 only did there appear to be any increase of difficulty in the progress of the labour. In one of these, a primiparous case, the face was forced through the pelvis, with the lower jaw pressed back on the neck or chest. And in one, a hand presented with the face.
- 1 child presented the occiput, shoulder, and one hand.
- 2 presented the ear. In
- 1 of these cases the shoulder presented with the ear.

2,042 Total presentations of some part of the head.

- 56 children presented either the breech or the inferior extremities. Of these,
- 27 presented the breech; and
- 29 presented one or both inferior extremities. In
- 3 instances a knee was first felt. In
- 8 instances the breech was down as low as the feet. And in
- 1 instance a hand was felt just above the feet.

56 Total presentations of breech or inferior extremities, or 1 in 37½.

- 8 children presented one or both hands, in addition to the six cases above mentioned, where a hand was down by the side of the head or face. In these eight cases turning was performed. In
- 2 of them, a foot being felt just above the hand, turning was very easy. Thus,
- 8 was the whole number of strictly transverse presentations, exclusive of the two cases mentioned, where the shoulder was down with the side or back of the head—1 in 266½.

COMPLICATIONS.

- 9 labours were complicated with prolapsed funis. In
- 2 of these cases the children were born alive, the delivery being hastened with the vectis in one instance. In
- 2 the children were putrid. In
- 2 the placenta was near the os uteri, and the labour was attended with hæmorrhage. In
- 6 there was malposition of the child, viz.:—feet presentation in three cases; arm down in one case; hand with head in one case; breech presentation in one case.
- 32 were cases in which instruments were used; viz.:
- 22 vectis.
- 2 long forceps.
- 2 blunt hook.
- 6 craniotomy.

The vectis was used, once on account of hydrocephalic head; twice in one patient on account of an exostosis projecting into the pelvis; once to hasten the birth in a case of prolapsed funis; twice where the face had come round to the pubes; and once in a case of face presentation. The rest were cases of impaction from various causes, such as

unusual size of the child's head, and presentations of the anterior fontanelle, all terminating with the occiput under the arch of the pubes.

In all the cases in which either the vectis or forceps was used, the children were born alive, and, with two exceptions, were quite uninjured. In those two instances (both of them vectis cases), one of the children died two days after (a face to pubes case); the other survived only five hours, being the one which had presented the face.

The blunt hook was used in two cases of impacted breech. In one of them the child weighed thirteen pounds and a half. Both children were born alive.

In two of the cases in which craniotomy was practised, I had the advice and assistance of other practitioners. In the other four cases I used my own judgment. In all of them the vectis and forceps were first tried in vain.

In all the cases in which instruments were used, the mothers recovered without the occurrence of a single unfavourable symptom.

48 labours were complicated with hæmorrhage.

21 of them were cases in which considerable hæmorrhage preceded and accompanied the labour. In

7 of these cases the placenta was felt over or near the os uteri.

In these 21 hæmorrhagic cases all the children survived, with the exception of three where the placenta had presented, one in the other cases, and three which were decomposed before birth.

9 were cases in which considerable hæmorrhage followed the birth of the child, in consequence of retained placenta.

3 labours were attended with hæmorrhage both before and after the delivery of the placenta. And

15 labours were complicated with hæmorrhage after the removal of the placenta.

2 cases occurred of secondary hæmorrhage, one at the end of a week, the other thirteen days after delivery.

In all the instances in which hæmorrhage occurred, the mothers recovered. The proportion of hæmorrhagic cases is 1 in about 43 cases.

34 cases occurred in which the placenta was retained or adherent, requiring the introduction of the hand,—1 in 61.

7 examples occurred of knots on the funis, two of them being very complicated.

4 cases were met with, in which the coccyx was projecting and ankylosed, three of them being in one patient. In all of them the bone gave way at last with an audible snap.

9 cases were noticed in which there was disease of the placenta. And in

1 case, the funis divided into its vessels before its insertion into the placenta.

23 labours, or 1 in 90, were cases of twins. One of them was a case in which the children were united at the sternum, constituting the form of monstrosity denominated by Geoffroy St. Hilaire, "Sternopage".*

Malpositions are much more frequently met with in twin cases than in single births: thus, my practice has furnished the following

PRESENTATIONS IN TWIN CASES.

- 9 cases—first child, vertex; second, breech or feet.
- 1 case—first child, vertex; second, face to pubes.
- 1 case—first child, vertex; second, face to pubes with a hand down.
- 3 cases—first child, vertex; second, hand presentation.
- 1 case—first child, feet; second, face to pubes.
- 1 case—first child, breech; second, feet.
- 1 case—both feet (in the monstrosity case.)
- 1 case—first child, face to pubes; second, vertex.
- 5 cases only in which both children presented naturally.

* *Anomalies de l'Organisation*, tom. III, page 98.

MATERNAL DISEASES.

13 mothers were suffering from different diseases at the time of labour, viz.:—

- 1 from scarlatina.
- 1 from fever.
- 1 from peritonitis.
- 1 from chronic bronchitis.
- 1 from pneumonia.
- 2 from chronic abscess under the fascia of the thigh. Both these cases occurred in the same patient in two consecutive confinements.
- 1 from cholera.
- 1 from excessive œdema.
- 2 from measles. In one case the child was born with the eruption.
- 1 from chronic gastritis.
- 1 from umbilical hernia.

13

88 cases of puerperal and other diseases arose within the month.

- 22 cases of peritonitis, puerperal fever, or hysteritis.
- 14 cases of intestinal fever or irritation.
- 6 cases of phlegmasia dolens.
- 6 cases of mania. Three times in one patient.
- 2 cases of intermittent fever.
- 1 case of intermittent pain with fever.
- 1 case of "hystericalgia" (Burns).
- 5 cases of ephemeral fever.
- 6 cases of diarrhoea with quick pulse.
- 1 case of pleurisy.
- 2 cases of rheumatic fever.
- 3 cases of convulsions.
- 5 cases of retention of urine without other disease. Three of these cases required the catheter.
- 1 case of pneumonia.
- 13 cases of inflammation and suppuration of mamma, with severe constitutional disturbance and fever.
- 2 cases of hysteria.

88

MATERNAL DEATHS.

16 mothers died either from puerperal diseases, or from other diseases arising during pregnancy. Of these—

- 10 died of diseases strictly puerperal; viz.:—
 - 2 of mania: 1 on the fourteenth day, primiparous: 1 on the eighteenth day; this was the third attack with the same patient.
 - 4 of peritonitis: 2 on the tenth day: 2 on the seventh day.*
 - 2 of intestinal fever: 1 on the thirteenth day: 1 on the thirtieth day.
 - 2 of phlegmasia dolens: 1 on the thirty-sixth day, from gangrene of both legs: and 1 on the tenth day from metastasis.
- 6 mothers died within the month from diseases arising during pregnancy, most of them inducing premature labour, viz.:—
 - 1 of scarlatina, commencing three days before the labour. Labour at full time. Death on eighth day of lying-in. Child living.
 - 1 of peritonitis, commencing eight days before delivery. Labour premature. Death on the sixth day of lying-in. Child living.
 - 1 of pneumonia, preceded by cynanche tonsillaris, inducing premature labour in seventh month. Death three hours after. Child still-born.
 - 1 of chronic bronchitis, existing long before delivery. Labour premature. Child living.
 - 1 of cholera, beginning two days before delivery. Labour premature. Death two hours after. Child still-born.

* One of these cases occurred with a woman who had been forty-eight hours under the care of a midwife with arm presentation, before I was sent for. The other was with a *primipara*, after a rather sharp labour. All the other deaths occurred with women who had had particularly easy labours.

1 of chronic gastritis, with vomitings and diarrhoea during latter months of pregnancy. Labour at full time. Death on the twenty-seventh day of lying-in. Child living.*

Therefore, the proportion of deaths from all causes would be one in 130 nearly; of deaths from diseases strictly *puerperal*, one in about 208 cases. But can we, from such data as I have here given, arrive at any knowledge of the average danger of death to lying-in women? If a correct average of the number of times each woman is confined can be made out, by comparing the number of cases in one's practice with the number of *primiparæ*, we have only to take the number of deaths and the number of *primiparæ*, and we shall arrive at a result. There were 364 *primiparæ* among my 2083 cases, and 10 puerperal deaths. I would conclude, therefore, that one lying-in woman in about 36 may probably die of some puerperal malady; that is, always supposing that my statistics give anything like an average.

DISEASES, MALFORMATIONS, MONSTROSITIES, OR OTHER CONGENITAL PECULIARITIES IN THE FETUS.

- 1 hydrocephalus, uncomplicated; lived two or three years.
- 1 hydrocephalus, with spina bifida; lived three days.
- 1 lobes of ears wanting.
- 1 eyes diseased through apparent want of power to close the lids. Eyes burst, and child died at the end of about six weeks.
- 4 well marked cases of the peculiar swelling of the scalp, in some respects analogous to spina bifida, and called by German writers, *kopfblutgeschwulst*.
- 1 palate wanting.
- 2 double harelip.
- 1 ascites; lived a few days. There was redundancy of liquor amnii in the case.
- 1 united, or "Siamese twins"; the sternopage of Geoffroy St. Hilaire. Still-born.†
- 1 spina bifida, uncomplicated at birth, but followed by hydrocephalus and club feet. Child lived six months.
- 1 a swelling of the nature of spina bifida on the sacrum. Child died of hydrocephalus when about a year old.
- 1 large hernia into sheath of funis; the opening through the abdominal parietes being as large as a crown-piece. I returned the intestines into the abdomen, and put on a bandage. The child survived, and is now living (aged five years), with a dense membrane filling up the original opening.‡ A little more, and the sheath of the funis would have burst, so that the case would have been one of eventration.
- 1 an exencephale,§ with eventration of all the abdominal viscera. The placenta was enormously hypertrophied. Still born.
- 1 inverted feet.
- 1 the cerebellum was contained in a bag of integuments hanging down the back. There was an opening through the centre of the occipital bone as large as a two shilling piece. The child lived five weeks. A case of partial nomenclature (St. Hilaire.)||
- 1 born covered with the eruption of measles, with which the mother was affected at the birth.
- 1 supplementary little finger.
- 1 born with a tooth.

STILL-BORN CHILDREN.

Of 2,106 children, 74, or 1 in 28½ nearly, were *still-born*, from various causes. Of these,

* When this patient died, she had been about three weeks under the care of another medical man.

† I published an account of this case in the *Edinburgh Med. and Surg. Journal* for October 1847.

‡ A remark made by an old nurse who was present at the birth of this child amused me excessively. She had been with me also at the birth of one of the spina bifida cases a short time before in the same village. She said: "Well! I don't know what's going to come to all the bairns. Not long ago, one was born without a back; and now here's one come without a belly!"

§ A monster with the brain uncovered by the skull, and with cleft spine; so named by St. Hilaire. *Anomalies de l'Organisation*, tom. ii, page 311.

|| *Anomalies de l'Organisation*, tom. ii, page 231

40 were decomposed at birth; 33 being premature, and 7 at the full time. I observed that, with one of the premature cases, there was *ramollissement* of the placenta; the heart was beating, though the cuticle was peeling off, as with putrid factuses. With one there was hypertrophy of the placenta; with one there was a kind of fatty degeneration of the funis, partially obliterating the vessels; and with one there was scirrhus of the placenta. With one of the decomposed children at the full period, I observed great redundancy of the liquor amnii; another was the first of twins. The proportion of decomposed children was 1 in 52 births.

6 craniotomy.

3 primiparous footling cases—delivery of head difficult.

5 from prolapsed funis. Of these, one was a case of arm presentation, in which the arm had been long down before turning was performed; one was a case of feet presentation, in which the edge of the placenta presented with great hæmorrhage; one was a case where the arm was down by the side of the head; one was a case of feet presentation, in which the pulsation had ceased in the funis when I first examined, the liquor amnii having been evacuated some hours with the funis down; and the fifth occurred in a case of vertex presentation, which, as it proceeded with great rapidity, I left to nature.

3 under placenta prævia (inclusive of one of the prolapsed funis cases mentioned above).

6 from the labour being unusually severe and protracted.

1 apparently caused by ergot, labour easy.

2 the monstrous twins.

2 ovum expelled entire in seventh month.

1 exencephale.

1 a midwife's case of arm presentation.

1 premature, placenta diseased.

1 premature, cause not manifest.

2 premature; mothers moribund, one from pneumonia, one from cholera.

1 premature, labour preceded by hæmorrhage.

The liability to recurrence in the same patient of any particular kind of obstetric disease or irregularity, is unquestionably of practical interest. A private country practice offers, I think, especial advantages to any one disposed to pay attention to such a subject; for, the number of practitioners being necessarily limited, and in some districts the practice being almost monopolised by a single individual, patients have scarcely the opportunity, even if they had the inclination, of changing their medical advisers. But, even with these advantages, it is, for obvious reasons, not possible to furnish from any practice a perfect list of such cases. The first set of patients have, for the most part, been attended in previous confinements by predecessors in the practice; and the obstetric history of a great many, in the latter years, can have only just commenced. In my own case, these causes have been doubly in operation; for having, after nearly sixteen years' practice in a village distant seven miles, removed to this place about three years and a half ago, I have, of course, added many altogether new patients to my list, while I do not retain more than half of my old practice. Nevertheless, I subjoin the following particulars, such as they are:—

Face to Pubes. Three times in succession with one woman out of ten labours; twice with one out of four labours; twice with one out of nine labours; twice with one out of five labours.

Presentation of Breech or Feet. Twice with one woman in four labours; twice with one in five labours; twice with one in five labours; three times with one in five labours; twice with one (the two last) in six labours.

Funis prolapsed. Twice with one woman in four labours; the first time with arm presentation, the second with vertex.

Peritonitis. Three times with one woman in five labours; twice with one woman in four labours.

Hæmorrhage post partum. Twice with one woman, in the last two of six labours.

Adherent Placenta. Six times with one woman in eight labours; three times with one in six labours; three times with one (the three last) in seven labours; twice with one in three labours; twice with one in six labours.

Still-born Putrid Children. Four times with one woman in five labours; three times with one in ten labours; twice with one in two labours; twice with one (the first and last) in six labours; twice with one in two labours; twice with one in three labours.

Mania. Three times with one woman in four labours, proving fatal on the last occasion.

Dysuria. Twice with one woman in three labours; twice with one woman in three labours.

Chronic Abscess under the Fascia of the Thigh. Twice in succession with one woman in four labours. This is rather a strange kind of case to be connected with pregnancy. The woman had recovered from the first abscess.

Anchylosed projecting Coccyx. Three times with one woman (the last three) of ten labours.

A particular kind of rigidity of the os uteri will occur repeatedly with some parturient women. I think I have observed two distinct kinds of rigidity. In one, the os is *thin*; it is met with most frequently in primiparous patients, and the head often presses the expanded cervix down into the pelvis so tightly, that it requires a practised hand to distinguish, at the first touch, the cervix from the head itself. I do not think this variety of rigidity is liable to recur with subsequent labours; in fact, it is seldom met with in any but primiparæ; at any rate, such has been my experience. In the other, the most troublesome and tiresome kind, the os uteri is *very thick*, and sometimes oval in form,—it is like an unexpanded or undeveloped cervix; the labour is excessively tedious and hard, and for many hours there will be unavailing suffering. This kind of rigidity seldom occurs with primiparæ, but will recur again and again with women who have borne one or more children; their previous labours, and now and then an intermediate one, being often remarkably quick and easy. Scarcely anything but patience will avail with such cases; but I fancy I have observed good effects from the application of belladonna ointment—the “pommade dilatatoire” of Professor Chaussier, from enemata, and from chloroform. I subjoin a few examples of recurring cases of this exceedingly unpleasant complication:—

Os uteri thick and rigid—labour very hard and tedious.

1. The second, fourth, sixth, and seventh of 7 labours.
2. The second and third of 4 labours.
3. The second, third, fourth, and fifth of 7 labours.
4. The second, third, fifth, sixth, seventh, and eighth of 8 labours.
5. The last four of 5 labours.

And there would seem to be great capriciousness in the recurrence of this affection, for the excepted labours were all particularly easy and quick; in one or two of them there having been literally “no time to fetch the doctor”. No. 5, in the above list, had peritonitis, requiring bleeding and much anxious attendance after the first and two last of her bad labours; and after the second of them, she had very severe afterpains, with deficient lochial discharge, but without abdominal tenderness or acceleration of pulse. No. 2 has had two very severe confinements since I left her neighbourhood, I suspect from the same cause; and yet her first (primiparous) confinement was very easy, and her fourth ridiculously so.

The list given above includes none but such cases as came under my own observation. I am enabled to add, from information derived from the patients themselves, and from other sources, the following facts.

The patient who had retained placenta on the second of the three last of seven labours attended by myself.

the same complication with her three first children under the care of my predecessor; thus suffering from the same cause six times in ten labours altogether.

One of the patients, who had *dysuria* twice under my care, has since suffered from the same malady under the care of another medical man.

A patient whom I attended a few years ago with *puerperal convulsions*, has since died of that disease under the care of another medical man; having had convulsions *twice* in four labours.

A woman, whom I delivered a few months since of a *still-born* decomposed child, which presented footling, had had four children previously; all still-born, all premature, all decomposed, and all footling.

One practical inference to be drawn from these facts must be, that when once a patient has had certain obstetric irregularities, she is liable to them again. And a second may be, that the proportion of individual women liable to certain obstetric irregularities is less than would appear from merely taking the proportion of such cases singly to the whole number of labours. Let us take, for example, the cases of adherent or retained placenta. I have registered thirty-four such cases. But it would be incorrect to assume from that fact that thirty-four women out of the whole number attended had suffered from that complication; for when we look at the table of cases just given, we find that sixteen of those cases were divided among only five patients, so that no more than twenty-three women were the subjects of adherent or retained placenta.

I have never attempted in my register to make any distinction between *quick* and *lingering*, or between *easy* and *hard* labours. In the first place, we are called in at all stages of labour; and it is impossible to arrive at any certain knowledge of the commencement of the process from the report of the patient herself, as women sometimes fancy themselves in labour many hours before there is any effect on the os uteri. And in the second place, no line can be drawn between *easy* and *hard* labours; because the two kinds run into one another by imperceptible gradations, and because some labours, which have commenced with rigid os uteri, will frequently, all at once, after hours of unavailing suffering, proceed with extraordinary rapidity; so that an accoucheur, arriving just at that moment, would certainly class as *easy* a labour which, if he had to his misfortune been sent for earlier, would as certainly have been classed as *hard*. Therefore, because we do not see all the labours in all their stages, I take it to be impossible to arrive at anything like a satisfactory division of labours into either quick and lingering, or easy and hard.

My statistics may to some persons seem incomplete in another respect. I have not given the different *cranial positions*. When I commenced my register, I did not consider myself competent to decide on points respecting which writers say there is so much difficulty;* and though, after some experience, I found little or no difficulty in distinguishing the fontanelles in the great majority of cases, I continued my register as I had begun it, marking no particulars but such as I have here given. I have, however, for the last three or four years been taking some pains with the *vexata questio* of cranial positions; and during the last year and a half I have registered the following particulars, adopting a classification of my own.

Of 235 children born in my practice since January 1, 1852, 222 presented the cranium. Of 57 of these, I was unable to ascertain the original position, either through putridity of the child, the too advanced stage of the labour, or because I was not present when child was born. Of the remaining 165 children,

106 presented the cranium in the first position, *i. e.*, with

the occiput coming round to the arch of the pubes from the left side;

49 presented the cranium in the second position, *i. e.*, with the occiput coming round to the arch of the pubes from the right side;

6 presented the cranium in the third position, *i. e.*, with the face or forehead coming to the symphysis pubis from the left side;

4 presented the cranium in the fourth position, *i. e.*, with the face or forehead coming round to the symphysis pubis from the right side.

In five of these ten face to pubes cases I rectified the position, after the face had come round.

The frequent occurrence of cases where the anterior fontanelle was felt, in an early stage, near the pubes, the occiput eventually coming quite round to the arch with the greatest facility, by degrees induced me first to search for an explanation in the works of obstetric authors, and secondly, when I could find nowhere any satisfactory explanation, but, on the contrary, the most discordant opinions among different writers, to study the subject for myself in my own practice. I have noted that among the 165 cases of cranial presentation above referred to:—

26 well-marked cases were observed where the anterior fontanelle was felt at first to the *left side* of the pubes. And

13 well-marked cases were observed where the anterior fontanelle was felt at first to the *right side* of the pubes.

All these cases terminated naturally and easily with the occiput under the arch. I have, therefore, classed them among the cases of the second and third positions respectively.

I consider that a classification of cranial positions, on any other principle than that of the four positions I have adopted for my own use, is fanciful and theoretical; because scarcely any two writers can be found to agree who make such an attempt. Between Ritgen, for example, who gives nine positions of the vertex,* and Nägele, who insists on forcing all cases into a sort of Procrustean arrangement of two positions only, I find a whole host of writers who give variously from eight to four positions, and who all differ from one another still further with respect to both the arrangement, and the relative frequency of those positions. And certainly of all subjects on which doctors differ, this would seem to be the most hopeless; for in the last published authority I have consulted, I find the writer dismissing the subject in a footnote, acknowledging himself staggered but not convinced by the arguments and assertions of Nägele.†

In making my observations on the progress of labour in cranial presentations, I have noticed one point which I have not found any writer refer to. Books tell us that when the head passes down the pelvis with the occiput to the left side, the right ear having been nearest the pubes, the right shoulder will come to the arch of the pubes when the trunk is expelled, and conversely. And that such is considered to be *invariably* the case, we have a proof towards the end of the footnote, in Dr. Ramsbotham's work already referred to; where he suggests that, when there remains any doubt as to the original position of the fetal head in the pelvis, we may decide on that position by observing how the trunk passes.‡ But, of course, if the trunk in coming to the outlet does not *invariably* follow the rule given, we cannot depend on the test proposed. Now, I noticed that in the 165 cases of cranial presentation, in which I distinctly made out to which side of the pelvis the occiput lay originally, having also in many of them verified my diagnosis by the presence of the

* Busch and Moser, after describing eight positions contended for by Ritgen, adds: "In einem Falle nimmt er sogar noch eine Lage zwischen der fünften und sechsten Stellung an."—*Handbuch der Geburtskunde*, b. iii, p. 327.

† *Principles and Practice of Obstetric Medicine*, etc., by F. H. Ramsbotham, M.D. Third edition. 1851. pp. 185-188.

‡ "By attending, therefore, to the mode in which the trunk passes, we may inform ourselves of the position which the child held in utero, and of the original direction of the fetal face."—*Vide note in Ramsbotham's Obstetric Medicine*, p. 188. Third edition.

* Nägele says, after making one of his dogmatic assertions in opposition to other writers: "Wer aber dieser Aeusserung wegen sich zu eutristen seyn möchte, der möge doch erwägen, für wie schwierig die Diagnose der Kopflagen von den grössten Meistern ausgegeben worden." And then he goes on to say that Roederer, speaking of face to pubes cases asserted, "nequit penitus cognosci, antequam caput est natum." And also that Smellie had freely acknowledged he had been mistaken.—Nägele, *Die Lehre vom Mechanismus der Geburt*, p. 40.

caput succedaneum, which is always found on the side which has been next the pubes, the shoulders were reversed no fewer than sixteen times; that is, where the right ear had been next the pubes, the left shoulder came to the arch, and conversely. Nägele, indeed, says that sometimes with roomy pelvis he has observed the shoulders entirely expelled with their greatest breadth in the transverse diameter,* that is, without either shoulder coming to the arch; but he alludes to no other deviation from the rule usually laid down. In my cases, the head twisted round soon after its expulsion, and the wrong shoulder came distinctly to the arch, not only in easy cases, but in some very hard ones. I need only mention one where I could not be deceived. In the early part of the labour I had felt the anterior fontanelle near the left acetabulum. The labour went on very slowly, though the pains were severe. The anterior fontanelle approached nearer the pubes. Thinking the labour was likely to be very protracted, I applied the long forceps, and with some trouble brought away the head. Just before expulsion, I felt the anterior fontanelle under the arch close to the left side of the symphysis. I found after birth the marks of the forceps, one on the right temple in front of the ear, the other on the side of the neck under and rather behind the left ear. My diagnosis was thus confirmed, by finding that the left side of the head had been the lowest, and consequently next the pubes in the first stage. But even in this case the right shoulder came to the pubes, and it required considerable traction to draw away the trunk, the child being a very large one. As I have been somewhat curious on this point, I have always been particularly careful after the birth of the head to allow the shoulders to take their own direction.

As I have given a hard case where the shoulders were reversed, I may as well add from my notes, written at the time, an example of an easy one, where the same phenomenon was observed. This case was one which occurred before January 1852, and is not included among the sixteen already referred to.

"No. 1846, December 13th, 1851. Anterior fontanelle felt near pubes, very close to it. Head quite disposed to descend, after rupture of the membranes with well dilated os uteri. Thinking this a case for spontaneous rectification, I contented myself with keeping a finger gently applied during the pains to the fontanelle, that I might accurately observe the changes. The sagittal suture was directed obliquely backwards, and the posterior fontanelle was felt distinctly near the sacrum, the anterior fontanelle being inclined slightly to the left side. Very rapidly, during one pain the head revolved, the anterior fontanelle passed upwards and to the left side of the pelvis, the posterior descended and passed round to the right side of the pelvis, and thence to the arch of the pubes with about two more pains, when it was expelled in the natural position. But the head continued to revolve, and the right shoulder passed under the pubic arch instead of the left, and thus the shoulders were expelled with the face turned to the right side of the mother, and the occiput to the left; although, as before said, in passing through the pelvis, the occiput was turned to the right side, and the face to the left". (Note in Register.)

In a future paper, I hope to be able to give the results of my observations on those interesting cases, in which, as in the one just quoted, the anterior fontanelle is felt in the first stage near the pubes. I think they can be satisfactorily explained.

Alford, Lincolnshire, July 25th, 1853.

* "Dass die Schultern mit ihrer grössten Breite im Querdurchmesser durch den Beckenausgang dringen."—*Die Lehre vom Mechanismus der Geburt*, p. 13.

CASE OF IMPERFORATE ANUS, WITH ABSENCE OF THE RECTUM.

By HENRY DAYMAN, Esq., Surgeon.

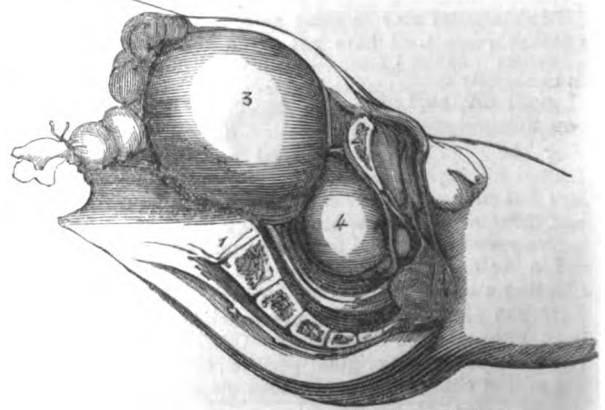
(Read before the Medical Society of Southampton.)

ON the 7th of March, 1853, I delivered Mrs. M., aged 36, of a fine healthy male child. On the 10th, I discovered that the infant was the subject of that peculiar arrest of development to which the term "imperforate anus" has been given. In the present instance, however, the anus was perfect; and within the apparently natural orifice there was a mucous surface, ending about three-fourths of an inch up, in a shut sac. Now, although the prognosis under this peculiar condition is confessedly unfavourable and the prospect from surgical interference most uninviting, yet, in this case it became at once evident that something must be done to relieve the pent up meconium. Accordingly I consulted with my friend Mr. Spear, of Eling, on the best plan of proceeding; and we arranged to meet the following day and perforate the sac, with the view of establishing a communication between the gut above and the imperfect rectum.

Mr. Spear and myself met on the next day, the 11th, having delayed our meeting several hours to allow the child to be baptized. Our services were not required for the living; the child had died a few hours before our arrival at the house.

A *post mortem* examination was at once obtained; and, with the assistance of Mr. Spear, I had the opportunity of making a thorough and elaborate investigation of the parts involved in this singular malformation.

The child was large and well formed, of natural colour everywhere, except over the abdomen, which was black, tense, and swollen, and its walls appeared so attenuated that one might almost imagine the convolutions of the intestines were visible through the parietes. On opening the abdomen, one immense object presented itself, which seemed to obscure every other. This was the descending colon, distended with meconium, and closed at its distal end, so that it rested on the bladder anteriorly, and on the iliac fossæ and lumbar vertebræ at the sides and behind. No portion of the colon was below the brim of the pelvis; but from it descended to the anal pouch a fibrous cord, which, on closer examination, appeared to be made up of condensed bands of pelvic fascia. I carefully removed the colon, together with the entire contents of the pelvis; and of these I subsequently made a minute dissection, with a view to discover whether any other, and what structures were implicated.



- | | |
|---|---|
| 1. The divided sacrum. | 6. The anal pouch. |
| 2. The divided os pubis. | 7. The levator ani, on the right side, which has been divided, and shown to show the connection of the pouch 4. |
| 3. The colon distended, and ending in a shut sac. | 8. The fibrous band between the colon and anal pouch. |
| 4. The bladder. | |
| 5. The fibrous band between the colon and anal pouch. | |

The only peculiarity which I observed was the absence of the rectum. The fibrous band mentioned was decidedly not a tube, but its entire length of being

and was continuous with the pelvic fascia before and behind. It possessed, so far as I could see, no vestige of proper muscular tissue; nor did the recto-vesical fold of the peritoneum appear. That membrane, on leaving the fundus of the bladder, was reflected over the enormous colon.

At the anal extremity, the appearances were natural. There was the retraction and puckering of the skin; and on dissecting deeper, the external sphincter was found perfect; but I cannot say that I discovered any circular band of muscle surrounding the pouch, which could be called the internal sphincter. The levatores ani were present and well developed, and together encircled the pouch just within the sphincter.

Milbrook, Southampton, June 27th, 1858.

HINTS ON THE CLIMATE OF AUSTRALIA.

By W. J. STERLAND, Esq.

[This paper has been communicated to us by Dr. COWAN, of Reading, who states that the author, though not a member of the medical profession, is entitled to speak with authority on the climate of Australia. EDITOR.]

THE salubrity of the Australian climate has been so much vaunted by almost every writer on the colonies of that vast continent, that it may appear an act of temerity in me to lift up my voice in opposition to the many who have lauded it as the healthiest climate in the world. Yet it is doubtful if these pages would have been written, had not an eminent physician suggested to me, that, having left England for Australia solely on the score of health, my experience of the climate might perhaps be useful to others; and it is on that account alone that I have ventured to pen the following remarks.

Before I set out for Australia, I had been suffering from ill health for some time; and, ere taking the important step of leaving my home for the antipodes, I very naturally consulted all the writers on the climate on whose works I could lay my hands. All (with only one exception) agreed in their accounts of its advantages. The exception was a little work by Dr. Clutterbuck,* a nine years resident in the colony; his statement alone varied from the rest, and he alone painted the climate in the colours which my subsequent experience has found to be correct. I believe his little book met with a good deal of opposition from the advocates of the colony, the writer being described as a disappointed man, who was endeavouring to revenge himself by depreciating the colony on a point which had always been strenuously insisted on as one of its chief advantages. However that might be, I know not; but, so unfavourable was his statement as to the healthiness of the climate, that I studiously kept back this book from some of my friends on this account.

The principal part of Australia that is colonised lies between the 28th and 40th degrees of south latitude, the mean annual heat being about 65° Fahr. In general, the atmosphere is a brilliant one; the extreme rarity and dryness of the air enabling one to see a far greater distance than is possible in England; indeed, the latter named quality, dryness, I believe to be its great characteristic. During the summer season, when there is a cool air stirring, there is a buoyancy in the atmosphere which I never felt elsewhere. Even during the rainy winter season, the air possesses the same quality; it may rain with almost tropical violence, but the air is free from dampness and clamminess; there are no walls streaming with condensed moisture, nor do the clothes steam on approaching the fire, as is so common in this country.

The season of spring commences in September, and is the most delightful part of the year; the ground is covered with an emerald verdure; and, though there are occasional showers, yet the sun shines brightly and cheerily, drying the ground which the heavy winter rains have deeply softened; too

much so, indeed, for the poor pedestrian, but not too much to fertilise the soil. In November, the summer heat commences, and then begins also that bane of the climate, the hot wind.

The interior of the vast continent of Australia, as far as it has been explored by Mitchell, Leichhardt, Sturt, and others, appears to be an interminable waste of sandy and rocky desert. Captain Sturt, who penetrated further to the northward than any other traveller, found himself in a desert of sandy hummocks alternating with bare rocks, and without a trace of vegetation or water. The heat was terrific; stones, that had lain on the ground in the sun, could with difficulty be held in the hand; the stirrups of the saddles became so hot, that the men could not always keep their feet in them; their nails became as brittle as glass; and all the horn handles of their combs and instruments split to pieces with the intense heat. A thermometer, hung in the shade at the back of a tree, rose to 132° Fahr., and in the sun to 157°! Only one living creature was observed: the wonder is, that any should be found in such a glowing region; but, perched on the highest and most exposed points of the rocks, where it was too hot to bear the hand for long, sat a beautiful little pigeon, with a long crest, the *geophaps plumifera* of Gould, seeming to find enjoyment in the heat which had driven all else living away.

The general opinion as to the cause of the hot wind is, that it becomes greatly heated in passing over the burning deserts just described; and I think the theory is so rational and sufficient to account for the effects, that no other need be sought for. The great proof of its correctness is, that the hot winds invariably blow from the interior to the colonies affected by them. In Port Phillip (now Victoria) they always blow from the north, and indeed I do not remember a north wind that was not a hot one.

We could always tell on rising in a morning, and sometimes before we left our beds, if the wind was in the north, even if we could not feel the heat. The sky, though generally free from clouds, wears a hard leaden aspect; and though at first there may be only a gentle breeze, yet it soon increases in intensity until it blows a perfect gale, driving the dust in clouds, while the sky has deepened into a lurid tint, and the sun has a coppery appearance. Every effort of course is made by those who have experienced the effects of these winds, to close all doors and windows, and every crevice that would admit a breath, in order to husband as long as possible the cool air which the house contains. In small houses the temperature within and without doors soon assimilates, while in larger ones the air can be maintained cool the whole day.

As the day advances, the heat of course increases, and the thermometer soon reaches 80°, but it still keeps rising until 82°, 84°, 86°, and sometimes 88° and 90° is attained; and this is within the house, and free from every breath of hot air. Out of doors in the shade the thermometer ranges from 90° to 105°, and sometimes higher; and I have known one instance in which it rose on a south wall (the cool quarter) in the shade, and within three miles of the sea, to 110°!!

During the summer season, rarely a week passes without one or two days of hot wind. Sometimes it blows for two days together; and on one occasion I experienced it without the slightest intermission for five consecutive days. I was told by a medical man in Melbourne, that one day more would have "laid half the people in Melbourne on their backs". The effects upon the human frame are, as may be imagined, extremely depressing; all energy is gone, one feels utterly exhausted, and gasps for breath like a fish out of water; but it is in vain that one opens a window to admit a little air to keep off the feeling of suffocation; a blast rushes in as hot as if it had just traversed a furnace, and one is quickly glad to close the window. Night draws nigh, and the wind generally changes at night; yet still it rushes on in the same violent monotonous manner. Suddenly there is a lull: one hastens to open the door. The hot wind has ceased; and in two minutes, sometimes less,

* Port Phillip in 1849. By J. B. Clutterbuck, M.D. London: J. W. Parker.

sometimes, though rarely, more, roaring over the tree-tops comes a south breeze, charged with cold from the Arctic ocean, and for a few minutes driving back the dust which all day long had been blowing in the opposite direction. When this has subsided, doors and windows are thrown open with a glad welcome, and thicker clothing is put on.

But if the wind should not change in the evening, matters are still worse. In the daytime there is something to attract attention, if one is almost melted; but at night there is no such resource, and one feels totally exhausted. Yet sleep is impossible; for the thermometer in the bedroom is never less than 84° or 85°, and the heavy monotonous groaning of the wind, as it rushes past, sings anything but a lullaby. There is nothing left but to lie on the bed, waiting and hoping for a change with as much patience as can be mustered. Often have I risen in the night and opened the window, in the vain hope that perhaps the wind might have changed without our hearing it.

It is, I believe, the extreme vicissitudes of the Australian climate, the great and sudden changes of temperature, that are so injurious to the constitution and so productive of disease. In the summer of 1851-2, on one occasion the thermometer at the back of my house, in the shade and facing the cool quarter, stood at noon during the prevalence of a hot wind at 107°; the next day at the same time and place it stood at 52°! This, I grant, was an extreme case; but I have frequently known a difference of from 10° to 30° in from two to five minutes, and indeed I never recollect an instance of a hot wind occurring, when the change to a south wind did not take place in the sudden manner I have described.

It must strike the most careless observer that such vicissitudes cannot be beneficial to health, when one hour you are perspiring copiously under the thinnest possible clothing, and the next glad to get to the fire-side, or put on winter clothes.

Fever and dysentery (as might be expected) are very frequent; and rheumatism, notwithstanding the dryness of the air, is far more prevalent than in England, a fact clearly to be attributed to the sudden changes of temperature. Consumption, too, is frequent, and fearfully rapid in its course; but I believe that, in its incipient stages, before any ulceration of the lungs has commenced, the Australian climate would prove remedial in its effects, if the extreme changes mentioned above were guarded against. Ophthalmia is very common, arising from the intense heat and glare of the sun, and the dust with which the air in summer is constantly loaded. During the summer of 1851-2, influenza made its appearance in the colony, and was very general in its ravages, few persons escaping a more or less severe attack.

I have found disease of every kind far more rapid in its course than in England; and generally speaking, it may be stated that the climate is fatal to the extremes of life, particularly to childhood, great numbers of children being annually carried off by dysentery and inflammatory diseases.

I have stated, at the commencement, that I visited Australia for the benefit of the climate, and the reader will be glad to learn with what success. The chief disorders from which I suffered, were a delicacy of chest without the presence of actual disease, and an extreme susceptibility to take cold. On these two points I found the climate highly beneficial; I have never felt the least symptom of weakness of chest since I landed in Australia nor since my return, nor have I ever had but one cold or cough during the same period. But, on the other hand, I suffered much from the depressing influence of the hot winds, and twice I was laid up with low typhoid fever, and fully expecting that the last attack would prove fatal.

I do not pretend to account for the manner in which the diseases I have mentioned are produced; this I leave to the physician. I have merely chronicled the result of my own experience during a few years residence in the colony; and the reader will be at no loss to gather that, on the whole, my opinion of the climate is unfavourable.

Great stress has been laid by writers on the Australian colonies on the fact, that persons, they say, may sleep out of

doors without any danger. During the summer season, when little or scarcely any dew or rain falls, a man may easily do this without risk, wrapped in his blanket or opossum rug; but at other times of the year it is almost as impossible as in England, and it argues great ignorance, or perversion of the truth, to take a few isolated months and hold them forth as a specimen of the whole year.

I may, perhaps, usefully conclude these notes by a brief description of the seasons as they occur. Spring, as I have elsewhere said, commences in September; and during this and the following month the weather is particularly fine and exhilarating, with frequent genial showers.

Summer sets in with November, and continues until the end of February, the latter being the hottest month of the year; the hot winds prevail during the whole of this season, and the dust during the same period is a constant plague. Within fifteen or twenty miles of the sea coast, the summer heat is tempered by the sea breeze; but beyond that distance it is much more intense. In general, little rain falls during the summer; but destructive floods occasionally occur in December, from heavy rains on the distant mountain ranges. March, April, and May, are the autumnal months, the last being frequently showery.

Winter begins in June and continues through July and August. The rains during these months are heavy and frequent, approaching the tropical in character. In the lower-lying country, the cold rarely produces more than occasional slight frosts, which are dissipated in an hour; on the high grounds and mountain ranges snow frequently falls to the depth of several inches, and ice is formed, of the thickness of a shilling, but neither last many days.

The mean annual depth of rain in Victoria is about forty-eight inches, the mean of London being only about twenty-two inches; a proof of the tropical nature of the winter rains, and of the rapid evaporation going on during the remainder of the year.

Reading, July 1853.

MASTURBATION IN A FEMALE APPARENTLY WITHOUT AN UTERUS; WITH REMARKS.

By EDWARD WADDINGTON, Esq.

THE following case came under my notice in the year 1848, while in practice in the country. By a reference to my case book, I find ample details of the case; but, as it would take up too much space to publish the whole, and as the case will lose nothing by being abridged, I shall adopt the latter plan.

Catherine Stevens, a finely formed, but sickly looking servant girl, aged 22, applied to me on account of frequent pains in the back, passing round to the loins. Upon inquiry, I found that these pains were first noticed about the age of sixteen, but were of so slight a nature, and so short in duration, as to attract but little notice. For the last few years, however, she had suffered more and more; the pains in her back appearing gradually to increase in strength and duration, recurring as nearly as possible every two or three weeks, seldom leaving so long an interval as a month, and lasting about three days. When first noticed, some years since, they did not continue more than half a day, or a night. She had never menstruated. From the peculiar pearly yellow appearance of the features, the tumid, discoloured skin, circle beneath the eyes, the pearly conjunctivae, the gummy white tongue, and feeble pulse, I came to the conclusion that this was simply a case of anasarca. For months I continued to treat this person for anasarca. She took at various times, one after almost all the emmenagogues in repute; but all avail. She was cupped on the loins; had leeches the vulva, and insides of the thighs; used hip-baths with no apparent benefit. I therefore insisted upon examination, to satisfy myself that no unnatural in- existed to render the

ment unavailing. I first directed my attention to the chest, and found the breasts well and fully developed, though rather more pendent and flaccid than usual in an unmarried woman at her age. The body was rather thin, but not emaciated; the muscles were relaxed and flabby. I found the organs of generation fully developed; the labia majora were large, and peculiarly flaccid; while the clitoris was prominent, appearing tumid, and very vascular. There was no appearance of the hymen. It was quite clear that this young woman had long been addicted to illicit connexion, although this was strictly denied. On introducing my finger into the vagina, I could find no os uteri. As the os externum was by no means small, I had no difficulty in making an extensive and careful examination. I found the vagina a perfect *cul de sac*; there was no trace at all of uterus. I was equally unsuccessful in finding the slightest indication by the rectum, or through the abdominal parietes. A medical friend (Mr. Ed. Gibson, of Huxey, Lincolnshire) by my request, made a long and careful examination, but came to the same conclusion, that no uterus could be found, and that this organ did not exist. A peculiar feature, remarked by this gentleman, as well as myself, was the large size of the vagina.

By strictly watching this young woman, and by frequent close questioning of her, the case was soon cleared up, or at all events, rendered more intelligible. Not only did she confess that she was in the constant habit of indulging in sexual intercourse upon every opportunity, but that she was addicted to the crime of masturbation to an extent scarcely credible. The failure of the constitutional effort at the establishment of the menstrual function, would partly account for her chlorotic appearance, and the pain in the lumbar region; but the feelings of exhaustion and nervous depression were doubtless the results of the vice of self-abuse. Had it not been for these consequences of indulgence in this vice, there is very little doubt but that this young woman might have passed through life without suspicion of the real cause of the non-appearance of the menses; as I am inclined to believe that the pains in her back and loins were more the result of loss of nervous energy, from excessive masturbation, than symptomatic of menstrual nusus. That the ovaries existed in this case is clear, from the presence of sexual appetite, and from the indications given of the attempt to establish menstruation, which the constitution appeared to have made at the time of puberty; a function in the performance of which the ovaries participate with the uterus. In this case, the uterus being absent an augmented activity would perhaps be induced in the endowments of the ovaries.

The last account I heard of this person was about a year since. She was then living in Sheffield, and cohabiting with a married man.

Masturbation is too often the only explanation of that chlorotic appearance the regular action of the uterus seems to abnegate. Medical men naturally shrink from bare suspicion, and will only deal with positive proofs, always most difficult to obtain in such cases; but once let the tongue be loosened by detection, and the modest motive for secrecy swept away, what a flood of disgusting relations is poured upon us, sickening to hear! Painful as it is, we cannot resist the conviction that the artificial system of education, and the mock morality now taught in some of our large educational establishments for young ladies, greatly tend to foster this vice, not only by the laxity of principles allowed, but by carrying out, almost to an insane extent, the system of outbidding one another in the scale of low charges, and the indiscriminate admission of all persons of respectable appearance or plausible connexion. This plan has admitted into schools improper characters—even kept women, who, under the denomination of "parlour boarders", have had full license and opportunity to corrupt juniors. The theory of immorality may have been "looming in the future", in the imagination of the young girl, long before she reaches school; and only at the latter place does she become acquainted with the practice of it.

2, Guildford Street, Russell Square, London, July 1853.

BIBLIOGRAPHICAL NOTICES.

ON DISEASES OF WOMEN AND OVARIAN INFLAMMATION IN RELATION TO MORBID MENSTRUATION, STERILITY, PELVIC TUMOURS, AND AFFECTIONS OF THE WOMB. By EDWARD JOHN TILT, M.D. Second edition. 8vo. pp. 276. London: 1853.

THIS volume is designated a *second edition*, whereas it is in reality a new work. The matter is greatly amplified, the arrangement is very much improved, and the composition, formerly too ornate and ambitious for the subject, is changed into a sober scientific style. The work, in its present form, is entitled to high commendation, both for its matter and its manner. It is not a treatise which claims or possesses originality; but it has the merit of being the best digest of the information which exists regarding ovarian inflammation. It is, however, something more than a compilation of other men's facts and opinions; for the author frequently expatiates, in a most instructive manner, from the abundance of his own resources. We may add, that Dr. TILT has filled, to as great an extent as it was possible, an acknowledged vacuum in our medical literature. The labours of many must, however, be devoted for years to come to supply the information which is still required, before we can be satisfied that we have learned all that is within our grasp regarding ovarian inflammation and its consequences.

Dr. Tilt's work is divided into an Introduction and twenty-five Chapters. A copious table of contents is prefixed to the volume, which gives the reader a good bird's-eye view of the subject before he commences to study it in detail; and for those who may wish to consult the book upon an emergency, there is appended an admirable alphabetical index.

In the Introduction, Dr. Tilt alludes to the defective nomenclature of the diseases of menstruation, as illustrated by the terms amenorrhœa, dysmenorrhœa, menorrhagia, leucorrhœa, and hysteria. For example, he says:

"LEUCORRHOEA stands either for—

1. Chronic catarrh of the Fallopian tubes. [*Rokitansky.*]
2. Uterine catarrh.
3. Hypersecretion of the mucous follicles of the neck of the womb in most cases. [*Tyler Smith.*]
4. Ulceration of the neck of the womb in most cases. [*H. Bennet.*]
5. Various inflammations of the vagina or external organs in most cases. [*Lisfranc.*]" (p. 2.)

The frequency of ovarian inflammation is proved by the statistics of hospital *post mortem* examination. We are reminded that—

"Mr. Pollock has shown that, out of 583 women opened at St. George's Hospital (from 1841 to 1850), 205 presented lesions in some parts of the generative apparatus, and in 116 were found the following lesions:—

"Adhesions of ovaries	-	-	13
Congestion	-	-	17
Scrofulous deposits	-	-	4
Fibrous deposits	-	-	1
Cartilaginous deposits	-	-	1
Calcareous deposits	-	-	2
Cystic tumours	-	-	51
Cancerous tumours	-	-	18
Atrophy [not senile]	-	-	8
Displacement	-	-	1

116"

The topographical anatomy of the ovarian region, and the methods of exploring the ovaries, are explained. Remarks are made upon abdominal, vaginal, and rectal exploration; and examination by the double touch and by the speculum are also considered.

Chapter I is occupied with the Theories of Menstruation.

Chapter II treats of the Natural History of Menstruation.

Chapter III contains some interesting observations on Type in Menstruation. By *remittent menstruation*, Dr.

Tilt means "that variety of menstrual derangement which is characterised by a change from the habitual type to another where the menstrual periods are brought nearer and tend to run into each other". Sulphate of quinine is often, as Dr. Tilt points out, a very valuable remedy in such cases. Alternately with this medicine, we are in the habit in such cases of giving sulphuric acid, and also gallic acid in pill with extract of henbane. The preventive treatment of remittent menstruation is thus laid down by the author:—

- "1. Strengthening of the nervous system.
2. Improvement of the blood by tonics and steel.
3. Observance of a judicious regimen during the menstrual crisis.
4. Forbidding the domestic use of purgative medicines, which frequently disturb the regularity of the menstrual type.
5. In general, marriage brings about the adoption of the normal type of menstruation, and parturition has often the same effect." (p. 54.)

Chapters iv and v treat of the Ovarian Nisus, and of the Ganglionic Symptoms of Menstruation. Did our space permit, we might make extracts from and comments upon these chapters.

Chapter vi treats of Cerebral Symptoms and their Classification. The morbid influences of the ovarian nisus upon the brain are thus classified: 1. Pain in the head; 2. Sick headache; 3. Pseudo-narcotism; 4. Hysteria; 5. Epilepsy; 6. Insanity.

By the term *Pseudo-Narcotism*, Dr. Tilt designates a group of cerebral symptoms similar to those produced on the brain by narcotic poisons, and which are familiar to practitioners. He seeks to assign these symptoms to six causes, viz., 1. Cerebral disease; 2. Plethora; 3. Anæmia; 4. Biliary derangement; 5. Toxæmic effects of retained menstruation; 6. A ganglionic nervous influence. The following paragraph is a specimen of Dr. Tilt's least careful and more dashing manner. Criticism races in before sober compilation, in place of taking its proper place in the rear.

"Struck by the fearful consequences of suddenly suppressed menstruation, producing in some cases delirium, cerebral congestion, and death, many observers, and lately Drs. Todd and Cormack, have sought to explain these effects by the toxæmic effects of the retained menstruation on the nervous system; but similar symptoms, and all the less degrees of pseudo-narcotism, are most frequent in the female before first menstruation, and after its cessation; and, as in the girl before puberty, so in the woman who has passed the climacteric, there can be no menstrual secretion to be reabsorbed: the explanation therefrom cannot stand." (p. 81.)

As no available reference is given to the writings of Drs. Todd and Cormack, we are unable to determine the passages to which Dr. Tilt alludes; but we can, nevertheless, state that Dr. Cormack speaks only of toxæmia from *non-elimination* of effete matter from the blood, and not from *re-absorption* of excreta from the blood. The paper referred to by Dr. Tilt is one probably upon Puerperal Convulsions. It has already been briefly noticed at p. 64 of the ASSOCIATION JOURNAL for January 21st; and it originally appeared in the *London Journal of Medicine* for June 1849.

Chapter vii is upon the Spinal Symptoms of Menstruation; chapter viii, upon the Critical Discharges of Menstruation; chapter ix, upon the Sanguineous Discharges of Menstruation; chapter x, upon the Mucous Discharges of Menstruation; and chapter xi, upon the Intestinal Discharges of Menstruation.

Dr. Tilt correctly remarks, that

"The critical discharge from the generative intestine is mucous as well as sanguine; that it generally constitutes the first and last part of each periodic crisis, and the first and last effort of the whole menstrual function; that it is often periodically repeated for years previous to the appearance of first menstruation, and is in some rare cases completely substituted for the sanguineous discharge. Thus, the first result of the ovarian nisus is to determine the pain; the second is to increase the habitual mucous secretion; the third is to determine the flow of blood." (p. 119.)

In chapter xii, Dr. Tilt speaks of the Influence of the Ovarian Nisus on the Cutaneous and on the Urinary Surfaces.

"If", says he, "cutaneous eruptions very seldom owe their origin to the menstrual function, during the period of its full performance, they are of frequent occurrence during the prodroma of first menstruation, and until it is regularly established. Those who attend large girls' schools know how frequently *acné* and other skin diseases appear on the face, the back, and shoulders, during that time, and how quickly they disappear when menstruation has become regular."

These observations are correct; and they harmonise well with a general remark we made when noticing, at p. 542, Dr. Neligan's book on "Diseases of the Skin", viz., "that it is monstrously absurd to speak of any appearance on the skin, except as a sign indicating a derangement of one or other of the leading functions of the body".

Chapters xiii to xxiv inclusive are devoted to Ovaritis, in its acute and subacute forms, in reference to its diagnosis, treatment, sequelæ, and statistics. A great amount of valuable matter is collected and submitted to the reader in a well arranged form. Subacute ovaritis is represented as assuming the following types, viz., the puerperal, the amenorrhæal, the dysmenorrhæal, the menorrhagic, and the hysterical. Sterility is mentioned as a common consequence of subacute ovaritis; and, by the consideration of that point, the author is led to consider inflammation of the Fallopian tubes as a cause of the same condition. He describes and condemns Dr. Tyler Smith's proposal to catheterise these passages: he doubts the possibility of performing the operation, and affirms that, if it could be performed, it would be both useless and dangerous. The chapters on ovaritis invite to lengthened commentary; but our arrears are so heavy in various departments, that we must pass on, simply commending them as deserving of study.

The xxvth and last chapter is devoted to the Pathology and Treatment of Sanguineous Pelvic Tumours. The subject is by no means exhausted, and the remarks upon diagnosis are particularly in want of additions. The information given is, however, very interesting; and the chapter, as it stands, is a good contribution towards a more extended inquiry. It is impossible satisfactorily to consider sanguineous pelvic tumours apart from other pelvic tumours: and this is a large and difficult subject which is still in much want of elucidation.

We have now rapidly run over the contents of Dr. Tilt's volume; and we hope that the indications of its value which we have given may induce many of our readers to peruse it with the deliberation which it deserves. Though the pages often sparkle with speculations, they likewise abound with telling facts and sound therapeutical data.

ON THE CONSTRUCTION AND USE OF THE MICROSCOPE. By ADOLPHE HANNOVER, M.D., Lecturer on Anatomy in the University of Copenhagen. Edited by JOHN GOODSTIR, F.R.S.E., Professor of Anatomy in the University of Edinburgh.

THE author of this work, after making some judicious preliminary remarks on vision, the different forms of lenses, and the refractive power exerted by the latter in their transmission of the rays of light, divides his work into five chapters, which successively treat of the Simple and Dioptric Compound Microscope; of the directions for the use of the latter instrument; of the Solar Lamp, Oxyhydrogen, and Photo-Electric Microscope; and of the Catoptric Compound Microscope. From this arrangement it will be seen that the method is highly judicious; inasmuch as it passes, by regular gradation, from the most simple to the more complex and difficult parts of the subject. Under each chapter the different parts of the subject appertaining to that division, are set forth with a clearness, conciseness, and precision, which cannot fail to render the work of great use to all who may choose to adopt it as their guide to the correct knowledge of the important subjects which it treats.

Chapter III deserves especial mention, as being full of practical remarks in reference to the preservation and arrangement of the microscope, illumination, the choice of magnifying powers, and the selection, preparation, observation, measurement, delineation, and preservation of objects. In short, the whole work forms a complete treatise on the construction and use of the microscope; whilst it has this special recommendation, that it conveys a vast amount of very valuable information without wearying the reader by a tedious prolixity of detail. We therefore highly recommend it to the notice of the profession, in the full expectation that it will shortly become as great a favourite in England as, we doubt not, it is upon the continent.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

REPORT OF THE SMALL-POX AND VACCINATION COMMITTEE.

THE Report which the Small-pox and Vaccination Committee presented to the Council on the 26th March, was drawn up by them, as then stated, in consequence of a bill for the extension of vaccination having been laid before Parliament by Lord Lyttelton. It contained a review of the present state of vaccination in this and foreign countries, and concluded with an unanimous expression of opinion on the part of the Committee in favour of a compulsory enactment, and with some suggestions for the improvement of the Vaccination Extension Bill.

The Report having been adopted by the Council, copies of it were forwarded at their desire to the Secretary of State for the Home Department and to Lord Lyttelton; and it has since been printed and published by order of the House of Commons. The bill having passed through all its stages in the House of Lords, is now waiting a second reading before the House of Commons;* and as in its progress it has undergone many alterations, avowedly in consequence of the Report emanating from this committee, the committee consider that it has become their duty to examine how far these changes are in conformity with the suggestions made, and to what extent the bill in its present shape is likely to be successful in attaining the end proposed by its author,—the more general diffusion of vaccination.

To attain this great object, two things appear to the committee to be alike indispensable: a compulsory enactment, and the encouragement and stimulation of those employed to administer it.

They consider that the argument in favour of compulsory vaccination was satisfactorily established, when it was shown that the proportionate mortality from small-pox in England and Wales, where the practice is entirely voluntary, is considerably more than double what it is in any European country in which the practice is compulsory, and *ten times as great as it is in many of them*; and the committee only revert to this point for the sake of recording their satisfaction at finding that the National Vaccine Board, in their Report just presented to Parliament, are equally anxious that vaccination should be made compulsory, and renew the expression of "their conviction that, if England is to be free from the small-pox, the interposition of the legislature alone, by wise and comprehensive measures, can disarm the pestilence of its terrors, and realise the fond hopes and prayers of the friends of humanity." The committee, however, are quite as firmly convinced that any measure of compulsion will fall far short of what may reasonably be expected of it, unless encouragement be given at the same time to administrative zeal and energy. They showed in their former Report how much had been effected, and might be effected, by these alone; and they gave a most striking illustration of their importance by contrasting two provinces of the same kingdom (Belgium), subject, of course, to the same compulsory laws,—in one of which the vaccinations in proportion to the births were nearly twice as numerous as in the other.

These, then, being the essential or fundamental conditions to be kept in view in any measure for the extension of vaccination, the committee have examined the amended bill of Lord Lyttelton with reference to them, and beg to observe:

1. *In reference to compulsion.* That the clause for this purpose (clause viii) is simple and direct, and likely, to a large extent, to be efficacious for its object; but that it would have been more so, had the suggestion of the committee been adopted, and had it been made the duty of some special officer in every union or district, to proceed against persons not complying with its terms.

2. *In reference to encouragement.* That not only does the bill hold out no encouragement to stimulate the zeal and activity of those upon whom it will mainly devolve to carry it into execution, but that by imposing upon them additional duties, while at the same time it expressly provides that they shall receive no remuneration for these duties, it makes it their present interest to oppose the bill in its passage through the legislature, and will disincline them, should it eventually become the law of the land, from rendering that active and spirited co-operation, which the committee have pointed out as essential for the attainment of the object sought. It would need no laboured argument to show, that on the medical men employed as public vaccinators throughout the kingdom, it will depend in a great measure whether the act shall be successful in its operation or not. If they be interested in its success, the universal vaccination of the people of this kingdom is not far distant; if, on the other hand, they be indifferent and apathetic, still more if they be hostile, this or any other measure will fail to a great extent to secure its end; and the real alternative before the legislature is this—whether they will permit some thousands of deaths from small-pox to take place yearly, or whether, by a wise and just expenditure of the public funds, they will evince their earnestness to eradicate this scourge, so disgraceful to the empire and to the age in which we live.

In their former Report, the committee exhibited some of the evils resulting from the present system of medical remuneration, as regards the practice of vaccination. They showed that the average sum paid for each successful case in England and Wales was less than eighteen-pence—a sum so inadequate that in many districts it was the custom to delay vaccination until a sufficient number of cases had accumulated to make it worth the while of the medical practitioner to perform the operation. This serious evil will, to a certain extent, be prevented by the enactment, that all vaccinations shall take place within a given time after birth; but additional trouble will thus be so far imposed on the vaccinator, and this of itself should constitute a ground for increase of remuneration.

Another and great evil of so low a scale of payment has been found to be, that the vaccinator having performed the operation has, in many instances, considered his task as accomplished, and has taken but little pains to ensure the inspection of the person vaccinated. Yet such inspection is alike necessary for ascertaining that the vaccination has taken proper effect, and for keeping up the supply of lymph. It should be one of the first duties of the legislature so to provide for the remuneration of the vaccinator, as to enable him to afford the requisite time, and to make it worth his while to follow each case to its own home (provided it be not brought to the station); so that in no instance should there be any doubt as to the success of the operation, nor any opportunity lost of maintaining a proper stock of good healthy lymph.

But if the payment hitherto given has been found insufficient to secure the attendance thus pointed out as absolutely indispensable, still less can it be expected that the additional duties imposed by the act will be efficiently discharged, unless additional remuneration be afforded. By the third clause the vaccinator will have, besides keeping the books and registers with which he is already furnished, to give two certificates *in every case*—one to the parents, the other to be sent to the registrar; and by the fourth clause, he will be required to examine into the state of health of persons submitted to him for the operation, and to certify thereupon, if they be not then fit for it; and this examination and certificate (which are as much professional acts, and involve as much knowledge and judgment, as vaccination itself) may have to be renewed an indefinite number of times. It is only those who have had such duties to perform who can understand the time they require and the trouble they give. The labour they imply ought not to be unrewarded; and the committee are quite at a loss to understand why a fee should be given to the registrar for each certificate he may give, or entry he may make, and yet be withheld from the medical man for the far more important duties which he has to perform.

Independently of the mischief which has arisen from the insufficient remuneration to the public vaccinators, there are other evils resulting from the mode in which that remuneration is given. Under the present system, payment is made by the

* It has, since this Report was drawn up, been read a second time.

Boards of Guardians—half from the consolidated fund, and half out of the poor's rate.

One serious evil was shown in the Report to be that some Boards, from a mistaken notion of economy, and desire to keep down the rates, actually discourage the efforts of the public vaccinators, and remonstrate with them if the number of vaccinations be large.

Another, to which the Committee did not then advert, appears to be this—that poor law medical relief, and public vaccination, being administered by the same board, and *paid for out of the same funds*, private practitioners, who would willingly be vaccinators under a national system, but who do not desire to be considered as in the employment of the Boards of Guardians, have abstained from taking the office, and thus the number of public vaccinators has been unduly limited.

The first of these evils would be entirely, and the second partially obviated, if the payment for vaccinations were made altogether out of the consolidated fund.

The most effectual remedy, indeed, for all the evils which have been pointed out would be to disconnect public vaccination from the poor law administration, and to place it under the superintendence of competent persons (as in other countries) whose sole duty should be the organizing and carrying out a system for the entire vaccination of the people. But if the legislature should be unwilling at the present moment to make this fundamental, and, as the Committee believe, most essential and ultimately indispensable change, it will yet be a great improvement on the present system that the rate of remuneration should forthwith be increased, and that payment should be made out of the consolidated fund.

To give effect to these suggestions it will be necessary that a short clause be introduced between clauses II and III, requiring the parents or guardians to return with the child on the eighth day after the operation, that the arm may be inspected and the certificate of successful vaccination given: that the fifth clause be omitted altogether; and that a clause be added fixing a minimum fee for the operation, and regulating the manner in which the fee shall be paid.

There are some other points to which the Committee have to advert. They find that clause II of the Bill is still so worded as to interfere with the rights of private practitioners; an obligation being thereby imposed by the legislature on every qualified medical practitioner to vaccinate *any* child which may be brought to him. Such is undoubtedly the effect of the clause, though the Committee know that this is far from the intention of the author and promoters of the Bill; and they suggest that the object of the clause will be attained, and every objection obviated, if all the words from the end of the thirty-fourth line be omitted, and the following substituted:—"for the purpose of being vaccinated (unless he shall have been previously vaccinated by some other qualified medical practitioner, and the vaccination duly certified), and the said medical officer or practitioner, so appointed, shall, and he is hereby required thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child."

The Committee regret to observe that no provision is made for the vaccination of children immigrating into this country, for the case of the removal of a child from the district in which he is born to some other district previous to the time till which vaccination may be deferred, for the exemption of children and persons who have had small-pox, nor for securing more frequent periodical returns of the numbers vaccinated to the central authorities.

R. D. GRAINGER, <i>Chairman</i> .	C. A. AIKIN.
J. F. MARSON.	W. B. KESTIVEN.
THOMAS HUNT.	E. C. SEATON, M.D., <i>Hon. Sec.</i>
W. A. LEWIS, M.B.	

[This Report upon Lord Lyttelton's Bill, as amended on re-commitment, was presented to the Council of the Epidemiological Society by the Small-pox and Vaccination Committee, and was adopted and approved by the Council.]

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

JUNE 15TH, 1853.

JAMES Y. SIMPSON, M.D., F.R.S.E., in the Chair.

ANCHYLOSIS OF THE ELBOW-JOINT REMEDIED BY EXCISION.
BY JAMES SYME, ESQ., F.R.S.E.

Mr. SYME placed before the Society what he believed to be the first case, in which anchylosis of the elbow had been remedied by removal of the ends of the bones involved. The satisfactory

results of this operation, as performed for caries, had frequently suggested the expediency of extending its field of usefulness to cases in which the elbow had been rendered stiff by the effects of injury or disease; and four years ago a case presented itself, so urgently requiring relief, as apparently to warrant even a doubtful experiment. The patient was a young man who came from one of the most remote highland glens, with both of his arms stiff in the straight position; the right elbow-joint being nearly, the left completely destitute of motion. The former had suffered a dislocation of the fore-arm backwards, which from being overlooked, remained unreduced; and the latter had been fractured through the condyles of the humerus. The state of helplessness thus resulting was extreme—rendering the patient unable to dress and undress, eat his food, perform his ablutions, or, in short, perform any service whatever either for himself or his neighbours. The left arm, being completely rigid, was chosen for operation, and the Society would now perceive that it had been rendered perfect in regard to form, mobility, and strength. The operation was performed in the Royal Infirmary, and the patient was now attending the normal school, to qualify himself for the duties of a practical teacher.

Dr. MACKENZIE said he had performed the *same operation* in a similar case some time ago, but with a less favourable result than in Mr. Syme's case. The elbow in this case had been ankylosed nearly in the straight position, which rendered the limb comparatively useless. It was now, since the operation, at a right angle, which enabled the patient to bring her hand up to her mouth or to the back of the head. The degree of motion, however, at the elbow was very limited. He would be glad to know how it was to be explained, that the amount of motion after excision of the elbow varied so much in different cases. In some cases in which he (Dr. M.) had performed the operation of excision of the elbow-joint, the amount of mobility (like the present case shown by Mr. Syme) was nearly natural, while in others the new joint was but slightly moveable, and this without any difference in the operation or after treatment, or in the extent of bone removed.

Mr. SYME replied that he could only answer for the results of his own practice, and that the mobility of the new joint depended on the operation being properly performed.

Dr. MACKENZIE said that this explanation was not very satisfactory. Mr. Syme must be aware of the facts he had mentioned. He (Dr. M.) had enjoyed extensive opportunities of seeing Mr. Syme's mode of operating and after treatment, and it differed in no particular from his own. He had asked the question solely with the view of eliciting information.

ANATOMICAL PREPARATIONS. BY JOHN GOODSIR, ESQ.

Professor GOODSIR described and illustrated a new mode of closing bottles containing wet preparations. The preparation-jars, (which were invented and manufactured by Mr. Stevenson, philosophical instrument maker, 9, Lothian Street, Edinburgh,) resembled in form the ordinary cylindrical jars at present in use, but had no lip, the glass being rather thicker at the top of the jars than elsewhere, and being carefully ground flat, so as to receive a circular slide of smooth plate glass, adapted in size to the mouth of the jar. When the jar was filled with fluid, and the plate glass cover accurately adapted, it was found that it could be inverted without the escape even of a single drop; and all that was necessary to maintain this amount of security was to surround the top of the jar by a metal ring, so as to prevent lateral displacement of the slide. The brass ring, as adapted by Mr. Stevenson, rendered the whole apparatus exceedingly elegant. The preparations were suspended by a piece of whale-bone, fitting into two notches on the internal surface of the jar, about three-eighths of an inch below the top; this arrangement displayed them to great advantage, the light being let in on all sides; while, on the other hand, it did not in any degree interfere with the perfect closure of the jar.

A preparation thus adjusted, might at any time be easily removed and replaced in a few minutes. It might, therefore, be without difficulty covered in while still recent, and again at every change of spirit. A great deal of spirit would thus be saved, which is usually lost by evaporation during the numerous changes required by most wet preparations before they are finally covered in. When permanently enclosed, a little thick luting might be placed around the mouth of the jar beneath the metal ring, and thus all access of air would be prevented.

Mr. Goodsir, in the course of his remarks, observed that the method hitherto followed in Edinburgh of covering preparation-jars by two layers of moist decomposing bladder with an intermediate portion of sheet-tin, was, in his opinion, almost as perfect as could reasonably be looked for, and he believed it would

still continue to be best adapted for very large collections. On the other hand, the time and trouble saved by the new method, and its comparative simplicity and cleanliness in the manipulations, as well as the elegant appearance of the result, would make it preferable for private collections. In point of expense he believed that the new method would prove the cheaper of the two, as it added, on an average, not more than one shilling to the expense of the preparation-jar, while the saving in trouble and in spirit would be very great.

The only objection that could be urged against the new method was that it did not allow for changes of temperature, and the consequent expansion and contraction of the fluid. Mr. Sheldon, who had in London pursued a somewhat similar method of enclosing wet preparations, covered the plate glass with bladder; but this method, though apparently very perfect, was found to lead to bursting of the jars under the effect of increased temperature. The principle of the method now proposed was to avoid fixing the top to such an extent as to prevent expansion of the fluid; and by leaving a little air in the jar, all inconvenience and risk would be avoided.

Dr. W. T. GAIRDNER had made a practical trial of the method recommended by Mr. Goodsir, having employed it for the last two months in enclosing a number of preparations. He was convinced that it would fulfil the expectations entertained of it by Mr. Goodsir, and had determined to adopt it in future, although he had found that it was almost impossible to avoid the escape of a very little fluid under increase of temperature, and he believed that any mode of removing this objection and rendering the process theoretically perfect, would endanger the preparation-jars. He had found it convenient, in covering the jars, to use the preservative fluid slightly warmed (to 90° or 95° F.) In this way the glass top was firmly pressed down on the jar from the first, and a vacuum was created, which, although it afterwards filled with air to a certain extent through the slight imperfections of the fitting, maintained for a long time the balance of pressure on the exterior. He believed that external luting would probably be found of no use, as this small amount of imperfection was absolutely necessary to safety, and any luting, not firm enough to endanger the jar by fixing the top, would be displaced so soon as there was any material pressure in either direction. The perfect cleanliness and simplicity of the method, and the ease with which preparations could be removed and replaced, were its great advantages.

Dr. BALFOUR referred to the mode of covering preparations by Mr. Ball, of Cambridge, by glass and India rubber. He intended, however, to give the present method a trial.

STATISTICS OF DEATHS AMONG THE ASSURED. BY ROBERT CHRISTISON, M.D.

The abstract is incorporated with that of Dr. Begbie's paper.

JUNE 29TH, 1853.

J. Y. SIMPSON, M.D., in the Chair.

STATISTICS OF DEATHS AMONG THE ASSURED. BY JAMES BEGBIE, M.D.

Drs. CHRISTISON and BEGBIE laid before the society the substance of reports which they had drawn up on the above subject, for the use of the life offices with which they are respectively connected.* The communications were of considerable length, and contained a great number of numerical details.

The report of Dr. Christison was chiefly directed to the investigation of the causes of death as bearing on the business of life assurance; that of Dr. Begbie, while embracing this view of the subject, entered also more into strictly medical detail, for which the large experience of the Scottish Widows' Fund (embracing considerably more than 1000 deaths) afforded a sufficient basis. Both reports were full of matter interesting to every medical practitioner. A large proportion of deaths in both offices had been caused by epidemic fever; and both reports testified to the fact, that the typhus of this country is not only a frequent cause of death, but that it appears to select its victims very frequently from the most unexceptionable lives of the community, and to terminate these abruptly at the period of greatest activity. The same may be said of cholera, which, during the last epidemic visitation, seems to have fallen heavily upon the assured in middle life. Next to fever, as a source of loss to the community, stands phthisis and tubercular disease, which likewise finds its victims to a great extent before the middle period of life. It was remarked that, in the report of the Scottish Widows' Fund, the number of deaths from phthisis after the age of 40 appeared larger than is usually observed in mortality lists,

or in the general experience of medical men. In apoplexy and palsy, on the other hand, the returns at the different ages corresponded closely with the table given by Rochoux. An accurate analysis of the deaths from these causes showed that, whereas in phthisis most of the lives had, at the period of acceptance, presented some character which might have led to their being considered doubtful, this was not the case in apoplexy. The investigation, therefore, of the premonitory signs of the apoplectic tendency was pointed out as a desideratum by the authors of the papers.

The discussion which followed the reading of Dr. Begbie's paper was of a rather desultory and conversational character.

Dr. OMOND adverted to the general impression, that the more rigorous examinations of the vital organs now in use had given rise to a greater number of refusals than formerly on the part of insurance companies. He said that, in some diseases at least, this was not the case; and referred to hæmoptysis, as an affection which would have been uniformly rejected twenty years ago, but which, in certain select cases, would now be admitted to insurance at a slightly increased premium.

Mr. SYME referred to one probable effect of the information afforded by these reports. It was possible that the evident attention paid by insurance companies to hereditary causes of disease might effect a reform which political economists and philosophers had long attempted in vain; and that the relations of marriage might be regulated to a greater extent than hitherto, by a consideration of the inexpediency of transmitting to succeeding generations hereditary peculiarities, which might exclude them from the benefits of life assurance.

Dr. W. T. GAIRDNER said that, although insurance companies were quite warranted in taking the safe side of a doubtful case, he believed the tendency of the present day was to overrate the importance of hereditary influences in relation to some kinds of diseases. The rule, for instance, established in some companies, that two deaths from phthisical disease in a family excluded its remaining members from the benefits of assurance, could not be very strictly adhered to without causing great and unnecessary hardship. Judging from various statistical data, it appeared to Dr. G. that, in a moderately large family, two deaths from tubercular disease would not necessarily imply a very high average, and could not be held as in general affording such proof of a marked hereditary taint as would justify the rejection of an otherwise unexceptionable life.

Dr. CHRISTISON differed from Dr. W. T. Gairdner in his estimate of the importance of the rule alluded to, and defended the practice of the insurance companies, which, he said, admitted of many exceptions to that rule, and could by no means be justly accused of erring on the side of too great strictness.

Considerable discussion followed, in which Drs. Begbie, Christison, Alex. Wood, and W. T. Gairdner, took part.

EDITOR'S LETTER BOX.

MEDICAL ETHICS.

LETTER FROM W. H. MICHAEL, ESQ., TO THE EDITOR.

SIR,—I shall be glad if you will announce in your next number, that it is my intention to move at the Annual Meeting of the Association at Swansea, "That in the opinion of this meeting it is desirable that a code of laws for the guidance of the members in all matters appertaining to professional ethics should be adopted, and that a committee consisting of the following gentlemen" [to be then selected] "be appointed to deliberate upon the subject, and report to the next Annual Meeting of the Association."

Entertaining a strong opinion as to the desirability of this resolution being carried into effect, and hoping to have your valuable cooperation and support, I am, etc.,

W. H. MICHAEL.

Swansea, July 12th, 1853.

THE BRANCHES OF THE ASSOCIATION.

LETTER FROM JOHN MCINTYRE, M.D., TO THE EDITOR.

SIR,—The perusal of the gratifying reports of the different Branches, which have recently appeared in the Journal, induces me to offer a few remarks on the organization of our body.

The locality in which I reside is so situated, as not (so far as I can find) to be included in any of the existing Branches. I

* The Standard Life Assurance Company and the Scottish Widows' Fund.

am thus deprived of any opportunity of meeting with my fellow practitioners, except at the General Meeting. I very much regret being so circumstanced, as I am fully alive to the many advantages, as well moral, as social and professional, that accrue from frequent intercourse between the members.

I am not aware whether any particular plan was adopted in the formation of the existing branches in the first instance; or whether they accidentally originated wherever a certain number of members resided near to each other. If there was not, it seems to me desirable, with our swelling numbers, that some fixed plan should be adopted; and no one appears so little objectionable as a geographical. England and Scotland might be divided throughout their length and breadth into districts, each of which would assume active operations where a stated number of the resident practitioners had joined our ranks.

It seems to me also that the great objects of our body would be more effectually promoted were we to have meetings more frequently betwixt the members; but this, considering our position with the community, and the difficulty we have in leaving our homes for any length of time, is impossible, if we have forty or fifty miles to travel. I would therefore suggest to the members, for their consideration before the annual meeting, the propriety of having *local*, as well as *district Branches*.

Each *local* branch might comprise an area about twenty miles, meet once a month, and have a central and fixed place of meeting. Its business should comprise the discussion of questions affecting the sanitary condition of the people; the reading of medical papers and cases; the taking cognizance of all irregularities in practice; and the private hearing of, and adjudicating upon, all professional differences and peccadilloes.

The Council of the *district* Branch should be composed of representatives from the local branches—chosen, either in rotation, by ballot, or the suffrages of their fellows—who would carry up the report of the discussions of their several bodies for the opinion, or judgment it might be, of the higher Assembly; and assist in the transaction of the other business of the Branch.

The General Executive should be composed also of representatives from the various local branches; be considered the highest court of appeal in matters medical; receive the results of scientific investigations, and all discussions of the Branches; canvass the correctness of the one, and the justness of the other; issue reports of its transactions through its accredited organ, and be, in fact, a representative council for conducting the business of the Association. The Annual Meetings of the Parent Association, I mean of course to take place, as at present, at the principal towns of the United Kingdom.

With this arrangement the whole country would in time be brought within reach of our operations. We should present to view an organization whose highest objects and greatest efforts were for the welfare of humanity; we should command the attention and the ear of the legislature in all matters connected with the public health; we should be in a position to demand the representation of our body in the councils of the nation, by members of the profession; and be thereby more likely to witness a satisfactory adjustment of all matters connected with that *questio vexata*—Medical Reform.

I am, etc.,

JOHN MCINTYRE, M.D.

Odiham, July 18th, 1858.

ASSURANCE COMPANIES AND THEIR TRICKS.

LETTER TO THE EDITOR.

SIR,—There is a trick of the assurance companies, which I wish you would expose, and warn medical men from falling victims to. I do not think that it has yet been noticed: perhaps it is a new one.

The trick referred to is sending the schedule of the *private friend* to the medical man without a fee. Whenever a man, wishing to insure, says he has never required to employ a medical man, the agent asks him if he is *acquainted* with any. He very likely names the family attendant, and the latter receives a schedule to fill up as the private friend of the former.

This has been done to myself, on two occasions, by different offices; and a third instance has come under my notice as medical referee of a third company: so that in this town there are at least three offices in the practice of this shabbiness.

When I was referred to, I took no notice of the application. Others are not so decided; for as referee I have this very day received a schedule filled up by an M.D., as private friend, and of course no other medical certificate was sent me.

The dilemma is, either to give medical information without a fee, or to refuse to act as private friend to one whose family the practitioner attends, and thus to risk giving offence in that quarter. I need not lengthen my letter by any remarks: the bearings of the trick are obvious enough. I am, etc.,

SOCRUS.

June 20th, 1853.

TO CORRESPONDENTS. We are still unable to publish the letters, on various subjects, now in type, and to which we formerly referred. We still continue to receive letters upon *Sunday observance*, several of which, on both sides of the question, treat it theologically, and therefore in a way not suited to the pages of a medical journal. We have said all that is at present necessary on the subject; and we shall not therefore do more than publish those letters which we formerly named, when we can do so conveniently. In reply to *Dr. Simpson's Letter to Dr. Meigs*, we have received several communications; and some of them we intend to publish with as little delay as possible. EDITOR.

NEWS AND TOPICS OF THE DAY.

CHARING CROSS HOSPITAL SCHOOL OF MEDICINE.

A hot war has been raging for some time past between the Managers of this institution and one of the Lecturers, Dr. Edward Smith. The disclosures which have been made show too plainly that medical teaching in a recognised metropolitan school is sometimes at least an occupation which brings with it neither honour nor emolument. We trust, however, that good may result from what has transpired. Already, a private quarrel seems to promise a public good. The following letter was addressed by the Secretary of the College of Surgeons to a member of the medical profession, in reply to his inquiries. We reprint it from the *Lancet* of July 23rd:—

"Royal College of Surgeons, July 1853.

"SIR,—In reply to your inquiry, whether the Charing Cross Hospital Medical School is now recognised by the College, I have to acquaint you that the Court of Examiners of this College have found it necessary to direct a visitation of the said school, but have not come to any decision on the question of its continued recognition. If the additions and alterations which the Court of Examiners think necessary to the efficiency of the school should be completed before the beginning of the ensuing winter season, the recognition will be continued. In the meantime, the Council has directed its removal from the list of schools from which certificates of the professional education of candidates for the fellowship and membership of the College will be received for the year commencing the 1st of August next.

"I am, sir, your most obedient servant,

"Edward Hart Vinen, Esq.

EDW. BELFOUR, Secretary."

QUEEN'S UNIVERSITY, IRELAND. The Senate have appointed the following Examiners in the Medical Department for the ensuing year:—*Chemistry*: Edmund Ronalds, Ph.D., Professor, Queen's College, Galway. *Anatomy and Physiology*: Charles Croker King, M.D., Professor, Queen's College, Galway. *Zoology and Botany*: George Dickie, M.D., Professor, Queen's College, Belfast. *Midwifery*: John Banks, M.D., King's Professor of Physic. *Surgery*: James G. Hughes, M.D., Fellow of the Royal College of Surgeons, Ireland. *Materia Medica, Pharmacology, and Medical Jurisprudence*: Aquila Smith, M.D., V.P. and Censor, King and Queen's College of Physicians, Examiner in *Materia Medica and Pharmacy*, T.C.D. *Midwifery and Diseases of Women and Children*: Henry L. Dwyer, A.M., M.D., Fellow of the King and Queen's College of Physicians.

SIR ASTLEY COOPER'S CLINICAL PRIZE. The prize of £300 has just been awarded to Henry Grey, Esq., of St. George's Hospital, for his Essay on the Spleen. The Council has offered to print the essay, at its own cost.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXI.

LONDON: FRIDAY EVENING, AUGUST 5, 1853.

NEW SERIES.

LAMERT *alias* CURTIS VERSUS DAWSON, FOR LIBEL.

MR. JUSTICE MAULE and a Leicester jury have had the disagreeable duty of sitting to arbitrate on one of the most disgraceful trials for libel that ever was listened to or recorded. The reporter of the trial tells us, that LAMERT, the plaintiff, is a man practising in London, under the assumed name of Curtis, in a certain department, but is not a qualified practitioner of medicine or surgery; and that DAWSON is also a person practising in London in a certain department, but is a member of the Colleges of Physicians and Surgeons. Dawson is the author of a book in which something is said calculated, it is alleged, to do injury to Lamert *alias* Curtis. These are briefly the circumstances under which Dawson is called upon to defend himself for libel. The trial, as reported in the *Times*, appears in a subsequent page.

In our ignorance of law, we had fancied that such a trial for libel could not have been permitted. A libel is a statement which is calculated to do injury to an individual in some particular way; to do injury to his character morally, or to do him injury in the practice of some lawful pursuit or business. In the trial before us, it was proved that the plaintiff was not following any lawful calling; on the contrary, that he was acting in downright and direct opposition to the law; and the law would no more receive from such a man skilled evidence having reference to that department which he assumes, than it would from a shoe-black or a razor grinder: and yet this same law allows itself to defend this plaintiff against a libel calculated to do him injury in a department or business carried on contrary to legal statute, and sustained only by official apathy.

It is not pleasant to contemplate eminent legal gentlemen defending, for a handful of gold, a nasty character, who practises his destructive trade in opposition to the laws of the realm, and who is notoriously the disseminator, at an enormous outlay of money, of filthy books and demoralising advertisements.

The report of this trial conveys an admonition to our Colleges. If we wish to hold on in the path of duty and of honour, it is necessary for us to disown every one who disgraces his great vocation. Let the Colleges of Physicians and Surgeons, whose names have been so much polluted by the trial at Leicester, take notice of the conduct of persons who for the present shall be nameless. Let us all, with one accord, repudiate vile men who fill their purses by unscrupulously lowering the character of their professional brethren, and by resorting to unprincipled puffing of their

own assumed integrity and superior skill. "If", said brave old Sir Humphrey Gilbert, "if, through pleasure, selfishness, or idleness, we purchase shame, the pleasure vanisheth, but the shame abideth for ever."

Join with us, then, fellow associates, in adopting these simple yet powerful words, and in striving to regulate our conduct, as individuals and as members of medical colleges, under a deep conviction of the truth which the words convey.

MEDICAL WITNESSES IN RELATION TO THE DIFFERENT SYSTEMS OF CRIMINAL JURISPRUDENCE OF ENGLAND AND OF SCOTLAND.

WE formerly (June 2nd, p. 478) had occasion to advert to the superiority of the Scottish system of criminal law, under which processes are instituted by the Crown authorities, and not by private individuals bound over to prosecute, as is the case in England. We remarked that "the want of a public prosecutor is a glaring defect in the criminal jurisprudence of England, which ought at once to be remedied". We had chiefly in view, when we made that observation, the notorious frequency with which justice miscarries in England, as compared with Scotland, apparently in consequence of the more clumsy and more cumbrous machinery of the English law. We have now to direct attention to another mischief, which arises from the same cause,—a hardship which may occasionally press upon any member of the community, but which is liable to occur most frequently to members of our profession. We refer to the astounding fact, that, when a prosecution breaks down in its preliminary stages, medical witnesses may have no legal claim to remuneration, even though they may have been taken for days together from their practice, and subjected to hotel and travelling expenses. They may not only be unable legally to claim any compensation for their loss of time, but they may even be unable to obtain restitution of their compulsory outlay of money.

We are not speaking of hypothetical grievances: we have before us a newspaper report of a case in point, which was discussed at the Glamorganshire Quarter Sessions, on the 27th of June last. A sketch of this discussion will do more to enlighten our readers upon the glaring defect in English criminal law to which we have now adverted, than any dissertation which we could frame upon the subject. Apposite facts, when simply told, are always the most cogent arguments against oppression.

"Mr. FRANKLEN called the attention of the court to a case, important to every magistrate present. In March last

he chanced to be the Chairman of the day at the Bridgend Petty Sessions. A complaint was made on that day by Edward Jones against David Richards, for an assault. The magistrates came to the conclusion that an aggravated assault had been perpetrated, inasmuch as the complainant's jaw had been broken by a stone, and the defendant had waylaid him for the purpose of assaulting him. David Richards was therefore committed for trial at the Quarter Sessions; and to secure the ends of public justice, the magistrates bound over Edward Jones, and Mr. Phillips, a surgeon, to give evidence. David Richards was indicted at the Easter Quarter Sessions, at Swansea. A true bill was found against him by the grand jury. He was tried before a petty jury and acquitted. The costs of the prosecution were not allowed by the court; the result of which was, that the justices' clerk, the police officers, and the surgeon, who were witnesses in the case, were all unpaid for their attendance at Swansea, and their other services.

"The CHAIRMAN said, that although a jury might acquit a prisoner, the court might think the verdict contrary to evidence, and would not refuse the costs; but, in the case alluded to by Mr. Franklen, the party who prosecuted for an assault had himself been convicted of an assault on the party committed for trial, on the very same night.

"Mr. FRANKLEN said, that by the refusal of costs in the case referred to, the sufferers were the justices' clerk, the police officers, who were witnesses, and the surgeon,—persons who were perfectly innocent of those charges, and had been bound over in heavy penalties to attend and give evidence.

"Mr. H. A. BRUCE said, that costs might be refused on two separate grounds. First, on the ground that the case ought to have been summarily disposed of by the magistrates; and secondly, on the evidence adduced, not before the magistrates, but before the court, which would lead the Chairman to consider that the case for the prosecution did not justify the payment of costs out of the funds of the county. The costs were refused, not because the Chairman found fault with the magistrates for committing the man for trial, but because the prosecutor was not entitled to bring that case into this court. No doubt the decision not to allow costs was pecuniary loss to innocent witnesses; but he did not know what other means the court had of showing disapprobation of the conduct of a prosecutor than by disallowing the costs.

"Mr. FRANKLEN said, it was a very painful position for the magistrates to be in, that of being the means of fining a gentleman many pounds, in addition to his loss of time, by requiring him to perform a public duty. The medical gentleman was perfectly innocent, and was bound over in heavy penalties to attend.

"Mr. H. A. BRUCE said, that the decision had been given by their Chairman, who was assisted by one of the most judicious and able magistrates in the county; and they ought to receive it as a decision properly arrived at.

"Mr. BRUCE PRYCE had seen costs applied for, in cases where the court was not able to award them. Were there no means at the disposal of the magistrates, by which the costs of the surgeon might be paid, as he was bound over by the magistrates? He (Mr. Bruce Pryce) thought they were right in refusing costs; but, at the same time, it was very hard on witnesses to lose so much time, and yet not be paid.

"A MAGISTRATE asked whether the witnesses could not proceed against the prosecutor for payment?

"Mr. FRANKLEN said that the prosecutor was a pauper, or very little better."

Is it possible to read the above discussion, and refuse to allow that the machinery of English criminal law requires a radical reform, and that the members of the medical profession, as a body, as well as in their relation of citizens, are called upon to exert themselves to promote this end? The injustice inflicted upon Mr. Phillips demands redress: and it is an injustice which may be inflicted any day, upon any of us. Unrepresented as is our profession in Parliament, we cannot reasonably be sanguine as to speedy success crowning our exertions in any cause; but we can console ourselves by reflecting that, in this free country, the persevering agitation of a real grievance uniformly paves the way for its ultimate redress. It is this conviction which encourages us to remonstrate whenever we learn that the rights of the profession have been violated; even though we are well aware that the ear of power is listless, unwilling, and deaf to our complaints.

POSTPONEMENT OF THE VACCINATION EXTENSION BILL, AND ITS GREAT IMPROVEMENT IN COMMITTEE.

We have printed at p. 696, three new clauses which have been introduced into the Vaccination Bill, in its progress through Committee. They undoubtedly improve the Bill very much. Some of its more objectionable parts have also been altered, in deference to the suggestions of the Epidemiological Society. The Bill, however, is still open to criticism; and it is likely to be still farther improved by postponement for another year.

In a subsequent page will be found a short account of an interview between a deputation from the Metropolitan Counties Branch of the Association and Lord Palmerston, the Home Secretary. Lord Palmerston readily admitted that there were good reasons for delay; and for the present, perhaps, the danger of a mischievous Vaccination Act is averted. It remains for the profession, and in particular for the Provincial Medical and Surgical Association, to make known their opinions before another session of Parliament commences. *The best machinery for extending efficient vaccination is the problem which has to be solved.* Many helps to a right solution have already been published in this Journal, and to them we refer for ample information.

THE SWANSEA MEETING.

Our number for the 19th inst. will contain a full report of the proceedings at Swansea, on the 10th and 11th inst. If gentlemen who move resolutions, or propose committees, will have the kindness at once to place distinctly written duplicates of their motions in the hands of our reporter, that accuracy will be obtained which could in no other way be secured.

ORIGINAL COMMUNICATIONS.

CASES IN OPHTHALMIC PRACTICE.

By WHITE COOPER, F.R.C.S., Ophthalmic Surgeon to St. Mary's Hospital, etc.

CASE I. ENLARGEMENT OF THE EYEBALL FROM INJURY: EFFECTS PRODUCED BY A SUBSEQUENT BLOW: EXCISION OF THE FRONT OF THE EYE. James Cooper, aged twelve, was admitted into the male eye ward of St. Mary's Hospital, October 1st, 1852. He was said to have enjoyed good health until five years and a half previously, when his left eye was accidentally scratched with a fragment of glass. This was followed by total loss of vision, but without much pain until the expiration of three months, when the eye became painful, and began to enlarge. It was then treated with leeches, blisters, etc., for about six weeks; the pain subsided, but the globe continued enlarged. He had since complained of pain in it from time to time. Seven days before his admission the eye was struck by a potatoe thrown by another boy, which caused it to burst and to bleed very profusely. Ever since he had suffered excruciating pain, and the eye had remained in a state of inflammation.

The lad was greatly emaciated, of a pale strumous aspect; light-haired, and with bloodless lips. He lay constantly on the bed, with his face buried in the pillows. The left eyelid was of a dusky purplish hue, and traversed by many tortuous veins. The eyeball was considerably enlarged, and the sclerotic was of a deep brick-dust colour. All traces of the cornea had disappeared; and its place was occupied by a yellowish brown mass, having a deep ulcerated spot nearly half an inch in length, and two lines in width, extending down its inner side; from this there flowed a sanious offensive discharge. The patient complained of paroxysms of severe lancinating pain.



He was ordered to take two grains of hydrargyrum cum creta, with four grains of the potassio-tartrate of iron, thrice daily: the eye was directed to be kept moistened with a lotion of half an ounce of liquor sodæ chlorinatæ in ten ounces of water.

This treatment was continued for twelve days, with some advantage, as the pain diminished in intensity, and the general swelling was rather lessened. A white sloughy mass now occupied the place of the cornea, and the discharge was considerable. The case was, at this juncture, seen by several of my colleagues, and by Mr. Hodgson. A difference of opinion existed as to the precise nature of the morbid change, but all agreed that it was proper to endeavour to afford relief by operation, as the lad's general health was failing rapidly, and the prospects of improvement from palliative or medicinal measures were very slight.

It was determined, therefore, to slice off the mass occupying the front of the eye. If the contents of the globe were fluid, they would be thereby evacuated, and the eye would collapse. If, on the contrary, the disease appeared to be of a malignant character, the organ should be forthwith extirpated.

On the 13th October, the lad was placed under the influence of chloroform; and, with a long cataract knife, the mass occupying the front of the eye, including the ulcerated fissure, was fairly sliced off. Contrary to expectation, there was very little bleeding; but the eyeball was found to be filled with a tough mass, there being no trace of either lens or vitreous humour. Portions of the mass were immediately submitted to the microscope, and presented a fibrinous appearance, with great numbers of crystals of hæmatine dispersed through it. No definite cellular structure could be made out; and certainly no traces of malignant disease. It seemed, in fact, as if the globe was filled with the remains of a large blood clot. This rendered further proceedings unnecessary. The eyelids were closed with strips of plaster; and cold wet bandages ordered to be applied.

From the time of the operation, the relief was most marked; all pain ceased, the lad slept well, and rapidly recovered his appetite and spirits. On the third day after the operation, the eyelids had assumed a natural appearance, and healthy granulations were seen springing from the surface of the wound. Iron and cod liver oil were prescribed; and, on the tenth day after the removal of the mass, the wound was found to have healed kindly, and the remains of the globe to be perfectly free from irritation, forming an excellent stump for an artificial eye.

CASE II. NEURALGIA OF THE EYE FROM MECHANICAL IRRITATION: OPERATION: RECOVERY. W. W., aged 22, was admitted into the male ophthalmic ward of St. Mary's Hospital, on June 14th, 1853. When eleven years of age, he had received a violent blow on the right eye, which discoloured it, but was not at the time followed by inflammation. The eye speedily resumed its natural appearance, under the application of the popular remedy of raw beef. Three months afterwards, however, inflammation attacked the organ, and was speedily attended with ulceration, which penetrated through the cornea, causing adhesion of the entire circle of the pupil, and subsequently giving rise to a dense leucomatous projecting cicatrix, occupying two-thirds of the cornea. After this, the eye suffered from repeated attacks of pustular ophthalmia; and, in 1850, violent neuralgic pain set in, which, with the exception of one fortnight's reprieve, continued constantly, though varying in degree, until the period of his application. He had sought relief at many institutions in town and country, and had undergone a great variety of treatment, including the frequent application of caustics, without deriving the least advantage.

He was pale, emaciated, and evidently worn down with suffering. Every attempt to face the light, or to open the eye, brought on a gush of tears, and a paroxysm of violent pain. The cornea presented a solid leucomatous mass projecting from it, having almost a staphylomatous character; and on its most prominent point a small white scale was seen.

Being of opinion that this scale, together with the mass generally, was the cause of the pain, I determined to slice it off. On the following day, the patient having been chloroformed, the scale was first lifted off, and the mass then carefully pared off down to the level of the cornea. It was solid, and blood oozed from the cut surface. The lids were closed with strips of plaster, and wet rags were ordered to be applied. Twenty drops of liquor opii sedativus were given at bedtime. The patient passed an excellent night, and had no pain whatever.

The eye rapidly recovered from the operation, and the patient was discharged from the house on June 21st, and ordered to attend as an out-patient. The only further treatment required, was tonic medicine to improve the general health. It is satisfactory to find that he is now able to follow his occupation as a workman, and that the eye continues sound, with the exception of the opacity of the cornea. There has been absolutely no pain since the operation.

Under the microscope, the portion removed presented the characters of ordinary cicatrix tissue. The solid scale was

calcareous deposit, and had been attached to the apex of the growth.

CASE III. PUNCTURED WOUND OF THE EYE: HERNIA OF THE AQUEOUS MEMBRANE. For the history of the following case, up to the 1st of May, I am indebted to Mr. Lawrence, one of the resident medical officers of St. Mary's Hospital, who had charge of the case up to that time.

William Peach, aged 33, a metal fitter at the Great Western Railway, became an out-patient at St. Mary's Hospital April 21st, 1853. He had been struck on the right eye, a short time before application, by a nearly red-hot chip of iron, propelled with great force from a piece of metal which he was boring. On examination, there appeared a wound of the cornea towards the lower part of its inner half; but no foreign substance could be detected in it. The conjunctiva of the eye was slightly inflamed; there was considerable lachrymation, and some intolerance of light.

The eye was ordered to be covered, and the patient to take two grains of calomel with the fourth of a grain of opium, thrice daily; collyrium aluminis was ordered to be used occasionally.

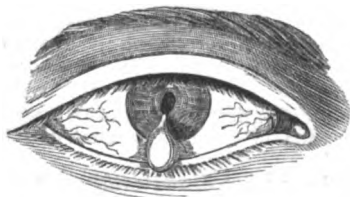
April 22nd. The eye was more inflamed, and more painful. There was increased photophobia. Pulse 100, and full; tongue furred. Four leeches were applied to the temple. The pills and collyrium were continued.

April 23rd. The leeches bled freely, and the eye was much better. The conjunctiva was raised over the injured portion into a vesicle, so that the sight was disturbed.

April 27th. The eye was not so well, being more inflamed and painful. The mouth was slightly sore. Three leeches were ordered to be applied, and the treatment to be continued.

April 29th. The eye was less painful, and less inflamed; but the vesicle seemed to be increasing. He was ordered to see Mr. White Cooper.

April 30th. This patient came this day under my care; and the appearances were as represented in the sketch;



there was slight general congestion of the conjunctiva, most marked in the neighbourhood of the wound. The iris was not inflamed. A pear-shaped transparent vesicle projected from the cornea, quite over the margin of the lower lid. The pupil was contracted and distorted, the edge being apparently adherent to the wound. I could not satisfactorily make out whether the vesicle was the posterior elastic lamina projecting in a hernia-like pouch through the wound, or whether it was more anterior. There could be no doubt, however, that it was in connexion with the anterior chamber. From its large size, and its situation, interfering with the closure of the lids, I determined to puncture it, and, by the application of the nitrate of silver, to stimulate the union of the edges of the wound. On pricking the vesicle with a cataract needle, the fluid shot out, and it instantly subsided. The point whence the fluid escaped was lightly touched with nitrate of silver.

May 3rd. The vesicle had nearly regained its former size. It was again punctured and touched with the caustic.

May 6th. It was only about one-half its former size; but it was deemed advisable to puncture it once more, and to apply the nitrate of silver rather more freely than on the former occasions. The application was followed by a considerable amount of pain, which continued more or less for two days; there was, however, no active inflammation. From that time the wound healed, the surface of the cornea

merely presenting a linear cicatrix, indicating the situation of the injury. The pupil, being adherent at one point, remains oblong; but the sight of the eye is now nearly perfect.

REMARKS. The first case affords an illustration of a rather unusual result of injury to the eye. The appearances before the operation, namely, the livid palpebrae traversed by great tortuous veins, the hard, enlarged, and thoroughly disorganised globe, discharging an acrid sanious fluid from a foul and ragged fissure, and the intolerable pain, led to suspicion of malignant action; a suspicion favoured by the unhealthy, emaciated aspect of the lad. Cases are on record, in which diseases of the eye, of an innocent character, have been pronounced malignant, and treated accordingly. Professor Roser especially states that the mistake occurred to him, "to consider as fungus oculi a case of purulent choroiditis, which supervened on staphyloma, that had been cured several years previously, and which I first beheld when it was at the height of its development. I accordingly prescribed extirpation. In a case which occurred at a later period, which, still more illusively than the first, resembled carcinoma, a medullary fungus breaking forth through the eye, and in which nothing else was found than purulent choroiditis, with staphyloma of old standing, I was prevented from forming an erroneous diagnosis, solely by the circumstance that I had several times, at early periods, seen the child as a patient with staphyloma."

The effusion of blood deep in the eye sometimes gives rise to appearances which may be mistaken for malignant disease. At the present time, I have in attendance at St. Mary's a little child, into whose left eye a fork was thrust just at the junction of the cornea with the sclerotic, wounding the iris. It probably missed the lens, as there is no cataract; but, deep in the eye, there is visible a fawn coloured, metallic looking mass, just like the commencement of medullary disease. I was in doubt, for some time, whether the injury might not have excited some such morbid action; but I believe that is not the case, and that the appearance is merely fibrin, from which the red particles have been removed. I am the more led to this conclusion from two other cases which have fallen under my notice, where, in elderly people, a vessel had given way deep in the eye, producing sudden blindness, and causing first a red, then a brown, and lastly a yellow reflection from behind the lens.

In the case of James Cooper, the solid contents of the globe were probably the remains of blood which had been poured into the cavity; a condition at the first glance unsatisfactory, but really useful, as its firmness afforded an excellent cushion for an artificial eye. The benefit afforded by the operation was most marked; and the rapid subsequent improvement in the nutrition of the patient manifested how vast a relief had been afforded to the constitution.

Though the incision for the removal of the diseased parts passed through highly inflamed structures, it was attended with very little bleeding. Formidable hæmorrhage, however, occasionally takes place in similar operations; an instance of which occurred in my own practice, a few months ago. I removed a portion of a staphylomatous cornea from an enlarged and disorganised eye, for the purpose of sinking the globe. For thirty-six hours, with trifling intermissions, the wound continued to bleed, in spite of a variety of efforts made to stop it. In such cases, the erect posture, the local application of styptic fluids and pounded ice in bags, with such gentle pressure as a moderately tight compress will afford, are the best measures for controlling the flow of blood. As this is seldom from one point, but rather from many weakened and dilated vessels, neither ligatures nor caustics can be conveniently used. The globe often remains distended with blood; but much of this is subsequently absorbed.

When the wound made by the operation has nearly healed, it is not uncommon to find a few exuberant granulations lingering and retarding the cure. They should be touched

with sulphate of copper, and the eye bathed twice daily with a solution of alum or of tannic acid, which latter, in the proportion of four or six grains to the ounce, is very useful. The alum and tannic acid have been prescribed in combination; but a curdy precipitate of tannate of alumina is thrown down, and a large portion of tannin is rendered inert. By the treatment mentioned, the cicatrix soon acquires firmness, and the eye becomes free from mucous discharge.

The nature of the change by which such opacities, or such heaping up of abnormal tissue, as that described in case II, is produced, has been well explained by Mr. Bowman: "The nature of the nutritive process in the lamellated tissue is such, that this tissue recovers itself in a great measure, by timely treatment, from almost any amount of inflammation, and consequent effusion, which falls short of actual destruction of its elements; but when these elements are at all displaced or consumed under the morbid process, then permanent opacity is very likely, and, indeed, almost certain, to follow; for so artificial is the mechanical arrangement of the elementary lamellæ, on which the transparency of the cornea depends, that when their substance is once removed, its place cannot be supplied with a tissue of an equally elaborate organisation. The new material, though its bulk and strength may be equivalent to those of the old, is fibrous instead of being lamellated, and opaque instead of being translucent. It contains a considerable quantity of yellow tissue, intimately mixed with the white, and both most irregularly interwoven and ill-developed—ready to become the nidus of small granules of earthy or fatty matter, such as readily settle in parts of deteriorated structure."

The presence of such earthy or ossific deposit in the eye is far from uncommon; osseous cataract being perhaps the most frequent example. Of this, a very excellent specimen was exhibited at the Pathological Society by Mr. Canton, in May 1851; the capsule of the lens was completely converted into calcareous material, and osseous patches had been formed in several places between the retina and choroid. It was taken from a woman aged 73, who, thirty years before her death, had received a blow on the eye, followed by wasting of that organ.

It does not necessarily follow, that ossific deposits in the eye should be attended with neuralgic pain; but they are so in a large number of cases. In the first volume of the *London Journal of Medicine*, four cases were related by me, which illustrate this point. The case above described affords another example; and one very similar is mentioned by Mr. Bowman. A girl, aged 14, was brought to that gentleman, suffering from severe inflammation of the eye, which had been partially sunk several years before, and in which no perception of light remained. The irritation was very great, especially on every movement of the lid: on examination, a hard, angular piece of bone was observed, imbedded in the front of a dense opacity of the cornea, and projecting beyond it, quite bare. The fragment, which was of the size of a large pin's head, was easily removed with a pair of forceps, and the patient speedily got well.

I am an advocate for the use of the knife, in preference to escharotics, for removing leucomatous growths or tumours from the eye; it is more sure, more speedy, more manageable, and less painful. In a few cases which have fallen under my notice, where inflammation has followed excision, it could generally be traced to long continued and abortive attempts to pare off the growth, accompanied with violent pressure on the eye to steady it. If chloroform be used, the operation can be performed at once with neatness and a light hand, and the relief is immediate.

19, Berkeley Square, July 1853.

CASE OF RUPTURE OF AN ANEURISM OF THE TRANSVERSE PORTION OF THE ARCH OF THE AORTA INTO THE TRUNK OF THE PULMONARY ARTERY.

By W. BIRD HERAPATH, M.D.

On a Sunday evening, at half past nine, P.M., I was summoned to attend Mr. Charles M—— R——, aged 53, who was then residing near me. I found him in bed; he was complaining of pain in the epigastrium, and of disposition to nausea, which had been increased to vomiting by the ingestion of warm water. He had an uneasy sensation in the bowels, with slight relaxation also. The substances ejected from the stomach were highly charged with acid. He also suffered from thirst; the tongue was, however, clean; the pulse was quicker than it ought to be, 100, soft and regular. The skin of the extremities, where exposed, was cold and moist, but under the bedclothes, warmer. He had no headache. The respiration was somewhat quicker than usual; he also had a slight cough, with frothy mucous expectoration; he compared the pain in the epigastrium to a constant burning sensation. He had often suffered from it before; and had hitherto always obtained relief from a draught of cold water. This had failed, as well as the emetic treatment on the present occasion.

The history of the case was the following, as given me by the wife. He was a brewer and distiller, and had held a situation in a neighbouring brewery during the last six months. He was rather fond of Scotch whiskey, and generally had several glasses of "toddy" during the day at intervals; but he was never intoxicated. The day previously, he attended to his duties as usual, and came home in the evening in his ordinary state of health. He had supped on beef, which was not fresh or good. The child had also eaten of the same dish, and not liking it, declined taking any more. Mrs. R. could not eat it, as it tasted strange and "fusty". He had tried to go to church on the Sunday, but came home again faint, and had taken no food. Taking all these circumstances into consideration, I thought that he laboured under gastralgia, from acidity; that the faintness and depression were produced by the emetic and exertion, together with abstinence from food and stimuli during the day.

I prescribed a pill containing four grains of calomel and one grain of opium, to be taken directly, and an antacid saline aperient, with some compound spirit of ammonia, every two hours; a mustard cataplasm to the epigastrium, and bottles of warm water to the feet; a little arrowroot and brandy as diet. At this time he only sent for me in consequence of the advice of a friend: the patient himself did not think it necessary to have a medical man.

About a quarter before eleven the same evening, I was again summoned to this patient, who was stated to be much worse. Thinking it to be over anxiety and timidity, I at first advised perseverance with the remedies; but a second messenger, following on the heels of the first, said that he was certainly dying, and begged my instant attention. In crossing the road, I met a third on the way to me. This had prepared me for a great and sudden change; but I certainly was not a little surprised to find my patient moribund. He was pulseless; cold; clammy; the face was pallid; the eyes glazed and insensible; no reflex excitatory phenomena of eyelids; and the jaw fallen. He made two or three convulsive gasps, and all was over. I attempted to restore animation by placing the head low, and applying burnt and smouldering rag under the nostrils, whilst I at the same time induced and kept up artificial respiration, by alternately compressing the thorax, and relaxing the pressure on the ribs. The heart was auscultated, but it had ceased to beat: and all attempts to restore animation were unavailing.

Upon more calmly questioning the spectators of the last moments of this sudden calamity, the following facts were elicited. He had complained of being worse and in more agonising pain, and of having more difficulty in breathing.

All at once he was seized with a "few spasms, not convulsions"; he became blue in his face; made some rattling noises in the throat; a cold clammy perspiration stood on his face in large drops; he groaned repeatedly as if in great pain; this groaning gradually became a dull moaning sound; then the countenance and skin assumed a dull slate colour; the eyes rolled about spasmodically; the patient appeared to fall into a comatose, stupid, or unconscious condition and rapidly assumed that appearance in which I found him. In the meantime he had been raised from the recumbent to the sitting posture, and the features were bloodless and pallid when I came in.

The whole appearances to me were those of a combination of syncope with asphyxia. As, however, considerable doubt remained as to the cause of these symptoms, and even some suspicion subsequently arose as to whether he had not committed suicide in consequence of some existing mental disquietude, it became my duty to acquaint the coroner with the whole circumstances of the case and await his decision, before I proceeded to request a *post mortem* examination.

In my letter to him, I hazarded the conjecture that one of four causes produced death: suicide or other poisonous agency; rupture of the stomach or duodenum from perforating ulcer; laceration of an aneurismal sac and internal hæmorrhage; or an epileptic attack merging into apoplexy. In the absence of further evidence, however, a decided opinion could not be arrived at.

EXAMINATION OF THE BODY, BY ORDER OF THE CORONER; EIGHTEEN HOURS AFTER DECEASE. The surface of the abdomen was thickly covered with fat, and the whole body was plump and well nourished. There were no appearances of violence; no ascites or anasarca; on opening the peritoneal and thoracic cavities, there were no traces of peritonitis, or any evidence of hernia, intussusception, or other intestinal displacement. There was no hæmorrhage; no rupture or perforation of the stomach or viscera. The pleural and pericardial cavities were free from fluid.

The coats of the stomach and smaller intestines were uniformly engorged with blood; all the branches of the portal system were in a highly congested state.

The lungs were equally gorged with blood. The vesicular structure, however, was everywhere crepitating; and there was no appearance of blood having been extravasated into the pulmonary structure, or of recent pneumonia.

The stomach and œsophagus were carefully dissected out, as it at first appeared necessary to undertake a chemical examination of their contents. There were no traces of any corrosive irritant, however, upon the œsophageal mucous membrane. The stomach contained about a wineglassful of dark coloured fluid, somewhat bloody. The gastric mucous membrane was everywhere gorged with blood; many ecchymosed patches of small extent being evident. The whole surface was dotted over with these, and some long narrow streaks of ecchymoses marked the rugæ, and were very apparent; and three small ulcerations existed at the lesser curvature. These appearances were so similar to those produced by an irritant corrosive poison, that considerable care was taken of the whole viscera and their contents. The intestinal mucous membrane presented the same pathological appearances, more especially that of the duodenum and the jejunum. The large intestine was empty, the coats were covered only by a whitish creamy mucus; they were destitute of feces and fœtor. There was a small portion of feces in the cæcum.

The heart was now examined; and then arose a change in the whole aspect of the case. The pericardium was empty, and not adherent; the heart was flabby and large; its muscular coat was pale. The aorta was dilated very considerably, and was strongly adherent to the pulmonary artery. The lining membrane was diseased, being rugous, roughened, and atheromatous throughout. At one portion of this vessel a lacerated opening was found. This was situated on the anterior and inferior wall, at the junction of the transverse with the descending portion of the arch of the aorta; it was three-quarters of an inch in length and about one-third of an inch in width. The edges were

everted. A probe used very gently passed through it into the cavity of the pulmonary artery; around the borders of the opening in the aorta were red patches of fibrin, in flakes, adherent to the serous coat; some few were between this and the middle coat. No distinct aneurismal pouch was apparent; but a thinning and semiprotusion forwards of the aorta was somewhat perceptible in this position. Upon slitting up the pulmonary artery—carefully avoiding the probe—the serous membrane was found lacerated to the extent of an inch in width, horizontally or transversely just above the free border of the anterior semilunar valve. Upon lifting this free and lacerated edge of the loosened serous membrane, a cavity was found underneath it, capable of holding a pigeon's egg. This cavity was not an ordinary aneurismal sac, but was merely produced by the dissection of the serous from the fibrous coat of the vessel. The superior border of the cavity was convex upwards, and extended to within half an inch of the pulmonary insertion of the ductus arteriosus, which was distinct from and not implicated in the disease. No clots were found in this cavity, nor any fibrinous layers; but, at the superior border, a thin waving line of clot marked the boundary of the dissecting process. The whole loosened serous membrane now appeared more like a loose valvular fold superposed on the aperture of communication between the two large vessels. Previously, however, to the laceration of the serous membrane of the pulmonary artery, it must have formed the wall of an aneurismal sac protruding into the cavity of this vessel, and greatly interfering with its duties. The calibre of the vessel must have been more than half obstructed; and the whole of the right side of the heart and veins, both systemic and portal, gorged with blood, even to the cutaneous and mucous capillaries; hence the decided cyanosis preceding dissolution. Soon after this followed the rupture of the serous layer; and then took place the engorgement of the pulmonary capillary system, the spasm, with attendant syncopal asphyxia, and pallor of countenance, so marked upon my entrance; the systemic capillaries being relieved at the expense of the capillaries of the pulmonary circulation.

The valvular apparatus of the aorta, and pulmonary artery, and right ventricle, were perfectly healthy and efficient. The mitral nerve was thickened and indurated; some patches of calcareous matter were deposited at its base, and in the anterior plate: it was perfectly capable of performing its functions. The sinuses of Valsalva were large and aneurismal. The left ventricle was hypertrophied to some extent; the right ventricle was dilated slightly, but this arose just before death, from distention, in consequence of the accident interfering with the course of the systemic venous circulating current. The pulmonary artery was not dilated; its external circumference being precisely the same as that of a healthy adult, namely, three inches. The calibre of the aorta was dilated.

The pleurae were extensively adherent on the right side, and slightly on the left. The lungs contained some minute hardened bodies in the intralobular spaces, and disseminated between the pleura and vesicular structures. These were numerous, and not unlike minute tubercles of the miliary variety. The trachea and bronchial tubes every where contained frothy saliva. The vascular system of the lungs was universally in a state of distension, but the blood had not a florid hue. It is probable that the length of time elapsing before death was sufficient to blend the whole circulating current, and render it homogeneous: and secondly, the period intervening since the fatal result would be sufficient to remove any arterial tint. The blood was perfectly fluid, and such as we invariably find it in cases of asphyxia. The quantity of circulating medium was above the average, and was certainly at variance with the appearances of syncopal prostration, as observed before death. The coronary arteries had commencing fibrinous deposits within their coats, disseminated at various distances; but no calcareous matter was yet apparent. The brain was perfectly healthy; and the vessels did not present any unusual turgescence, or any morbid appearance.

In order to obtain more exact data of the extent to which the aortic dilatations had proceeded, the following measurements were taken, and compared with those of a normal aorta:—

	Case.	Normal.
Internal circumference of the aorta at the superior border of the aortic valves	2.85	3.00
Internal circumference at the level of the lacerated opening, situated about 1.4 inch above the superior border of aortic valves	3.50	3.00
Internal circumference at the origin of the brachio-cephalic artery	4.30	2.80
Internal circumference after the origin of the left subclavian, and at the remains of ductus arteriosus	3.15	2.40
Length of arch of aorta, from the attachment of the anterior and left semilunar valves to inferior edge of the brachio-cephalic origin	3.00	3.00
Internal circumference of pulmonary artery	3.00	3.00

The following CONCLUSIONS may be drawn from an examination of this case:—

I. That aortitis had existed for some time previously to death.

II. That dilatation or true aneurism of the ascending and transverse portions of the arch of the aorta also existed during some considerable period antecedent to the fatal accident.

III. That this dilatation was not sufficiently extensive to produce the *general* symptoms of aneurism of the aorta, the pressure on surrounding parts not having been sufficient.

IV. That it is probable that the stethoscope would have discovered the disease by the physical signs, viz., "a rough, harsh sound, loudest above the clavicles, and beneath the first bone of the sternum"; whilst there would have been little or none over the region of the semilunar valves, or at the apex.

V. That a purring tremor might have been discovered in the same situation, more especially at the root of the neck.

VI. That the rupture of this dilated aorta took place immediately preceding death.

1. From the absence of the peculiar pulse at the first visit, at 9½ P.M.

2. From the total absence of dropsy, and any appearance of cyanosis, or other marked derangement of the circulating apparatus at this period.

3. From the sudden and well marked supervention of these important symptoms.

4. From the ragged and lacerated appearance of the opening, and the absence of coagula and blood stains in the cavity of the false aneurism, and from the non-dilatation of the pulmonary artery, it is evidently one of sudden formation.

I consider this case as one of importance in a physiological as well as in a pathological point of view; and that it proves the following general propositions:—

I. That, in rupture of the aorta into the trunk of the pulmonary artery, death may take place suddenly from syncope asphyxia; the embarrassment of the circulation and respiration being sufficient to occasion death.

II. That, under these circumstances, no blood escapes from the hydraulic apparatus; the vascular system being as full as ever.

III. That dyspnoea would exist as a prominent symptom, arising from the excessive and irremediable engorgement of the pulmonary capillaries.

IV. That dropsy does not occur under these circumstances, the death being too instantaneous to admit of its occurrence; but, should life be prolonged, the congestion of the systemic and portal capillaries would occasion it.

V. That the size of the orifice of communication would probably determine the occurrence of sudden or protracted death; a small opening, gradually enlarging, being likely

to permit of the patient rallying from the first shock, and gradually accommodating himself to the accident.

VI. That, although a communication was established between the aorta and pulmonary artery, yet there existed a great difference between the circulation and that of the fœtus or the new born infant before respiration.

1. The valvular nature of the opening demonstrates that the current must have been from the aorta to the pulmonary artery. In the new born infant and fœtus, it is from the pulmonary artery to the aorta.

2. The cause of the cyanosis in these cases cannot be the same. It probably arises from the fact that the current of venous blood, propelled by the weak right ventricle, is hindered in its course, in consequence of the stronger action of the left ventricle producing a more powerful current of arterial blood, and from the aortic elasticity being more constant in its action, by which means the semilunar valves of the pulmonary artery are *kept in a state of tension*; and the course of the venous current being thus retarded, a state of general congestion and cyanosis results.

REMARKS. The importance of this case of rupture of the aneurismal aorta into the pulmonary artery will appear from the scanty literature of the subject.

Rokitansky and Andral do not give any case of the kind. The Museum of the College of Surgeons of England contains, in its pathological department, two specimens of aneurism of the *ascending* (intrapericardial) portion of the arch of the aorta opening into the pulmonary artery (Nos. 1650 and 1651). In the latter case, it is mentioned that the patient died of jaundice and dropsy; the aneurismal disease not being distinctly indicated during life. Dr. Hope never saw a case; but he gives the details of one which Dr. David Monro of Edinburgh observed, and kindly communicated to him (p. 469). Dr. Copland, in his *Dictionary of Practical Medicine*, vol. i, p. 74, states, that three cases are on record; one related by Dr. Wells, in the *Transactions of Society for the Improvement of Medical and Chirurgical Knowledge*, vol. iii, p. 85; a second by M. Sue (*Journal de Médecine Continentale*, tome xxiv, p. 124); and a third by MM. Payen and Zeink (*Bulletin de Fac. de Méd.*, No. 3, 1819.)

Mr. Thurnam's paper on Aneurisms of the Heart, in the *Medico-Chirurgical Transactions*, vol. xxi, does not contain an instance, although he gives the analysis of seventy-four cases. The *Lancet* contains a case, in which an aneurismal tumour of the aorta threatened to burst into the pulmonary artery. This is the only one contained in it at all similar (vol. ii, 1850, p. 605).

As Dr. Monro's case differs very materially from the one which has fallen under my notice, I will transcribe it in full. It is contained in Dr. Hope's work, 3rd edition, p. 469.

James Evans, aged 24, a porter, admitted into the Edinburgh Infirmary, Oct. 30th, 1833. Accustomed from his profession to lift heavy weights. Had a severe attack of acute rheumatism about ten years ago. About ten months ago, had an attack of pneumonia, which yielded to copious depletion. To this he ascribed his symptoms, viz., palpitation, dyspnoea, followed, three months before admission, by swelling of the abdomen and lower extremities, which has gradually increased.

On admission, the following were the symptoms: great dyspnoea, amounting to orthopnoea; abdomen much distended, and fluctuation; lower extremities swollen and tense; countenance tumid, and somewhat *livid*; great general uneasiness; action of the heart tumultuous, diffused over a large space, not *strong*; cough, with expectoration; pulse large, harsh, and thrilling, 112.

Physical Signs. Much dullness on percussion in the præcordial region: first sound accompanied by a loud soufflet, audible over the whole fore part of chest, and on the back on both sides of spine, but most distinct at middle of the sternum: second sound short, and much obscured by the first; hence it appears that a *continuous* murmur extended from the first over the second sound. The treatment employed, viz., digitalis, calomel, and squills, had the effect of reducing the pulse, and increasing the quantity of

urine, but produced no impression on the symptoms. His general uneasiness continued, though temporarily relieved by a small bleeding. The pulse became intermittent some days before his death a fortnight after admission.

Autopsy. Much anasarca. The chest contained several pounds of serum in both pleuræ. The heart, enveloped in the pericardium, occupied a great part of the left side, displacing the corresponding lung. It was found to be more than twice the natural size, pale, flabby, and blunt towards the apex. All the cavities were much dilated, together with the corresponding orifices. The walls of both ventricles retained their natural thickness. All the valves were healthy, excepting the semilunar at the mouth of the aorta, which were thickened. The aorta itself, from its origin to the arch, was dilated into a large irregular sac, which adhered firmly to the pulmonary artery, and communicated with it by two openings, situated an inch and a half from the valves; the largest capable of receiving the point of the little finger; the smaller, of transmitting a crow-quill. The edges of both were regular, round, and cartilaginous. Nearer the arch, a third smaller opening was discovered, with thin rugged edges. The internal membrane of the dilated portion of the aorta was reddened and rugous, from numerous cartilaginous patches, which had advanced in some parts to ossification.

In comparing this case with one of rupture into the right ventricle, Dr. Hope makes the following remarks:—

1. A lift was the immediate cause of the symptoms, although disease of the aorta had preceded. 2. Pulse pre-eminently jerking; for such was evidently the large, harsh, and thrilling pulse of Dr. Monro's case. 3. A loud superficial murmur, with both sounds incessant in one case, and apparently so in the other, judging from Dr. Monro's description. 4. A livid venous tint of complexion. 5. A great, rapid, and universal dropsy.

And he gives the following, as signs of aneurism of the aorta opening into the pulmonary artery:—

Physical Signs. 1. A very loud, superficial, sawing murmur, prolonged continuously over the first and second sounds, probably weakened during the interval of repose, and loudest along the tract of the pulmonary artery. 2. A purring tremor in the pulmonary artery, in the interspace between the second and third ribs. 3. The second sound weakened at the clavicles.

General Signs. 1. The jerking pulse. 2. Great, rapid, and universal dropsy. 3. Livid venous tint. 4. The circumstance of the symptoms having followed an effort would afford corroborative evidence.

I am indebted to Mr. J. S. Soden, of Bath, for this report of Dr. Wells's case.

CASE. Mr. A. B., a merchant, of a fair complexion, thin make, and temperate habits of life, in 1789, being then thirty-five years old, became affected with symptoms which were thought to denote the approach of pulmonary consumption. These, however, after some time, entirely disappeared. In 1798, he was attacked with a slight hemiplegia, from which his recovery was soon so nearly complete, that the only inconvenience left by it was an inconsiderable sense of coldness in the foot of the side which had been affected with palsy. In March 1804, he complained to me of being frequently troubled with a noise in his ears, flatulence in his bowels, and pains in his hands and feet, sometimes attended with slight swellings in the same parts. From one or more of these symptoms he was never, I believe, long entirely free during the remainder of his life. He never spoke to me, however, concerning any unusual feelings in the chest; and I have not learned upon inquiry that he ever mentioned his having such feelings to any of his friends or relations, after his recovery in 1789, though his attention was always much directed to the state of his health, and he was not indisposed to make it a subject of conversation.

On the 11th of August, 1807, he fatigued himself considerably with walking. Upon his return from London, on that day, to his house in the country, he ate rather a full dinner, and, having fallen asleep afterwards, he felt so much refreshed in the evening, as to play with his children in the

garden. While thus amusing himself, he was suddenly seized, between eight and nine o'clock, with a sense of great oppression in his chest. He soon after became sick at the stomach, and vomited; in the matter thrown up, some streaks of blood were observed. He now went to bed; but, though the weather was warm, and he was covered with bedclothes, his skin felt cold to those who were attending upon him. Mr. Bliss, a medical practitioner at Hampstead, saw him soon after midnight. He then laboured under a constant desire to cough, and was continually expectorating mucus tinged with blood. His body was moistened with a cold sweat; and his pulse was extremely feeble, sometimes it was scarcely perceptible. Mr. Bliss having declared him to be in great danger, a messenger was sent to desire me to see him; but, as I happened to be from home, the messenger applied to Dr. Baillie, who in consequence visited him about five o'clock in the morning. His pulse was then very feeble and irregular; his breathing difficult; his skin pale, cold, and covered with a clammy sweat. Frequently he tossed and writhed his body, as if he was suffering great pain or uneasiness. The faculties of his mind, however, seemed unimpaired. Dr. Baillie concluded, from what he observed himself, and from what he was told by Mr. Bliss and the patient's attendants, either that a large quantity of serous fluid had been suddenly effused into the cellular texture surrounding the air-cells of the lungs, or that some considerable blood vessel had been ruptured in the chest. Mr. B., about a quarter of an hour after Dr. Baillie had seen him, became suddenly worse, and in a few minutes expired. Almost immediately before his death, he complained much of heat in his chest, and threw off the bedclothes.

Two days after death, the body was opened by Mr. Bliss and his partner, Mr. Haynes, when the following appearances were observed.

The blood-vessels of the lungs were very much distended, and there was also a considerable quantity of blood in the air cells. The right lung adhered slightly to the ribs and pericardium; but this seemed to have been the consequence of some disease which had existed long before death. Each cavity of the chest contained about ten ounces of a fluid highly tinged with blood. The pericardium contained about two ounces of a fluid similarly tinged. The ascending aorta was distended to about the size of a large orange. The tumour adhered to the pulmonary artery, just before its division into the right and left branches. Within the circumference of this adhesion, there was a narrow hole, by means of which a communication was formed between the two arteries. The cavities of the heart and the great blood vessels were very much distended with blood. The diseased portions of the aorta and pulmonary artery were afterwards seen by Dr. Baillie and myself. Dr. Wells says: "The occurrence of such a disease as I have described might be readily imagined; but I have found no instance of it in the books which I have read; and no previous example of it, I believe, had been seen by any of the surgeons or anatomists of London." Also: "It will be admitted, I suppose, that the communication between the aorta and pulmonary artery took place on the evening before the patient's death, when he first felt an oppression in his chest. In consequence of the superior strength of the left side of the heart, a part of the blood, which was thrown by it into the aorta, must have been forced into the pulmonary artery; from which circumstance an explanation may readily be derived of all the symptoms the patient laboured under, except the sickness and vomiting. These would probably have occurred if any other great disease had attacked him shortly after a full meal, without proving immediately fatal."

I have also been kindly furnished with the following report of M. Sue's case, by Dr. Peacock. It is evidently the same as that of MM. Payen and Zeink. It is entitled, "*Observation d'une Aneurisme de l'Aorta s'ouvrant dans l'Artere pulmonaire, et l'obstruant.*" Par M. Sue: recueillie et présentée à la Société par MM. Payen et Zeink."

CASE. Lefrère, a soldier of the Imperial Guard, aged thirty-eight years, was admitted into the military hospital in July 1808. He had been ill eight months, suffering

from palpitation and sense of suffocation, caused by walking quickly, or by ascending stairs. He was compelled to sit constantly upright in bed; face swollen, lips livid, respiration difficult, pulse almost imperceptible; he became anasarcaous, and gradually got worse: four days before his death, he became jaundiced, and died exhausted in February 1809.

Autopsy. The pericardium contained some fluid. The heart was of its natural size, with traces of inflammation on its surface. The pulmonary artery was greatly dilated, and, on being opened, was found to contain a tumour of the size and shape of a small egg, and *this being cut open*, the finger passed into the aorta. The aorta was dilated at its curvature, and the aneurism proved to have been formed in the aorta, and to have become adherent to the pulmonary artery; and had destroyed its parietes, and closed the orifice. The liver was fatty, but the viscera otherwise healthy.

The case, adds Dr. Peacock, is not very clearly described; and it does not appear that the aneurism had formed any opening into the pulmonary artery.

It follows, from carefully reconsidering these reports, that there are only *three* cases of rupture of an aneurism of the aorta into the pulmonary artery on record: Dr. Wells's case, Dr. Monro's case, and my own. The one related by M. Sue, and quoted by MM. Payen and Zeink, was merely that of an aneurismal tumour pressing on the pulmonary artery, and partially obstructing it, eventually causing dilatation of the vessel. It is so far similar to the one detailed in the *Lancet*.

Dr. Wells's case and my own agree in many respects, more especially in the suddenness of the fatal attack, and the insidious nature of the progress of the disease, merely being marked by slight palpitation, dyspnoea, cough, followed by vomiting, burning heat in the chest or epigastrium, and pain; then by sudden dyspnoea of a greatly aggravated character, prostration, and collapse: cyanosis in my case, pallor in his; asphyxia predominating in mine, syncope in his; coma then following in mine, but the sense remaining unimpaired in Dr. Wells's; death taking place about nine hours after the fatal calamity in his case, but occurring almost instantaneously in mine.

Dr. Monro's case is remarkable for, there having been found three perforations, the symptoms having lasted over as many months as in the other cases hours and minutes: the extent to which the circulatory system was embarrassed was, therefore, considerably greater; but, in consequence of the gradual manner in which the chain of events came on, the body became accustomed to the change, and probably some pathological balancing power accomplished. Do the anasarca and ascites thus act? It is certainly very extraordinary that such a serious derangement of the apparatus of circulation should have existed, without death having come on at an earlier period. It is probable that Dr. Monro's case permitted a free circulation of mixed arterial and venous blood, and that the force of the left ventricle was not therefore thrown on the pulmonary capillaries; for the rounded, cartilaginous openings, in Dr. Monro's case, are decidedly an evidence of the communications having been made in a more gradually progressive manner, and from a different pathological cause. Were they the result of ulceration in his case? Mine was decidedly a lacerated opening, and so was that in Dr. Wells's case. The number and size of the communications would allow a perfectly equalized circulation between the two arteries; and probably the livid cyanosis in Dr. Monro's case arose from very nearly the same physiological cause as exists in the fetus through the ductus arteriosus.

In Dr. Wells's case, the size of the opening and its character are not stated; it is merely said to be a *narrow one*; and probably, from the detail of the case, occurred nine hours before death, and commenced in sudden laceration. Dr. Wells does not state whether any hypertrophy of the left ventricle existed; but *all* the cavities were distended with blood: therefore, I should imagine that it was dilated, and weakened in its power.

Bristol, July 1853.

PERISCOPIC REVIEW.

MICROSCOPICAL DISCOVERY.

THE STRUCTURE OF TISSUES.

Virchow's Archiv, v, 270, contains an interesting paper by Dr. F. Hoppe, on certain chemical researches into the anatomical structure of various tissues. These are based upon the fact that animal structures which can be exposed to the action of water boiling under a pressure of three atmospheres for several hours without being dissolved, are not of gelatinous character. In this way a mechanical analysis of the tissue can be made, the gelatinous part is dissolved away, and the cells are demonstrated, by their resistance to the action of the boiling water, to be perfectly distinct from the intercellular matter, to have non-gelatinous walls of their own, and thus to be in all cases more than mere cavities in the surrounding tissue.

Small portions of cartilage, enclosed in glass bulbs, were boiled under high pressure in a Papin's digester. The intercellular substance was dissolved, and the cells could be detected by the microscope, floating free and uninjured in the fluid. Elastic fibro-cartilage, treated in the same way, gave a like result: all was dissolved except the fibres and the cells, which were found free in the solution of chondrin; disproving Mulder's dictum, that "the cells of fibro-cartilage yield chondrin on being boiled."

Bone was next examined; the earthy matter having been removed by a weak acid, small fragments of the animal matter were boiled, as above described. All was dissolved except the cells, which were found, as in the other cases, in the fluid, with portions of the canaliculi still connected with them. Our author concludes that the corpuscles and canaliculi of bone are no mere hollows or canals in the tissues, but have independent walls of their own, containing no gelatinous matter, and distinguished from the surrounding bone substance, exactly as the cells of cartilage are from the seemingly structureless matter in which they are imbedded. Our readers cannot fail to be interested in this experiment, taken in connexion with the facts respecting the structure of bone which we recorded in a former number. Dentine, submitted to the same ordeal, underwent changes precisely analogous to those observed in bone; and Hoppe concludes, respecting tooth substance also, that the tubes and fibrillae which it contains, possess walls of their own,—of a smooth, thin, membrane, containing no chondrin. Other tissues consist of cells alone, without intervening matter; and, in general, the tissues of the vertebrata may be arranged in two classes: 1. Those which consist of cells and intercellular matter, as areolar tissue, cartilage, fibrocartilage, bone, and tooth; 2. Those which consist of cells alone, as epithelium, muscle, nervous and elastic tissues. This division holds chemically, anatomically, and also physiologically; since the first class compose the supports of organs, the latter the organs themselves.

NERVES OF THE HEART.

A. CLOETTA (*loc. cit.* v. 274) gives the result of his microscopical examination of the nerves of a hypertrophied heart. He has, indeed, done little more than confirm the observations of Dr. R. Lee, on the increased development which these nerves undergo in such cases; a development precisely analogous to that which the same author so successfully demonstrated to take place in the uterus, hypertrophied from natural pregnancy. The matter is well worthy of our notice, chiefly for the practical purpose of observing how closely mere nervous (so-called "functional") disturbance of the heart's action may be connected with the subsequent induction of organic disease.

Cloetta found that the nervous filaments, where they happened to cross arterial twigs, presented small swellings; but he cautiously adds, that the examination he made did not enable him positively to say what proportion of the said enlargement depended upon real increase in the nervous tubules, and what upon hypertrophy of the fibrous neurilemma. Our readers, who are acquainted with the structure of the spleen, will readily recall to mind the error which might be committed in respect to the large nerves of that organ in certain animals, by supposing them to owe their unusual size to nervous matter, while they are in truth indebted for it to the dense neurilemma alone.

THE RELATION OF THE APPEARANCES IN THE URINE TO DISEASE OF THE KIDNEY.

A paper upon this subject by C. E. L. MAYER (*loc. cit.* v, 199) is well worthy of perusal. He attempts, by careful examination

of the urine during life, and of the kidney after death, to resolve the following questions :

1. In cases of mere catarrhal or fibrinous inflammation of the kidney, does the urine present appearances similar to those which occur in the more serious structural degeneration commonly called Bright's disease?

2. Can the first named slighter inflammatory affections of the kidneys be detected during life, in the course of other diseases, by an examination of the urine, with the same frequency as they are found to have existed by inspection after death?

3. If the first question is to be answered in the affirmative, is there any possibility of distinguishing, in examination of the urine, between the changes induced upon it by the slighter, and by the more serious cases above mentioned?

The importance of these questions must at once be understood: and, in fact, we fancy that most practical men have already revolved them in their minds; for how often does it happen, in cases of scarlatinous dropsy, for example, that we observe the urine turbid, bloody, or albuminous, or pale, moss-water like, and also albuminous; in fact, presenting derangements much more remarkable than those accompanying many cases of incurable Bright's disease, and yet the patient, in the course of a week or two, restored to health, with sound kidneys, and urine perfectly natural?

In reply to the first question, our author concludes that, even in the slightest forms of inflammatory affection of the kidney, occurring in the course of other diseases, the urine is found to contain albumen and plastic coagula from the tubuli uriniferi, the latter of course to be detected in the fluid by the aid of the microscope; in fact, that there exists no case of such renal inflammation, without the consequent appearance of these coagula in the urine.

With regard to the information which may be gathered from the appearance of these casts of the urinary tubules, as to the actual condition of the kidneys, he finds that the greater their consistence and refractive power, and the less their solubility in muriatic acid, the more intense is the inflammatory action, while the greater their number, the more widely is it spread over the organ; but that there is no constant relation between the quantity of albumen in the urine, as displayed by the usual tests, and the number of these casts.

The simpler inflammatory affections of the kidney may be of very short duration, the organ being very rapidly restored to health, or, on the other hand, they may last very long, and yet without inducing any deep seated degeneration; and the answer to the third question above stated thus becomes most important. After a full examination of the point, our author comes to the conclusion that while, by the examination of the urine, we may generally distinguish between acute and chronic renal disease—the former giving rise more frequently to the appearance of blood and of small albuminous masses in the urine—we have no certain mode of distinguishing between chronic cases of renal catarrh or simple inflammation, and chronic cases of deep seated Bright's disease. We are thus left to gather from the general symptoms the information which the simple examination of the urine will not yield us, and to study the condition of the patient with respect to anæmia, dropsy, vital power, duration of the disease, etc., before coming to a conclusion.

Here we are reminded of the great principle which we endeavoured to inculcate in our introductory article on microscopical discovery and its use in practical medicine—that all special means of investigation, whether by the stethoscope, the test-tube, or the lens, are always by the good and safe physician held in due subordination to the great radical principles of our science, and thus only can they be considered as more than a delusive *ignis fatuus* by the bedside.

THE RELATION OF DISEASE OF THE LUNGS TO PHLEBITIS.

Four cases have been published by W. GRIESINGER (*loc. cit.* v, 391), with a view to determine the precise relation between these diseases. It is of course well known to our readers that lobular pneumonia is a frequent consequent upon purulent infection of the blood; and Cruveilhier and others, in figuring or describing such occurrences, refer them to what we have long believed the true cause, the entanglement in the capillaries of these very vascular organs, of the pus or colourless corpuscles, and consequent obstruction to the circulation in the affected part. Our author's researches go so far to confirm this conclusion: he found, in two cases in which the lungs were unaffected, that the quantity of colourless corpuscles was the same in the blood of the right and that of the left side of the heart; while

in two cases, accompanied by considerable pulmonary disease, the pus-corpuscles were found in multitudes in the blood of the right side of the heart and pulmonary arteries, and very sparingly in the arterial blood. The conclusion he draws is, that they had been arrested in the lungs, in consequence of their comparatively large size, and the feeble circulation of the exhausted patient. The fact, at all events, is worthy of note.

He noticed, also, in a case of "leukæmia" (leucocythæmia of Bennett), that the white corpuscles were much more numerous in the splenic artery, than in the corresponding vein; a curious circumstance, tending, if confirmed, to show that the enlargement of the spleen, so usually connected with this very curious and interesting disease, is the *consequence*, and not the cause, of the abundance of white corpuscles in the blood. For our own parts, we are rather inclined to think that this may turn out to be the correct theory of the disease; for we cannot consider it as proved, that the spleen is the organ either for the destruction or creation of blood corpuscles.

ASSOCIATION INTELLIGENCE.

SHROPSHIRE BRANCH: ANNUAL MEETING.

The Annual Meeting was held on Tuesday, July 26th, at the George Hotel, Shrewsbury, under the presidency of ROBERT BROUGHTON, Esq., of Ruyton. The following members were present:—

Samuel G. Bakewell, M.D. (Church Stretton); Jas. Bratton, Esq. (Shrewsbury); R. Broughton, Esq. (Ruyton), President; Edward Burd, M.B. (Shrewsbury); Peploe Cartwright, Esq. (Oswestry); T. J. Drury, M.D. (Shrewsbury); W. Eddowes, Esq. (Pontesbury); W. Fuller, M.D. (Oswestry); S. B. Gwynn, Esq. (Wem); Joseph Hickman, Esq. (Brockton); J. R. Humphreys, Esq. (Shrewsbury); J. Rider, Esq. (Wellington); R. Thursfield, Esq. (Broseley); F. Webb, Esq. (Wellington); M. Webb, Esq. (Wellington); Richard Wilding, Esq. (Church Stretton); Samuel Wood, Esq. (Shrewsbury).

Mr. George Hastings, the Secretary to the Association Reform Committee, also attended the Meeting.

ELECTION OF OFFICERS.

The following officers were elected for the ensuing year:—John Dickinson, Esq., President; Samuel Wood, Esq., Vice-President; Dr. Drury, and Mr. J. R. Humphreys, were re-elected Honorary Secretaries.

MEDICAL REFORM.

The following petition to both Houses of Parliament was then unanimously agreed to and signed.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the undersigned, members of the Shropshire Branch of the Provincial Medical and Surgical Association, at their annual meeting assembled.

SHREWETH,—

That the laws at present in force relating to the medical profession are in a most conflicting and anomalous position, and require the interference of the legislature. That there are no less than nineteen sources from whence licenses to practice may be obtained. That there is no uniformity either of education or qualification for like degrees in the three divisions of the united kingdom. That there is no proper system of registration, whereby those who are duly educated, and legally qualified, may be distinguished from ignorant and dishonest pretenders. That the representative system is not sufficiently carried out in the different corporate institutions; and consequently, the profession and the governing bodies are not in that harmonious relation to each other, which is essential to the maintenance of the dignity of the profession, the enlargement of its sphere of usefulness, and the protection of the general interests of its members.

Your petitioners, therefore, pray your honourable House to adopt forthwith such a comprehensive measure of medical reform as in your wisdom may seem meet for the correction of these evils, and for the better regulation of the profession generally. Your petitioners are humbly of opinion, that the carrying out of such a measure will be equally beneficial to the profession and to the public at large.

And your petitioners, as in duty bound, will ever pray, etc.

NAVAL ASSISTANT SURGEONS.

A petition was signed, to be forwarded to the House of Commons, praying for the better accommodation and more gentlemanly treatment of naval assistant surgeons.

THE DINNER.

The members afterwards sat down to an excellent dinner, and spent a most pleasant evening.

SOUTH WESTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of the South Western Branch was held at the Royal Hotel, Torquay, on Wednesday, the 27th ultimo; the attendance was numerous. Before the proceedings commenced, the members partook of a splendid breakfast provided by the members of the Branch residing in the town. At one o'clock, Mr. DELAGARDE of Exeter, the retiring President, took the Chair.

Mr. DELAGARDE, as Chairman, said his duty that morning was very short. He had to thank them for the great consideration he had received during the past year, which, as regarded the future prospects of the profession in this county, he conceived had been exceedingly critical. He trusted the South Western Association had done its duty, and that it had to a considerable extent opened the eyes of the profession to matters which he was convinced would be highly injurious to them. He was happy to congratulate his successor in the presidential chair, which he doubted not would be very efficiently occupied by Mr. Toogood.

Mr. Toogood having taken the chair, delivered an interesting address, from which we take the following passages:

GENTLEMEN,—In addressing you on this occasion, I must claim your indulgence, it being the first time that I have taken any prominent part in meetings of the Association; and never having had either the opportunity or advantage of attending more than one of the anniversaries, my position is a novel one, and my experience of the practice usually observed very limited.

I bid you a cordial welcome to this favoured spot; and to those who now visit it for the first time, it may be desirable to give a short history of the town of Torquay, its statistics, and the advantages of its mild climate, so peculiarly beneficial to invalids, especially to those who have a tendency to pulmonary affections, as well as to point out any object of interest.

The chief recommendation of Torquay is its climate, and the extreme beauty of its situation. Forty years ago it was a fishing village numbering 700 inhabitants; since that time it has grown up into an important town, with a population (at the last census) of 12,000. We have no public institutions of interest, though there are some in contemplation. An infirmary was built two years since, which, although in its infancy, already dispenses much good to the town and neighbourhood.

In pursuing my description of Torquay, I shall avail myself of the labours of my friend Mr. Vivian, who, for upwards of ten years past, has paid close attention and taken daily observations of the temperature, humidity, and other characteristics of the climate; and from those published statements it is proved that "the summer in Torquay is as much cooler than in other parts of England as the winter is milder"; also, that though the fall of rain is sometimes in excess, the number of wet days is below the average, and the humidity of the air is considerably less, as shown by the additional amount of vapour required to produce saturation, which constitutes sensible dampness at any given temperature. The last autumn formed an exception, the fall of rain and number of wet days during the last autumn being far beyond the average of other seasons, and some hardy plants which usually were uninjured in the winter having been destroyed by its unusual severity. According to Mr. Vivian's letter, the annual mortality of the Newton union, in which Torquay is situated, is about one-eleventh below the average of Devonshire, one-ninth below that of the five western counties, and nearly a quarter below the general average of England and Wales. That deaths from consumption (including strangers) are less in this district in the proportion of twenty-eight to thirty-nine, and those from diseases of the liver and digestive organs in the proportion of eight to thirteen, as compared with the same average. These observations show that the mean annual temperature of Torquay is higher than any other place in Great Britain or Ireland; and that this advantage is felt in the cold months, the summers being cooler than at most other places in about the same proportion as the winters are warmer, the climate being more agreeable; that the number of days upon which rain falls is less in Torquay than in any other place in England, it

possesses a drier air than any other place mentioned in the Registrar General's report, and that the east wind is a sea breeze, an advantage peculiar to this coast. But for these and other interesting details I must refer you to Mr. Vivian's little pamphlet on the "Climate of Torquay". It is to be regretted that very erroneous impressions still prevail in the minds of the public with regard to the heat during the summer months, such as that it can only be compared to that of India, though it is well known to the inhabitants, as well as the visitors, that a fire is often as agreeable here as in many parts of England. The superiority of the summer climate is at present satisfactorily shown by the visit of the Grand Duchess of Leuchtenberg, eldest daughter of the Emperor of Russia, shortly to be followed by the Princess Olga, and other foreign families of distinction, induced to sojourn here during the summer months by the favourable report of the Grand Duke of Oldenburg, who passed two summers in this place.

It is a subject of congratulation to the members of this Association, and a proof of its influence being extensively felt, that our example has lately been followed in Ireland, and an association established by the profession there on the model of our own. Our professional brethren of the Sister Kingdom, taking advantage probably of our experience, have also very wisely improved on our plan—and in no respect more so than in sinking the term "Provincial", and in calling their Institution by the more comprehensive title of "The Irish Medical Association". Assuredly, this is a time when it is most desirable to remove rather than to perpetuate unnecessary distinctions in the profession—a time when the whole body of the profession should combine against the inroads of falsehood and empiricism, the grinding injustice of local Boards of Guardians, and the encroachments of wide spreading and indiscriminate medical charity. This is surely a time too, when it is less than ever necessary to keep up a distinction between metropolitan and provincial medical men—now that the rapidity and facilities of communication place all improvements going on in every medical institution in the country within the reach of every member of the profession—whilst the increase and improvement of periodical medical literature, and the full and early information thus diffused of all transactions in the science and practice of medicine, place the advanced knowledge of the day within the reach of all, wheresoever they may be located. The want of libraries is much felt, particularly amongst the junior members of the Association. I would therefore suggest for consideration, whether it may not be advisable to establish one in every district Branch, in which, after a time, a good assortment of monographic and standard works may be found, which would enable members to pursue and continue a systematic course of study, or thoroughly investigate any one branch of medical science. Some steps have already been taken towards the accomplishment of this object in this town, and it is hoped that at no very distant period our efforts will be successful.

NEXT ANNUAL MEETING OF THE BRANCH, OFFICERS, ETC.

Dr. NANKIVELL, of Torquay, moved that the next Annual Meeting of the Branch be held at Plymouth. He hoped that that arrangement would induce their medical brethren in that town, as well as Devonport, to come forward and join their ranks in larger numbers than heretofore.

There could be no doubt in the minds of those who had watched the proceedings of the past year, that the Association had made a considerable step in advance, and that there was a prospect of its being still more largely supported; and he likewise trusted to its being conducted with more spirit and energy, and with better success.

Mr. EDYE seconded the motion, which was adopted.

Dr. SHAPER moved that Mr. W. J. Square be the President-elect, which was seconded by Dr. HALL, and carried unanimously.

Mr. SQUARE, in returning thanks, said he had much pleasure in accepting office, and expressed a hope that their numbers might increase during the coming year.

Dr. BLACK said he regretted the necessity of his having to move the next resolution, as they all felt greatly indebted to the gentleman who had hitherto acted as Secretary. They were sorry he was unable to continue that office, but as he had resigned, it was proposed that Mr. Drake, of Exeter, should be appointed Secretary of the Branch.

Dr. MILLER, in seconding the motion, expressed his regret at the resignation of Dr. Kingdon.

Mr. SQUARE moved the appointment of the new members of the Committee who retire by rotation, which was seconded by Mr. KERSWILL, and carried.

Mr. Edye, Mr. James, Mr. C. Gay, Mr. Barnet, Mr. Gillard, Mr. W. Clapp (House Surgeon to the Devon and Exeter Hospital), Mr. Dakin, Mr. Haydon (Bovey Tracey), and Mr. Bigg, were elected new members.

CASES AND COMMUNICATIONS.

Mr. BOND related a case in which a young woman was delivered of a healthy child, and subsequently when he imagined she was going on well, she gave birth to a second, which was partly decomposed, and appeared to have been dead almost three weeks.

Mr. SQUARE stated a similar case which he had met with about ten years ago.

Mr. TOOGOOD, sen., commenced an interesting discussion on the best mode of stopping hæmorrhage in the hand, whether by tying the palmar artery or by flexion of the arm. Eminent authorities were named in favour of both plans.

MEDICAL REFORM BILL.

The following resolution was passed:—

That this Meeting, in recognising the services of the Committee appointed at a meeting of the profession at Exeter, on the 26th April, to watch the progress of a Bill for Medical Reform, request them to continue to direct their attention to that subject, and suggest that the Committee may with advantage add to its numbers Mr. Square, of Plymouth, Mr. Mackenzie, of Tiverton, and Mr. Toogood, of Torquay.

Votes of thanks were then passed to Dr. Kingdon, Mr. Delagarde, and the President, which were duly acknowledged, and the proceedings terminated.

BATH AND BRISTOL BRANCH.

At the Anniversary Meeting, a committee was appointed to draw up a petition on the

VACCINATION BILL.

The following is a copy of the petition presented by the members in Bath:—

"To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

"The petition of the undersigned members of the medical profession in Bath and its vicinity,

"HUMBLY SHEWETH,—

"That your petitioners are of opinion, that no bill for the extension of vaccination will be successful, that does not receive the willing and active co-operation of the medical profession, as it is to that body the public must look for the carrying out of any scheme of vaccination.

"That it is the opinion of your petitioners, that vaccination should be compulsory.

"That it is frequently impracticable, especially during the winter, to keep up a supply of vaccine matter from the arm; and that, therefore, it should be permissible to vaccinate from dry matter when fresh is unattainable.

"That the ordinary duties of a medical practitioner render it impossible that he shall be able at all times to be at the appointed place for vaccination at the fixed time; and that, therefore, he should not be subject to any penalties for the occasional omission of this duty.

"That it should be imperative for the person having the care of the child, to bring it on the eighth day after vaccination, for inspection; neglect of which should prevent their receiving a certificate.

"That, whenever the residence of the medical officer is one mile from the vaccination district, the remuneration should be not less than 2s. 6d. each case.

"And your petitioners will ever pray," etc.

METROPOLITAN COUNTIES BRANCH: DEPUTATION TO LORD PALMERSTON ON THE VACCINATION EXTENSION BILL.

Dr. Cormack, Dr. Fraser, and Dr. Semple, waited upon Lord Palmerston on Monday last, as a deputation on the subject of the Vaccination Extension Bill.

The deputation strongly urged upon his Lordship the propriety of delaying the Bill until next Session, more particularly on the ground that the Anniversary Meeting of the Provincial Medical and Surgical Association was appointed to be held on the 10th of this month, when the whole subject would be taken into consideration. The deputation stated, that efficient vaccination was not necessarily to be obtained by making the operation compul-

sory, and that the proposition to leave the machinery of the Act entirely in the hands of the Guardians of the Poor Law Unions was unpopular with the profession.

His Lordship asked various questions, and entered freely into conversation with the deputation. He stated that the request for delay seemed very reasonable; that he thought that Sir John Pakington would be satisfied this session with having had the Bill amended in Committee, and that it would be submitted to the deliberate consideration of the profession. Lord Palmerston stated that he had little doubt that the Bill would, under all the circumstances of the case, be postponed until next Session. He distinctly intimated to the deputation that, in his opinion, that was the proper course to be adopted.

MEDICAL BENEVOLENT FUND.

At the meeting of the Committee, held July 26th, letters of acknowledgment of the sums granted at the previous meeting having been read, the Treasurer announced that the balance due to him was £4 10s.

The following cases were considered and relieved:—

i. The widow of a medical man, now at a training establishment to enable her to become a schoolmistress, so that she may support her family. Relieved several times previously. Recommended by Mr. Newnham and Mr. Toynbee.

ii. An orphan of a medical man, who died leaving four children; she has been an inmate of an orphan asylum, but has not been re-elected; in order to complete her education. The sum of £90 is required to secure her re-election, towards which a grant of £10 was voted. Recommended by Dr. Bernard and Dr. Rogers.

iii. The widow of a medical man who died lately at sea when in charge of an emigrant ship. He left five children wholly unprovided for; the eldest of whom is only five years old. A policy of insurance for £100 was forfeited on account of some informality. Recommended by Mr. I. B. Brown, Mr. Brown of Hammersmith, and Mr. Toynbee. Voted £10.

iv. The widow of a physician who practised in London, and who died lately, leaving seven children. Recommended by Professor Fergusson and Mr. Toynbee. Voted £20:—£10 to be given now, and £10 in January.

v. The widow of a medical man in distress. Voted £5.

Several other cases were brought forward, but they were not taken into consideration, on account of their being inadmissible.

EDITOR'S LETTER BOX.

CHLOROFORM IN MIDWIFERY.

LETTER FROM J. DEANE, ESQ., TO THE EDITOR.

SIR,—Dr. Snow's admirable paper on Chloroform in Labour has elicited a discussion in which all your readers must take an interest. One cannot help admiring the kind spirit in which the opposition is conducted; but it is rather remarkable that not one of the respondents has used chloroform in labour, and therefore not one of them is competent to say one word on the subject. The proposal made in your number for June 21st, is good as far as it goes. It would be desirable to elicit the opinions of competent persons on a momentous practical question; but one element in the qualification to speak, as such, at any assemblage for this purpose convened, ought to be *experience*; and no man ought to utter a word on the question unless he can give the affirmative to the question, "Have you used chloroform in labour?"

The objection based on Scripture is simply amusing. It is certainly said, "in sorrow shalt thou bring forth children"; and it is also said, "in the sweat of thy brow shalt thou eat bread". Thoughtful men do, however, rid themselves of the troubles of life as much as possible. "Five hundred a year, payable in advance quarterly", will considerably relieve a sensible man from the masculine part of the "curse"; and if we could relieve the gentler section of our race of an equal part, or, still better, one or both of the entirety, whether we used science or religion for the purpose, or both together, I do think we might readily and willingly bear the reproach of profanity; but assuredly not from a disciple of Him who went about "doing good". A dose of laudanum or of chloroform will often relieve human agony; it would be droll if neither of them could be used without sin.

piety. As far as I understand the subject, from the observations of others and from personal experience, the sorrows of conception and the many disagreeable incidents of parturition are not affairs for chloroform. It aims only at relieving the last agonies of the last stage of labour.

I believe, however, that opposition to chloroform is the popular side of the question. It is certainly a good way of making thoughtless people think you cautious and trustworthy. The opposition is made chiefly by persons who, not having used it, and who being often men in highly respectable practice, and therefore not having leisure to learn how to use it, and having moreover strong fiscal objections to appearing ignorant or negligent, do more or less unconsciously slide into the evil of opposing what they do not understand. Medical men under such circumstances are in a dilemma. Oracles in their own circles, they wish to let it appear that they know on every medical subject all that is known, and what are they to say to the inquiries of their clients? If they approve, they must use it, and often they must learn its proper mode of application from some of their neighbours, and they must add considerably to the toils of practice; if they disapprove, they must find reasons against it—and who cannot do this against anything? There are reasons even against eating and drinking; for instance, your butcher's bills; but the reasons for eating outweigh the reasons for a perpetual fast. So there may be manufactured reasons against chloroform in labour, but not reasons equal to those in its favour. Its opponents can at any rate parade themselves as models of prudence and of vigilance over the welfare of their patients, as abjurers of all experiments, as enemies of all the weaknesses of humanity, as hardheaded monopolizers of wisdom, and last, not least, as the faithful defenders of the Book of Genesis! Verily, wisdom is with us; and when we die, common sense and religion will die also. Such, Mr. Editor, is the *rationale* of the opposition to chloroform: it is, *ad captandum*, chiefly also, I regret to say, made by men of very honourable position in the profession. The proof which I assign is, that its antagonists have, as a general rule, *never tried it*, and have not the courage to say that they know nothing about it.

I should be sorry to speak much of my experience in the use of chloroform; I have, however, used it, and with much satisfaction. For more than a year, dating from Professor Simpson's first paper on the subject, I used it on the lower animals, and with perfect safety. I kept a common meat-fly eighteen hours in a state of anæsthesia under a wineglass, leaving him once for four hours, and frequently for a shorter term. Among other preliminaries before using it on the human subject, I rebroke a badly united fracture in a dog's leg, and reset it under profound anæsthesia, and then kept him asleep for one hour without any bad result. A neighbour's donkey had fungus hæmatodes of the eye; I removed the eyeball under chloroform. Several of the lower animals were thus experimented on before trying it on the human subject. I name these incidents to show that the advocates of chloroform are as cautious as its opponents; for I presume we have all resorted to similar expedients. I have since employed it in operations on the human subject, and have seen nothing like an accident. I have not used it less than one hundred and fifty times. You must know, that no accidents have happened in the Edinburgh and Glasgow Infirmarys, where it is administered according to the rules laid down by Professor Simpson. One rule is, that where muscular action precedes loss of sensation, you must desist. In most cases where death has occurred, the first action has been on the muscular system, and yet it has not been discontinued; so the newspaper reports themselves have stated. Sometimes another rule has been infringed: the chloroform has not been sufficiently diluted with atmospheric air. In every administration of chloroform, a great deal ought to be wasted. The defence has been, we used only so much, naming a small quantity. The truth is, that it has been breathed undiluted, and the patient has been suffocated.

"He who would win the race must guide his horse,
Obedient to the customs of the course."

If we want the benefits of chloroform, we must be so far docile as to use it according to the instructions of its discoverer; and if we err from unteachableness, let us blame ourselves, and not the knowledge which we will not acquire. These and other principles I have carefully adopted in the use of chloroform: I have resorted to it seventeen times in labour, with the best results.

I had nearly resolved to have nothing to do with it in labour, merely because I would not face a prejudice, when the following incident changed my intentions. One of my patients,

a young woman in her first labour, after nine hours of grinding pain which she had borne patiently and without sending for me, was suddenly seized with severe cramp in the gastrocnemii and inside the soles of the feet; she experienced at the same time a sudden cessation of uterine pain. She sent for me; I found the os uteri dilated to the size of a crown piece, thick and soft; the vagina was flaccid, the pelvis large. I predicted favourable progress, and probably a speedy delivery, if she had bearing-down pains. There being what the older writers call metastasis of labour, laudanum was advisable, but I considered it would be slow in its action; and her pain from muscular cramp was so severe, that I wished a more immediate remedy. She was starting round the room and screaming like a maniac, although a young woman naturally of great fortitude. Who could forbid chloroform here? I administered it, with instant relief from pain, and in about ten minutes she was in an imperfect sleep. A groan was occasionally heard; a distinct and powerful forcing was felt *per vaginam*, the membranes projected, the caput succedaneum was formed; I kept up the chloroform at intervals for more than an hour, and the child was born. In this case we had the forcing of labour without the pain, and suspension of sensation without unconsciousness; she knew all that was going on around her, had heard a mumbling of voices occasionally, had been agreeably spellbound; had had no pain, and declared "the stuff was worth one thousand pounds", and that no woman ought to be confined without it.

The result of this case, together with my former experience, was a very favourable opinion of chloroform in labour. I did, however, blame myself on one point, which I resolved in future to guard against. I did not consult her friends beforehand; and although they were all content, and even delighted with it, and grateful to me, I considered there was a slight omission. Unestablished remedies should not be used but with the consent of friends, after full explanations. When a medical man is consulted, medical science is consulted; and what is not usage established and approved by a vast majority of the profession, is more or less non-medical. Since that time, I have worked this principle into the following rule. Unless pre-engaged by the patient for at least one month beforehand, and approved by the husband and friends, chloroform has been refused in the kindest way possible, but often with much difficulty. I have, altogether, used chloroform seventeen times in labour; and not one of my patients has disliked it. I have had no obstetrical case where muscular action has prohibited it, although I have had three non-obstetrical, where slight muscular quiverings have led me to desist. All these cases have been simple uncomplicated labour, where I have used it solely to relieve pain. I have considered that, if the patient and her friends wished it, there was sufficient medical authority to sanction its use. My experience, as far as it goes, proves its safety in the human subject generally, and in these cases in particular. My impression also is, that labour proceeds quicker, there being less resistance in the soft parts; and that patients feel better after anæsthetic labour, I am quite certain. Pain is exhausting; it is as much an expenditure of the system, *for the time*, as loss of blood. After labour, under ordinary circumstances, how faint you find your patient; how thoroughly "worn out", to use her own expression. In a profuse perspiration, with a haggard countenance, a voice almost inaudible, your involuntary and untaught impression is, that she has gone through almost mortal agony. Where chloroform has been used, your patient, having eluded the last and worst stage of her "sorrow", looks just as comfortable as if she had been confined a fortnight. Medical men, who have seen these things, will not pronounce the statement hyperbolic; and although some of them may, for reasons of policy, decline "to do likewise", yet, when asked their opinions in the fabled temple of truth, where men say what they think, not one among them will fail to give a favourable reply. There are reasons not strictly medical, which will sometimes prevent its use: where you suspect a bad result you do well to shelter yourself by declining it. One of my patients, to all appearance in good health, except that she had a bronchocele, wished chloroform, but I declined it, because of the too frequent connexion between this morbid condition and cerebral affections. I did not assign my reason. She did well during her confinement; but five months after, suddenly became insane, and remained so for several weeks. I have very little doubt that I here escaped an unjust censure, both on myself and on chloroform. Some time ago, I was requested to remove a scrofulous finger under anæsthesia. I agreed to do so as soon as an extra servant was hired, which was to be in about ten days; but, before the interval had expired, meningitis with profound stupor set in, and my

patient died. Suppose chloroform had been used the day before? These are the real, and, I think, the only difficulties to deal with in the use of chloroform. I have been so far timid under other circumstances rather unpromising, as not to use chloroform when requested, and perhaps required, thus yielding not a little to the fear of public opinion and allowing reliable suffering to be unrelieved, lest a useful expedient should be unduly blamed. These patients will do better for themselves under chloroform, but, being more likely to go wrong than others, they will, without chloroform, do better for the character of the attendant. With the chloroform they have a better chance of recovery; but, without it, the surgeon has a better chance of saving himself, by attributing death, when it occurs, to its true cause. Here we incur a great responsibility in using chloroform, because the only differential fact seen by the public will be chloroform, and we are sure, in the face of an adverse result, to be blamed for using it, and discredited when other special causes are assigned. In critical cases, I regret to say, I have not yet been sufficiently indifferent to public opinion, but recent events, adding to the names of Simpson and of Conquest, the distinguished names of Locock, Fergusson, Snow, and others of reputation, have so biased professional authority in favour of chloroform in labour, that we are bound to look upon it as sanctioned by a large majority of the professional talent of the kingdom. It is probable that the warm advocates on both sides are wrong. To argue that it should always be used, or that it should never be used, are both extremes. I think all who have resorted to it with proper caution will pronounce it safe, and then it will become a woman's fancy "to be or not to be" according to the predilections of the patient. To relieve pain seems to be one of our duties; and it is only for those who have never felt them, to speak lightly of the horrors of parturition. I honour the name of Simpson, and I look on his discovery as a gift to society, fully equal to any ever made by any one man in the profession, unless, perhaps, we except the name of Jenner alone.

I am, etc.,
J. DEANE.

CHLOROFORM IN MIDWIFERY.

LETTER FROM JOHN AUDLAND, ESQ., TO THE EDITOR.

SIR,—I cannot think that Dr. Simpson's paper is conclusive in favour of the general use of chloroform in midwifery practice. Take, for instance, the portion respecting its employment in forceps cases. Now there is no question, that accoucheurs like Dr. Simpson, practising in the metropolitan and large provincial towns, become, in consequence of having extensive consultation practice, expert in the use of the forceps and other instruments. They acquire a mechanical dexterity which country practitioners, although they may be well acquainted with the anatomy of the pelvis, cannot possibly do. Such practitioners may not require, they may even despise, the aid derived from the feelings of the patient, but I apprehend that is not the case with the generality of country practitioners.

A country practitioner is called to a case, some miles from home, and from the residence of a professional friend. The case is tedious, the pains occasionally strong, and then, for a few hours, slow and weak. He carefully watches the case, soothes his patient, and encourages her and her friends. Owing, perhaps, to the head being large, to rigidity of the soft parts, or to a slight contraction of the pelvis, or to some other cause, the natural efforts are ineffectual. He explains this to the patient and her friends, tells them that it is possible that by patience, etc., all may yet end well, but that there is risk in delay; that the vital powers may give way, and that if instrumental assistance be not had recourse to, she may possibly sink. The woman and her friends are alarmed at the mention of instruments; but the practitioner assures them that the instrument he is about to use will neither injure the woman nor child. He explains to them, that it is merely intended to assist the natural efforts, and promises the woman that he will desist when she experiences severe pain.

Now, I say that a practitioner so circumstanced, alone, often without adequate assistance, even to keep the woman in a proper position, has sufficient upon his hands, without the additional anxiety he must have if chloroform be administered.

But, supposing there were no additional risk, supposing that chloroform could be administered as safely as a dose of opium, is there no fear that the practitioner might be tempted to use more force than is prudent; that, for the want of the safeguard of the woman's feelings, "he might bruise, lacerate, destroy"? Is there no fear that temporary relief from pain, might be pur-

chased at the risk of permanent suffering and misery? And if so, is not great caution needed; ought not the subject to be well considered in all its bearings, before we habitually employ chloroform in ordinary midwifery practice?

Dr. Simpson asks, if a surgeon, in taking up a large artery, does not discriminate between the artery and its attendant nerve, by his anatomical knowledge, and not by the feelings of his patient? Granted. But yet, are there no instances where an accomplished anatomist and surgeon has only been made aware by the cries of his patient, that the nerve has been included in the ligature? One such case, I think, I myself have seen. Are there not other cases in surgery, in which the sensations of the patient are of service to the surgeon? Take, for instance, the introduction of the catheter. Supposing that in every case of stricture and retention of urine, chloroform were administered, would there be no fear of too much force being used; no danger of a false passage being made? Are not practitioners constantly obliged to withdraw the instrument a little, on account of the exclamations of the patient? And may not the sensation of pain in these cases, as well as in those of instrumental midwifery, be frequently *conservative*?

Then, again, take cases of flooding. We know that occasionally copious flooding suddenly takes place, either before or after the birth of the placenta, which requires the greatest promptitude on the part of the attendant. Supposing it were to occur whilst the patient were under the influence of chloroform, would it not add to the anxiety of the practitioner? From what we know of the effects of chloroform on the system, would the hæmorrhage be more promptly checked? Would the system be as susceptible of the application of cold? Could brandy be as readily administered?

Now, I am considering ordinary cases, which occur in country practice, when only one practitioner is present, and when the whole responsibility devolves upon him. And I ask the question, Would the constant use of chloroform in midwifery practice be attended with beneficial effects, or the reverse?

I consider that there is a great difference between using means to relieve the pains of "headache, colic, of sciatica, of pleurodynia, of gout, rheumatism", etc., and administering chloroform in ordinary cases of midwifery. In the former class of cases, we endeavour to remove the morbid condition upon which the pain depends. In the latter, we render the person unconscious of pain, by administering a powerful inebriant.

It would be presumptuous in me to set my opinion against so eminent a physician as Dr. Simpson; but I must confess that I think there is a good deal of begging the question at issue in his paper. The question is, not whether it is the part of true wisdom to take advantage of the discoveries of science, but whether the general use of chloroform in midwifery would be advantageous or not.

I am, etc.
Tintern, near Chepstow, July 16th, 1858.

JOHN AUDLAND.

CHLOROFORM IN MIDWIFERY.

LETTER FROM SAMUEL BEECROFT, ESQ., TO THE EDITOR.

SIR,—After the perusal of Dr. Simpson's letter to Dr. Meigs of Philadelphia, inserted in our *Journal* of the 8th inst., I confess that my mind is as much unsettled as to the propriety of using chloroform as it was previously; for not even Dr. Simpson's logic does away with the necessity of having facts recorded to guide us in forming an opinion. These facts should be supplied, if possible, by parties not having the same interest in supporting the question as the discoverer, as being more likely to be free from bias, and therefore more to be trusted. Dr. Simpson cannot be offended with this remark, since he tells Dr. Meigs that his rule, while applying the forceps, of inquiring whether pain is produced, is "an after thought, only sprung up since the practice of anesthesia was proposed."

It is to me extremely remarkable that, after chloroform has been used for so many years, and so generally, in our hospitals, no return has been made, stating the number of cases in each hospital in which it has been used, and also giving their termination; for it is only by such a return that we can at all arrive at a sound conclusion on the subject.

Dr. Simpson states, that in amputations, the success has been much greater under the use of chloroform; but I hear of other parties holding the contrary opinion. In this statistical age, it is so easy to form a table supporting anything new, that any statistics brought forward ought to undergo a most rigid scrutiny, prior to being received as correct. I am sometimes inclined to think, that we place too much stress on the advan-

tage to be derived from the absence of pain under the use of chloroform, in surgical operations, in preventing shock to the system; and to me it seems very questionable, if the pain of an operation does exercise the power assigned to it in the production of shock—at all events, to the extent generally attributed to it. Indeed, some think that the knife has acted sometimes as a stimulant. And it appears probable, that the pain of an operation may be of service, in telegraphing to these conservative powers of life what is taking place, and thus rousing into activity the *vis medicatrix naturæ*, to repair the injury and equalise the circulation, especially after the change produced on it by the loss of the limb. Two of the most severe cases which I have read of in our Journals, almost lead me to infer such to be the case; for, in these two cases (I believe patients of the Bristol Infirmary, in whom amputation of both legs was performed), in one chloroform was used, and the patient died; while the other patient, who was suffering from a greater degree of collapse, did not inhale chloroform, and he recovered. I cannot find the Journal in which these cases are recorded; but I believe the above account to be correct. Again, in the *ASSOCIATION JOURNAL* for July, Mr. Falloon gives 310 cases of midwifery; and whether it be owing to his use of chloroform, or from some other causes, I am sure, after having examined the same number of my own cases, and after making inquiries from my medical friends, that his mortality among children, and the number of cases of *post partum* hæmorrhages and retained placenta, are much above the average.

With respect to the letter of Dr. Simpson to Dr. Meigs, I shall make no other remark, than that I am astonished that any person, who has seen any midwifery, can be bold enough to assert that "pain is non-essential for the successful completion of natural labour". Dr. Simpson has often startled the profession by astounding statements; but I fancy that many of us will not be led to use chloroform in labour, by such reasoning as the above.

But the question of the propriety or impropriety of using chloroform can never be settled by letter writing. What is required, is a faithful account of its use in every case admitted into our hospitals and obstetrical institutions; and, if the benefit from its use preponderates much over the evil, the profession can at once decide, and set the matter at rest. Until its benefits be proved, I, for one, shall be very cautious in using chloroform, although our Journals may contain communications, stating that large doses may be administered with impunity. In the *Lancet*, a few weeks ago, there was a case related of a child, under two months of age, having inhaled, in sixty hours, about sixteen ounces of chloroform: and yet the child still lived! Yet I know that, a short time previously, in the same city (Manchester), a strong man was killed by a few drachms of it. It is the recollection of such cases, and not any inherent dislike to its use, that makes us anxious and afraid of using chloroform; for I believe that no discovery was ever received with so much delight as that of chloroform; and it is painful to find our early anticipations so greatly disappointed.

I am, etc.,

SAMUEL BEECROFT.

Hyde, near Manchester, July 1853.

THE SABBATH.

LETTER FROM WILLIAM ALLISON, ESQ., TO THE EDITOR.

SIR,—As a member of the medical profession, allow me to thank you for your article in the *JOURNAL* of July 1st, in reference to the opening of the Crystal Palace on Sundays.

We all wish for the bodily and spiritual welfare of the poor; although some of us differ in opinion from others as to the best means for promoting those blessings. With you, I do not agree with Dr. Forbes in thinking, that by withholding from the working mechanics an opportunity for crowding together in the Crystal Palace on a Sunday, they will be rendered more liable to meet in alehouses, to fall into a state of constrained idleness and listlessness at home, or to have their brains exhausted and their thoughts weakened and confused by an excess of religious study, or of religious exertions. The poor may derive as much advantage from being dispersed abroad in parks or open places with their children, as from congregating in the Crystal Palace, when not resting at their homes in their family circles.

The members of the medical profession are notoriously said to be an atheistical body; and I think that your writings are calculated to defend them against that unjust reproach, and to uphold their characters as Christians.

I am, etc.,

W. ALLISON.

East Retford, July 2nd, 1853.

THE SABBATH.

LETTER FROM CHARLES COWDELL, M.D., TO THE EDITOR.

SIR,—Having long striven to vindicate our honourable profession from the commonly believed allegation of a tendency towards infidelity, it rejoices me to witness a practical refutation of the calumny in a movement on so large a scale as that reported in your columns, as having been made in the metropolis to defend the poor from invasion of their rights, and the nation from certain demoralisation, by legalised desecration of the Lord's day.

This joy is, however, tempered with unaffected sorrow to see one, for whom I entertain sincere regard and esteem,—one who has devoted great talents to the improvement of our profession, advance single-handed to the charge in defiance of this phalanx.

Like you, I do not advocate a puritanical observance of the Sabbath, (though no one has ever repented of its too strict observance); and, like Dr. Forbes, I do advocate the right of the poor man to his weekly holiday. But, while it is conceded that God made the country, and made it too for the refreshment of the toil-worn townsman, I maintain, that the same God made, or gave the fourth commandment, which forbids that toil-worn man to work horse or ass, or servant—male or female, and if so, a railway train, omnibus, or steamboat, to take him hither and thither on Sunday.

To be more particular. I apprehend that the whole force of Dr. Forbes's charge against unphilosophical and illogical medical men, and the whole grounds of his defence of poor men's rights, so far as this matter is concerned, are contained in the following passage from his communication to the *Journal*: "It is truly at once humiliating and melancholy to observe—in these later years, when we might reasonably expect a more philosophical consideration of such subjects—that there is a growing disposition among the clergy and the upper classes generally in England, and still more in Scotland, to curtail such simple and natural enjoyments of the poor on their only holiday, the Sunday. To say nothing of the necessity of such relaxation on the score of mere bodily health, the advocates of this system seem entirely to overlook the principle of man's nature, which renders the occasional remission of activity necessary for the perfect exercise of all voluntary functions, and most of all, the functions of the brain." We do believe that "the occasional remission of activity"—in other words, that regular periods of recreation—are "necessary". But then we ask Dr. Forbes to show us that it is necessary that such recreation should be had only on the Sabbath, or, as he says, "*on their only holiday, the Sunday*". Only during the last month, a noble example has been set by a large business firm in London (Messrs. Barclay and Co., the brewers, and I am informed that Messrs. Fox and Henderson, of Birmingham, have yielded the same benefit to their fifteen hundred workmen), of giving up the Saturday afternoon to their workmen.* This is the true solution of the problem; for it is the mammon maw of the money seekers, exacting the utmost quantity of labour from their slaves, which drives the artisan to Sabbath desecration. Let the legislature step forward and secure to the poor man his right, without touching that portion which God has reserved as His own; and we trust Dr. Forbes will be satisfied as well as ourselves; aye, and the poor man too, who, he says, never goes to church but once on a Sunday, will then perhaps set a better example than many of his wealthier fellow men. On the other hand, let Sunday public amusements be legalised, and the stigma which Sir Thomas Browne, in his *Religio Medici*, endeavoured to prove was undeserved—"ubi tres medici, duo athei"—will soon probably be true, not only of physicians, but of all other classes of Englishmen.

It is implied, that those medical men who have contributed to this movement are illogical and unphilosophical. Be it so. Religion is the foundation of philosophy. God is truth. And philosophy is only true so far as it conforms to Christianity.

In the words of *Evening Thoughts*, "Philosophy is the statue, Christianity is the man: philosophy is the cold marble Laocoon struggling with the serpents; Christianity is the man himself struggling with the outer world."

I am, etc.,

CHARLES COWDELL.

Dorchester, July 5, 1853.

* We could add many other firms to this list. There is a hopeful progress in the right direction.—EDITOR.

PETITION FROM MEDICAL PRACTITIONERS IN
EDINBURGH, AGAINST OPENING THE
CRYSTAL PALACE ON SUNDAY.

LETTER FROM B. BELL, Esq., TO THE EDITOR.

SIR,—The petition from medical practitioners in London, against the opening of the Crystal Palace on Sunday, was hailed with much satisfaction by many of the profession here. It was thought to be a right and seemly thing to strengthen the hands of our brethren in the metropolis in an object so laudable; and, accordingly, a petition has been drawn up and largely signed by the practitioners in Edinburgh and Leith, including many of our most eminent men, and several of the professors. The signatures amount to above one hundred, which, considering the relative populations of the two cities, is not discredit to the northern metropolis.

I am, etc.,

BENJ. BELL.

8, Shandwick Place, Edinburgh, July 21st, 1853.

*To the Honourable the Commons of Great Britain and Ireland,
in Parliament assembled.*

The petition of the undersigned physicians, surgeons, and general practitioners, resident in Edinburgh and Leith,

HUMBLY SHEWETH,—

That your petitioners believing in the Divine institution of a seventh day of rest, and recognising its remarkable adaptation to the constitution of man, and its absolute necessity to his health, both bodily and mental, cannot but view with anxiety and alarm every new encroachment upon the Sabbath rest of a large and increasing section of our fellow countrymen.

That every addition made to the number of public amusements on the Sabbath, is not only inconsistent with the spirit of God's word and the habits of our country, but leads inevitably to an increased amount of locomotion by railways, steamboats, and vehicles of all kinds; that this cannot exist without numberless forms of entertainment and traffic; and that the whole complex system necessarily involves the Sunday labour and toil of many thousand persons throughout the land, who are thus systematically robbed of their Sabbaths, under the plea advanced by so called philosophers and philanthropists, that they are ministering to the simple and natural enjoyments of the poor on their only holiday.

That the proposal to open the Crystal Palace at Sydenham on the Sabbath, if carried into effect, will add to those evils on a prodigious scale, besides acting as a wedge for other and grievous inroads upon the sanctity of the poor man's day of rest.

That your petitioners, fully alive to the importance of country air and relaxation to the physical health and intellectual progress of the working classes, would anticipate great advantages from such places of amusement and instruction as the Palace at Sydenham, if the weekly Sabbath were kept inviolate, and a half holiday conceded by employers to their people, as in Manchester, and to some extent in Glasgow, on one of the six working days of the weeks.

May it, therefore, please your Honourable House to refuse your assent to any measure calculated in any way to set aside the law actually in force, and to legalise the opening of the Crystal Palace and its grounds for gain on any portion of the Lord's day.

And your petitioners, as in duty bound, will ever pray, etc.

PETITION FROM THE MACCLESFIELD MEDICO-
ETHICAL ASSOCIATION AGAINST OPENING THE
CRYSTAL PALACE ON SUNDAY.

LETTER FROM T. B. KENDERDINE, Esq., TO THE EDITOR.

SIR,—The subject of the opening of the Crystal Palace on Sundays having been lately much discussed in your pages, with a view to strengthen your hands in what I conceive to be the admirable line you have adopted with respect to it, I beg to forward you a copy of a petition promoted at the last meeting (4th instant) of the Macclesfield Medico-Ethical Association, and shall feel obliged if you will give publicity to it, and express the hope that others may be induced to follow the example set by our professional brethren in London.

I am, etc.,

THOS. BRUTTON KENDERDINE,
Hon. Sec. to the Mac. Med.-Eth. Assoc.

*To the Honourable the Commons of the United Kingdom of
Great Britain and Ireland, in Parliament assembled.*

The petition of the undersigned practitioners in medicine and surgery, resident in Macclesfield.

HUMBLY SHEWETH,—

That your petitioners, recognising the Sabbath as of divine institution, regard with apprehension the efforts which are in progress, in certain quarters, to secularise its character, under the sanction of a legislative enactment.

That deeply impressed as your petitioners are with the conviction that the health of the community depends very materially on the morals of the people, and, with the fact, that the frequenting of places of public resort on the Sabbath, for the sake of amusement, is a fruitful source of moral evil and licentiousness, tending, in no insignificant proportion, to an increase of disease, and of the ratio of mortality; they earnestly deprecate any measure which, under colour of legislative authority, would be likely to open the flood-gates of dissipation and immorality through the length and breadth of the land.

That an Act of Parliament, like that which is contemplated by the advocates for the opening of the Crystal Palace on the Sabbath—framed, ostensibly, for the purpose of affording facilities for public recreation—involving, as it necessarily must, the principle of coercive employment (inasmuch as it would be a virtual surrender of the sacred and indefeasible right of every one to exemption from positive labour on that day), would, in all probability, seriously disturb the existing social relation of master and servant, as it would leave every employer at liberty to exact from his dependents the same amount of service which they had been accustomed to render only on the other days of the week.

That on these grounds your petitioners humbly conceive that the wise and benevolent purposes of the Divine Being in the institution of the Sabbath—if they be regarded simply in a physical point of view—would be frustrated by the concurrence of the legislature in any proposal which would lead to its general desecration on the one hand, or to its secularization on the other.

They therefore implore your Honourable House to withhold your support from any project, which, by compromising the moral relations of the Sabbath as embodied in the Decalogue, would deprive the community of the only guarantee which is thereby furnished for its perpetual observance as a day of repose from the exhausting occupations of the other days of the week.

And your petitioners, as in duty bound, will ever pray.

POOR LAW MEDICAL RELIEF: SUGGESTIONS FOR
ITS IMPROVEMENT.

LETTER FROM C. P. COLLINS, Esq., TO THE EDITOR.

SIR,—I have frequently considered the state of the poor and medical officers under the Boards of Guardians, with a view to the relief of both; and, should you think with me, that good may emanate from the following suggestions, be pleased to give this a place in the Journal.

I begin by asking, if it be not the duty of the state to see that its poor are in every way properly provided and cared for? Taking this for granted, I then say, Parliament is bound to frame laws accordingly; and, as the present poor law is in many instances faulty and inadequate, I would suggest that, with a view to put a stop to the frequent sources of disagreement between medical officers and boards of guardians, by which the poor eventually suffer, in any bill to be introduced, relative to the poor law, into Parliament, a clause be inserted, naming what charges shall be made for the future by medical men, for attendance on the poor; and this can well be done by the per case system, with so much for mileage in country districts. If the law was thus altered, the poor would have this benefit, that they might employ any medical man in their district or union they preferred; and who can deny that this would be a great relief to them? It would also do away with what is now considered by some as a stigma, the name of *union surgeon*. All would be union surgeons; and those who chose to decline a case when sent them by the proper authorities (the relieving officer or overseer), might do so, and the applicants take the orders to the medical man next preferred by him. A consultation fee should also be added, with certain restrictions and regulations; for why should not the poor have, in this respect, the same chance of benefit as the rich? As a union surgeon, it has occurred to me—and I doubt not, to others similarly circumstanced—to have under my care patients for months, without receiving relief from the treatment adopted; and why, in such cases, because the patients are poor, should they be deprived of the benefit of consultation? Care should be taken that none but properly qualified medical men, according to the rules at present laid down by the Poor-law Board, be employed, which, I am sorry to observe, are not faithfully carried out. A list of such should be furnished to each board of guardians, by authority.

That the above could be carried out with little or no difficulty, if taken up in a proper spirit, I am confident; and that it would be for the advantage of all concerned, is, I trust, equally evident. The poor, who are now frequently neglected by the medical officer, and often obliged, in cases of accident, etc., to await his return home for hours, might at once be relieved by a choice of medical men; and the country would have the satisfaction of knowing that their poorer brethren were properly cared for; and what, in my opinion, is of nearly equal advantage, the union surgeon would cease to exist, and we should hear no more of the disgraceful conflicts continually occurring between boards of guardians and medical men. I am, etc.,

CHAS. PALKE COLLYNS.

Dulverton, Somerset, July 18th, 1853.

P.S. Since the above was written, I have read with great surprise the speech of the Chief of the Poor-law Board, as given in the *Times*, in answer to Mr. Miles. I can only say that either the hon. gentleman or the reporter is incorrect, for we have in the Dulverton Union a case of a medical officer, without the double qualification spoken of, elected by the guardians, and sanctioned by the Poor-law Board, so lately as April last. To this the attention of the Poor-law Board was directed.

C. P. C.

THE VACCINATION MEASURE, AND THE INSULT TO THE PROFESSION BY ITS PROMOTERS.

LETTER TO THE EDITOR.

SIR,—The Vaccination Extension Bill has passed through Committee in the House of Commons with its faults and imperfections entire. The remonstrances against it, the threatened opposition of Messrs. Frewen, Brady, and Strickland, have been so feeble, that there has not even been a single amendment. It has been universally condemned; and yet no voice has persisted in disapproving it; and the vain empty words which have reached the House have been contemptuously passed over. How is this? Echo does indeed answer—How? The profession is never consulted on any hygienic measure; and as to their interest—Pshaw! How absurd to think that Parliament can attend to anything of so little consequence!

I have endeavoured to obtain some concession from the promoters of the Bill as to the following proposals, which I will conclude by laying before your readers.

I. That the Bill must have reference not only to those who are to be born, but to *all* who have never been vaccinated, or have not had small-pox; and that the duty of giving notice to the parents or guardians should devolve on the vaccinator, and not on the registrar.

II. That the Registrar General, and not the Poor Law Guardians, should superintend vaccination.

III. That the fee should be 2s. 6d. in town, and 3s. in rural districts.

Surely it behoves the Vaccination Committee of the Epidemiological Society to remonstrate against such a futile and illiberal piece of legislation. I am, etc.,

A COUNTRY VACCINATOR.

Somersetshire, July 27th, 1853.

BREECH PRESENTATIONS.

LETTER FROM R. U. WEST, ESQ., TO THE EDITOR.

SIR,—Since sending off the statistical paper published in yesterday's *Association Journal*, I have read your report of a meeting of the Edinburgh Medico-Chirurgical Society (p. 646), in which it is stated by Dr. C. Bell, that the mortality among children in breech and feet presentations is very great, as much as one in three or four cases, in consequence of the pressure on the funis during the passage of the head. And I have before seen similar statements. But I do not think that the average mortality can be really so great as that, unless where there is very bad management. The presentations of breech or feet, in my practice, have been fifty-seven in number, and of the hand or arm, requiring turning, nine. [I have had one case of breech presentation, and one of the head, since I made up my paper.] The total number delivered with the pelvic end of the child first was sixty-six. Deducting from this number, fifteen still births from other causes, viz., nine *premature putrid* fœtuses, two where the funis had been prolapsed some time before my arrival, one with *placenta prævia* and *prolapsed funis*, one a midwife's case of arm presentation, and two the monstrous twins,—we have fifty-one footling or pelvic births, without any element

of danger but the one in question. Of these fifty-one, three only were still-born; but, as one of these still births occurred in a case where I was called upon to deliver the head for a junior practitioner, after the body had been born some time, the foetal mortality from delay in the delivery of the head, in the fifty cases for which I am fairly responsible, will appear to have been exactly in the proportion of one in twenty-five. As my two still births were both presentations of the feet, there would appear to be in that fact some confirmation of the opinion held by writers, that, *cæteris paribus*, footling are more dangerous than pelvic births. I am, etc.,

R. U. WEST.

Alford, Lincolnshire, July 30th, 1853.

THE PROPOSED MEETING OF PROVINCIAL PHYSICIANS.

LETTER TO THE EDITOR.

SIR,—In your number for July 22nd, I see an advertisement announcing a meeting of provincial physicians appointed to be held at Swansea, during the Association meeting. I fully intend to be there, for I think the time is at hand when we ought to unite to form a permanent Association to look after the interests of our important, but strangely divided body.

The questions of the stamp duties, the indiscriminate relief afforded to all who apply at our hospitals and dispensaries, the evils of the system of gratuitous advice, and the suppression of disgusting advertisements, are all subjects which peculiarly require notice and discussion by provincial physicians.

I am, etc., M.D. EDIN.

July 29th, 1853.

NEWS AND TOPICS OF THE DAY.

MIDLAND CIRCUIT: LEICESTER.

(Before Mr. Justice MAULE and a Special Jury.)

LAMERT V. DAWSON AND ANOTHER.

Mr. Macaulay, Q.C., Mr. Mellor, Q.C., Mr. Serjeant Miller, and Mr. Hayes, appeared for the plaintiff; Mr. Field and Mr. Brewer for the defendant.

This was an action of libel brought by the plaintiff, who, under the name of J. L. Curtis, practises in London as a doctor for a peculiar class of cases, though not a licensed medical practitioner, against the defendant, Dawson, who also devotes his chief attention to the same description of cases, but is a licentiate of the College of Physicians, and a member of the College of Surgeons.* The libel complained of was contained in a book written by the defendant Dawson, and published by the other defendant, and was in the following words:—"I have been repeatedly consulted by patients, who complain of having paid these advertising people large sums of money, and I have at this moment a gentleman under my care, sent to me by Mr. B. W. Hutchinson, of Sidney Street, Cambridge, in consequence of suffering from ———. He gave one of these persons a bond for £1,000, payable on his coming of age. I have also another sent to me by Dr. Chapman, of Grosvenor Street, Grosvenor Square. This gentleman is proceeding against Curtis, the author of *Manhood*, for a similar fraud. The case was set down to be tried on the 6th of this month, but Curtis prevented the trial coming on by refunding, at the last hour, the money and paying the costs. The case had not been settled more than a few days when Dr. Henry Bird, of Chelmsford, sent me a patient who had the misfortune to fall into the hands of the same party. It has rarely occurred to me to see a person suffering more intensely from mental anxiety than this unfortunate patient, in consequence of a peremptory demand from Curtis for the payment of a part of the bond which he had obtained on the promise of a cure."

The defendant, in his plea, alleged the truth of the libel, and mentioned the names of two persons said to have been defrauded of their money by the plaintiff by promises of cure. The plea also set out the advertisement of the plaintiff's book, which is to be seen in the newspapers almost every day (*Manly Vigour*, etc.), and alleged that, by means of that advertisement, the plaintiff induced these persons to come to him

* We cannot find Dawson's name in the official list of the College of Physicians. Editor.

for advice. On the part of the defendant they were called as witnesses; and it appeared that one of them had, upon the advice of the defendant, sued the plaintiff in the Westminster County Court, to recover back a sum of about £80, which had been paid to him for his attendance; and that before the hearing of that case the present plaintiff compromised it by paying the sum of £43 for debt and costs.

These witnesses, however, failed to establish that the plaintiff had undertaken to cure them as the consideration for the payments to him; and from one of them, indeed, the plaintiff obtained only an I O U for £25, but no money.

The plaintiff himself was not examined as a witness, but Dr. Dawson was; and he stated that he had acted upon the information of the two persons who had been sent to him by Dr. Chapman and Dr. Bird, after they had been attended by the plaintiff, and he had failed to cure them. He was cross-examined as to the authorship of certain pamphlets, which contained passages very encomiastic of Dr. Dawson's skill, purporting to be written by "J. Teevan, B.A.," and denied that he was himself the author of them; he admitted that he knew who "Teevan" was, and that the name was an assumed one; but he declined to say who he was. He was also cross-examined as to his violation of professional confidence in bringing his patients forward as witnesses—conduct which he had strongly condemned in his book; but he stated that the witnesses had volunteered their evidence, and they themselves substantially confirmed that statement, though their consent did not appear to have been expressly obtained before their names were inserted in the plea. The cross-examination went, also, to other matters affecting Dr. Dawson's mode of treatment; but nothing material was elicited from him, and the subject is not one very fit for public discussion.

The learned counsel for the defendant commented severely upon the absence of the plaintiff, as well as upon the indecent character of the book of which he was the author, and vindicated the defendant from any imputation of malice; contending that the libel was a simple statement of facts which had been revealed to him, and which he felt bound to publish.

The learned Judge, in summing up, intimated to the jury his opinion that the justification was not strictly proved, inasmuch as it did not appear that the plaintiff had promised a cure; and he left to them the question of damages.

The jury almost immediately returned a verdict for the plaintiff—Damages one farthing. (From the *Times* of 27th July, 1853.)

DEWHURST, THE PSEUDO-DOCTOR. "Professor Dewhurst", the well known begging letter impostor, is at present very active. The following is the copy of a letter which he sent to a lady whose name lately appeared as a contributor to the Medical Benevolent College:—

"10, Mitre Street, London.

"Dr. Dewhurst very humbly solicits Miss — to benevolently subscribe to his forthcoming work named in the prospectus, for which he will feel most grateful, as it will free him from the poignant distress he suffers through his frequent illness, and the want of constant literary, professional, and scholastic employment. The favour of an early reply with the enclosed is very humbly supplicated.

"Will Miss — condescend to inform him if there is in Clapham a Temperance Society, to whom he can offer his Lectures on Drunkenness?"

MEDICAL BENEVOLENT COLLEGE. At a meeting of the Council held on Tuesday last, Jas. Wm. Freshfield, Esq., M.P., in the chair, the Treasurer reported that on the late occasion of laying the foundation stone of the College, 315 ladies presented purses of five guineas, and that the collection altogether amounted to £3,400. Thanks having been voted to the Lord Bishop of Winchester for kindly officiating on the occasion, his Lordship was elected a Vice-President of the College, as was also Benjamin Eveleigh Winthrop, Esq., who presented on that day the munificent donation of 500 guineas. Dr. Colledge, of Cheltenham, was also elected a Vice-President. Thanks having been voted to the Rev. Wm. N. Harrison, the Vicar of Reigate, for having kindly advocated the cause of the institution on the 24th ult., that gentleman was constituted an honorary Life Governor of the College.

VACCINATION EXTENSION BILL.

[House of Commons, July 25th, 1853.]

The Bill passed through Committee without opposition. Various important amendments were adopted. The obligation to vaccinate from arm to arm, and from a healthy arm, is erased. The following clauses were introduced. They are clauses III, VI, X, of the Bill.

III. Upon the eighth day following the day on which any child has been vaccinated as aforesaid, the father or mother, or other person having the care, nurture, or custody of the said child, shall again take, or cause to be taken, the said child to the medical officer or practitioner by whom the operation was performed, in order that such medical officer or practitioner may ascertain by inspection the result of such operation.

VI. In all contracts to be hereafter made under the provisions of the first recited act, by any guardians or overseers of the poor with any medical officers or practitioners for the vaccination of the persons resident in their respective unions or parishes, the sums contracted to be paid shall not be less than the following rates; that is to say, for every person successfully vaccinated at the residence of such medical officer or practitioner, or within two miles therefrom by the nearest public road, a sum not less than one shilling and sixpence; and for every person successfully vaccinated at any place more than two miles distant from such residence, any sum not less than two shillings and sixpence.

X. A fee of threepence shall be paid to such registrar for each child vaccinated, in respect of which he shall have performed the duties required in this act; and he shall keep a book, to be provided as hereinafter directed, containing a minute of his having duly given such notice as hereinbefore directed; and the said fee shall be payable in the same manner as the fee now payable to such registrar for registering the birth of such child as aforesaid is paid.

THE CHARGE AGAINST A PHYSICIAN FOR RAPE. The charge against Dr. Banks, of Louth, Lincolnshire, for rape, was alluded to at p. 475 of our number for May 27th. For the honour of our body, and the reputation of the accused, we are glad to learn that the bill has been thrown out by the grand jury.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

- ARTHUR, John, M.D., Deputy Inspector General of Army Hospitals, at 23, Church Road, De Beauvoir Square, Kingsland, London, aged 70, on July 18.
 FISHER, Nathaniel Briggs, Esq., Surgeon, at Bungay, Suffolk, aged 43, suddenly, on July 10.
 IZOD, Ibberson, Esq., Surgeon, at Newport, Isle of Wight, aged 25, on July 18.
 PHILLOTT, Arthur, Esq., Surgeon, of Wimpole Street, London, at Lee, Kent, lately.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

- *DOBIE, Wm. Murray, M.D. VALEDICTORY ADDRESS delivered to the Members of the Royal Medical Society of Edinburgh, at the last ordinary meeting of Session 1852-1853, April 15th, 1853. 8vo. pp. 19. Edinburgh: 1853.
 *SMITH, Edward, M.D., and the Medical Committee of Charing Cross Hospital. 8vo. pp. 36. London: 1853.
 SOCIÉTÉ DE CHIRURGIE DE PARIS. MÉMOIRES. Tome Troisième: quatrième fasc. pp. 377 à 648. Paris: 1853.

ERRATUM.

In Mr. WEST's paper on "Obstetric Cases in Private Country Practice", published in last number, page 669, line 32, instead of "I have, therefore, classed them among the cases of the second and third positions respectively", read "I have classed them among the cases of the first and third positions respectively".

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXII.

LONDON: FRIDAY EVENING, AUGUST 12, 1853.

NEW SERIES.

THE RECENT DEPUTATION TO THE HOME SECRETARY FROM THE METROPOLITAN COUNTIES BRANCH ON THE VACCINATION BILL.

IN the *Medical Times and Gazette* of August 6th, we were astonished to find a leading article containing the official minute of an interview between the Home Secretary and Drs. Cormack, Fraser, and Semple, so interwoven with editorial remarks as to misrepresent the objects of the deputation, and to pervert its language. We trust that our contemporary will admit that he has been misled, when he peruses the following

STATEMENT BY THE DEPUTATION.

We, the undersigned, have read the following paragraph in a leading article of the *Medical Times* of Saturday last, August 6th:—

"We have our doubts whether the deputation acted wisely in making the question of professional remuneration a ground for postponing the Compulsion Clauses of the Bill."

We hereby declare, that in the interview with Lord Palmerston, the question of professional remuneration was never introduced.

We farther declare, that we did not urge any objection to the Compulsion Clauses of the Bill, and rested our petition for delay on the grounds stated in a minute, drawn up in the Home Office immediately after the interview with Lord Palmerston, and which was published in the *ASSOCIATION JOURNAL* of August 5th.

JOHN ROSE CORMACK, PATRICK FRASER, ROBERT H. SEMPLE.	}	The gentlemen who composed the deputation.
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IS IT POSSIBLE TO REDEEM THE NEWSPAPER PRESS FROM ITS SERVITUDE TO FRAUD AND OBSCENITY?

THIS is the question which has been urgently repeated to us by more than a hundred correspondents. We cannot reply separately to each individual; and moreover, we cannot offer any other answer to it than that which we gave on the 22nd July, when we said:—

"If the attack on quackery in the fourth estate be wisely directed and well sustained, it cannot fail to be crowned with success. There are a few, we know, ready to maintain, that so essential is the money of the quacks to the very existence of most of the provincial newspapers, that such an attempt as that proposed can only be regarded as a well meant but hopeless crusade. A pretty extensive inquiry into the state of public feeling leads us to adopt a more cheering view of the case. We feel assured that there is an enormous power, slumbering at present, but quite ready, upon a proper signal being given, to march forward in united phalanx, and drive forth the quacks from their 'strongholds in the fourth estate', which at present seem almost impregnable."

In the article from which we have reprinted the above

paragraph, we spoke with well merited severity of the *North Wales Chronicle*, for admitting into its columns beastly advertisements side by side with religious and ecclesiastical controversies. We have now very sincere pleasure in stating that the editor, so far from attempting any defence of his conduct, admits its impropriety, and promises amendment. We cannot admit that the pecuniary difficulties of the paper afford any palliation of its servitude to sin; but as money bribes are the true explanations of the filthy state of the majority of the provincial newspapers, the editor cannot be blamed for alluding to their seductive power.

In a leading article of the last number of the *North Wales Chronicle*, we find the following passage.

"Our undoubted success, since we ventured upon the experiment of resuscitating an almost defunct journal, has long induced us to entertain a project which we have now determined to carry into execution, viz., the abolition from our columns of certain advertisements, which must be offensive to persons of correct taste, as well as injurious to public morals, and which will be done as soon as the termination of the present engagements permits. In discarding them, we sacrifice a large and regular amount of revenue, which, even in the improved circumstances of our paper, we can scarcely afford to do; but in this, as in all other matters, we look only to the general good, assured that our readers and supporters will not permit us to suffer for the attention which we pay to their wishes."

The *Edinburgh Christian Magazine* and the *North Wales Chronicle* have done well to take our censures in good part; and they deserve to have their amendment as widely published as their offenses. We trust, therefore, that those editors who are aiding our endeavours to reform the tone of the newspaper press may have the goodness to give the same publicity to these remarks, which they so kindly afforded to our former articles on "Quackery in the Fourth Estate".

For the zeal and energy of the *Reformer's Gazette* (a Glasgow newspaper), we are particularly grateful, because the great ability and honesty for which it is remarkable give to its advocacy of any cause much weight with the educated classes in Glasgow and the western counties of Scotland. We find, from the concurrent testimony of several members of the Association resident in Glasgow, that Mr. PETER MACKENZIE, the accomplished editor of the *Reformer's Gazette*, has long ago given to that paper a high status, from his telling exposures of medical quackery and its cognate villanies, as well as from his rigorous exclusion of all fraudulent and obscene advertisements. In these circumstances, the *Reformer's Gazette* mingles with its praises of our humble endeavours a gentle but just reprimand for our having neglected to acknowledge its earlier assaults upon that enemy, against which we have waged and begun a war—a war in which we shall neither ask nor give any quarter, and in which we shall accept of no offers of truce, except upon a guaranteed treaty of unconditional surrender.

In a leading article upon the *ASSOCIATION JOURNAL*, and its efforts to establish a "Society for the Suppression of

Fraudulent and Obscene Advertisements", the *Reformer's Gazette* of July 30th has the following observations:—

"The ASSOCIATION JOURNAL farther remarks:—'The *Scottish Guardian*, a Glasgow newspaper, excludes quack advertisements; and we believe there exists a small and honourable self denying minority who act in the same way.' Now, we have much pleasure in acknowledging this feature in the paper above mentioned; but when our London contemporary carries his inquiries a little farther, he will discover that there is another journal in Glasgow (with no pretensions to a semi-religious character) which not only steadily persists in excluding the quack advertisements, but which has been battling with the quacks themselves, and exposing the whole of the nefarious system in all its naked and hideous deformity for years.

"However, we are glad to hail the acquisition of the ASSOCIATION JOURNAL, with Dr. Cormack's powerful assistance, in this good cause. We like his style of writing on the subject; and, therefore, we have given a fair specimen of it in these columns. We beg to tell him that a pretty nest of venerable quacks will be found comfortably settled down, like so many grave doctors, in the Glasgow press, where they must now begin to imagine that they have the prescriptive right of tenancy claimed by other nuisances. We want a Hercules sadly, to muck (as we say in Scotland) this Augean stable of filth; and the arduous feat, if accomplished, will richly deserve to be rendered as famous in song as the celebrated 'Mucking of Geordie's byre', by our old friend, Sandie Rodger. It will be no easy operation, we are quite aware. The quacks and the quack-press will stick together like a conspiracy. We shall have homilies and sermons upon the subject. The whole herd of quacks will commence 'rowting and roaring' to some purpose, at the bare mention of 'mucking' their filthy byre. Rodger's vision will be realised:

But now they're far louder than ever,
They bellow wi' might and wi' main,
An' threaten to gore an' to skiver
The first that daur flash them again.
In droves, too, they gather thegither,
And closely united conspire,
To brak baith the stake an' the tether
Before that they get a clean byre.

However, we shall try and get them a clean byre. If the whole herd of Holloways, Du Barrys, Father Parrs, and Widow Welshes, should conspire together, we shall charge them all down the Gallowgate. We hope, by and by, with the aid of a well organised society, to see them fairly routed and rooted out. Everything depends on the honest and energetic cooperation of the public. Much depends also on *thoroughly* exposing the system. This must be the great aim of the society."

The *North British Advertiser* is another noble ally to whom the thanks of all good citizens are due. This paper, on the 6th of this month, announced that its publication of that day had a guaranteed circulation of 26,530; and we believe this statement to be strictly true. Its columns are entirely occupied with advertisements. The *North British Advertiser* never admits an advertisement bordering upon obscenity; and, during the many years in which we have weekly glanced at its columns, we have rarely detected announcements of deceiving character. When the magnitude of the enterprise in which the publishers of this paper are engaged, and the lateness of the hour and consequent bustle amid which numerous advertisements are received, are recollected, this is the very highest praise which we believe it possible for any newspaper to claim with justice.

A few days ago, a gentleman called upon Mr. JOHN GRAY, of the *North British Advertiser*, at his office in Edinburgh, and introduced himself as a member of the Society now forming for the suppression of fraudulent and obscene advertisements, who was anxious to benefit by his

experience. The facts unfolded by Mr. Gray are so interesting when viewed in connexion with the high character which his paper has uniformly maintained, that we append some of them for the instruction of our readers. Mr. Gray stated that, in the question of admission or exclusion, he followed no particular rule, but considered every case separately, and rejected those which seemed unsuitable, either with or without a reason. He gave many curious instances of his rejections, including one where some persons advertised for servants, offering wages so high as would have secured a great many hundred applications. Each answer was directed to be accompanied by a postage stamp: this, in connexion with the high wages offered, led to the suspicion that the advertisement was the trick of a swindler, and to its consequent rejection. Mercantile prospectuses, when manifestly on unsound principles, and not *bona fide*, Mr. Gray in like manner refuses to insert. The most serious difficulty experienced is with the decent advertisers of patent medicines, although his high charges generally prevent applications from such parties. Every allusion to generative debility, etc., etc., however correctly worded, he refuses to sanction; and he has repeatedly denied admission to advertisements of works on the rectum, bladder, urethra, piles, etc., in some cases even when he believed the authors to be respectable. When nothing in the language of an advertisement is likely to be distasteful to the general reader of delicate feeling, he feels himself in a position of some difficulty, and occasionally unable, as the servant of the public, to exclude that which he would rather avoid inserting. We suspect that this is one of the greatest difficulties with which the new society will have to contend; and we therefore set it forth as a point for the early and careful consideration of our friends, and as one upon which we shall often have occasion to touch.

We have been informed by a correspondent in York that one of the newspapers of that city—the *Yorkshire Gazette*—refuses to insert indecent advertisements. We have not seen this newspaper, but we shall be glad to receive some numbers of it, and subject them to the same tests by which we try newspapers professing similar purity.

From the above details, solid ground for encouragement may be derived; and did space permit, we might furnish much additional evidence of the same kind. Already, a noble army of allies is rallying round the standard which we have unfurled, and even, ere the battle has been set in array, detachments of the enemy show a disposition to surrender. This, however, far from engendering apathy or self-confidence, ought only to inspire us with more zeal and more determination.

Before another anniversary meeting of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, we doubt not that we, or our successors in office, shall be able to announce that the most noxious and the most beastly of the medical swindlers have been expelled from their principal strongholds in the fourth estate. In the meantime, the warfare must be active, and it must never slumber. Come forward then, fellow associates, and aid in this good cause. Let those who receive the circular which is about to be issued extensively by the provisional committee of the proposed society, reply to it early and fully. Let each individual act as if victory could not be achieved, unless he gave with his whole heart his individual exertions in behalf of the present movement.

ORIGINAL COMMUNICATIONS.

OBSTRUCTION OF THE LIVER.

By W. S. OKE, M.D., Senior Physician to the Royal South Hants Infirmary.

OBSTRUCTION in the parenchymatous or internal texture of the liver may be temporary or permanent; temporary, when caused by recent interstitial deposit of fibrinous lymph, or simple congestion of the capillary circulation in the organ; permanent, when it is the result of any organic change of its structure.

EXCITING CAUSES. These will be found in inflammation, intermittent or remittent fever, long residence in hot climates, excessive drinking, etc.

SYMPTOMS. When obstruction has taken place in the internal organization of the liver, the following symptoms will usually mark the progress of the disease: a sense of fulness and tightness across the epigastric region, pain and tenderness of the right hypochondrium, jaundice, embarrassed respiration, intestinal or gastric hæmorrhage, anasarcaous swelling of the inferior extremities, dropsy of the belly, and lesion of the heart.

PATHOLOGY. The above results may be explained in the following manner. The whole of the portal circulation being formed by veins derived from the stomach, intestines, spleen, pancreas, and omenta, the blood which fills them must necessarily flow from the arteries supplying those viscera, namely, the celiac (excepting the hepatic branch) and the superior and inferior mesenterics. When, therefore, the vena porta hepatica becomes obstructed in its capillary system, the immediate effect must be a congested condition of the vessels of the viscera just mentioned, unless relieved by gastric or intestinal hæmorrhage. If the congestion be not so relieved, and the obstruction continue, the celiac and mesenteric arteries will be obstructed also, and gradually disallow the normal quantity of blood to pass through their channels. The abdominal aorta will then have to inject more blood through the iliac arteries into the inferior extremities than the returning vessels can carry back; and, consequently, infiltration through their capillaries into the cellular tissue must take place, and cause anasarcaous swelling. If the obstruction be long continued, the same thing will occur in the abdominal circulation, and peritoneal dropsy will follow: and further, if the obstruction be permanent, the heart will be at length involved. By its constant efforts to pump the blood through the congested and obstructed vessels, the left ventricle will become hypertrophied and dilated, and its valvular apparatus diseased, as evidenced either by a bellows, sawing, or rasping sound. Moreover, the mischief might not end even at this point; for, as the vascular system becomes more and more obstructed, the respiratory and cerebral organs also will be implicated, and in danger of infiltration or extravasation from their congested vessels.

DIAGNOSIS. When the obstruction is incipient, that is, before any infiltration has taken place, it may be diagnosed by a feeling of embarrassment in the breathing, a dry cough, pain and tenderness in the right hypochondrium, and a jaundiced aspect; and when it is of longer standing, in by far the majority of cases, the liver itself is more or less enlarged, which alone will suffice. Should the enlargement be concealed by dropsy of the belly, the indurated surface of the liver may often be easily detected by deep pressure of the fingers, suddenly made below the margin of the ribs. Enlarged liver cannot well be confounded in this stage with any other cause of obstruction; not with enlargement of the spleen, because here all the symptoms arise in the left hypochondrium; nor with renal disease, because, in the latter case, the microscope, the urinometer, and chemical tests, will infallibly demonstrate a morbid condition of the kidney. The disease which may more probably be mistaken for disease of the liver is a large tumour occupying the epigastric region; but, even in such a case, the presence or

absence of the acute margin of the liver will decide the question one way or the other. The following is a case of this kind, and is quoted from my *Practical Examinations*, p. 68.

CASE. J. D., aged 28, a blacksmith, placed himself under my care in the Southampton Dispensary, on account of an enormous tumour upon the epigastric region, which had been gradually increasing during eight months, and which he thought arose, in the first place, from a strain in lifting a heavy piece of timber. It appeared to be sarcomatous, and extended longitudinally from the ensiform cartilage to the navel, and transversely from the anterior margin of the ribs on one side to that of the other: indeed, it could be traced beneath the ribs on the right side. It was of a flattened shape, and, as well as I could judge, about three inches in thickness. Its texture was generally firm, except at one point on the left side, where a fluctuation could be distinctly felt, occupying a cavity about the size of a hen's egg. He had been first under the care of a gentleman in the neighbourhood where he lived, and subsequently under a physician in the county hospital, by both of whom many judicious means had been employed, but without success; and I confess, from the opinion I had formed of the character of the tumour, that I did not expect he would have received any benefit from me, fearing that the disease arose from an enlargement of the liver.

I ordered him the extract of sarsaparilla, with an alterative dose of the oxymercurate of mercury, three times a day; and local friction with tartarised antimony ointment; but, finding that the tumour did not subside under these means, I exchanged the antimonial ointment for that of the iodide of potassium, by which the tumour was eventually absorbed.

When one only of the inferior extremities is oedematous, the swelling can hardly be due to any hepatic obstruction; it must rather be sought for in some local pressure upon one of the common iliac veins before they form the vena cava abdominalis. Not long ago, I met with an interesting case of this kind, which was at first very obscure, and was attributed to hepatic causes.

CASE. Miss W., aged 37, of short stature and venous aspect, having been several times attacked with pain and constipation of the bowels, became affected with severe neuralgia of the branches of the right crural nerve, at the upper, outer, and front part of the thigh. The pain returned in paroxysms of great suffering, and was aggravated by lying in the horizontal position. The utmost attention was paid to ascertain the cause of her sufferings, and every possible remedy, both internal and external, was tried for her relief; but, in spite of all, the neuralgic pain returned with undiminished severity at irregular intervals. She became lame, could not bear the weight of the body upon the right foot, nor make the slightest effort with the rectus femoris muscle without intense agony. The limb, as high as the knee, was oedematous, assumed a dark blue aspect, and lost much of its warmth. The inguinal and iliac regions were repeatedly examined; but nothing appreciable could be detected to account for the obstruction to the circulation. At length, by a deeper manipulation, a flattened tumour was felt behind the abdominal muscles, lying upon the right iliac fossa, in the track of the external iliac vein, which at once explained the whole of the matter.

Before quitting this part of my subject, I would remark, that a bilious aspect must not *always* be expected in the advanced stage of hepatic obstruction. In some cases, the aspect is venous or pallid, without the admixture of any bilious tint whatever; and that where an immense enlargement of the liver is at once evident. I remember an instance of this kind in an elderly lady, who had for very many years an enlargement of this organ, the acute margin of which could be traced considerably below the umbilicus. Her lower extremities were often oedematous; the heart's action was interrupted; the respiration sometimes embarrassed; she was attenuated, pale, and liable to profuse hæmorrhage from the nose: in short, there could be no question as to the character of the disease; and yet she had never exhibited any appearance of jaundice to the day of

her death. Saunders, in a note to his valuable work on diseases of the liver, states that, "in many cases, as has been already observed, the liver is so far diseased, that it does not even secrete bile, and a pallid and unhealthy aspect takes place."

TREATMENT. If it be correctly stated at the commencement of this paper, that hepatic obstruction might be caused either by the recent deposit of fibrinous lymph, by congestion of the portal capillaries, or by organic lesions, the curative indications will be sufficiently plain, and, in the two first, will often be successfully fulfilled by the efficacy of medicine. If, then, the symptoms of obstruction have followed closely upon an inflamed condition of the organ, interstitial fibrinous deposit is probably the cause, and will best be treated with mercury combined with diuretics.

R. Hydrargyri chloridi,
Scillæ pulveris,
Gum. cambog., aa gr. xij.
Pulv. foliorum digitalis gr. viij.
Pilulæ scillæ comp. 3j.
Syrupi q. s. Misce.

Divide in pilulas xxiv, quarum capiat duas ter die.

Should there be any remaining tenderness of the right hypochondrium, with darting pain and an acceleration of the pulse, local bleeding and external irritation may be added. When there is no evidence of antecedent inflammation, and the anasarca, embarrassed respiration, etc., have succeeded to an intermittent or asthenic fever, and the symptoms are associated with those of great debility, with a weak irregular pulse, and a venous and bilious aspect, congestion of the portal capillaries is to be suspected, and the case must be treated with calomel combined with tonics, diuretics, and a generous diet.

R. Hydrargyri chloridi,
Quinæ disulphatis,
Pulv. scillæ, aa gr. xij.
Confect. rosæ q. s. Misce.

Divide in pilulas xij, e quibus sumat unam ter quotidie.

CASE. J. C., a labourer, aged 50, of a bilious and venous aspect, had been suffering from tertian ague many weeks. As the paroxysms subsided, he felt pain and tenderness of the epigastric region, which was prominent; his stomach was uneasy after meals; his breathing was extremely embarrassed; and he could not lie down. The abdomen was swollen, and his lower extremities were greatly enlarged with anasarcaous infiltration. The secretion of the urine was irregular, sometimes scanty and high coloured, and sometimes more copious. The tongue was furred; the pulse intermittent; and he was so weak and oppressed, that he could scarcely bear the journey to my house.

As it appeared to me that the symptoms of obstruction in this case were caused by a congestion of the hepatic capillaries, weakened by the preceding intermittent, I ordered disulphate of quinine with calomel and squills, as in the last prescription, three times a day. The result exceeded my most sanguine expectations. The bowels were gently acted upon; the renal function speedily restored; the anasarcaous swelling gradually subsided; and, in a few weeks, he was able to walk a distance of three miles, to report himself cured.

But, when the cause of obstruction has advanced to a morbid change in the structure of the liver, the disease becomes permanent and incurable. It matters not whether the organ be enormously hypertrophied, cirrhotised by hard drinking, or atrophied and shrunk up into a dark coloured tuberculated mass: the result will be eventually fatal. It is true, that the dropsical infiltrations may sometimes be removed, either by the renal secretion being artificially increased, by the escape of the serum through cutaneous outbreaks between the knee and ankle, or by scarifications, so as often to delude the patient with a hope of recovery; but, in a short time, the oedema, with all its distressing associations, is sure to return again and again, till the constitution is exhausted, and succumbs to the disease.

The following is a case of obstructed liver from organic lesion, showing its fatal progress.

CASE. Geo. G., aged 35, tall and well built, went to the coast of Africa, as a shipwright, in 1846, in H.M. brig *Wasp*. He had not been long in this service before he was shot through the left side of the thorax by a musket ball, in an attack upon a slaver. The ball entered between the third and fourth ribs, and was extracted from beneath the integuments at the edge of the base of the scapula. He completely recovered from the wound. After about two years' residence on this station, from the heat of the climate and excessive drinking, his liver became involved. He complained of acute pain through the right hypochondrium, which was attended with jaundice, white stools, and bilious urine. These symptoms were followed by fulness of the abdomen, anasarca of the inferior extremities, and soon afterwards by cough, shortness of breathing, and undue action of the heart. This state of things continuing more or less for a considerable time, he was invalided home.

When I first saw him, about three months ago, his breathing was exceedingly short; he was unable to observe the horizontal posture; his inferior extremities were enormously swollen with anasarca; his abdomen was ascitic, and the skin of a venous hue. The whole of the right side of the belly, from the inferior margin of the ribs to the crest of the ilium, was prominent, dull under percussion, and exhibited an immense enlargement of the liver. The heart was hypertrophied and dilated, and imparted a distinct *bruit de râpe*, from probably a morbid condition of the mitral or aortic valves. From this time, although he was, as a forlorn hope, speedily brought under the action of mercury, he grew rapidly worse. The jaundice returned, accompanied by intestinal hæmorrhage; and he is now sinking under the fatal progress of the disease.

I have another case of enlarged liver in our infirmary, in which there is a distinct sawing sound in the mitral valves; indeed, I rarely meet with obstructed liver, occasioned by organic disease, that is not associated with disease of the heart also.

When the abdomen is much distended with serous fluid, it is seldom that absorption can be effected by the aid of medicine; and therefore, as the abdominal and thoracic functions become interrupted, it will be necessary to evacuate it by the trocar as often as the symptoms may require. If the external opening can be made fistulous, so much the better. I saw one instance of immense distention, in a man over the middle age, with bilious aspect, in which this was effected, and he recovered; but in this case there could not have been any organic lesion, or the relief would have been only temporary.

Hæmorrhage from the portal veins is another effect of obstructed liver. It may be both vomited from the stomach and discharged from the bowels. It is of course venous, comes away coagulated, and generally in immense quantities, leaving the patient exhausted and bloodless.

The treatment of this symptom requires caution. The indications clearly are to remove, if possible, the capillary obstruction in the liver, and to prevent a return of the portal congestion. These, in my own practice, have been best fulfilled by the following:—

R. Pilulæ hydrargyri,
Extracti copaibæ, aa gr. iv. Misce.
Divide in pilulas duas omni nocte sumendas.
R. Magnesiæ sulphatis ʒss.
Spiritus ætheris nitrici 3ij.
Syrupi aurantii ʒss.
Tincturæ hyoscyami ℥xx.
Infusi rosæ compos. ad ʒvi. Misce.
Capiat quartam partem bis terve die.

Sometimes the bleeding takes place from the hæmorrhoidal veins, which are also a part of the portal system. So long as it appears to be beneficial in relieving the congested condition of that system, and, in fact, the obstruction of the liver itself, without too much debilitating the constitution, it ought never to be stopped, either by me-

dicine or any surgical operation; but when the loss is a daily occurrence with every motion, and so profuse as to produce all the distressing symptoms of anæmia, extreme pallor, shortness of breathing upon the slightest exertion, palpitation, beating of the temporal arteries, indicating great debility, it becomes absolutely necessary to stop the bleeding, lest the constitution should sink from sheer exhaustion; for we must remember that this is not a mere case of occasional piles from local causes, such as a costive habit of body, the gravid uterus, etc., where there is no hepatic obstruction, but a bleeding from an extensive system of obstructed veins without valves, and therefore more apt to bleed profusely.

The remedy which will be found most efficacious in restraining such hæmorrhage, is the purified oil of turpentine, with the tincture of kino, as prescribed in the following formula:—

R Olei terebinthinæ pur. 3ss.
Tincture kino,
Syrupi zingiberis, aa 3j.
Aque cinnamomi,
Aque mollis, aa 3ij.
Misturæ sacchar. q. s. ad bene miscendum.
Fiat haustus bis terve die sumendus.

It is important that the oil should be first carefully rubbed down with the mucilage, and the other ingredients gradually added, in order that the draught may be well mixed; otherwise it may be rejected.

I will now adduce a few cases, to show the efficacy of this treatment.

CASE I. A tradesman, aged 45, the father of a large family, had been for a considerable time subject to daily hæmorrhage from the veins of the rectum. He had lost so much blood with every stool, as to become blanched and exhausted. Several medical men had been consulted, who endeavoured to restrain the bleeding by a variety of remedies, both internal and external, but without success; and the patient had prepared himself for a fatal issue. Being requested to visit him at this time, I placed him at once under the above treatment. The effect was really marvellous. The bleeding was almost immediately controlled; and, what greatly surprised me, the stools, which had been of an ash colour,—and they are always of a light colour in these cases,—assumed a healthy and well digested appearance. It is, therefore, probable that the turpentine not only acted as a styptic, but also as a deobstruent in removing, in some way or other, the hepatic obstruction. Be this as it may, the bleeding never returned; the patient gradually regained his good looks, and has for many years enjoyed excellent health.

CASE II. A lady, aged 47, unmarried, of a bilious aspect, and regular in her menstruation, had been for some time disordered in the hepatic function, and subject to severe facial neuralgia. She was, at the same time, in the habit of losing large quantities of blood by stool. After a while, the bleeding ceased spontaneously; but her general health did not satisfactorily improve. Shortly afterwards the hæmorrhage returned, and continued daily for two months; when she became so bloodless and debilitated, as to occasion great anxiety and alarm to her friends. I went to town to see her, and immediately recommended the turpentine in the above formula. In a week the bleeding was controlled, and the medicine was left off. It returned, however, as profusely as before, and the remedy was resumed three times a day for another week; after which it was again and completely successful. She has been in good health for the last two years.

CASE III. Mrs. C., aged 39, married, but without any family, came to consult me, in February 1852, for bleeding from the hæmorrhoidal vessels. She informed me that she had lost a large quantity of blood with every stool, but at no other time, for the last eight months. Her aspect was most unfavourable. She was pale as death, and was constantly drowsy. Her pulse was feeble and rapid, her tongue colourless and cold, her feet cedematous, her respiration hurried, and her strength so exhausted that she was scarcely

able to walk across the room; in short, she appeared to be in a hopeless stage of anæmia.

In this case, as in the two former, the same treatment was equally successful. At her next visit, she told me that the hæmorrhage had ceased on the third day after she had commenced the medicine, and reported herself much better. From this time her health steadily improved, without any return of the bleeding; and her strength was restored under the use of dilute sulphuric acid and decoction of bark, with gentle aperients.

Turpentine, in the above formula, has seldom failed in my own practice to ensure the purpose of a styptic in this kind of hæmorrhage. Whether it acts as a deobstruent also in removing the obstruction of the portal capillaries, I have not sufficient evidence to decide; though, from its subtle qualities entering the vascular system so rapidly, such a result is not improbable. It certainly appeared so to act in the first case. As a styptic for internal passive hæmorrhage it stands unrivalled.

The bowels are to be regulated by such aperients as will gently act upon the liver, without irritating the rectum.

R Pil. hydrargy.,
Extracti jalapæ (vel extr. rhei),
Extracti copaiabæ, sing. ʒj. Misce.

Divide in pilulas xij; è quibus capiat duas horâ somni pro re nata.

Should the bleeding recur from a hæmorrhagic idiosyncrasy, an injection of cold water should be employed every morning; which will not only evacuate the bowels, but give tone to the veins of the rectum.

Southampton, July 13th, 1853.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE ŒSOPHAGUS.

By C. E. REEVES, B.A., M.D.

SPASMODIC STRICTURE.

THE position of the inferior constrictor of the pharynx, at the point of junction of the two portions of the gullet, renders it, like all constrictors, extremely susceptible to spasmodic contraction, whether arising from direct or from indirect irritation. Contraction of a spasmodic character is rarely met with in any other part of the canal; yet Courant* mentions an instance where it existed at both extremities at the same time, the alimentary ball being conveyed from one end of the canal to the other, and then expelled with violence or driven into the stomach. In Percival's† case it existed at the lower extremity; and in the one published by Dumas‡ at the point where the œsophagus passed through the diaphragm.

PATHOLOGY. It is rare to find any morbid change in the œsophagus, even when spasmodic stricture has existed for a considerable length of time. Portal, Monroe, Howship, and others, report cases of this kind. "It will," says Abernethy,§ "be readily allowed that spasmodic stricture, when long continued, may cause a thickening in the affected part of the tube"; and Baillie|| states that thickening of the canal may be sometimes met with at the *post mortem* examination. But the reverse does occur, thickening often giving rise to spasmodic contraction.

CASE. F., aged 44, single, just at the change of life, after exposure to wet and cold, experienced some slight dryness in the throat with a sense of undefined uneasiness. She found on eating fast or swallowing a large mouthful, if not well masticated, that the food was apt to become arrested in the throat, requiring several gulps to get it to descend, yet it was not sufficient to cause any uneasiness, or require fluid

* De Nonnullis Cont. Œsoph. Quoted by Mondière. Arch. Gén. de Méd., 1835.

† Transactions of the College of Physicians, vol. ii.

‡ Consultations Médicales.

§ Surgical Works.

|| Morbid Anatomy.

to assist it. The illness and subsequent death of her father, about nine months from the commencement of the affection of the throat, affected her general health materially. She became dull and desponding. While in this state, she was exposed to cold and wet, which brought on an attack of spasmodic stricture. It lasted two days; it then subsided under treatment, leaving the difficulty of swallowing much in the same state as before the attack.

In the following case, spasmodic stricture had existed three years, yet no thickening was found after death.

CASE. F., aged 52, tall and thin, with dark complexion and grey hair, since the disappearance of the menstrual discharge four years previously, had become highly nervous and irritable, and for the last three years subject to attacks of difficulty of breathing and also of swallowing, generally occurring after dinner, but also liable to occur during any other meal, particularly if it were of a substantial character, or if more were taken than enough to stay the appetite. Attacks were excited by drinking cold fluids, when heated by exercise or sitting in a close room. During the last two years of life she became subject to frequent attacks of hæmorrhage from the nose. She died rather suddenly from apoplexy.

The mucous membrane of the œsophagus seemed rather more vascular than usual; the mucous follicles were more developed, but there was no contraction or thickening of the canal. The brain contained in its right hemisphere a large clot of blood; the right and left lateral ventricles also contained blood; and the septum lucidum was destroyed. The vessels of the membrane covering the medulla oblongata seemed rather larger than usual, and the substance of the medulla itself more vascular, but the eighth pair of nerves seemed quite normal. The walls of the left ventricle of the heart were rather thick, and the auricular ventricular orifice was somewhat contracted. The liver was large and slightly livid, but all the other viscera were normal. The uterus was very small, and the ovaries were much contracted.

Hysteria had never existed in either case.

CAUSES. These may be considered under two heads: direct and indirect.

1. *Direct.* Under this head, affections of the larynx, trachea, pharynx, and œsophagus, and foreign bodies, may be placed.

2. *Indirect.* This head includes affections of the stomach, liver, and diaphragm, uterus, gout, and suppression of cutaneous eruptions.

In addition to the above, a third cause exists, namely, affections of the brain and upper part of the spinal cord.

1. **AFFECTIONS OF THE LARYNX AND TRACHEA.** Mr. Shaw* has published the following case. "I was", he says, "requested to make the *post mortem* examination of a person about whom some doubt as to the nature of the disease existed during life. He had first suffered from pain in the throat, with expectoration of blood, which continued for some time, and was then followed by purulent matter and great difficulty of swallowing; bougies were repeatedly introduced, under the idea that stricture of the œsophagus existed. The opinion of another physician having been sought, he stated that the spasmodic stricture depended on disease of the larynx. He gradually sank, presenting, however, at times marked symptoms of stricture. The back part of the tongue, epiglottis, tonsils, and sac of the larynx were found eroded, the chordæ vocales thickened, and an ulcer existed in the upper part of the pharynx, but the œsophagus was quite healthy. The lungs contained a number of miliary tubercles."

"I was", says Howship,† "with Dr. Hooper, consulted on the 4th Dec., 1823, by a middle aged gentleman. He was, after exposure to cold and damp, first affected with soreness about the throat attended with some degree of fever, which left him without having recourse to medical treatment. Soon after, he began to suffer from soreness in the course of the trachea, with constant spitting of frothy mucus. In addition to these symptoms, a difficulty in swallowing came

on, gradually increasing in severity. The throat, on examination, seemed free from disease; but on depressing the tongue, severe irritation was excited, which was followed by the rejection of a large quantity of glairy mucus. The pulse was 90, rather hard, the skin hot, and the tongue white. A bougie was passed several times with great relief to the difficulty of swallowing. Dec. 22nd. An attack of severe pain in the side rendered antiphlogistic treatment necessary. The passing of the bougie was continued: in doing so, it was necessary to press lightly for the space of a minute on the obstruction at the lower part of the pharynx, which then gave way. He could now swallow with comparative ease, the sense of soreness in the larynx continuing and the expectoration was for a time much diminished under treatment, but early in January hectic symptoms set in, and he sank on the 18th.

"The epiglottis was found nearly destroyed; the larynx was ulcerated; but no trace of disease existed in the œsophagus. The intestines were ulcerated."

He mentions a case of spasmodic stricture occurring in a female in the last stage of consumption. Symptoms of irritation in the larynx and trachea had been present for some time. A bougie was passed: it met with an obstruction in the lower part of the pharynx, which was surmounted by slight pressure. She died eighteen days after.

The œsophagus was found constricted to half its diameter, for the extent of half an inch, from the effusion of lymph; the trachea was highly vascular, and covered with purulent mucus; the larynx was healthy; the lungs were diseased.

Mayo (*Outlines of Pathology*) mentions a case of ulceration of the larynx in a young man who suffered from great difficulty in swallowing. A bougie met with some resistance in the upper part of the œsophagus.

AFFECTIONS OF THE PHARYNX. CASE. ULCERATION OF THE POSTERIOR PART OF THE PHARYNX. A young man, of a scrofulous irritable habit, some time after having been cured of primary syphilis, became affected with superficial ulceration of the posterior part of the pharynx. A person to whom he applied, considering it to be secondary syphilis, advised him to undergo a second course of mercurial treatment. At the end of a week, from exposure to cold and wet, joined to habits of dissipation, he suffered from huskiness of the throat, and some slight thirst the next day. In the evening, the symptoms in the throat rather increased; and after tossing about some hours he got to sleep, but was suddenly awakened by a sensation of choking. He attempted to drink a glass of cold water, but the fluid excited so much spasm on entering the throat, that it was returned. He was seen three hours afterwards, suffering severely from thirst, which he was unable to allay. On examining the throat, there was observed some slight swelling of an erysipeloid character. The free application of a solution of nitrate of silver, and an anodyne clyster, soon enabled him to swallow a little warm fluid with ease.

Paletta* mentions the following case of stricture from secondary ulceration of the pharynx. A nervous man contracted syphilis, which was cured by a mercurial preparation. In the autumn of the same year, he suffered from an attack of intermittent fever, which was cured by bark. Immediately afterwards, an eruption appeared on the chest: at the same time, difficulty in swallowing came on, and a sense of soreness at one side of the pharynx. At the end of a month, the dysphagia had much increased, with a copious expectoration of viscid mucus, occasionally mixed with blood. Nothing could be seen on examining the throat; but, by means of the finger, an ulcer was easily felt. He was cured by the exhibition of mercury.

Morgagni† relates an instance of a female suffering from ulceration of the fauces, who had dysphagia.

Blassius‡ gives the following case of ulceration of the lower part of the pharynx:—

* Exercitationes Pathologicae. Mediolani, 1690.

† De Caus. et Sed. Morb. Epist. xxviii. Art. ii.

‡ Obs. Anat. Chirurgo-Medicæ, 1781. Dec. 4, Obs. 3. *Dysphagia* *causa* *ulcerationis* *pharyngis* *inferioris* *partis*.

* London Medical and Physical Journal, 1822.

† Practical Observations on Indigestion.

A female, aged 22, who menstruated irregularly, and was frequently the subject of coryza, became in 1730, after having had several attacks of ophthalmia, the subject of inflammation of the right tonsil and uvula, with swelling of the parotid gland of the same side. Soon afterwards, difficulty in swallowing set in. On exploring the pharynx with the finger, an ulcer was felt. This had evidently given rise to spasmodic contraction, on food and drink coming in contact with it. Under the use of astringent gargles and delayants, she was cured in fourteen days.

Baldinger* has recorded the following interesting case:— In 1785, a sensation of constriction in the pharynx was first experienced, which lasted four hours. The succeeding six weeks, it occasionally occurred, but very slightly. At the end of this period, it became more frequent and severe, attended with a sense of soreness, confined to one spot on the left side of the pharynx, not larger than a linseed: swallowing sour or sharp substances increased the sensation of soreness to one of smarting: the food and saliva were swallowed with great difficulty. These attacks came on only in the evening, continued during the greater part of the night, and disappeared towards morning. Blisters and change of diet were tried in vain; camphor gave considerable relief; but, at the expiration of six or eight weeks, the symptoms returned, but the exhibition of camphor caused them again to disappear in the course of a few days. In the winter, the disease again returned with greater severity, and was attended with difficulty of breathing, to which the patient was subject during the winter months. In June 1786, an eruption appeared on the extremities, which was followed on drying up by a severe cough (evidently depending on the affection of the pharynx), lasting about a quarter of an hour, and attended with retching. Nothing, however, was brought up but some slimy mucus. The attacks continued, with more or less severity, being sometimes absent for some time, and then returning, continuing for a longer or shorter period. In the winter of 1786, the sensation of soreness changed from the left to the right side of the pharynx, but not so severe as to attract much attention, yet it was attended with a strong afflux of saliva, and difficulty in swallowing. As before, it occurred at longer or shorter intervals, and was more or less severe. One of these attacks was attended with heat of the skin, followed by great difficulty in bending back the head, and turning it round. The affection lasted until 1787, when, under treatment and careful diet, the attacks were much mitigated.

CASE. AFFECTIONS OF THE ŒSOPHAGUS: SPASMODIC STRICTURE DEPENDING ON INFLAMMATION OF THE LOWER PART OF THE ŒSOPHAGUS.† F., aged 52, when forty-two years of age, experienced attacks of pyrosis: her health was otherwise good. One year afterwards, she was confined of a healthy full-grown child, which she nursed for a year. Then some disorder of the stomach set in, attended with nausea, constant hawking up of a thick glairy fluid, with regurgitation of food, and often of liquids. She ceased to nurse, yet the affection gained ground. Her chief complaint was of weight at the pit of the stomach, with some obstruction to the food passing through the cardiac orifice; but, when once this difficulty was got over, digestion went on well. At times, she suffered from spasms of the upper part of the œsophagus. Various remedies were had recourse to, but leeches and sea-bathing seemed alone to give her any relief. In August 1843, she accidentally swallowed a prune-stone, and the difficulty of deglutition, which had been for some time better from the treatment adopted, returned. Nothing could be made to enter the stomach. A bougie was introduced with some slight difficulty, yet no foreign body could be detected. Leeches, baths, and other remedies, were employed in vain. The spasm was at times referred to the upper, at others to the lower part of the canal. Every fifteen days, she suffered from attacks like ague. Her

breath had a highly acid odour, which pervaded the whole room. She at last sank on December 24th, having been nourished for some time by means of nutritive clysters.

A narrowing was found extending upwards from the cardia more than two and a half inches. The little finger could with difficulty be made to pass; the walls were not thickened; the œsophagus contained a prune-stone; two gangrenous patches existed just above the contraction, with some red points in others. The rest of the canal and the other viscera were healthy.

CASE. CHRONIC INFLAMMATION GIVING RISE TO OCCASIONAL ATTACKS OF SPASMODIC STRICTURE.* M., aged 50, nervous, yet of strong constitution, had been subject, for the last ten years, to occasional attacks of spasmodic stricture. On the 20th of November, 1836, he had an attack. This passed off, and he was in his usual excellent health. In the evening, he made a supper on apples, and afterwards attempted to swallow a potato, which became arrested in the throat, and was got rid of by vomiting. The irritation of the potato brought on a return of the stricture in all its severity. After two days' suffering, medical assistance was sought. He complained of a pain in the throat, opposite the thyroid cartilage; and there the obstruction to swallowing existed. The thirst was intense; efforts to swallow a little fluid gave rise to a peculiar gurgling sound, and, if long continued, to convulsive contractions of the muscles of the face, and pain between the shoulders, and discharge of thick cream-like mucus. Blisters were applied to the nape of the neck, leeches to the throat, and belladonna clysters were thrown up.

November 24th. He was no better. A dose of morphia gave immediate relief; and he was soon enabled to swallow fluids with the greatest ease.

INFLAMMATION OF A CHRONIC CHARACTER GIVING RISE TO SPASMS, AND FOLLOWED BY AN ATTACK OF ACUTE INFLAMMATION.† F., a middle aged female, had suffered during the last few days from attacks of difficult swallowing, particularly of fluids. The swallowing of a little cold water relieved her. A silver ball, half an inch in diameter, was passed to the bottom of the pharynx, where some slight obstacle to its passage was met with. The affection afterwards took on an inflammatory type, and was treated with leeches, blisters, etc.

Abercrombie‡ mentions a case somewhat analogous. A. F., forty years of age, had suffered for more than a year from symptoms of spasm of an irritable character. Bougies had been passed, and various remedies employed, in vain. By mere chance, he ordered a silver ball, attached to a piece of wire, to be passed: this, after four or five introductions, quite removed the affection.

Mr. Lawrence, in his Lectures (*Lancet*, 1829-30), mentions the case of a young lady, who, from some affection of the throat, could not take food without exciting spasmodic constriction.

Thillnéus§ mentions a case where a man was unable to swallow any solid or fluid, even at the temperature of the atmosphere, without giving rise to spasm; yet, when hot, he could swallow them with the greatest ease.

Courant|| mentions a like instance. In the case published by Percival in the *Transactions of the College of Physicians*, cold fluids met with greater obstruction than warm. The reverse is occasionally met with, as in the second case quoted above, and in other observations mentioned by different writers.

CASE. SPASMODIC STRICTURE OF TEN WEEKS' DURATION, EXCITED BY AN EMETIC.¶ A robust female drank, when heated from dancing, a large quantity of cold water, which

* Dr. Olaszewski, in Caspar's *Wochenschrift*, 1837.

† Howship, *Pract. Observations on Indigestion*.

‡ Abercrombie, on *Diseases of the Stomach*, etc. This case also somewhat resembles the one published by Sir E. Home, in his work on *Stricture*. A female, after much retching from a sea passage, suffered from difficulty in swallowing, which increased in severity. A bougie was passed with some difficulty, but the next day she could swallow with ease.

§ Jour. de Méd. Chir. et Phar., 1791, p. 280.

|| Courant de Nonnullis *Con. Œsophag.*, in Mondière's paper.

¶ Rheatus in Hufeland's *Journal*, Bd. lviii.

* Neues Magazin für Aerzte, Bd. 9-515. 1767.

† LAMOTHE, Jour. de Méd. de Bordeaux, 1844.

produced great uneasiness and distension of the stomach. An emetic was exhibited, which acted about twenty times, and produced also several evacuations from the bowels. Spasmodic contraction of the œsophagus set in, and the menstrual discharge, which had just appeared, was suppressed. Five days passed without anything entering the stomach; the patient was greatly exhausted from want of food, and suffered intensely from thirst. An elastic tube was now introduced into the stomach with some difficulty, and through this food was administered. At the expiration of ten weeks, the menstrual discharge reappeared, and the spasm subsided. Carron* mentions an instance where a strong emetic excited spasmodic stricture of the œsophagus.

Harrington Square, London, July 1853.

[To be continued.]

THREE CASES OF POST-PARTUM HÆMORRHAGE.

By FREDERICK JAMES BROWN, M.D.

CASE I. PLACENTA PRÆVIA: DELIVERY: HÆMORRHAGE ON THE NINTH DAY, AND DEATH. EXAMINATION OF THE BODY. Mrs. Gadfield, aged 37, residing at Strood, the wife of the mate of a coal vessel, sent for Dr. John Dan Brown, on the morning of Saturday, 30th April, 1853. She was at the full term of her sixth pregnancy. She had been attended previously by Dr. J. D. Brown, when she had favourable labours.

She stated that she had a "show" three weeks ago, succeeded by another in a short time; and that she had a "show" on the nights of Thursday and Friday, the 28th and 29th April. Through Friday night and the early morning of Saturday, she lost half a potful of blood. She had had very slight pains. On examination, the os uteri was found thin and rigid; it was equal in size to a shilling. The placenta was felt over all the os uteri that was open. There was bulkiness of the posterior part of the os and cervix uteri. The presentation was cranial. There were no pains, and no hæmorrhage. The vagina was plugged, and rest in bed enjoined. At 9 p.m., hæmorrhage recommenced, the blood escaping by the side of the plug. Slight pains had occurred from 7 p.m. On withdrawing the plug, there were gushes of blood, greatly increased by each pain. The patient's system was suffering from loss of blood. The pulse was small and weak, not rapid. The os uteri continued rigid. The plug was reintroduced, and the assistance of an able and experienced practitioner was sought. The hæmorrhage by the side of the plug, during a pain, was now but slight. At twenty-five minutes to 11 p.m., the os uteri being thin, somewhat rigid, and nearly equal to a crown in size, Mr. Ely of Chatham commenced dilatation. By 11 o'clock, dilatation had been carefully effected, the child turned, and the right foot brought down. The child was delivered by pains and the assistance of the operator, in fifteen minutes after the version. The placenta was found to be detached, and was removed from the vagina in five minutes.

During the operation, the placenta was ascertained to be attached over the posterior part of the os uteri, thus permitting the operator to reach the membranes anteriorly, and to evacuate the liquor amnii in carrying up the hand. The uterus contracted well after the birth of the child; and the pulse became augmented in strength and volume. There was no hæmorrhage.

The child, which was a female, was dead. No pulsation was felt in the funis during the operation. Its death appeared to be quite recent, not exceeding a few hours. The patient fell asleep, and was not removed to a dry part of the bed until after two hours and a half.

May 1st. The patient had not slept during the night. She had pain in the abdomen, in the left iliac region. The pulse was 108. Calomel and opium were given; and four leeches were applied to the abdomen.

May 2nd. She slept in the night. There was pain along the left side of the uterus, and hardness, forming a ridge in the abdomen. The lochia were scanty; the pulse was 108, moderately full; the tongue dry. The calomel and opium were continued.

May 3rd. She slept in the night. The bowels were much acted on by the mercury. No pain, swelling, or hardness by the side of the uterus remained. The whole abdomen was swelled in the morning; but the meteorism disappeared in the afternoon. Pulse 112, large and firm; tongue clean. The calomel and opium were omitted.

May 4th. She slept during part of the night. The diarrhoea had ceased; the bowels had been twice open. Pulse 108; tongue clean. Pain in the umbilical region came on in the afternoon. Four leeches were applied; and some doses of hydrargyrum cum creta and Dover's powder were ordered.

May 5th (*vespere*). The pulse was 116 at six o'clock; 104 at nine o'clock. The patient complained of uneasiness and fulness of the abdomen. A blister was applied to the middle portion of the abdomen; and Dover's powder and oxide of silver were administered.

May 6th. She was convalescent. The mouth was sore, and the face swollen. She had no pain or swelling of abdomen. The skin was moist; the pulse 108; the bowels were open. The lochia were very scanty. The breasts had scarcely swelled. There was pallor of the surface; but the nervous system was tranquil. The patient was of a quiet disposition.

May 8th. She slept in the night. There was now no swelling of the face. She felt comfortable on awaking, and took two cups of tea for breakfast.

At twenty minutes to 9 a.m., she suddenly asked for the bed-pan, and passed, *per vaginam*, bloody clots. She immediately fell into a fainting fit, with slight struggling. On recovering, she said that she required to pass water; but, instead of urine, gushes of blood escaped *per vaginam*, and flooded the bed as low as the patient's feet. Dr. John D. Brown saw her in the course of a few minutes. The hæmorrhage had entirely ceased; but he applied cloths dipped in cold water, and exhibited tincture of cannabis Indica (℥xxv), and, subsequently, acetate of lead. Brandy and wine were administered by the teaspoon every few minutes. The patient's skin was cold and pallid as marble. The pulse was flickering. There was no recurrence of hæmorrhage.

The patient gradually became lower; but consciousness persisted till 2½ p.m., when the agonies of death commenced. She died at ten minutes before 3 p.m.

EXAMINATION OF THE BODY, twenty-six hours after death. There were present Dr. J. D. Brown, Mr. Ely of Chatham, Dr. Ely of Rochester, and myself. Rigor mortis was present. The surface was pallid; the abdomen was not swollen.

The Thorax was not examined.

Abdomen. The intestines were healthy. There was no appearance of inflammation of the peritoneum, nor any serous effusion. The liver was fawn coloured. The spleen was healthy. The kidneys were pale, but healthy.

The uterus was equal in size to a large fist. It was white and firm; it probably weighed twelve or fourteen ounces: it filled the pelvic cavity. The ovaries were like almonds; they were quite healthy. There was purple staining along the spermatic veins, and under the pelvic peritoneum, on the left side. No blood was found effused. Urine was found in the bladder; the interior of which viscus was white and firm.

The os uteri was capable of admitting the tips of four fingers: it was irregular. An old laceration (not deeper than a few lines) existed on the right side, and a recent laceration, equally shallow, on the left side. The posterior surface of the cavity, from the fundus to the cervix and os uteri, was in a rough granular state, showing the attachment of the placenta during life. The back of the uterus could detach the granules, leaving the uterine structure beneath firm and uninjured. The sinuses in the body of

* Cited by Mondière, in Archives Gén. de Méd., 1838.

the uterus were plugged with firm white fibrin. Those in the canal of the cervix (which part was easily distinguishable from the body) were plugged loosely by clots of moderate tenacity. One vessel, capable of admitting a blow-pipe through its whole length, was open, except at its mouth, where there was a loose clot. A large artery on the side of the cervix was entire. No ulceration was found. Two oval thin clots, three inches in length, lay in the cavity of the uterus. One was whitened on one surface. The parietal thickness of the uterus was half an inch at the fundus, seven-eighths of an inch at the angles, and one-fourth of an inch at the cervix.

CASE II. HÆMORRHAGE AFTER THE BIRTH OF THE CHILD: SECONDARY HÆMORRHAGE ON THE THIRTEENTH DAY, AND ON THE TWENTY-FIRST DAY: GASTRO-INTESTINAL DISORDER. Mrs P., aged between 30 and 40, wife of a master tradesman in Rochester, was confined of her ninth child on May 20th, 1852, about 7½ p.m., under the care of Dr. John D. Brown. The labour lasted eight hours. The child was a female, and alive. There was sharp hæmorrhage immediately after the birth. The placenta was thrown off by the uterus, and was readily removed from the vagina; but the hæmorrhage continued until after the application of cold water.

This patient had suffered during her pregnancy with gastric disorder, and a sensation of coldness in the abdomen; from which symptoms she was not free up to the time of her labour. The sanitary condition of the house was exceedingly bad. There was a water-closet opening into the room on the ground-floor used by the family. It was frequented by several persons, and there was, day and night, an intolerable stench, like that of cabbage-water.

May 22nd. The patient vomited in the night and this morning. There was abdominal tenderness and hiccup. The pulse was 100; the tongue moist; the bowels open; the countenance calm. She was bled to 3x; and six or eight leeches were ordered to be applied to the abdomen. Calomel and morphia were prescribed.

May 23rd. There was retching. The bowels had been open six times. Pain was present in the umbilical and the left iliac regions, and in the back. The lochia were moderate. The breasts were full of milk. The urine was removed by the catheter, on account of inability to void it. The pulse was 108-116; the tongue moist. Venesection to 3xx was performed. Very little relief was afforded by the bleeding, but all the pain was removed by a turpentine epithem. Calomel and opium, and prussic acid, were given.

May 24th. Pain was felt in the lumbar regions, and there was frequent vomiting. The patient was bled to 3xvj. The blood-clot was flat and red.

Vespere. There was sweating. The pulse was 120, small; and there was frequent retching. Twelve leeches were applied over the sacrum, a blister to the epigastrium, and blue ointment to the abdomen.

May 25th. She was better; had no pain or vomiting. There was occasional hiccup. The pulse was 120, good; the tongue clean.

May 27th. She was doing well, excepting griping from the mercury.

May 28th. There was some mercurial purging. Logwood and laudanum were prescribed.

June 1st. Pain was present in the back yesterday and to-day; and she had frequent desire to go to stool. A turpentine epithem was applied. Morphia was prescribed; and she was ordered to continue the logwood and laudanum. She became free from pain in the afternoon.

6 p.m. Violent hæmorrhage occurred *per vaginam*. The patient was lying in bed, and had not been sitting up; but she had had a copious motion just previously to the hæmorrhage. Cold water was applied, and the tincture of cannabis Indica given in five minim doses. The hæmorrhage was free till nine o'clock, and entirely subsided by ten p.m. The patient did not seem much affected. The surface was rather cold, and the pulse was weak.

June 2nd. She felt better than previously. The pulse had lost the sharpness and frequency which it formerly

had. There being mercurial purging, an opiate enema was ordered.

June 4th. She was better.

June 9th. She had burning pains in the lower part of the spine yesterday. 9½ a.m. Sudden hæmorrhage *per vaginam* took place. The hæmorrhage was smart but not severe; cold water was applied; and acetate of lead and cannabis Indica given. She had a few bloody stools, with griping.

Vespere. She was comfortable; had no pain; had retched twice. 10 p.m. She was rather faint. A little before midnight, she was seized with fluttering of the heart, flatulence, burning in the sacral region, and coldness of the skin. The pulse was quick and feeble; the tongue anemic. A venous murmur was heard in the neck. A blister was applied over the cæcum. Wine was given; and two grains of oxide of silver every four hours, and seven grains of citrate of quinine and iron every two hours.

June 11th. 4 a.m. The skin was warm and perspiring. She had had six motions, but without blood.

Noon. An opiate enema was ordered.

Vespere. The pulse was 108, febrile; the tongue clean and moist. No pain or purging had occurred since noon.

June 12th. She did not sleep in the night. The pulse was quiet. The bowels had been open four times. Some fluttering of the heart was present. The enemata were continued.

June 13th. Sacral burning had been felt for the last three or four days.

June 14th. Tenesmus was present; and she had three or four motions, without blood.

June 18th. She was doing well. She convalesced very slowly after this date.

July 13th. Vomiting occurred; the bowels were not open. A purgative enema was administered.

July 14th. Vomiting had occurred all night. There was no pyrexia. Purgatives proved inefficacious, until after leeches were applied to the abdomen, and calomel and morphia exhibited. The bowels were well relieved the next day.

July 22nd. Colic was present, without vomiting; it was relieved by a mixture of Dover's powder, rhubarb, scammony, and hartshorn, followed by castor oil.

August 4th. She was much improved in health; and had colour in the cheeks.

August 5th. She had a spasmodic attack, with vomiting.

This patient recovered without any more untoward circumstances, but she did not regain her health until she availed herself of change of air.

CASE III. SECONDARY HÆMORRHAGE ON THE EIGHTH DAY. Mrs. C., aged 27, residing in Chatham, the wife of a young man employed in the dockyard, was confined of her first child (a puny male infant) on May 19th, 1852. The labour lasted nine and a half hours. This patient was of a spare habit, subject to hysterical sensations, and a frequent sufferer from headache. The latter was the result of a diseased state of the antrum maxillare on one side, succeeding to the extraction of a tooth.

Mrs. C. convalesced without a bad symptom till May 26th. She had what she considered her usual headache all the day. In the afternoon, whilst standing and about to return to her bed, (which she had not left many minutes,) a sudden flow of blood, *per vaginam*, occurred. The hæmorrhage ceased spontaneously in a few minutes. The loss was not clearly ascertained; but it would appear that it exceeded a pint.

She did not suffer any bad effects from the hæmorrhage; but she was not discharged till August, on account of sup-puration in both breasts. Each breast constituted an enormous abscess.

REMARKS. Of the three cases related, two occurred in houses with very defective sanitary arrangements. Mrs. Gadfield's house was built on the edge of a stagnant ditch, from which an offensive odour was commonly perceived; and the stench in Mrs. P.'s house from a water-closet was, as before mentioned, intolerable. An attempt was made to

deodorize the place; but the remissness of the friends rendered this measure ineffectual. In Mrs. C.'s house there was nothing of an objectionable nature discovered; but it is possible that there was something faulty in the sanitary condition of the neighbourhood. It is worthy of remark, that the placenta was in each case detached naturally, and within ten minutes.

Chatham, July 30th, 1858.

PUERPERAL CONVULSIONS IN A PRIMIPARA DELIVERED OF TWINS: ADVANTAGES OF CHLOROFORM IN SUCH CASES.

By HENRY RUDGE, Esq.

SINCE the discovery of the superiority of chloroform over ether as an anæsthetic agent, by Professor Simpson of Edinburgh—a discovery destined to render his name immortal—much diversity of opinion has been expressed by accoucheurs, as to the safety and propriety of employing it in labour. It is not my intention to enter upon this field of controversy. My object is to contribute an observation from my own practice, which points out a class of cases in which anæsthesia, induced by chloroform, must be at once recognised as a great boon. I propose to give a simple history of the successful administration of chloroform in a case of puerperal convulsions, occurring in a primipara, during her labour with twins.

CASE. On the 25th of July, at 11 P.M., my assistant, Mr. Boyce, a gentleman of ability and considerable experience in midwifery practice, was called to Mrs. E. M., aged 23. The pains were ineffective, and at considerable intervals. The head presented. She was unusually restless; and it was stated by the nurse that she had been convulsed two or three times previous to the arrival of Mr. Boyce. He remained with her during the night, treating her judiciously. The labour slowly advanced until half-past five o'clock A.M. on the 26th; when, after falling asleep, she was seized with a violent convulsive paroxysm, during which she severely bit her tongue, causing considerable hæmorrhage, before a cork or any substance could be thrust between her teeth. The convulsions were suspended until nine o'clock A.M., when they returned with greater violence, and in frequently succeeding fits. The danger of the patient now being imminent, and the responsibility great, Mr. B. very properly sent for me. On examination, I found the os uteri dilated, and the head presenting. The pains were entirely arrested; and the patient was in strong convulsions, attended with considerable hæmorrhage. Under these circumstances, I quickly procured some chloroform, twenty drops of which were administered at intervals, by means of a folded cambric handkerchief, by my assistant. The effects were magical. The convulsions, after a few inhalations, entirely ceased; and I proceeded to extract the child, which was effected without difficulty. On examination, I found it was a twin case (both females); and a second head presenting, I ruptured the membranes, and extracted the second child without difficulty, with the forceps; and, in consequence of smart hæmorrhage, after a few minutes, I introduced my hand, and carefully extracted the placenta. Leeches and cold applications were applied to the head. After delivery she had, at 3 P.M., one attack of convulsions. She passed a good night; the bowels having been well cleared out. No unpleasant symptom has arisen up to this date.

Mrs. E. M. was not conscious of her delivery; and was much surprised when informed that she had given birth to twins. Both infants are well, and likely to live. I have no hesitation in attributing the favourable issue of this case to the use of chloroform: and I firmly believe that, in skilful hands, it will prove an inestimable boon to the fairest portion of the creation, relieving them from much of the danger and dreadful suffering of tedious and complicated labours—sufferings, the witnessing of which frequently unnerves the strongest of the other sex.

Cominster, Herefordshire, July 31, 1858.

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THE PATHOLOGY OF THE BRONCHIO-PULMONARY MUCOUS MEMBRANE. By C. BLACK, M.D., formerly Medical Scholar in Physiology and Comparative Anatomy in the University of London. Part i, pp. 99. Edinburgh: 1853.

Dr. Black has undertaken the task of showing the application of chemistry and the microscope to the investigation of pulmonary diseases; of doing, in fact, for these affections what Bowman, G. Johnson, Simon, and others, have done for the kidney and its diseases. The attempt has not, as far as we are aware, been before made—at any rate, not on so extensive a scale as is here presented before us. Although the work is as yet incomplete, the novelty and interest of the subject will tempt us to present our readers with a pretty full abstract of the author's researches; which we may at once state to form a highly valuable contribution to pathological medicine.

Dr. Black first describes the Structure of the Bronchio-Pulmonary Mucous Membrane. He differs from the majority of histologists, with regard to the question whether the pulmonary epithelium is continued into the ultimate cells. He says:

"If a very thin slice of pulmonary tissue be taken from the surface of the lung, macerated for a short time in distilled water to decolorise it, and be afterwards subjected between two slips of glass to the microscope, each pulmonary cell is seen to have a perfect layer of epithelium." (p. 4.)

The uses of the pulmonary epithelium are to protect the basement membrane on which it rests, and to secrete mucus for the purpose of lubrication. In certain forms of disease, however, the epithelial cells "act the part of true excretory organs, and thus eliminate from the blood the elements of disease, in the same manner as the renal epithelium is believed to eliminate the scarlatinic poison in cases of albuminous nephritis." There is, however, this difference; that the morbid products of the bronchio-pulmonary epithelium are physically and chemically determinable; while those of the renal epithelium, in the instance cited, as yet have eluded our means of research. To this interesting subject we shall presently have occasion to return.

Contrary to the opinion generally expressed, Dr. Black asserts that acetic acid *coagulates* albumen. He says that if to the white of egg pure acetic acid be added, and the mixture stirred with a glass rod for a few minutes, distinct flocculi of coagulated albumen will immediately form; and that, if more acetic acid be added, and the mixture be allowed to stand for a short time, the whole will pass into a firmly coagulated mass. He agrees with Kirkes and Paget, that albumen, coagulated by heat, is soluble in acetic acid, if boiled with it; but he finds, contrary to their statement, that digestion in the acid produces no effect.

The author next proceeds to the investigation of the Diseases of the Bronchio-Pulmonary Mucous Membrane. These he arranges under the following heads:

- I. Inflammatory Diseases;
- II. Diseases for the most part non-inflammatory;
- III. Lesions of Structure.

Inflammation of the Bronchio-Pulmonary Mucous Membrane may be; 1. Simple, acute, or chronic; 2. Sthenic or asthenic; 3. Specific.

Acute inflammation is subdivided into

- I. Simple Acute Epithelial Bronchitis;
- II. Bronchitis involving the Submucous Tissue;
- III. Cellulitis, or Inflammation of the Epithelium of the Pulmonary Cells.

The first pathological condition of Epithelial Bronchitis is that of inordinate congestion of the blood-vessels of the mucous membrane. This produces encroachment on the calibre of the air-tubes, tightness of breathing, and, by pressure on the nerves, cough. At first, there is no discharge from deficient transudation of fluid; but afterwards

tion is poured out more quickly than in the healthy nutrition of the part. The percussion note is not appreciably modified; but the diminution in the diameter of the bronchi gives rise to the production of rhonchi, depending, for their amount of loudness and shrillness, on the smallness of the opening through which the air has to pass, the sharpness, tenseness, and rigidity of its edges, and the rapidity of the current of air.

The indications of treatment are to unload the overburdened capillaries, and to prevent their subsequent distension. The former of these is to be fulfilled by depletion and by augmenting the cutaneous circulation by warm clothing; while the tonic of the capillary walls is to be augmented by the constant breathing of cold air.

The second pathological state of epithelial bronchitis is characterised by an increased secretion of mucus, giving rise to the production of mucous and submucous rhonchi. Dr. Black believes that in this disease "the submucous tissue is not affected, and that the disease consists in an excessive nutrition, arising out of an overplus of nutritive blastema supplied to the basement membrane, and consequently exciting inordinate cell-growth in its epithelial covering". The following is the description of the secretion in this form of disease.

"The secretion, in its simply physical character, resembles at first a thinly viscid fluid, similar to the white of egg considerably diluted by admixture with the solution of an alkali. When, however, a quantity of it is collected together in a vessel, it is sufficiently tenacious to form a mass, which adheres to its sides, and which quits them, on inverting the vessel, in long, ropy, stringy portions or bands.

"Microscopically examined, it consists of well formed mucus-corpuscles, mingled with epithelial or basement patches, floating in a viscid fluid menstruum—the contents of cells which have already liquefied. The epithelial or basement patches are chiefly present in the first portions of the secretion, and are caused by a blighting of their cells by the suspension of the natural fluid transudations from the blood through the basement membrane during the previous stage of the disease. Sometimes these patches are formed entirely of epithelial cells which have almost attained a perfect development, but which yet cohere by their edges, as is shown in the adjoining figure. Had such patches of cells retained their position on the basement membrane a short time longer, they would have undergone a further trifling increase of growth, at the expense of the shred of basement membrane which yet intervenes between their edges, after which they would have fallen apart and become separate, isolated, and distinct cells. While thus united, they, in general, measure from 1-2800th to 1-3100th of an inch; but when they have attained full growth, and exist as separate and distinct cells, they have a diameter from 1-2000th to 1-2500th of an inch.

"Their outline is now well defined, and their surface, which presents a full and globular appearance, shows numerous granules, which have an average diameter of 1-18000th of an inch." (pp. 18-19.)

Dr. Black has sometimes, though not often, been able to observe the action of cilia on the mucus-corpuscles just expelled.

The indications of treatment are: 1. To diminish the supply of nutritive blastema to the basement membrane, and thereby to limit the amount of cell growth upon its free surface: 2. To restore the vital tonic of the bronchial capillaries, and to thus enable them to reduce their quantity of blood to their healthy standard. The first of these reductions is to be fulfilled by abstinence, as much as is practicable, from food and drink, and by exciting other secretions; the second is fulfilled by the breathing of a light, dry, cool—not cold—air. Very cold air, in this stage, would only increase the exhaustion of the vital capillaries. Alkalies, from their power of liquefying mucus, are indicated in all cases of bronchitis from the time of their passing into the second pathological stage. Potassio-tartrate of antimony

exerts a beneficial effect in promoting expectoration, up to a certain point, when its depressing influence on the capillaries tends to maintain the very condition of them which it is the object of the treatment to modify.

Bronchitis involving the Submucous Tissue is next taken into consideration. This differs from epithelial bronchitis in the following particulars.

"Epithelial bronchitis is always acute, whereas the above variety may be either acute or chronic. The former is always sthenic in type; the latter is either sthenic or asthenic. In epithelial bronchitis, the epithelium and basement membrane only are affected; in the above variety, the submucous tissue is likewise involved. In the former, the discharges from the affected membrane consist of epithelial scales or patches, and an excess of the natural secretion; in the latter, certain organic and inorganic bodies are added to the above.

"The effects of epithelial bronchitis are epithelial desquamation or ulceration, and epithelial and basement hypertrophy. Of bronchitis involving the submucous tissue, ulceration, hypertrophy, bronchial abscess, and bronchial obstruction, as primary; and emphysema, bronchial dilatation, and collapse and atrophy of the pulmonary tissue, as secondary." (p. 22.)

This form, in its earlier pathological condition, may be either sthenic or asthenic. Passing over the author's lucid description of the first stage, and of the treatment which he recommends, we come to some very interesting observations on the pathology of the disease in its more advanced form, or what he terms the "second pathological condition".

In epithelial bronchitis, there is an "excessive mucous cell-growth, coupled with epithelial desquamation"; but, in the variety now under consideration, there is also invariably exudation into the submucous tissue. This exudation, the fibrinous portion of which coagulates, forms a nutritive matrix, in which are germinal centres capable of being developed into cells. The phenomena which take place are represented in figure 8.



Fig. 7.—1. Epithelial patch; 2. Mucus-corpuscles.

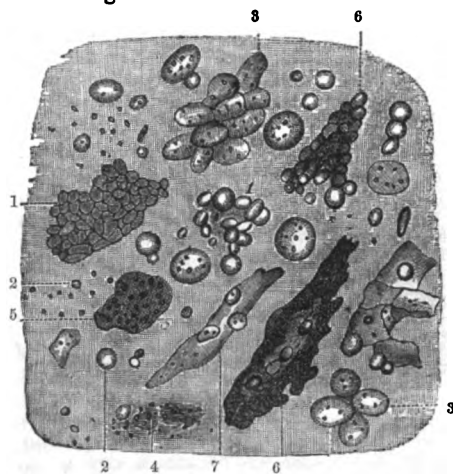


Fig. 8.—1. Exudation masses; 2. Exudation cells and molecules of fibrine; 3. Epithelial patch; 4. Superficial layer of basement membrane; 5. Entire thickness of basement membrane; 6. Mass of coagulated exudation, showing traces of cell development; 7. Bronchial cast.

Pus cells are also sometimes formed in the exudation. [Of their formation, Dr. Black gives the following explanation.

"They occur when the quantity of exudation is great, and the inflammatory action continues severe; or when a scanty exudation takes place, and continues to be influenced by a slow, persistent inflammation. They originate, like the exudation cells, in the fibrinous portion of the exuded plasma, and are, in fact, no other than such cells modified by the degree and persistence of the inflammation, and the quantity of nutriment which is offered to them. The physical differences which they exhibit consist in a slight difference of colour, to be afterwards explained, and in the presence of a number of granules, which are scattered over the inner surface of their walls, and which have the same chemical composition as the walls themselves. These cells generally measure from 1-2100th to 1-2600th of an inch in their diameter, contain from three to nine granules or nuclei, are

rendered more transparent by the action of acetic acid, and are entirely destroyed by prolonged contact with liquor potassae. Thus, in their chemical reaction, they manifest the same disposition as fibrin and albumen subjected to the same reagents. Hence the identity of composition with these substances, in the distribution, as it were, of which the fibrin represents the cell-walls and nuclei, and the albumen the liquid contents. The conditions which determine their formation may be thus explained. A severe inflammation affects the bronchial membrane, exudation takes place into the submucous tissue, but still the capillary engorgement is maintained in all its intensity. None of the fluid exudation is therefore reabsorbed, neither is the temperature of the part reduced. The necessary stimuli of growth abundantly exist, the result of which is, that the inherent vitality of the exuded fibrin germinates, and rapidly develops cells. Owing, however, to the persistence of capillary engorgement, the nutritive elements offered to the cells are in excess of the demand which is necessary for the complete development of their walls. The overplus of fibrin, still in a state of solution, consequently passes by endosmosis into the cells, in which, from the force of homogeneous attraction between it and the cell-walls, it is precipitated in minute granules or nuclei upon the inner surface of the latter, thus constituting the plastic corpuscles of Bennett. Such cells have now reached the utmost limit of development of which they, as isolated structures, are capable; and in this condition they either admit of being assimilated to the surrounding tissues, under the influence of the vital force which pervades the living organism, or they undergo a process of partial decay, during which they assume the particular character of pus-cells.

"Now, this conversion into pus-cells is due to the action of oxygen on the structures of the plastic corpuscles, by which they undergo an *adipoceros* degeneration, similar to the well known effect produced on dead muscular tissue when exposed to moisture, and to a very partial contact with air. Hence the origin of the fat which invariably forms a chemical constituent of pus; and hence also the colour of the latter fluid, as a consequence of the saponification of such fat by the alkalies present in the exudation. The oxygen necessary for this purpose is, in this particular instance, derived, at least in part, from the air taken into the lungs during respiration; but when maturation occurs at some distance from a mucous surface, or from the surface of the body, it (the oxygen) is supplied by the blood as it passes through the capillaries in the immediate neighbourhood of the affected part." (pp. 29-30.)

In every well marked instance which the author has been able to examine after death, he has found pus-cells forming a part of the exudation into the submucous tissue. The



Fig. 9.—Pus cells from imperfectly vitalised exudation.

irregular appearance which they present, as compared with that of exudation-corpuscles, is well represented in figure 9. Dr. Black concludes, very reasonably, that the presence of these cells indicates an imperfect vitalisation of the fibrin from which they were formed, and

that hence the constitutional powers were deficient.

The sputa in this form of bronchitis at first contain an excess of mucus-corpuscles, mixed with a great number of epithelial scales or patches, and with portions of basement membrane, some consisting of the most superficial layer, and others of the whole thickness. (Fig. 8, 4.) The epithelial and basement patches disappear soon after expectoration has been established; and are replaced by masses of exudation-corpuscles, which are either expelled in an imperfect state (fig. 8, 1), or proceed to the form of plastic cells. After this, they must either enter into structural relation with the surrounding tissues, or be thrown off as pus-cells; in which form they now appear in the sputa.

The microscopic examination of the membrane under this condition has led Dr. Black to some important conclusions. He finds that the points, denuded by the removal of the epithelium and basement membrane, are the only parts at which exudation appears; and he concludes that the doctrine, that pus can be formed on the free surface of mucous membranes, without there being any breach of structure, is opposed to microscopic examination, which teaches—

"That every case of pus from mucous surfaces is invariably preceded by epithelial desquamation, and not unfrequently by ulceration of the basement membrane itself."

This is, to our mind, quite satisfactory; for how can exudation take place unless the epithelium be removed? And, after all, the exudation-corpuscle is only, in such cases, what would be an epithelium cell if it were not hurried through its development; and the pus-cell is the result of diminished vitality. The differences are in degree rather than in kind.

Bronchitic sputa sometimes also contains portions of coagulated fibro-albuminous exudation, occasionally forming casts of the bronchi, in the same way as casts are formed in the renal tubes. They are more common in subacute and semichronic than in acute attacks; and include granules, exudation and plastic-corpuscles, and occasionally pus cells. (Fig. 8, 6 and 7.) In a foot note, Dr. Black points out a strict analogy between these products of bronchitic inflammation, and the casts in acute and chronic desquamative nephritis. The renal casts, he says, are formed by

"1. Vascular engorgement of the capillaries surrounding the uriniferous tubes, arresting for a time the natural transudation of fluid into the basement membrane, with which they lie in contact; 2. Exhaustion of the vital tonicity of these vessels, exudation as a consequence, and desquamation of those portions of epithelium which have perished during the stage of congestion, and the consequent suspension of all natural transudation; 3. The escape from the denuded surfaces of the basement membrane of an exudation, which, when copious, fills the corresponding uriniferous tubes, coagulates, and thus forms a cast, but which, when scanty, remains for some time attached to the basement membrane, on which it coagulates, germinates, and undergoes the same process of cell development as characterises the products of bronchial inflammation." (pp. 34-5.)

The next subject which occupies attention is the chemical analysis of the sputa of acute sthenic bronchitis. The mean of sixteen analyses has given of

	In 100 parts.
Water	96.75
Organic matter	2.15
Alkaline sulphates	1.10
" phosphates	
Chlorides of sodium and potassium	
Sulphate and phosphate of lime	
	100.00

The organic matter is three times as much in proportion as in healthy mucus; while the salts are increased tenfold. Again, in healthy mucus the salts are to the organic matter as 1 to 5.66; in bronchitic sputa, as 1.10 to 2.15. This remarkable increase of the salts is thus explained by the author:

"After the coagulable portion of the exuded plasma has solidified on the denuded surfaces of the basement membrane, a continual supply of alkaline fluid from the blood is required to effect its resolution, before it can be assimilated in the growth and development of cells.

"This supply of alkaline fluid, regularly taking place for some time after all inflammatory exudation has ceased, must necessarily lead to a relative increase of salts, as compared with the organic matter of the sputa, which, according to the analysis before given, is actually the case.

"If we take into consideration the absolute increase of organic matter and salts, as well as the greatly increased quantity of sputa, in acute sthenic bronchitis, we can appreciate the drain which is continually being made upon the blood by this cause alone; and if we further regard the waste produced by all the other secretions, and occasionally by the effects of medicines, as well as the negative result of almost total abstinence from food, we can readily understand how and why the bulk and weight of the body rapidly decrease in disease." (pp. 36-7.)

The indications of treatment in the second pathological condition of submucous bronchitis are to remove the exudation, to favour its tendency to cell development, and to procure its subsequent disintegration. For these purposes, alkalies are *primâ facie* the appropriate means; but, where inspissated mucus and bronchial casts exist, the abstraction

to breathing may be so great, as not to allow sufficient time for the alkalies to gradually disintegrate the causes of obstruction through the medium of the circulation. In these circumstances, we must use emetics, selecting those which are least likely to produce a depressing effect—such as sulphate of zinc, a warm solution of common salt, and mustard. When expectoration fails in consequence of debility, expectorants, such as senega, squills, ammoniacum, and the balsams and oleo-resins, must be employed.

By the term Pulmonary Cellulitis, the author designates an "inflammation confined to the epithelium of the pulmonary cells,—a disease which is extremely prevalent among children, and often regarded as pneumonia, and which is not rare even in adults. It bears the same relation to pneumonia, as epithelial bronchitis does to the severe variety of that disease." With regard to its seat, and other particulars, the author states that

"Cellulitis is more common in the lower than in the upper half of the lungs; in the posterior than in the anterior portion of the lungs; in infants and children than in adults; that it may occur suddenly and at once; or that it may supervene on either the epithelial or the more severe variety of bronchitis; and that, when it occurs in the upper half of the lungs, it is generally dependent on tuberculous or other deposit in the pulmonary tissue." (p. 39.)

From the lucid description given by the author, we condense an account of the phenomena of the first pathological condition of the bronchio-pulmonary membrane in this disease. They are, vascular engorgement, with suspension of secretion; sometimes spasm of the capillary bronchi; diminished diameter of the pulmonary cells, and of the minute bronchi; deficient breathing, and hence increased action of the lungs; cough; a sense of weight and sometimes of burning; dulness on percussion, confined to the affected part; and compensatory action of the opposite lung. This compensatory respiration may take place in one of two ways. In one, the breathing is deep, the ribs on the sound side are unusually elevated during inspiration, and the number of respirations is fewer than when activity of function is the means adopted. In the other, where activity of function prevails, the elevation and eversion of the ribs on the sound side exceed but very slightly, and sometimes not at all, those of the diseased side; but the number of respirations is always increased. The former method is invariably associated with the sthenic, the latter with the asthenic form of cellulitis.

The vesicular murmur is diminished, but not, as in pneumonia, entirely destroyed. Indeed, until the tonicity of the pulmonary capillaries is impaired by the continued pressure of blood upon their walls, a sufficient quantity of air is admitted to produce an increased vesicular murmur, by acting on the as yet contractile walls. As vascular engorgement advances, the vocal resonance increases; and tubular breathing and bronchophony are always present in the affected part, modified, however, by the extent and degree of vascular engorgement, by the portion of lung affected, and by the relation of the bronchial tubes to its surface.

The consideration of the second pathological condition of pulmonary cellulitis leads the author to refer to the much debated question of the origin of crepitant and subcrepitant rhonchi. These he explains by the presence of fluid in the pulmonary cells, the slight irregularities on their surface, and the engorgement of the surrounding vessels. If the quantity of fluid fill the cells at the extreme of expiration, if it be very viscid, and if the breathing be hurried rather than deep, the bubbles formed and burst by the passage of air through the fluid are small and numerous; this is the crepitant rhonchus—a sound seldom heard in cellulitis. But if the breathing, instead of being hurried, is somewhat deep, the bubbles are larger and fewer; and subcrepitant rhonchus is produced—a sound most frequently heard in the second stage of cellulitis. Again, if the breathing is both hurried and deep, or deep only, submucous rhonchus is produced. This is heard in the sinking stage of the disease; in which it is also produced in the minute bronchi.

The sputa, when first discharged, present exactly the

same appearance as the first portion of sputum expelled in bronchitis. (Fig. 7.) Subsequently, in pure cellulitis, the sputa are more consistent, viscid, and tenacious, and present a yellowish or greenish-yellow colour. This sputum Dr. Black believes to be characteristic of cellulitis in contradistinction to pneumonia proper, which is almost invariably characterised by the presence of rust-coloured sputa, from the admixture of blood. When examined under the microscope, the sputum of cellulitis is seen to present the appearances represented in figure 11.

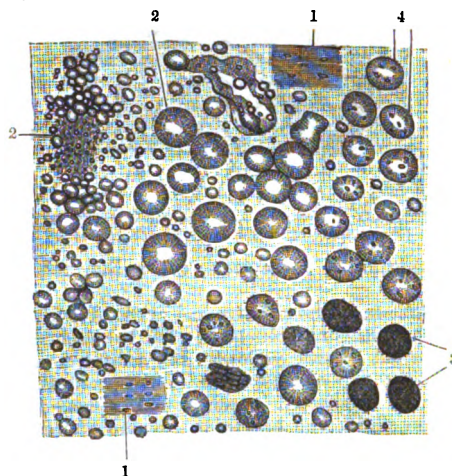


Fig. 11.—1. Portions of basement membrane; 2. Exudation masses and cells; 3. Casts of pulmonary cells; 4. Mucus cells.

If capillary bronchitis be associated with cellulitis, casts of the tubes will also be present. Sometimes the exudation obstructs the bronchi; and then what is called "bronchial abscess" is produced, by accumulation in the cells.

In the sinking stage of the disease, whether it have been of the sthenic or of the asthenic type, the sputa present the microscopic characters delineated in figure 12; and at a

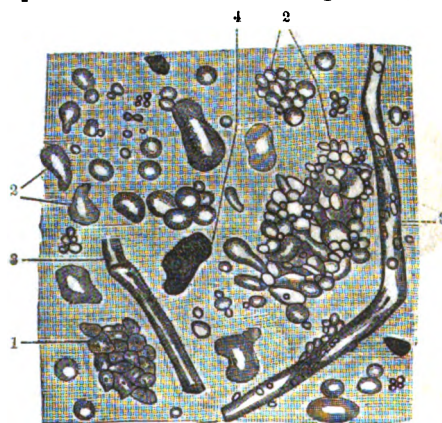


Fig. 12.—1. Epithelial patch; 2. Exudation masses and cells, showing their deficient vitality by their irregular shape; 3. Bronchial casts; 4. Mass of simply coagulated exudation.

still more advanced stage of depression, the appearances represented in figure 13 are seen.

We now come to a most interesting part of Dr. Black's investigations—one in which, to the best of our knowledge, he possesses the merit of originality. We refer to his demonstration of the fact that

"When a constitutional peculiarity, a particular diathesis or another disease, is associated with cellulitis, the exudation from the pulmonary membrane frequently contains evidence of the presence of certain products, dependent on such peculiarity of constitution or other disease in the system."

He has, in this way, found uric acid, oxalate of lime, cyst-

ine, cholesterine, and the colouring matter of the bile, in the sputum of cellulitis.

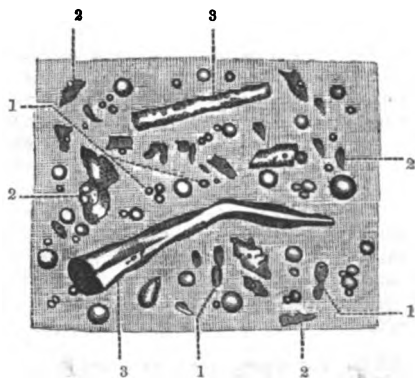


Fig. 13.—1. Minute and abortive cells and cell walls; 2. Minute basement patches of exudation; 3. Bronchial casts.

In illustration of these facts, the author relates three cases.

In the first case, the patient had acute articular rheumatism, with epithelial bronchitis. On the second day, the urine deposited a thick yellowish red sediment of urate of ammonia: the expectoration was thinly viscid and frothy, consisting of epithelial patches and mucus-corpuscles. During the night, the breathing became oppressed, with weight and burning in the lower and posterior part of the right side of the chest, cough, and partial suppression of expectoration: the physical signs indicated cellulitis. On the third day, the urine deposited urate of ammonia: the expectoration was reestablished, and becoming more copious. It was seen to consist of a few epithelial patches, mucus-corpuscles containing distinct globules of urate of ammonia, free urate of ammonia, exudation masses and cells, and irregularly shaped flakes and masses of fibrin. (Fig. 14.) During

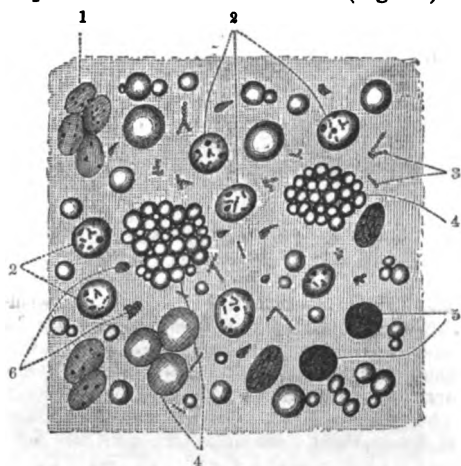


Fig. 14.—1. Epithelial patch; 2. Mucus-cells containing urate of ammonia; 3. Free urate of ammonia; 4. Exudation masses and cells; 5. Casts of cells; 6. Nodules of simply coagulated exudation.

this and the following day, the urate increased in the urine and diminished in the sputa. On the fifth day, no trace could be discovered in the sputa. On the ninth day it reappeared in the sputa, at which time the urine was quite free from it; but on the morning of the eleventh and during the remainder of that day, a copious excretion of the urate took place from the kidneys; and on the following day there was no appearance of it in the sputa. From this time the urate was confined to the urine, in which, on the fourteenth day of the disease, a very copious sediment occurred. The cellulitis henceforth rapidly disappeared: and on the twenty-second day, convalescence from rheumatism was established.

That the globules seen in the sputa were urate of am-

monia, was proved by the production from them of uric acid crystals by the addition of hydrochloric acid, and by the formation of murexide on the addition of nitric acid and ammonia.

In the second case related, a medical student, aged 20, while under treatment for oxaluria, took cold from incautious exposure, and pulmonary cellulitis supervened. On the establishment of the expectorant stage, examination of the sputa proved the occasional presence of urate of ammonia, and of oxalate of lime, particularly at the time when they were being eliminated by the kidneys in small quantity, and were hence accumulating in the blood. Crystals of the oxalate were present in the mucus-corpuscles to a limited extent, being for the most part free in the sputa; but the urate of ammonia was not infrequent in the mucus-cells. In the wood-cut accompanying this case, the form of crystal of oxalate of lime in the sputa is the octohedral: this, with the dumb-bell and ovoid forms, were found in the urine. (Fig. 17.)

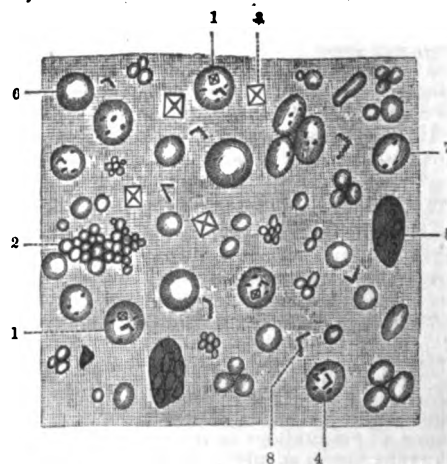


Fig. 17.—1. Mucus-cells, containing urate of ammonia and octahedra of oxalate of lime; 2. Mass of exudation cells; 3. Free crystals of oxalate of lime; 4. Mucus-cell containing urate of ammonia only; 5. Coagulated fibrin, showing the commencement of cell development; 6. Exudation cell of full growth; 7. Mucus-cell of full growth; 8. Free urate of ammonia.

In the third case, pulmonary cellulitis supervened on jaundice in a woman lately confined. The sputa exhibited plates of cholesterine.

In all these instances, Dr. Black employed the usual chemical tests, which confirmed the appearances presented under the microscope.

The demonstration of the presence of urinary and biliary products in the exudation and mucus-cells of pulmonary disease, presents several points of interest, both physiologically and pathologically. We could, if our space permitted, perhaps say much on this subject; but at present we will only remark, that the lungs are thereby demonstrated to be capable of performing the function of *secreting glands*. When they take in a vicarious action for other organs, and the secreted matters are chemically deposited within the mucus-cells, we have a proof of their analogy, in function as well as in structure, with other organs containing fine tubes lined by epithelium lying on a basement membrane.

Chronic Bronchitis is described as a continuance of the second pathological condition of bronchitis affecting the submucous tissue. To the epithelial desquamation, exudation into the submucous tissue and on the basement membrane, and increased mucus-cell growth, are added thickening of the submucous and basement membranes, from non-removal of the exudation which is poured out on them. The mucous membrane presents an increased colouration, apparently of a deeper hue in some parts; viz., where the epithelium has been shed. The parts which are unprotected by epithelium are covered with a greyish white exudation, in which are seen a number of nuclear points, manifesting a disposition to exudation cell development. In other parts,

again, the basement membrane is covered with coagulated molecules of exudation plasma; and, as these are more firmly adherent than the masses of exudation, from these are more particularly produced plastic and pus-cells. The basement membrane is also in parts removed, in the whole or in part, of its thickness. With regard to the aid afforded by the presence of basement membrane in the sputa, Dr. Black observes that—

"The presence of basement patches in the sputum is indicative of basement ulceration; but their absence is by no means diagnostic of the integrity of that structure, inasmuch as the latter may become so charged with inflammatory exudation, that when such exudation undergoes cell development, it may thereby break up the basement membrane, in the same manner as tuberculous deposits will hereafter be shewn to break up the pulmonary tissue, and that, too, into such minute portions that the original structure admits no longer of recognition. Hence, from the above facts, the advantage to be derived, in reference to diagnosis and prognosis, from microscopic examination of bronchitic sputa." (p. 60.)

When chronic bronchitis has lasted many months, and has been of rather slow progress, there is a minor degree of coloration and puffiness, but considerable thickening, consolidation, and more or less firmness and rigidity of the bronchial tissues generally, due to the progressive organisation of the exudation; the quantity received exceeding that which is discharged. This gives rise to a narrowing of the tubes. It is chiefly manifested in cases of chronic capillary bronchitis, attended with a certain amount of constitutional vigour; and, according to the author, is generally met with in otherwise healthy subjects, from the forty-fifth to the sixtieth year of age. But, after the latter of these periods, bronchitis—

"Owing to the natural disposition to decay which now, in obedience to the immutable laws of nature, pervades every tissue—to the consequent excess of molecular disintegration, as compared with molecular nutrition—and to the looseness and laxity of tissue thereby occasioned, assumes more particularly the character of atonic inflammation of the bronchi; whilst, owing to the deficiency of the nutritive principles of the blood, as compared with early life, the products of this pathological condition exhibit but few of the characteristic structures of inflammation. There are, therefore, various shades of chronic bronchitis, some of which are characterised by a certain degree of constitutional power, others, by the sheer debility attendant on natural decay. The former cases are liable to the sudden supervention of acute attacks of bronchial inflammation; while the latter are not thus influenced. Again, the former may be limited in the extent of the membrane involved; nevertheless, they invariably extend: the latter are more general in the extent of surface affected, but they are always stationary. Of the former kind, plastic bronchitis is an extreme example; of the latter, senile bronchitis. These extremes approach each other by cases of intermediate severity, each of which, by the character of its sputa, indicates, to a considerable extent, the particular pathological condition of the bronchial membrane which exists." (pp. 61-2.)

To the examination of the sputa in these cases, we shall presently return.

We are reluctantly obliged to pass by several interesting subjects, connected with the effects produced in this disease on the respiratory phenomena, and on the cough, and on the nutrition of the system.

The next subject which meets our notice, is the examination of the sputa in the four following varieties of chronic bronchitis:—

1. Plastic Bronchitis.
2. Early stage of simple Chronic Bronchitis.
3. Latter stage of simple Chronic Bronchitis.
4. Senile Bronchitis.

The characters of these sputa may thus be briefly exhibited:—

1. *Plastic Bronchitis. General Appearance.* Coats of bronchial tubes, solid or tubular; from 1-1000 of an inch to several inches in length; in latter case branched; of bluish-white or dirty yellowish-white colour; soft, and frequently streaked with blood; when tubular, they collapse, and appear as flattened bands. *Microscopic Appearances.* They frequently consist of a fibrous tissue, on which rests a base-

ment structure, surmounted by an imperfectly developed epithelium. If not connected with a tuberculous diathesis, they present a fibrillar arrangement, interspersed with exudation cells: but if of tuberculous origin, they are rather distinguished by an amorphous or granular state of the exudation.

2. *Early stage of simple Chronic Bronchitis. General Appearance.* Drab coloured, viscid, ropy matter, of consistence slightly less than that of white of egg; containing minute portions of yellow or yellowish-white substances, giving a mottled or corrugated appearance. *Microscopic Appearance.* The sputum contains numerous well formed and very granular mucus-corpuscles; patches and masses of coagulated exudation, some being opaque, others partially transparent; together with exudation cells, basement patches, plastic and pus cells, bronchial casts, a few epithelial scales, and granular or amorphous deposit of the sulphate and phosphate of lime. These appearances are represented in figure 18.

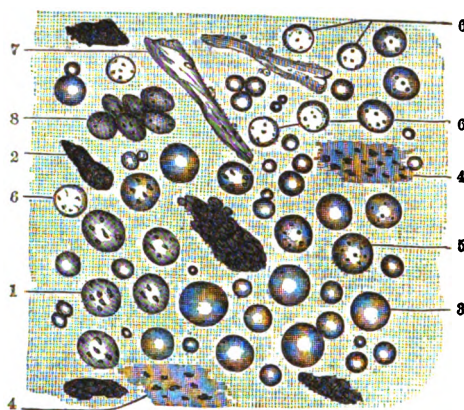


Fig. 18.—1. Mucus corpuscles; 2. Coagulated exudation mass; 3. Exudation cell; 4. Basement patches; 5. Plastic cell; 6. Pus cells; 7. Bronchial cast; 8. Epithelial patch.

Chemical Composition. The mean of twelve analyses gave Dr. Black the following result:—

Water	97.36
Organic matter	1.72
Chlorides of sodium and potassium	
Alkaline sulphates and phosphates	.92
Sulphate and phosphate of lime	
	100.00

3. *Latter stage of simple Chronic Bronchitis. General Characters.* The sputum is less tenacious, consistent, and variegated than in the former variety. It resembles a thinly diluted and dirty drab serum, in which grey, yellowish-grey, or greyish-white flocculi, and isolated irregular looking masses are suspended; which, after rest for a few hours, sink to the bottom of the vessel. *Microscopic Appearances.* The structures exhibited are the same as in the former variety; but they are fewer in number, and exhibit a lower degree of development. *Chemical Composition.* According to the mean of eight analyses, the composition of the sputum in this form of disease is—

Water	98.83
Organic matter	1.02
Chlorides of sodium and potassium	
Alkaline sulphates and phosphates	.15
Sulphate and phosphate of lime	
	100.00

4. *Senile Bronchitis. General Appearances.* The colour and consistence of the sputum are similar to those of a thin solution of gum, through which numerous small, irregular, yellowish-white or drab, flocculent, and semi-solid bodies are dispersed, which, after a short time, sink to the bottom, and occupy about 1-14 of the height of the fluid. *Microscopic Appearances.* The supernatant fluid consists of a

thin menstruum, containing numerous nodules of fibrine, from 1-1000 to 1-18,000 of an inch in diameter: a few isolated exudation cells; a few superficial basement patches; and a very scanty proportion of irregularly oval mucus corpuscles.

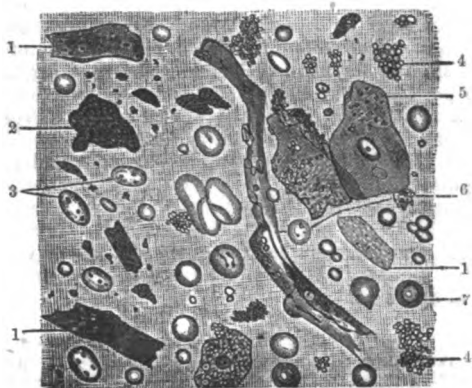


Fig. 19.—1. Basement patches; 2. Mass of coagulated exudation, showing traces of cell development; 3. Mucus-corpuscles; 4. Exudation masses, showing diminutive cell growth; 5. Thin layer of exudation, showing cell development at points of its surface; 6. Bronchial cast; 7. Collapsed blood-disc.

The sediment exhibits the same scanty numerical proportion of mucus-cells. There are, in addition, a few isolated exudation cells. The number of exudation masses is great; but they present a mere trace of cell development. There are also present superficial basement patches, bronchial casts, sometimes a few pus cells and blood globules, and thin, transparent, irregularly formed layers of coagulated exudation.

Chemical Analysis. The mean of six analyses gave the following composition:—

Water	99.14
Organic matter	.72
Chlorides of sodium and potassium	
Alkaline sulphates and phosphates	.14
Sulphate and phosphate of lime	
	100.00

For the explanation of the pathology of these forms of sputa, we must refer our readers to Dr. Black's Essay, promising them that they will find much to repay a careful perusal. We must also pass over, with a similar recommendation to attention, his remarks on the treatment of Chronic Bronchitis, and on Specific Inflammation of the Bronchio-pulmonary Membrane.

Dr. Black concludes his work, so far as it has been presented to us, with an examination of the following question: "How far are the different forms of Asthma dependent on inflammation of the bronchio-pulmonary membrane?"

He recognised two distinct forms of asthma—

"One in which the paroxysm comes on suddenly, and is followed by an interval of perfect ease, during which there is neither the slightest difficulty of breathing, nor the least increase of the bronchio-pulmonary secretion; the other, in which the invasion of the paroxysm is more gradual, in which there is more or less straitened breathing during the interval, and in which the secretion of the membrane is somewhat greater than that of health, and is also changed as to its physical appearance to the naked eye, as well as being microscopically and chemically different." (p. 85.)

The first of these forms he dismisses with a few remarks, referring it to disorder of the general health, or to some local disease apart from the lungs. With regard to the mode of attack, the term "nervous asthma" is appropriate; but, looking to the pathological cause, that of "symptomatic asthma" is more applicable.

The second form embraces the majority of cases, and includes all the varieties of true spasmodic asthma.

The history of these cases points, in nearly every case, to their origin in chronic bronchitis; and this is confirmed by

inspection of the bronchio-pulmonary membrane, and by microscopic examination of the sputa. Dr. Black also finds hypertrophy of the structures composing the membrane, and a manifest increase in diameter in the bronchial muscular fibres, in all cases which have manifested a distinctly spasmodic character before death. He has likewise found thickening of the coats of the vessels; and, in several cases, a degree of hypertrophy of the sentient nerves.

At a more advanced period, a stage arrives, in which distinct paroxysms of dyspnoea cease to occur. The degree of respiration has been permanently brought below the standard of health; and this is attended with a diminution in the bulk of the body. The sputum in this state consists of fully formed mucus and pus-cells, the latter being numerous; and of exudation-cells. There are also a few superficial basement patches, a few minute opaque nodules of fibrin, and transparent irregular layers of exudation plasma. Very few bronchial casts, and as few epithelial patches, are found. The structures composing the mucous membrane have undergone a process of matting together; while the circular and longitudinal fibres are hypertrophied and so amalgamated, that their power of contracting is in a great measure lost. We also find occlusion of the bronchi, lobular collapse, and vesicular emphysema.

To explain the occurrence of spasmodic asthma, Dr. Black has performed some experiments in order to show the properties of the bronchial muscular fibre, and its influence in the production of the asthmatic paroxysms.

Volkman has asserted that galvanism, applied to the vagus nerve, will cause contraction of the bronchial muscles; and he states that a lighted taper, placed opposite to the open end of the trachea, could be in this way extinguished. Dr. Black relates four experiments which he performed with the pulmonary organs of animals, in which he applied galvanism both to the pneumogastric and to the sympathetic nerves, without producing the result described by Volkman. On applying the galvanic stimulus to the lungs, or to denuded portions of the bronchi, the end of the trachea being directed beneath the surface of water, bubbles of air escaped through the water, showing the contractility of the bronchial fibres. In some of the experiments, the smallest bronchi were observed to contract during the experiment. For the details of these experiments, we must refer to the work itself; merely stating the results at which Dr. Black has arrived.

"The result of these experiments shows that the muscular fibre of the bronchi, as also the fibrous tissue of the mucous lining, is endowed with the power of contractility; that this property is excited by stimuli directly applied to it; that it is highly questionable whether such property can be called into action by stimulation of the trunks of the bronchio-pulmonary nerves; that the mode of contraction is similar to that of the non-striated muscular fibre, commencing at the point of stimulation, and gradually propagating itself to neighbouring fibres; that the expulsion of air from the minute bronchi is, by virtue of their structure, more rapid than from the larger bronchi; that, in the latter tubes, the presence of their cartilages, the consequently limited action of their muscular fibres, and the greatly increased area of such tubes passively retard, rather than actively augment, the speed of the outward column of air set in motion by contraction of the smaller bronchi; that this negative opposition of forces is further increased in the trachea; and that, therefore, the expulsion of air from the lungs can never, under the above circumstances (*i.e.*, unaided by contraction of the expiratory muscles), take place in a forcible manner; but must, on the contrary, be a slow, continued, or intermittent oozing of air, according to the continued or intermittent action of the cause of the contraction of the bronchial and other fibres." (p. 91.)

According to Dr. Black, the longitudinal and circular fibres of the bronchio-pulmonary membrane take an important part in the act of respiration; and he gives the following formula, as representing the expiratory forces:—

During the commencement of Expiration, { Vesicular and Bronchial Contraction, maximum.
Muscular Contraction, minimum.

At end of Expiration, { Bronchial Contraction, minimum.
Muscular Contraction, maximum.

The term "muscular contraction" is applied to the external respiratory muscles.

To illustrate the direction of the action of the component forces of the longitudinal and circular fibres of the minute bronchi, Dr. Black makes a happy application of the principle of the *parallelogram of forces*.

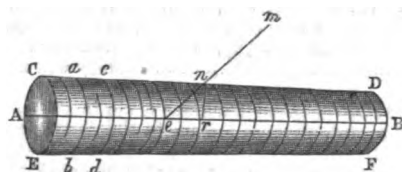


Fig. 20.

"Let $A B$ represent the axis of a portion of the bronchial tube; $C D, E F$, two of its longitudinal fibres, directly opposite to each other, so that a plane passing through them would likewise pass through the axis $A B$; and let a, b, c, d , be circular fibres, and n a radius of one of the circles. Now, if we suppose the expansive and contractile forces of the circular fibres to be in operation, it is evident that the circumferences of these circles, and likewise their radii, increase and decrease respectively. It is also evident that, if the forces of the circular fibres alone are in operation, motion of any point n takes place in the direction of the radius $n r$, because n is the extremity of that radius, which increases or decreases during the act of expansion or contraction. But we have likewise the expansive and contractile forces of the longitudinal fibres in operation, which tend to move the point n in the direction $c d$. Hence, by the principle of the parallelogram of forces, motion of that point takes place in the direction of a straight line, $m n e$, lying in the plane $C D E F$, and passing obliquely through the centre of the tube, with an angle, $m e r$, greater or less, according as the ratio of the expansive and contractile forces of the circular fibres to those of the longitudinal is greater or less.

"From the above representation, it is evident, that the expansion and contraction of the minute bronchi are in the diagonal of a parallelogram described on one of the longitudinal fibres, the sides of which parallelogram represent the two forces of the longitudinal and circular fibres; and we have only to conceive the maintenance of the contraction of these fibres at any and all points of their range of action, to understand the proximate cause and the different degrees of the asthmatic paroxysm." (pp. 94, 95.)

The author then notices bronchial dilatation, which he explains on the principle of unequal progress of disease, parts of the tube having lost their contractile power, while other parts are free. The production of dilatation is further favoured when the complete or partial obliteration of some bronchi causes an excessive quantity of air to be forced into others.

The proximate of spasmodic asthma being an irregular contraction of the bronchial fibres, the next question to be determined is, On what pathological condition does it depend? Dr. Black does not believe that the nerves have any influence; and that, therefore, the direct cause of the contraction cannot exist at a remote part of the system. With this view, we can scarcely at present agree. It does not follow that, because Dr. Black has failed in producing contraction of the bronchi by stimulating the vagus nerves of healthy animals, a diseased bronchio-pulmonary structure may not be liable to inordinate muscular contraction, from stimulation of its afferent nerves through disorder of some other part of the system. And we cannot imagine such a well marked line of distinction between the cases of true *sympathetic* asthma, and those of spasmodic asthma connected with bronchitis. Further, we find the author, a page or two further on, referring to indications of treatment derived from the "presence of undigested food in the stomach". This, and other forms of gastric and hepatic derangement, certainly sometimes excite or aggravate the asthmatic paroxysm. At the same time, we fully admit, with Dr. Black, that the necessary pathological condition is

inflammation of the bronchio-pulmonary mucous membrane and its consequences.

Returning to the exciting causes, we find the author referring them exclusively to agents acting locally on the diseased membrane, viz., sudden reduction in the atmospheric temperature; inhalation of irritating vapours, or of dust; accumulation of mucus; vascular congestion of the membrane; and possibly the slight retention of carbonic acid in the blood; the two latter causes operating principally during sleep.

In the treatment of true spasmodic asthma, the indications, in order to obtain permanent benefit, are those of chronic bronchitis; while the indications during the paroxysm are thus concisely explained:—

"1. To relieve spasm of the bronchial fibres.

"2. To withdraw the exciting cause, and to correct any condition of the system which may indirectly contribute to an attack.

"The spasm is relieved by the exhibition of ether, opium and its different preparations; by lobelia inflata, camphor, conium, henbane; by extensive counterirritation to the chest, and by the cautious inhalation of chloroform when no cardiac disease exists. Benefit is likewise derived from the use of assafetida and turpentine enemata; and, during the intervals of the paroxysm, from the exhibition of belladonna and stramonium, in conjunction with the remedies already indicated in the treatment of chronic bronchitis.

"In withdrawing the exciting cause, regard must be had to its particular nature. If it depends on any irritating qualities of the air breathed, these must, as far as is practicable, be obviated, by removal to the more congenial air of another apartment. If, on suddenly increased vascular engorgement of the bronchio-pulmonary capillaries, derivation to the skin should be energetically solicited by counterirritation to the chest, the warm stimulating pediluvium, by warmth to the general surface, in the form of warm water or vapour bath, and by the internal administration of the acetate of ammonia, camphor julep, coffee, and the different carminatives, followed immediately by a brisk purgative. If on the accumulation of mucus in the bronchi, or the presence of indigested food in the stomach, an emetic of antimony, ipecacuanha, or the sulphate of zinc, must be exhibited, according to the particular features of the case,—antimony being the preferable where the patient manifests a moderate degree of constitutional vigour, and ipecacuanha or the sulphate of zinc in cases attended by marked debility.

"To correct any condition of the system which may indirectly contribute to an attack, it will be necessary to inquire into the state of the general functions, and particularly those of the digestive organs, and to treat any deflection from the standard of health according to the recognised principles established by experience." (pp. 89, 99.)

The copious analysis which we have given of Dr. Black's work will, we believe, sufficiently justify us in declaring it to be one of the most valuable contributions, as far as it has gone, to the pathology of diseases of the pulmonary organs, which we have ever met with. The application of the microscope and the test-tube in the investigation of disease was, a very few years ago, an acquirement confined to a favoured few; but the day is evidently coming, when the physician who is not able to make at least a certain degree of use of them will be regarded in the same light as would now be one who was ignorant of the application of the stethoscope. Dr. Black has made an advance in the right direction; but while he brings prominently forward the value of chemistry and the microscope, as aids in the investigation of chest-diseases, he does not underrate the stethoscope and the pleximeter; and his remarks on treatment are on the whole highly judicious. We trust that he will not long delay presenting the profession with the results of his examination into other diseases of the respiratory organs.

We may here state that, in order that the descriptions transferred to our pages might be more easily apprehended by our readers, we applied to Dr. Black for the loan of some of the woodcuts with which his work is illustrated. Dr. Black at once more than acceded to our request, by placing the whole of them at our disposal.

EVERY MOTHER'S BOOK: Plain Advice on the Management and Diet of Infants, with Observations on the Symptoms of the Diseases to which they are liable. By WILLIAM PEARCE, Esq. 12mo., pp. 46. London: 1853.

WE cannot commend this tract. It contains certainly some truths, but it likewise contains errors of serious magnitude. Take for example the following passage:—

"Where the unfortunate mother has surrendered her own life in giving birth to the infant which survives her, or where, from malformation of the breast, or other causes, it is impossible for the mother to suckle her child, we must endeavour to provide something as nearly as possible similar to the milk which, under more fortunate circumstances, the child would have received. Good cow's milk, prepared according to the following form, is an excellent substitute for mother's milk in the early months of feeding:—

"Take half an ounce of fresh mutton suet, cut into small pieces, and tie them in a muslin bag, taking care that they are not pressed upon; boil in a pint of cow's milk, to which half an ounce of good oatmeal and a teaspoonful of powdered sugar candy have been added.

"Of this give an ounce (*two tablespoonfuls*) every two hours, or a smaller quantity more frequently." (p. 15.)

We have had a considerable experience in directing and observing minutely the rearing of infants upon a substitute for mother's milk. We never allow a healthy infant, for the first two months, to have any other food as a substitute for its mother's milk than cow's milk diluted with two-thirds of water, and well sweetened with fine sugar. Of this fare we sanction an *unlimited supply*, at intervals of from one and a half hours during the day, and three or four hours at night, provided it be sucked from a teat. Upon this simple fare, we have seen children grow up in the plenitude of health and strength. If the food be as thin as we have described, no evil can arise from overfeeding: and by allowing an interval to elapse between the times of feeding, digestion goes on better, and fretfulness is averted. To weak or scrofulous infants, the addition of a little mutton suet is good, or the same benefit may be obtained by giving two teaspoonfuls of cod liver oil daily. Oatmeal, and all farinaceous foods, are unsuitable and unnatural for the first two months, and are certain to induce fits of feverishness and griping pains. How oatmeal should be set down in the above receipt, we cannot imagine. After the second month, rusk, melted down in the sweetened milk and water, is useful; but the food must still be thin, and sucked from a teat by the infant. The exertion of sucking is, for many reasons, very salutary.

EDITOR'S LETTER BOX.

CHLOROFORM IN MIDWIFERY.

LETTER FROM F. H. RAMSBOTHAM, M.D., TO THE EDITOR.

SIR,—In the number of your Journal for June 19th, which did not come under my notice till a few days ago, there is a paper by my friend Dr. Snow, on the exhibition of chloroform in obstetric practice. He notices a case that proved fatal, subsequently to the inhalation of that drug,—reported by me in the last edition of my *Principles of Obstetric Medicine*,—in a manner which might lead your readers to suppose that the patient referred to had been under my own care. This was not the case: I obtained the history from a friend, who conducted it, who kindly supplied me with the facts, and permitted me to publish them.

Although I am quite sure the chloroform was given with caution and judgment; and although I consider the treatment, after the dangerous symptoms had appeared, as the best that could have been devised; nevertheless I think it right to state thus much, that no misapprehension may exist.

Dr. Snow says, "he doubts whether I would have considered this death as due to the medicine, if I had had extensive experience in the use of chloroform, either in obstetric, or any other class of cases." I have myself seen quite enough of the action of this medicine, and a sufficient number of deaths under its

use have been reported, to impress me with the conviction that chloroform can in no case be given, to the production of an *entire annihilation of the mental faculties*, and the *complete destruction of sensation*, without some risk; and, in regard to the instance under discussion, notwithstanding Dr. Snow's authority, I am still of opinion that the fatal event was occasioned by the inhalation.

Dr. Snow argues that, as the symptoms I have detailed differ from those hitherto observed in poisoning by chloroform, therefore they must be referred to some other cause, probably disorganisation of the kidneys; and, in confirmation of his view, he gives the outline of a case with similar symptoms, that occurred under the hands of Dr. Murphy, in which chloroform was taken, and where granular degeneration of the kidney was detected on dissection.

As no *post mortem* examination was made in the case that I have put on record, we must remain in the dark as to the condition of the internal organs; but, as I never saw such symptoms supervene after labour as those that appeared in that case, and as I do not recollect of any such on record, I think we may fairly refer them to the chloroform itself. It is not unlikely, indeed, that some organic disease might have been lurking in the system; but the question raised ought to be, not whether any important organ was the subject of degeneration, but whether, if that were so, the train of unhealthy action, which terminated in death, did not arise from the influence of the medicine on the diseased structures; or, in other words, whether the lady would have died in this way, if chloroform had not been exhibited. I cannot help believing that such would not have happened; and therefore attribute the distressing result to the noxious qualities of the drug.

With respect to a case of puerperal mania following the administration of chloroform, which I have alluded to in the same work, but without going into particulars, Dr. Snow remarks that "I do not state at what period after labour the mania commenced; whether, for instance, an hour or a month." He is quite correct; for I merely mentioned the case casually for the purpose of illustrating an argument not strictly professional, and did not propose to detail it. But, being called upon in this way, I may be allowed to state, that the first decidedly maniacal symptoms shewed themselves within three or four days after delivery, as far as I can recollect; and that the account given to me when I saw the lady induced me to believe that she had never been quite herself since her labour. I was told that she had scarcely slept; and that, until her mind succumbed, she was constantly exclaiming, "Oh! that chloroform; I cannot get rid of the smell of that chloroform!"

Dr. Snow remarks, "it is well known that out of the vast number of patients, to whom this agent has been administered for the performance of capital operations, a few have unfortunately died while inhaling it, or a minute or two afterwards; but it is satisfactory to know that no accident of the kind has happened in the practice of midwifery." Dr. Snow should rather have said that no case of the kind has come before the notice of the public. We can be by no means sure that such cases may not have happened, though they have not been made known. I sincerely hope I may be wrong in this supposition; and that future experience may demonstrate that these vapours can be administered under labour, not only with safety, but with all the advantages that their advocates teach us to expect from them. It does not require a great stretch of credulity, to believe that every one who possessed the least spark of humanity would receive with joy and gratitude so easy a method of abrogating or assuaging the pains of parturition, if only it can be proved that the practice is void of danger.

Dr. Snow truly says, "when the practice of inhalation in midwifery was first introduced by Dr. Simpson, he adopted the plan, which is universally followed in surgical operations, of making the patient unconscious at once, and keeping her so to the end of her labour." It was against this thorough subversion of mental consciousness as well as personal sensibility, thought it might be comparatively temporary, that I ventured to raise a warning voice. Believing, as I did, that we are not warranted in encountering the hazard attendant upon such a complete prostration of the faculties as was then insisted on, merely for the purpose of deadening the physiological pains of parturition, I considered that I should not be doing my duty, as a public teacher, if I withheld from my professional brethren the fears with which my own mind was so deeply imbued.

Contrary to the belief formerly entertained, it is now said (and from the trials I have myself made, I have no doubt with truth) that a large proportion of the suffering of labour can be removed by placing the patient only partially under the influence of the

anæsthetic vapour; that it may be administered indeed, with great relief to pain, in such a modified degree, as that not only shall consciousness not be destroyed, but that the integrity of the mind shall be preserved nearly perfect. If that be so, the chief objection to the practice vanishes, at least when entrusted to judicious hands.

Here, however, we are met, *in limine*, by a serious obstacle; for before we can assure ourselves that we really possess the power of invariably producing only a mitigated impression, we ought to determine whether we can calculate on the inhalation of a certain quantity of vapour, within a given space of time, being universally attended by the same phenomena, in every patient subjected to its use. We know that this is by no means the case; but that different individuals, as well as the same individual upon different occasions, are affected by the same quantity of vapour, inhaled within the same period of time, in a manner so various as to create both surprise and perplexity. We have learnt, also, that the influence of the drug is not confined either to the quantity inhaled, or to the time employed; but that the degree of concentration in which the vapour is received into the lungs, as Dr. Snow himself has demonstrated, is the most material of all the circumstances that regulate its potency.

It follows, therefore, as a natural consequence, that we are very liable to be defeated in our attempts to insure only a moderated effect; that, although we may stay our hand just at the point where we expect that a particular state of insensibility has been arrived at, we may nevertheless have already passed beyond the bounds of safety; and we may have impressed the patient's system to a dangerous, or even fatal extent. The numerous cases of sudden, or rather instantaneous death, both on the continent and in this country, in which a comparatively minute dose of the anæsthetic was administered—and that, too, with the advantage of the most experienced assistance—fully confirm the truth of this position.

Notwithstanding the difficulty and obscurity in which this part of the subject is at present involved, it appears to me perfectly possible to let in a much clearer light upon it than it has hitherto received. This might be accomplished by the publication of a faithful record of cases where the nervous system has been but partially blunted, with a notification of the degree in which sensibility, sensation, and volition, seemed to be each individually affected. A mass of most valuable evidence might thus be accumulated, from which it would be easy to lay down some fixed principles for our guidance; so as to dispel the uncertainty and doubt that as yet clog our judgment, and proportionably embarrass our proceedings.

I am, etc.,

FRANCIS H. RAMSBOTHAM.

7 Portman Square, August 5th, 1853.

ASIATIC CHOLERA AND THE ROYAL COLLEGE OF PHYSICIANS.

LETTER TO THE EDITOR.

SIR,—The second fatal outbreak of Asiatic Cholera in 1849, found the medical profession of this country but little more prepared to grapple with the disease than on its first appearance in 1832. Its contagious or non-contagious nature,—what local circumstances gave an impetus to its epidemic influences,—what remedies most surely control its virulent attacks,—are questions which, with several others, were mooted indeed, but not satisfactorily answered. The works of Indian practitioners were not altogether adapted to meet the wants of this country; and English medical literature failed to supply the desideratum. So unprepared, in short, were the profession for the second encounter with their mortal foe, that they were more thoroughly worsted in the contest than before. Whether this was owing to a more formidable type of the disease or not, I shall not stop to inquire. But one opinion, however, seized the public mind; and that was, that medical men were not, on this point, up to the mark, and that the interests of society demanded fresh efforts on their part, if they would retain public confidence. Of this temporary distrust, quackery in its homœopathic and other forms largely took advantage. The Provincial Medical and Surgical Association and the Royal College of Physicians were both alike roused to institute the needful inquiries, and to bring into one focus all that had been observed by the awakened curiosity of the profession. Meanwhile, not a few works on cholera, of considerable merit, the productions of distinguished individuals, made their appearance, with all the advantages of an advanced chemistry and microscopic research. Your readers are familiar with the results of the labours of the former of

those learned bodies; for, like the sharp-shooters of an army, their movements were executed with a celerity, that did the Association infinite credit. Thanks were very properly voted, at its eighteenth anniversary, both to Mr. Hunt, of Bedford Square, London, for his strenuous exertions to obtain information from different localities, and to Dr. Williams, of Worcester, for his able abstract from the replies to Mr. Hunt's circulars. But as to the labours of the College, the issue proves the truth of the adage, that, in spite even of the impetus given to men's minds in railway times, still "heavy bodies move slowly!" Circulars, indeed, were issued from Pall Mall, now some four years ago, to all the members of that learned fraternity, with questions at once pertinent and weighty; and everything promised well for the much needed information of the profession, and the satisfaction of the country. But year after year has dragged its lazy length along, and still no report is forthcoming. How is this? Your proximity to head quarters will perhaps enable you to throw some light on a delay as inimical to the welfare of society, as it is scarcely creditable to a College, to which the country looks up for guidance on great emergencies. What heightens the public impatience is, that a hitherto irresistible and victorious enemy is again, for the third time, thundering at our gates. Slowly emerging from its malarious haunts in the East, the Asiatic Cholera has again travelled northwards, and is now bending its way with gigantic strides to the West of Europe, and is actually within a few days' sail of our shores. Surely, the Asiatic Cholera Report of the Royal College of Physicians will be printed and published without a moment's further delay; or its appearance, after a third visitation of the pestilence over which it will have exercised no influence, will challenge the reproaches of all reflecting men.

I am, etc., PERCONTATOR.

August 3rd, 1853.

NEWS AND TOPICS OF THE DAY.

TRIALS FOR PROCURING ABORTION.

At the York Assizes, on Friday, July 15th, Margaret Simpson, aged 33, was charged with having feloniously caused Mary Fielding to take a noxious drug, with intent to procure abortion. The young woman having formed the acquaintance of a young man (Moore), found herself *enchantée*. She made known her condition to him, when he advised her to call on the prisoner. The prisoner gave her a bottle containing a liquid, and a powder, telling her to take twenty-four drops of the former on a piece of lump sugar, and the powder at twice. The liquid in the bottle was found to contain oil of savin, cantharides, and pennyroyal, the effect of a large dose of which on a pregnant woman might, according to the evidence of a surgeon examined, produce abortion. The powder was colocynth, and, used along with the liquid, would have the same tendency. "Guilty". Sentence deferred.

Auguste Wilhelm, aged 26, was then charged with having used a certain instrument to procure abortion. The prosecutrix in this case was the same as in the last. It appeared that the medicine she had taken not having produced the effect intended, she had been persuaded by Moore to visit the prisoner, who practised as a German quack doctor at Halifax; he told her the safest mode of administering the medicines, which would get rid of the child, was by an injection. After some persuasion, she was induced to allow him to use a syringe, which contained some liquid like porter in appearance. The application gave her no pain. His Lordship was of opinion that this was not using an instrument with intent to procure abortion within the meaning of the statute. The syringe was a vessel merely containing a liquid, which must be proved to be a noxious drug, to bring the case within the meaning of the first part of the section of the statute. The prisoner, in cross-examination of Mary Fielding, elicited that Moore had been accused of labouring under a loathsome disease at the time that this occurred, and that he told witness he was poorly, and that the prisoner was attending him. The prisoner then stated, that he had used the syringe on the person of the prosecutrix, supposing she was ill of the same disorder (knowing from Moore that she was intimate with him), for the purpose of curing her, as she complained of being ill, and he understood that to be her illness. His Lordship directed the jury to acquit the prisoner.

At the Oxford Assizes, Joseph James, labourer, was charged with feloniously administering savin to Ann Clarke, with intent to procure abortion. The case against the prisoner was proved by the young woman, Ann Clarke, a domestic servant, who stated that she had become in the family way by the prisoner, a farm servant, and that when she informed him of her state, he proposed to give her something which would procure abortion. He gave her something in three bottles, which she took, and also some powder. This produced sickness. The young woman was carried into court in a state of partial paralysis, and far advanced in pregnancy. Mr. Lamb stated that he had examined the remains of the drug found in one of the bottles, and, in his opinion, it consisted of an infusion or decoction of the leaves and twigs of savin. He stated, that this drug was generally believed to have the property of causing abortion; but, in his opinion, this was a vulgar error. It would produce vomiting and purging. Mr. Justice Coleridge told the jury the question was, whether the prisoner had administered savin or any noxious thing with the intent alleged. The medical man had stated, that it was a vulgar error to suppose that savin would procure abortion; but he (Mr. Justice Coleridge) thought the authority of Dr. Taylor was sufficient to show that savin, by the shock which it produced, might not only cause abortion, but destroy the life of the mother. The jury found the prisoner "Guilty". Sentenced to six months' imprisonment, with hard labour.

INQUEST AT BRADFORD ON A VICTIM OF COFFINITE QUACKERY. The *Bradford Observer* of July 28, contains an account of an inquest held in that town on the 25th of that month, on a young woman named Sarah Barraclough, a servant, who died while under treatment by a herbalist doctor of the name of Airey. Her disease appears to have been an attack of fever, for which she had at first the attendance of a regular practitioner (Mr. Douglas of Bradford); but subsequently the parents called in Airey, who treated the girl in the following manner, as described by himself in evidence:—

"I told my wife the case, and said that she might treat it as she thought proper. I did not tell her what to get. I afterwards gave her some herbs—some meadow sweet, yarrow, and a little dwarf elder. They were in a bunch. I had nothing to do with the powder; she took it herself. I told my wife that an injection and a little medicine—the meadow sweet, the yarrow, and the elder—to produce perspiration would be useful. I said nothing about the powder. I think she took some lobelia and some composition powder. The latter is a composition of bayberries, ginger, cloves, cinnamon, and a little Cayenne pepper. It is a composition to stimulate the circulation and to aid perspiration. It is not very material as to the quantities of each. I took no part in this matter—it is all my wife's management. I believe my wife is superior to myself. I have a very extensive practice. I buy the herbs, and prepare the medicines myself. I make my own tinctures and salves. I don't practise midwifery. I was a long time in the service of 'Dr. Skelton, of Leeds. I don't go anywhere, except they almost compel me to go. I don't charge for medicine. It is all gratuitous. I did not charge anything to Mrs. Barraclough. I never charge in a case like this. If persons come for herbs I sell them. I don't know of my own knowledge what my wife took, except the herbs which I gave her. She has told me she took lobelia and a little composition."

Mrs. Airey also gave evidence, and, with becoming modesty, disclaimed the compliments paid to her by her husband, stating that "he understood it better than she did." She further said: "I gave the deceased about half a teaspoonful of lobelia; and gave her nearly the whole of the composition in small doses in the herb tea. I first gave the deceased an injection; and then the herb tea. I then put a warm brick to her feet, and one to each side, to get her into a perspiration."

Dr. David Kay made a *post mortem* examination of the body, from which he arrived at the conclusion that the patient died from congestion of the lungs and brain, most probably produced by the action of some poisonous substance taken before death.

The jury returned a verdict "that the deceased died from congestion of the lungs and the vessels of the brain, but whether this was caused by the improper administration of a quantity of lobelia by a self-appointed vendor of medicine does not fully appear;" accompanying the verdict with a request that the coroner would administer a suitable reprimand to Airey for the improper part he had taken in dealing with such a case.

The coroner accordingly called Airey, and administered to him a severe rebuke—telling him that he was an ignorant quack, whose knowledge of medicine was of the meanest kind; that his

conduct was reprehensible in having by false representations sought to remove the responsibility in this case from himself to his wife; and that this subterfuge, if the result of the *post mortem* examination had been such as to satisfy the jury that death had been caused by the improper administration of lobelia, would not have saved him from a verdict of manslaughter.

We are informed in the same paper, that "Mr. Airey was a woolcomber a few years ago, and now appeared as a well attired young man, with a massive gold chain about his neck and waist-coat. His 'wife' is an Irishwoman, and put 'her mark' to her deposition. According to Mr. Airey's account, as stated above, he has a flourishing 'practice'! We understand he was once in trouble in a matter of bigamy!"

THE HONOUR OF KNIGHTHOOD has been conferred on Dr. John Forbes, Physician Extraordinary to Her Majesty's Household, and President of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association: and on Dr. James L. Bardsley, Consulting Physician to the Royal Infirmary, Manchester.

ROYAL COLLEGE OF SURGEONS:—PASS LISTS. MEMBERS admitted at the meeting of the Court of Examiners on July 1st:—Samuel Argent, Hinckley, Leicestershire; Thomas Chaplin, Lewes, Sussex; Peter Clark, Kirkconnell, Dumfries; Ephraim Matthews Cridge, Stoke, near Devonport; John Henry Gould, Broad Street, Golden Square; John Halliday, Wakefield, Yorkshire; William Hall Ryott, Thirsk, Yorkshire; Arthur Henry Sankey, Dover; Richard Burford Seale, Bridport, Dorset; Northcote William Spicer, Chard, Somerset; William Turner, Lancaster.

July 4th:—Charles Dunn, Scarborough, Yorkshire; James Thomas Fraser, Southampton; Henry Leach, Trinity Square, Southwark; Evan Llewellyn, Mount Place, Whitechapel Road; Thomas Alexander Moore, Preston, Lancashire; John Blake-more Phipps, Ipswich, Suffolk; John Bye Silver, West Wrating, Cambridgeshire; Alexander Packington Tomkins, Hon. East India Company's Service; William Edward Monckton Watts, Battle, Sussex.

July 8th:—James Collinge, Manchester; James Eyres Coward, Tiverton, Devon; Edward James, Exeter; John Ingham Fearley Marshall, York; Frederick Northover, North Brixton; Francis M'Manus Russell, Quebec; Thomas Robert Williams, Wincanton, Somerset; Luke Young, London.

July 11th:—Arthur Dupuy, Mauritius; John Hume, North Shields; Frederick Bellingham Swann, Weedon; Thomas Tomlinson, Maldon, Essex; Edmund Waller, Chesterfield, Derbyshire; William Philip Whitcombe, Wolverhampton.

July 15th:—William Falconar Clark, Cunningham Place, St. John's Wood; Matthew Corner, Whithy, Yorkshire; George Jules Gillam, North Leigh, Oxfordshire; Francis Gould, Dublin; John Heys, Liverpool; Thomas Lewis Grouger, Llandilo, Carmarthenshire; Arthur Edwin Temple Longhurst, Kirkby Mallory, Leicestershire; Samuel Alexander Patterson, Downham Market, Norfolk; John Sutton, Keyworth, Leicestershire; William Wright, Lincoln.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

*BROADBENT, Edward FARR, Esq., elected Surgeon to the Lincoln County Hospital, on the 29th ultimo.
DAMPIER, N. J., Esq., elected Surgeon to the Farringdon General Dispensary and Lying-in Charity.
MILES, Charles, Esq., elected Surgeon to the Farringdon General Dispensary and Lying-in Charity.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

TAIT, Dalhousie, M.D., only surviving son of the late Captain Tait, R.N. of Pirn, at Calcutta, on May 20.

BOOK RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

*WILDE, William R. PRACTICAL OBSERVATIONS ON AURAL SURGERY. pp. 501. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXIII.

LONDON: FRIDAY EVENING, AUGUST 19, 1853.

NEW SERIES.

August 5th, 1853.

In consequence of the One and Sixpence Duty on Advertisements having been repealed, the following scale will be adopted for all Advertisements ordered to be inserted after this date:—

For three lines and under	-	-	-	£0	2	6
For every additional line	-	-	-	-	0	6
For half-a-column	-	-	-	-	1	10
For a whole column	-	-	-	-	2	15
For a page	-	-	-	-	5	5

A line contains ten words, so that any one can calculate the cost of an Advertisement.

Advertisements ought to be delivered at the office on the Wednesday preceding publication, and paid for at the same time.

Post-Office orders are to be made payable to THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London.

THE ASSOCIATION JOURNAL will, like the old series, consist of ANNUAL VOLUMES. The convenience of a single index for the year is obvious; and the expense of binding is less than if the year was divided into two volumes. The Association year is from January 1st to December 31st; and for that reason it is desirable that the Journal should represent the same period of time.

THE SWANSEA MEETING.

TO-DAY our columns contain a long and circumstantial report of the Twenty-first Anniversary of the Provincial Medical and Surgical Association. Within the brief space of two days many important questions were considered, both in the departments of Association polity, and medical science. Much, we admit, was also left undone: but we are confident that upon the whole there was as great an amount of work accomplished as could have been performed by any body of men, of variously constituted minds, in an equal space of time.

The *Finances* of the Association occupied a large share of attention: but, had time permitted, they might with advantage have engaged still farther the consideration of members. While it is gratifying to be told in the Council Report "that the list of members is more perfect than it has heretofore been, and that fewer members are in arrear", it is most unpleasant to find, from the next clause of the same sentence, that "still £1093 are owing to the Association for subscriptions". As we are not informed how much of this sum is owing for the current, and how much for previous years, we cannot even guess at the proportion of this amount which is likely to be received; but, taking the most favourable view of the case, it is evident that £1,093 due to the Association on the 1st of January last (the day on which the Association year commences) had not been received by the treasurer on the 31st of July. This fact alone demonstrates the necessity of a more thorough organisation of our members under local discipline. Having no clue to the value of this large amount of arrears, it would be absurd for us to say what we think it is worth; but without entering the regions of speculation we may aver that, if every defaulter who reads these lines takes shame to himself, and at once remits his one, two, or three guineas to Mr. Sheppard, at Worcester, or to

some other authorised local receiver, we shall have a cleaner and more creditable balance sheet to greet us at Manchester.

At Oxford last year, the amount of arrears was stated to be £1900; so that we have added to our arrears £93. But there is a more cheerful contrast between the amount of subscriptions announced at Oxford as received during the year 1851-52, and the amount of subscriptions announced at Swansea as received during the succeeding twelve months. The year's income from subscriptions was reported at Oxford as £1,365:11:11; whereas at Swansea we have a return of £1,785:5:5—an increase of £419:13:6. At Oxford, the members on the roll were 1,629. Of this number 200 were, at January 1st of this year, struck off as persons who were either dead, or defaulters, or who had resigned: yet at Swansea our year's increase, both in numbers and in income from subscriptions, is more than twice as much as our surrender of unprofitable names.

So much will be found regarding the finances in subsequent columns of this number, that we shall for the present leave this subject, after stating the law of the Association with reference to arrears. The twenty-fourth law directs that THE JOURNAL SHALL BE WITHHELD FROM MEMBERS WHO ARE TWELVE MONTHS IN ARREAR: and, after the discussion which took place at Swansea, the Secretary cannot be expected to continue past forbearance towards those who have so much abused his kindness. Dr. Tunstall was perhaps substantially correct, when he spoke of members having received the Journal gratuitously for three years; but when this has occurred, it has only been through indulgence, and we may add, through a species of indulgence never again likely to be allowed. At the request of the Secretary, we most earnestly call attention to a law which was made at the Hull meeting in 1850; and which for the future is to be rigorously enforced. It is as follows:

"If any member's subscription remain unpaid twelve months after it shall have become due, the *Medical Journal*, and other publications of the Society, shall be withheld from such member till his arrears be paid; and when any member has been in arrears of subscription for the space of three years, application shall be made for the same by the General Secretary, and, if the arrears be not paid in *three months*, the name of that member shall be omitted from the list of subscribers; but this omission shall not be deemed, either in honour or equity, as releasing any gentleman from his subscriptions owing during his membership."

It was gratifying to find, that notwithstanding the great expense which has attended the as yet unavailing efforts of the Association in the cause of *Medical Reform*, all were of one mind as to the propriety, nay, the necessity of continuing the struggle with unabated zeal under the auspices of the same committee who have hitherto so ably conducted this business. Last year £200 was voted to the Reform Committee from the funds of the Association: this year, the Committee is to be thrown upon the private generosity of the profession. A subscription has already been commenced in a very spirited manner, regarding which we shall be able

to speak upon a subsequent occasion more in detail than at present.

The idea seems to have gone abroad very widely that the *Benevolent Fund of the Association* and the Benevolent College have exactly the same objects in view, and are in fact rivals in precisely the same field of philanthropy. The distinctive characters of the two institutions have been often pointed out both by Mr. Newnham and Mr. Propert; but they have, nevertheless, been generally regarded as almost identical. We trust that the recognition of these admirable charities by the Association may be the means of extending their usefulness; and that in future, donors will perceive that by contributing to the College they are not giving to the relief of those urgent cases of distress which it is the province of the Fund to succour; and that on the other hand, the cases which the College proposes to help never can be taken up by the Fund. The College and the Fund are not rivals: they are Sisters of Mercy, each having her own peculiar sphere of piety. We trust, therefore, that those who from a misapprehension transferred their subscriptions from the Fund to the College will, in future, recognise the claims of both institutions.

The debate on *Medical Ethics* may be regarded as the most prominent feature of the meeting. The task which has been assigned to the committee is not the less necessary, that it is both difficult and delicate. Possibly we may not receive at Manchester a medico-ethical code in a form quite ready for adoption; but we may at least hope for a valuable contribution towards this hitherto almost unwritten chapter of our laws. Excepting the 22nd law in the old sheet, and the laws regarding irregular practitioners, which were adopted at Oxford on the report of the Brighton Committee, the Association has not, as yet, formed any ethical rules. This opprobrium need not long attach to our body; for if the secretaries of the Branches collect and digest the opinions of their constituents, the report of the Ethical Committee will carry with it so much weight as necessarily to command approval and adoption.

While it is matter of congratulation that so much business was so well accomplished, it cannot but be deeply regretted that the important question of a *Revision of the Laws* could not be entered upon. The discussion would have naturally afforded an opportunity of shewing how eager the Association was to respond to the fraternal salutations from the other side of the channel. It does, indeed, deeply grieve us to think that a whole year must be lost before the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION can have an opportunity of so modifying its rules, as to reciprocate with its Irish brethren the privileges of an *ad eundem* membership. Then, again, considering the great accession of members which we have recently had from Scotland, it was, we know, expected by our friends on the other side of the Tweed, that such an alteration would be shadowed forth as would enable a committee to state the best method of giving to our Scottish colleagues the position and the power in our councils, to which they are entitled. Considering that the Association has now attained its majority, the occasion was looked forward to as suitable for mooted the question of the members being entrusted, through duly chosen representatives, with the management of their own affairs.

These deeply important and vital questions, as well as others connected with finance, ought to have been con-

sidered; but they could not have been adequately expounded, or patiently listened to, during the brief space which remained between a protracted meeting and an appointed feast. Again we say, that we regret that these subjects were not unfolded at the meeting, as we feel that questions of Association polity, about which there is notoriously a diversity of sentiment, ought but sparingly to occupy the editorial pen.

The *Arrangement of the Business* at future anniversary meetings is evidently a subject of the greatest practical importance. Owing to the admirable management of Dr. Bird, a much greater amount of business was transacted than could under ordinary circumstances have been anticipated; but still, as we have already said, some of the most important discussions which could have engaged the meeting were left unattended to for want of time. Perhaps we may be allowed to suggest, that a good deal of time might at future anniversaries be saved by making one or both of the addresses form part of the proceedings of the evening of the first day—a plan which was adopted with great success at Worcester in 1849. Such a plan would effect a clear gain of two hours. A further relief might be obtained, were the authors of communications to be restricted to a specified amount of time. In this way, the forenoons might be devoted to business, and the evening of the first day to science. The opportunities of listening to and reading scientific communications are abundant, both in town and country; but it is only once in twelve months that the profession is convened to discuss questions of medical polity and internal discipline. It therefore behoves the Association to turn this annual opportunity to the best possible account.

The news that Her Majesty had conferred the honour of knighthood upon Dr. John Forbes and Dr. J. L. Bardsley reached Swansea during the first day's proceedings, and was hailed with universal satisfaction. It was felt that inasmuch as these eminent men are two of our oldest and most distinguished members, an honour had been conferred not only on them, but upon the Association itself, as when Sir Charles Hastings was knighted some years ago, and as when he, along with Sir John Forbes and Dr. Conolly, last year received the honorary degree of D.C.L. from the University of Oxford. All honour to the Queen for uniting with the Association and the whole medical profession in delighting to honour our illustrious colleagues—Sir Charles Hastings, Sir John Forbes, and Sir James Lomax Bardsley.

VACCINATION BILL.

THE Vaccination Bill has passed through Parliament, and is ready to receive the Royal assent. In the opinion of the learned, and noble, and right reverend lords, who constitute the Upper House, and the merchants, barristers, naval officers, military officers, and country squires, who represent the people in the House of Commons, the medical profession as a body is either too paltry or too powerless as a political party to be worthy of being courteously consulted. The bill has been very much improved since we first assailed it in these columns; but the way in which it has been thrust upon the profession is most reprehensible. Additional evidence, however, has been given that there can be neither safety to the public nor justice to the profession, till several medical men have seats in Parliament.

ORIGINAL COMMUNICATIONS.

CASES OF CONGENITAL MALFORMATION OF THE RECTUM AND VAGINA.

By GEORGE MALLETT, Esq.

CASE I. IMPERFORATE ANUS: RECTO-VAGINAL FISTULA: OPERATION SUCCESSFULLY PERFORMED. Mary I—n, aged two years and a half, apparently a healthy and well-formed girl, was brought to me, her parents being desirous to ascertain if anything could be done to relieve a disgusting defect, which had existed from birth. They stated that there was no anus, and that she had passed all her feces through the vagina. An examination disclosed neither aperture nor depression where the anus should have been. Upon making further inquiry, I found that every second or third day she became restless and uneasy, and that she endeavoured to make them understand that she suffered pain in the lower or pelvic region. This state generally continued for an hour or two, when it was relieved by a copious discharge of feculent matter from the vagina. The feces were rarely liquid, their consistence being firm and about one-twelfth of an inch in diameter, or about the thickness of ordinary packthread. These deposits had a very curious appearance, the motions being at least two or three yards in length, and much resembling heaps of worms. After each evacuation she became perfectly well for two or three days, and seemed to enjoy excellent health and spirits.

Upon a careful examination of the vagina by means of a probe, I found at its further extremity a canal, evidently communicating with the rectum; and from the horizontal direction of the probe, I inferred that the communication was very near to the normal termination of the guts, and that probably the only defect was a closure of the natural outlet. I recommended an operation; and was then informed that several medical men had seen her previously, and that they had advised that the case should not be interfered with, as an operation might be dangerous and the result uncertain. Notwithstanding this, I still gave it as my opinion that the operation, if carefully performed, would not be attended with much danger; and that the result would most probably be favourable. In consequence the parents resolved that the child should be submitted to the operation, which was performed a few days after.

The little patient was placed near the edge of a table, and the thighs were drawn aside and elevated; in fact, she was placed nearly in the position for the performance of lithotomy. The probe was then introduced through the vagina into the rectum, and held steadily there by an assistant. There being no depression to indicate the natural situation of the anus, the integuments were divided by a scalpel, as near as we could judge would be the right place. The incision was carried about three-fourths of an inch in depth, when the end of the probe was felt, and another touch of the knife laid the bowel freely open. Almost immediately, a copious and rather firm motion was passed, apparently without much pain. Scarcely any blood was lost, either during or after the operation. The wound having been cleaned, a moderately sized candle, a bougie not being in readiness, was pushed in and allowed to remain.

On the following day, I found all going on well. The candle had been forced from the wound soon after my departure, and was followed by some more consistent feculent matter. A bougie was then introduced, lest the orifice should become too much contracted. On my next visit, I found that the bougie had shared the fate of the candle, and also that it had been followed by an evacuation.

It would be tedious and unnecessary to detail the further progress of the case: it will be sufficient to say, that there was but little trouble, and no anxiety, respecting its progress; and that, in about a month, the cure was complete. The recto-vaginal canal also became obliterated, no feces having passed by that channel since the operation; and, at

my last visit, I tried to introduce the probe as before, but failed in the attempt.

I lost sight of the patient for nearly two years; and at the expiration of that time I had an opportunity of inspecting the parts. I found all as it should be, excepting that the anus was rather more retracted and puckered than usual. There had been no difficulty in passing the motions *per viam naturalem*, if I may be allowed to apply such a term to a passage artificially made. There was also the power to retain the motions; from which I infer that the sphincter ani muscle had been formed in its natural situation, and that the scalpel had passed through it.

CASE II. OCCLUSION OF VAGINA. OPERATION: CURE. I was requested to examine Sarah T—, aged five years, a healthy looking girl, who had had some defect from birth in the genital organs. The only opening into them was a very small orifice in the upper portion of the external labia, scarcely large enough to admit a crow-quill, without being somewhat dilated by it. Through this opening the urine had always been expelled in a small stream. A probe was introduced, which passing downwards and backwards seemed to enter into a wider space, which I concluded to be the vagina. I recommended that the labia externa should be divided; and the parents consenting, a director was immediately pushed inwards and downwards, and a free incision made with a bistoury. An accurate examination of the interior, displayed by the incision, could not detect any deviation from the natural form and condition of the parts. I had some trouble in keeping the divided edges of the wound from reuniting, and in preventing too great a degree of contraction. The operation was, however, by the unremitting use of sponge tents, at last permanently successful.

Bolton-le-Moors, Lancashire, August 1853.

DEATH FROM THE BITE OF A CAT.

By GEORGE ALLEN, Esq.

A REPORT of the following case has appeared in the local papers. I had intended to bring the subject before the annual meeting of the Bath and Bristol Branch, but was prevented by professional duties. I now publish the case, as a general reply to the numerous letters which I have received on the subject.

CASE. On June 6th, 1853, I was called to see Richard Hunt, who was stated to have been bitten by a cat eight days previously. The statement given to me was, that the cat had been ill for some days, that it had refused food, was very thin, and had a noise in the throat resembling that of croup, with hurried laborious breathing. A lad had taken the cat by the tail for the purpose of killing it. Richard Hunt, passing at the time, seized it by the loins, when the cat bit the joint of his left thumb, which became very painful, and before night the hand and arm were swollen and inflamed. On the following morning, bladders of water had formed round the wound, hand, and arm, but he refused to have medical aid. Linseed-meal poultices and lotions had been applied to the hand, and some Epsom salts had been given to him, and to all appearance he was going on well, until the third night, when he got inebriated. After this period he did not complain of pain in the thumb; the swelling of the hand and arm had subsided; but shivering came on with pains all over him, accompanied by great difficulty of breathing. No medical aid was sought for eight days after the accident.

When I first saw him, on the morning of the sixth of June, I found him excessively nervous and dejected. The eyes were sunken, the breathing short, the pulse feeble. Upon examining the thumb, and removing the thickened corrugated skin, a copious ichorous discharge followed, the surface below having a livid appearance; there was very little sensibility to touch.

I ordered the arm to be kept in a sling; brandy and barm in linseed-meal poultices to be applied, and removed

every three hours; and brandy in gruel and arrow-root, and strong beef-tea, to be given. The treatment consisted of ammonia, camphor, and opium, administered at intervals of three hours.

June 7th. He had some refreshing sleep during the night. His countenance was this morning more cheerful. The breathing was not so difficult; the pulse was firmer. The wound was looking healthier. He was directed to continue the same treatment in every respect.

June 8th. He passed a comfortable night. The wound was discharging pus; and he had no pain in or about the surrounding parts. Pulse 80, full but soft. He was down stairs. The same treatment was continued.

June 9th. He was in every respect as yesterday. The wound was looking healthy. He was ordered to continue the same treatment.

June 10th. He was in every respect as yesterday.

June 11th. This morning he was not out of bed. He complained of being chilly. The breathing was rather short. The right shoulder, particularly at the back part, was very intolerant of pressure; in fact, the whole of the right side and epigastric region could not be pressed upon without considerable pain being given to the patient. No pain was experienced on percussion or other manipulation about the spinal column, chest, or cardiac region. The wound was discharging healthy pus. The pulse was stationary at 80. He was ordered to have mustard poultices applied to the side and epigastric region. Powders, with sesquicarbonate of ammonia, hydrargyrum cum creta, and Dover's powder, were given every three or four hours.

June 12th. He had had some refreshing sleep during the night. The breathing was not so difficult. He expressed himself as being much relieved. He did not wish to get up, stating, that when he attempted to get out of bed, the pain became most violent at the right shoulder-blade. The wound was discharging healthy pus; but there was no appearance of granulation.

June 13th. He was in every respect as yesterday.

June 14th. He passed a restless night. The breathing was very short; the head hot and painful; the eyes intolerant of strong light; the pulse 96, small and thready. The hair was ordered to be removed, and the head sponged with cold vinegar and water. Mustard sinapisms were applied to the feet, and a blister to the chest. The room was ordered to be darkened. Saline effervescing medicine with opium was prescribed.

In the evening I found him very much relieved. The head was cooler; and light was borne with less distress. Pulse 90.

June 15th. He had had a restless night, but no delirium. The head and skin were hot; the pulse 98; the breathing short; the bowels irritable; frequent evacuations of biliary matter occurred; he had much thirst; the urine was turbid. The saline effervescing medicine was discontinued, and a saline mixture with opium and tragacanth mucilage substituted; and compound chalk mixture was ordered to be given occasionally. In the evening I found him rather better. The bowels were not so much relaxed.

June 16th. He had had some sleep during the night. The head and skin were not so hot; the bowels not much relaxed; the wound was looking healthy; pulse 90.

June 17th. I was hastily summoned to see him. He had been delirious, and had sprung out of bed; but was now lying perfectly calm. Vision was apparently gone; the breathing was stertorous; the pulse 130. In this state he continued until the morning of the 20th June, when he died without a struggle.

Decomposition set in so rapidly (favoured no doubt by the then hot and humid state of the atmosphere), that I had no opportunity of obtaining a *post mortem* examination.

Two persons who had been in attendance on the deceased have since been taken ill.

The first was a young married woman, at whose house the deceased lodged, and who had constantly attended upon him and dressed his wound. She was seized, on the morning of his decease, with "synocha" in its most aggravated

form, and had one symptom connected with the case of the deceased, by which I was most forcibly struck, viz. the same intolerance to being touched upon the right shoulder blade, whilst other parts of the body might be handled freely. Copious venesection, mercurial purges, with calomel, antimony, and opium, and saline diaphoretic medicine, cut short the attack; and in five days she became convalescent.

The second, a neighbour's servant (who had assisted in removing the bed-clothes), was seized with faintness, headache and vomiting; but nothing further occurred.

Lodway Villa, St. George's, Somerset, Aug. 3rd, 1853.

CASE OF DOUBTFUL SEX.

By R. M. MANN, Esq.

Miss H., aged 28, was brought to me by her mother for examination, on July 18th, 1853. She had never been examined previously by a medical man, or by any other person. It was stated that her chief reason for applying to me was, that she had had an offer of marriage, and was anxious to know if she could enter the matrimonial state.

On examination, I found to all appearance a perfect penis, from an inch and a half to two inches in length, with distinct glans, corona glandis, and præputium, with the ordinary white secretion so commonly observed between this gland and the prepuce. The orifice of the urethra was on the under part of the glans, and was capable of admitting an ordinary sized goose quill. There was a distinct scrotum, but without testes; and this part, as well as the pubes, was covered with hair in the usual way. The mammae and nipples were those of a female. No growth of hair had taken place on the face or chin; but the voice was decidedly masculine. She had menstruated regularly since sixteen years of age, for about three days at a time, and had pain in her side at that period. The discharge came through the urinal aperture (as there was no other), which had doubtless a communication by a rudimentary vagina with an uterus. She stated that she had experienced sexual desire. When she was an infant, the nurse, though doubtful as to the real nature of the case, advised female costume, which has been adopted ever since.

The above case appears to resemble in some respects that which is reported by Dr. Schneider, and detailed in the twenty-first volume of the *Dict. des Sciences Médicales*, p. 97.

Manchester, August 13, 1853.

BIBLIOGRAPHICAL NOTICES.

THE SOPHISTRY OF EMPIRICISM. 8vo., pp. 84. London: 1853.

THIS able work gives an interesting and instructive account of some of the most famous forms of modern quackery, such as Mesmerism, homœopathy, hydropathy, and bone-setting. We have also some excellent remarks upon the claims of scientific medicine, and on the circumstances which favour the production of empiricism.

The *herbalists* are thus depicted:—

"Their outward appearance is intended to represent something of the practical gardener; but the impudent effrontery of the itinerant showman is stamped on the forehead. Their eloquence is fluent and exalted, and they can descend with abundant favour on the wisdom of the Creator in providing such a multitude of herbs for the benefit of the human race, who, without their aid, would be hastening fast to an untimely grave. On the other hand, the graphic tongue of such a sage can describe in glowing colours the destructive nature of minerals, with their necessary tendency to precipitate patients into the very habitations from which they were dug; and contrast their direful influences with the vivifying power of vegetables, which cause man to flourish like the lily of the valley, and mount into the heavens like the cedars of Lebanon. These worthies also find

it advantageous to exhibit specimens of their wares, consisting of

"Horehound, sage, mint, and thyme,
With hyssop, famed in every clime.

A few of this fraternity also deal, to a certain extent, with the herb named *savin*, and profess a mysterious knowledge of its powers in preventing those results which might prove serious to the reputation of a fair name." (p. 76.)

Bonesetters are thus described:—

"They are a little different from the herb doctor, being apparently more akin to the carnivorous than the herbivorous race of animals; and they often merit the title of 'whiskerandos' in a superlative degree, with a kind of braggadocio ferocity of countenance, a swaggering gait, and large superior extremities, which serve as indices of the Herculean power required in their important occupation. Their knowledge of human osteology has generally been derived from their scientific researches into the diseases and accidents of the domesticated quadrupeds; hence, professional accuracy and sound treatment are naturally to be expected from so excellent an analogy. This is a calling which in some instances has proved hereditary, descending from father to son, and even to a third generation; and we have heard of a regular practitioner who acquired much local fame in the treatment of fractures and dislocations, because his father was a celebrated manipulator in bone-setting. This brotherhood have a wonderful facility in discovering dislocations that do not exist, and seldom fail to imitate, by a sleight-of-hand movement of their own fingers, the characteristic snap which is often felt and heard when bones are put into their natural situation." (p. 77.)

Various quacks, great and small, are alluded to in groups and singly. In speaking of the northern metropolis, the case of the pseudo-physician who has drained the cup of degradation to its dregs is thus handled. The author evidently concurs with us in thinking that the profession of pathology in a University pulpit, and the practice of homœopathy among his patients, involves an amount of inconsistency both in creed and conduct, which can hardly be estimated.

"When the heresy is one that is merely *outré* or somewhat extravagant, the case is sufficiently bad; but if it be one that carries absurdity in its very front, and outrages all former philosophy and experience, its defenders ought either to walk out from the academic halls with a clean conscience, or be ejected into that *terra incognita* which they have discovered, and where they might reign triumphant among their own chaotic phantoms. But the potent talisman, the *aut ritam aut culpam*, at a touch of their magic wands, immediately springs up to their aid, from its generally undisturbed repository; and the transcendent philosophers sneak into its nook with instinctive sagacity. O ye lawyers of the northern metropolis, ever distinguished for your learning, acuteness, and ingenuity, can you not transmute this plausible little word *culpa* into something tangible, for it often slips through your fingers as if it were a mere nonentity? Is the word so indefinite that it cannot include absurdities in doctrine, impossibilities in belief, and a glaring violation of a presumed contract, in the discharge of most important duties? If the law of the land be paralytic, from extreme age or other causes, can the great law of equity thunder any of its wholesome anathemas against such delinquencies? Ye shades of Black, Cullen, Monro, Playfair, and Leslie, and ye who represent in greatness these illustrious names, which have shed such imperishable lustre upon your native land, can you contemplate with anything but scorn the men who have trampled on your high philosophy, and placed in substitution of your unerring demonstrations, visions of the brain, and fantastic atoms which can only be measured by the imagination?" (pp. 84-5.)

These extracts will convey an idea of the author's style. The whole work is well deserving of perusal, and we are sure that its circulation among the public is calculated to remove many mistaken ideas as to the manner in which medical men regard empiricism and its disastrous consequences.

ESSAYS. By H. S. BELCOMBE, M.D. 12mo., pp. 52. York: 1853.

In this pamphlet, we have three well written essays on Sleep, Dreams, and Sympathy. From the Essay on Dreams, we cull the following passage:—

"From the argument employed, I should desire to draw these deductions:

"1. Dreams proceed from the partial exercise of the faculties of the mind, and of the senses; the judgment, generally, no longer controlling them.

"An entire sleep is free from dreams, because all the faculties, and the senses, are then in repose, and, indeed, it is seldom that the first sleep in good health is attended by dreams; it is only towards morning, when some of the faculties awaken, that dreaming commences.

"2. Whatever may be the extravagance or incongruousness of the ideas presented to us, they are but the remembrances, or combination of remembrances. A French philosopher calls them the memory of the senses. Locke, more tersely, says, 'The dreams of sleeping men are, as I take it, all made up of the waking man's ideas, though for the most part oddly put together.' Perhaps their strangeness simply consists in the unaccustomed association of such ideas, because in sleep we are freed from all the laws of chronology, of relation, and of time. If any person will analyse his dream, he will find that he never has dreamt, and never can dream, of anything entirely unknown to him.

"We might also, perhaps, not be so much astonished at the singularity of our dreams, if we only reflected that, when awake, there are four powers that mutually watch over and rectify each other, viz., the sight, the hearing, the touch, and the memory; whereas in sleep each sense is abandoned, if I may so express myself, to its own resources.

"I think I am also justified in drawing these two conclusions respecting dreams and the utility of their investigations. They are useful in affording prognostics in various diseases.

"At the commencement of fevers in particular, sudden fright, the waking up in surprise, a convulsive anxiety during the dream, denotes that the disease will be long, perhaps complicated with some organic affection. These kinds of dreams also often precede and announce delirium.

"When we hear noises, explosions, tumultuous cries, it is more than probable that our dreams partake of a delirious and morbid nature, or of sensorial or intellectual hallucinations, in which the mind is actually diseased, and the perceptions become erroneous. When these hallucinations prevail after sleep, mania may be apprehended.

"In females of a nervous or of a sanguine temperament, when in a state of disease, the dreams are generally of a very painful character, the subjects being frequently murders, or some tragical events, where bloody and red coloured objects are seen.

"The morbid states of the thoracic and abdominal viscera are very much indicated by the dreams; even in their early state, when attention has scarcely been called to them, they will afford some diagnostic information. Thus, under such circumstances, dreams frequently occur in the first sleep, which are to be regarded as a bad omen. Also in dropsy of the chest, hardly has the patient dropped asleep than he considers himself placed in the most painful situations, perhaps on the point of being suffocated in some mode or other, without the power of opposing any resistance.

"In the diseases of the heart, or of the great vessels, the dreams are almost always short, and followed by sudden anxious awaking; the subjects are almost always painful—a precipice, or inclosed in vaults, often sudden death under dreadful circumstances.

"Gastric diseases are attended with dreams of hideous phantoms, horrid faces; and in these diseases, as well as in hypochondriacism and hysteria, there will be every shade of gloomy fancy, from a slightly painful oppressive dream, perhaps of a pigeon pie with live pigeons ready to fly out of the stomach, up to the most complete nightmare."

ELECTRICITY AND GALVANISM IN THE TREATMENT OF CANCEROUS, NERVOUS, RHEUMATIC, AND OTHER AFFECTIONS. By R. M. LAWRENCE, M.D. pp. 101. London: 1853.

THE Leyden jar "is not applicable to medical purposes, because, by bringing large quantities of electric fluid of great intensity at once into action, it produces in the human body concussions of too violent, and consequently injurious a nature." (p. 5). Yet, at page 31, the author, on the authority of Dr. Golding Bird, very properly recommends electricity as a direct and more valuable emmenagogue; and the form in which it was applied by that physician was by

passing these "violent concussions" through the pelvis. How Dr. Lawrance could advocate Dr. Bird's practice at page 31, after characterising electric shocks as perilous at page 5, is not very obvious.

At p. 10, a figure is given of one of the electro-magnetic machines, consisting of a single wire coiled round a bundle of iron wire, in the usual manner. After, in the preceding page, giving a serious caution against the use of an induced secondary current, he states the value of the single wire apparatus to consist in its "deriving its electricity from the battery, the current being sent through one coil of wire, in order to give it sufficient continuity to overcome the resistance which it experiences in passing through the body." Surely Dr. Lawrance must be aware that the shock produced by this apparatus is the result of an *indirect current*, and not of the battery current at all. The idea that a current of electricity is made more intense by causing it to traverse a long conductor, is quite unworthy of any writer on such subjects. Every one must be aware that every conductor, however good, offers an obstruction to the passage of a current. We had thought that the luminous researches of Dr. Faraday were sufficiently known to prevent any one being ignorant of the fact that the *apparent* increase of intensity of a current, on traversing a coil of wire, arose from the excitation of an indirect current, the result of the disturbance of the electric equilibrium of the wire.

Chapter II commences with a remark which cannot escape censure. The author states that "the *description (!)* he has given of electro-magnetic coils evidences how little attention has been paid to the subject. In fact, this agent has been employed in the treatment of disease merely with a vague notion of its power to remove the sufferings of the patient, and without a knowledge of those laws which guide its action, or any definite idea of the results to be expected from its application. No wonder that a remedy conducted in such blind ignorance of its operation should fail, and disappointment ensue to those who had resorted to it, perhaps when all other means had been tried in vain." (p. 14.)

This extract at once shows the character of the book: remarks of this kind cannot be justified. When an author can level the charge of "blind ignorance" at other practitioners of far higher standing and larger experience, he places himself almost beyond the pale of scientific criticism. He cannot be unacquainted with the lectures delivered by Dr. Golding Bird before the College of Physicians, and since published; he cannot, surely, be ignorant of the papers published in Guy's reports by Dr. Addison and Dr. Bird, and more lately by Dr. Gull. If the author of this remarkable book has not studied these contributions to our knowledge, he should hesitate before levelling the charge of "blind ignorance" at others. If he is acquainted with them, Dr. Lawrance is bound to justify such an accusation, to escape the judgment the profession must form of his thus presuming to wield the censor's rod.

With regard to the therapeutical application of electricity, there is not one remark which is new, there is not a single contribution to our knowledge in the whole volume. The sketch given of the reputed value of electricity in the treatment of different diseases is most meagre and imperfect. Indeed, so much so, that a person unacquainted with the application of electricity as a remedy could not, by any possibility, learn from its perusal the mode of applying it.

It is really difficult to conceive what could prompt the sending forth of such a book, one which bears evidence of the fact that its author has not very clear views of the *modus agendi* of electricity. As an example among many, Dr. Lawrance states that in certain conditions, the "free electricity in the nerves should be increased", p. 29; and under this head he gives an account of the application of electricity to the uterus in the mode suggested by Dr. Radford, to produce parturient action of that organ in cases of hæmorrhage during labour, and ends with an extract from Dr. G. Bird's lectures on the subject. He afterwards speaks of cases in which the "free electricity in the nerves should be decreased", p. 50; and under this head he requotes Dr. Radford's suggestions for the employment of electricity in in-

ducing uterine action, and gives an account of the cases of Mr. Cleveland and Dr. Dempsey, in which those gentlemen succeeded in inducing labour by passing electric currents through the uterus.

How electricity could act in one set of cases by *increasing*, and in another precisely similar one by *decreasing*, the free electricity in the nerves, must be left for wiser heads than ours to explain.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THURSDAY, JUNE 7, 1853.

JAMES COPLAND, M.D., F.R.S., President, in the Chair.

A CASE OF PERFORATING ULCER OF THE ŒSOPHAGUS, WHICH CAUSED DEATH BY PENETRATING THE AORTA. BY W. H. FLOWER, ESQ. (COMMUNICATED BY CAMPBELL DE MORGAN, ESQ.)

A painter, aged 51, had, an hour previously, suffered from profuse hæmorrhage from the mouth, the blood being bright and frothy; syncope supervened, in which state he was brought to the hospital. He was tall, well made, and muscular; but the countenance was death-like, the pulse imperceptible, and there was absence of consciousness. About a week previously, he had complained of a deep-seated pain at the top of the sternum, shooting to the spine. He was placed in bed, ice put into the mouth, and large doses of acetate of lead were administered. Slight reaction ensued. The next morning, at half-past nine, the pulse was 100, firm, steady, though small. On auscultation, free inspiration was heard in every part of the chest, except the upper lobe of the left lung, where the respiratory murmur was deficient; there was increased vocal resonance, and some dullness on percussion in this region. At 10 A.M. a fresh attack of hæmorrhage supervened, which proved fatal.

On examining the body, fifty-three hours after death, a few old adhesions were found at the apices of both lungs, with a few crube tubercles in the upper lobe of the left: the remaining portion of the lungs was much blanched. The heart was loaded with fat, but otherwise healthy; no coagula in any of the cavities. The stomach contained a clot of blood, which formed a complete cast of the organ; round the cardiac orifice were four irregular patches of erosion, or fissures in the mucous membrane, involving partly the stomach, and partly the Œsophagus. About three inches above the cardiac orifice, on the left side, was a perfectly circular opening, three inches and a half in diameter, with slightly elevated edges, which were sharp and clean, as if cut with a punch. It bore a strong resemblance, on a small scale, to the perforating ulcer so frequently met with in the stomach. On the inner surface of the aorta, at the termination of the descending portion of the arch, nearly corresponding with the ulcer in the Œsophagus, but on a somewhat higher level, was an irregular opening, with ragged edges, formed by the projecting and torn lining membrane. At this spot, the coats of the artery were much thinner than elsewhere. About half an inch above was a patch of atheromatous deposit, the centre of which had advanced to calcification. The opening in the aorta, and that in the Œsophagus, communicated freely. The duodenum contained a loose coagulum, and the ileum and large intestine contained much semi-fluid blood. The jejunum was, however, empty. The other organs were apparently healthy.

STATE OF THE BLOOD AND THE BLOOD-VESSELS IN INFLAMMATION.

BY T. WHEARTON JONES, F.R.S.

The author affirmed that the inflammatory process was similar in warm and in cold-blooded animals; and that, with proper precautions, we might accept the information afforded by microscopic examination from both.

PRIMARY AND SECONDARY FIBRINOUS DEPOSITS. BY H. LEE, ESQ.

Mr. Lee divided deposits of fibrin into primary and secondary, and drew these general conclusions:—1. That the blood may, under certain circumstances, deposit from itself a fibro-albuminous element, either in some of the larger vessels of the body, or in the structure of internal organs. 2. That the process is not of an inflammatory character, and may occur either with or without the intervention of a membrane. 3. That the changes in the blood which immediately precede such an action may be caused by the admixture of vitiated secretions. 4. That the deposit, when formed, is capable of undergoing various changes, which issue in the formation of purulent-looking fluid, and is capable, during these changes, of communicating irritation to surrounding fluids.

TUESDAY, JUNE 28, 1853.

JAMES COPLAND, M.D., F.R.S., President, in the Chair.

ANALYTICAL EXAMINATION OF ALL THE CASES ADMITTED, DURING SIXTEEN YEARS, AT THE SMALL-POX AND VACCINATION HOSPITAL, LONDON; WITH A VIEW TO ILLUSTRATE THE PATHOLOGY OF SMALL-POX, AND THE PROTECTIVE INFLUENCE OF VACCINATION. BY J. F. MARSON, RESIDENT SURGEON TO THE SMALL-POX AND VACCINATION HOSPITAL, LONDON. (COMMUNICATED BY DR. CHOWNE.)

During the period comprised within this analysis, small-pox had been epidemic four times—in 1838, 1844, 1848, 1851; and rather more than half of the patients admitted into the hospital had been previously vaccinated. The analysis referred principally to the following points:—

- I. Natural small-pox.
- II. Small-pox after small-pox.
 - a. After natural small-pox.
 - b. After inoculation.
- III. Small-pox after vaccination.
 - a. Number of cicatrices.
 - b. Character of cicatrices.
 - c. Vaccinated, but without cicatrices.
- IV. Febrile eruptive diseases mistaken for small-pox.

A remarkable difference was observed between the vaccinated and unvaccinated patients, and also between the vaccinated cases themselves; some patients having the small-pox in a mild form, wholly devoid of danger, whilst others had it in great severity, scarcely, if at all, lessened by the previous vaccination. The author thought that the causes of this remarkable difference might be sought for among the antecedents in respect to the vaccination of each individual admitted, with a view to explain the extreme mildness of some cases,—the danger, unmitigated course, and even death, of others. Small-pox, in the unprotected, remains as virulent as it ever was. Vaccination, when performed in infancy, affords almost complete security against the fatality of small-pox, up to the period of puberty; and the general experience of the Small-Pox Hospital shows that small-pox did not usually occur after vaccination, until several years had elapsed. The most trustworthy evidence of the perfection of vaccination was to be obtained from the cicatrices.

The analytical series consisted of six tables. Observations on the results accompanied each table; and it appeared that 3,094 patients with small-pox reported themselves to have been vaccinated at some period of their lives. 1,357 had one vaccine cicatrix; and of these, four and a quarter per cent. died with a good cicatrix, and twelve per cent. with an indifferent cicatrix: mean, seven and a half per cent. 888 had two cicatrices; two and a half per cent. died with good cicatrices, seven and a quarter with indifferent cicatrices: mean mortality, four per cent. and a fraction. 274 patients had three cicatrices: average mortality, one and three-quarters. 268 patients had four cicatrices; and there died with good cicatrices under one per cent.; with indifferent cicatrices, none, the average being only three-fourths of one per cent. The author described a good vaccine cicatrix as distinct, foveated, dotted or indented, in some instances radiated, and having a well, or tolerably well, defined edge: an indifferent cicatrix as indistinct, smooth, without indentation, and with an irregular edge. The author's opportunities of examining the foreigners admitted with small-pox at the hospital, and comparing them with each other, and with the same class of persons in this country, had led him to the conclusion that vaccination was performed in the best manner generally by the Danes, Swedes, Norwegians, and Germans. Then came the Italians; and, from the few he had seen, the Spaniards; then the Scotch; then the Irish; and, lastly, the English and French. There must exist some grave and lamentable evils (more especially affecting the humbler classes) connected with the circumstances under which vaccination in country districts was performed. There could be no justifiable reason why the rural inhabitants of England and Wales should be less well vaccinated than the rural inhabitants of Denmark, Sweden, and Prussia. The mortality, severe as it was between the indifferently and the well vaccinated, was not the only evil result of bad vaccination. Proportionate to the mortality was the severity of the disease; and, to those who escaped death, there was damaged health, disfigurement for life perhaps, and undeserved discredit was brought on vaccination. Great judgment and caution should be exercised in the selection of vaccine lymph. Lymph for use was in its best state on the seventh day of the progress of the vesicle, the day week from the vaccination.

The author's conclusions were—

1st. That natural small-pox destroyed about one-third of all whom it attacked.

2nd. That small-pox after small-pox was of comparatively rare occurrence; that a second attack of natural small-pox was rare, but not often fatal, and that protection seemed to be the law. That after inoculated small-pox, an attack of small-pox had more frequently led to fatal results; but there is reason to presume that the virus used for inoculation, like a great deal of the lymph used at the present day for vaccination, was often taken at too advanced a period of the disease, and thus did not afford the full measure of protection it was capable of affording if taken at a proper time.

3rd. That vaccination performed in infancy afforded almost complete protection against the fatality of small-pox, to the period of puberty; that a variety of circumstances conspired to make it almost impossible to ascertain exactly in what proportion to the vaccinated cases of small-pox subsequently occurred, or might occur, if all persons lived to an advanced age.

4th. That as a matter of safety, it would be well for all persons who were vaccinated in infancy to be revaccinated at puberty; this measure being more especially requisite for those who were either indifferently or doubtfully vaccinated in infancy, and still more necessary for those who, though vaccinated, had no cicatrix remaining. Finally, as a matter of precaution, it would be desirable that all persons should be re-vaccinated, on small-pox existing in the house where they were residing.

Mr. STREETER would suggest the necessity of attending to the health of the skin before vaccination was performed. He believed that the exhausted state of the skin in tropical climates was one cause of the imperfect vaccination in them. About thirty years ago, in the practice with which he was connected, out of more than a hundred children who had been vaccinated, not one half returned to show the arm and the effects of the operation. He had only seen one fatal case of small-pox after vaccination, on the fifth day. He alluded to one source of danger in cases of small-pox—namely, a profuse flow of the catamenia, which occasionally occurred in the secondary fever.

Dr. WEBSTER entirely concurred with the opinion stated, respecting the great fatality of small-pox among young people, compared with those in more advanced life. For instance, during 1847, when upwards of 4,200 persons died by variola throughout England and Wales, more than three-fourths were under five years of age—the sexes being equally divided; while very few had passed their forty-fifth year. Again, the fact that death very rarely occurred in cases where the individual had been properly vaccinated in three or four places at the same time, was likewise most important, and showed, if the system was once properly imbued with true vaccine virus, little danger of subsequent small-pox need be apprehended. In his (Dr. Webster's) opinion, many of the deaths reported from variola, after cow-pox, occurred where the party never had been correctly vaccinated, especially throughout rural districts and country towns, where numbers remain unprotected, owing to the prejudices prevailing in ignorant minds against vaccination, who obstinately object to the operation, "as an impious attempt to arrest the will of the Almighty."

Dr. CHOWNE, having been a frequent visitor at the Small-Pox Hospital, could corroborate many of the statements made in the paper. The fact mentioned in the paper, of the number of persons affected with small-pox after vaccination in the country, was most important. The failure of vaccination in country districts was most lamentable; but it was not the fault of the practitioners—it was the fault of the Boards of Guardians, of the Government, by whom no efficient arrangements for vaccination were made, and consequently thousands lost their lives.

Mr. MARSON said that, much of his paper being tabular, it could not be heard before the Society. He wished, however, just briefly to allude to the number and quality of cicatrices. The difference observed was remarkable. Thus, amongst the persons who had only been vaccinated in one place, and the cicatrix was imperfect, twenty per cent. took the small-pox; whereas, when there were four cicatrices, and these were good, the number who took small-pox after vaccination was only one per cent. The medical public had relied upon the circumstance of Jenner having at one time vaccinated in only one place; but he (Mr. Marson) knew that Jenner did not confine himself to one, for he had seen a patient whom Jenner had vaccinated in 1806, and the person had four cicatrices.

ON INTERMITTING DIABETES, AND ON THE DIABETES OF OLD AGE. BY H. B. JONES, M.D., F.R.S., PHYSICIAN TO ST. GEORGE'S HOSPITAL.

THE author's object was to point out some phenomena connected with diabetes, which he had not found mentioned by other writers.

He offered some observations on the incorrect results obtained by calculating the amount of sugar present in the urine from the specific gravity. If diabetic urines were solutions of nothing but sugar in distilled water, the tables by Dr. Henry, and the amount of sugar calculated from the specific gravity, would give all the information required; but a multitude of other substances were present besides sugar, each of which was variable, and each of which might cause the specific gravity to vary, whilst the quantity of sugar might remain constant. The amount of sugar should always be determined by direct experiment.

On the subject of intermitting diabetes, there could be little doubt that our knowledge of the nature of this disorder might be extended by accurate determination of the varieties in the amount of sugar in the urine, passed at different periods of the day, and under different circumstances. His object was to record cases in which, either from the medical treatment, or the regimen, or the natural course of the complaint, the variation in the amount of sugar was from highly saccharine urine to total absence of sugar. In intermitting diabetes, the disease might be seen beginning and ending; and the explanation of the state of the urine which preceded the appearance of the sugar, and followed its disappearance, must be included in the true theory of diabetes. The records of seven cases of the intermitting form of the disease were given, and very minute particulars in several, illustrating the amount of sugar present in the urine at stated intervals in the twenty-four hours, as well as the influence of particular forms of diet on the proportion of sugar excreted. A remarkable excess of urea was constantly found before and after the sugar disappeared; and, although this might be attributed to animal diet, yet the occurrence of free uric acid and oxalate of lime in the urine pointed most clearly to a state of indigestion, which was every day found without any sugar appearing in the urine.

The author offered the following theoretical contrast between ordinary and saccharine indigestion. Ordinary indigestion showed itself in a want of action on the sugar and starch taken as food, in consequence of which excessive acidity was produced—that is, the changes in the non-nitrogenous food were imperfect. Imperfect changes also occurred in the nitrogenous food; this was made evident by an excess of urates and urea in the urine, and perhaps also by the formation of oxalate of lime. In diabetic indigestion, the effect might be traced also on the two great classes of food. At first, from the non-nitrogenous food, sugar was formed instead of acid. Ultimately, if not simultaneously, sometimes the arrest of healthy changes extended to the albuminous food; and, instead of an excess of urates and urea, other products were formed, one of which was sugar. Possibly benzoic acid, which is present in some cases of diabetes, in variable quantities, might be one of the new products. Whether this theory were true or not, it was of practical importance to remark the tendency to acidity in these cases of intermitting diabetes. In such cases, animal diet alone, or with alkalies, might stop the formation of sugar. It followed also that, when oxalate of lime, uric acid, and excess of urea, were found in the urine, it was probable that the diabetes might be temporarily, if not permanently, removed. The second part of the communication related to the frequency of diabetes in old age. M. Dechambre concluded, from observations made on the urine of old people at the Salpêtrière, that sugar was habitually present in the urine of old people. The author gave the particulars of nine cases of diabetes in elderly people, and thought that its occurrence at the latter periods of life pointed to the theory of diabetes as an indigestion resulting from an arrest of healthy changes in the food. The cases mentioned were, in the opinion of the author, opposed to the view of diabetes depending upon an affection of the nerves or of the liver; and his observation led him rather to the view of Dr. Prout, that diabetes was an indigestion, and that it first affected the non-nitrogenous, and afterwards the nitrogenous constituents of food. As regarded treatment, whatever was beneficial for excessive acidity, was found equally serviceable in diabetes. Alkalies were used in all the cases with benefit. Small meals, free from sugar and acid, and the substances that could give rise to them, formed the best diet. Vegetable acids with alkalies were also occasionally useful.

The author mentioned some experiments, determining the quantity of sugar in several kinds of beer and wine. Porter contained from 27 to 57 grains of sugar in each ounce of liquid; ale from 43 to 50 grains; beer 25 to 40 grains; port wine 8.5 to 11 grains; sherry 2 to 4.7 grains; claret none. The absence of all sugar, and the presence of a little alcohol, caused claret to taste highly acid, while the quantity absolutely present was not more, sometimes less, than in other wines which have no acid taste, as, for example, most port wine.

AN ACCOUNT OF A DISSECTION OF AN OVARIAN CYST WHICH CONTAINED BRAIN. BY HENRY GRAY, ESQ., F.R.S.

The patient was a female, aged 28, who died in St. George's Hospital of typhus fever. The vagina was healthy; the uterus was somewhat larger than natural, and its muscular wall thickened. The membrane lining its cavity was covered throughout its entire extent with a highly vascular villous membrane, resembling the decidua. The round ligaments were both healthy; the right Fallopian tube more dilatable than natural, and contained a thin bloody fluid; the right ovary was healthy; the left Fallopian tube was healthy. The left ovary was occupied as a large cyst, the size of an orange; the lining membrane of the interior of the cyst was vascular; its wall was composed of an external peritoneal layer, an inner, smooth, shining coat, devoid of epithelium. The cavity of the cyst contained a few short, light-brown hairs. The lower half of the tumour consisted of a second cyst, containing some yellowish, white, purulent looking fluid, with some granular fatty matter of the consistence of honey, scaly epithelium, and fine hairs of a brownish colour being intermixed with it. The fatty matter was found to be fluid at less than the natural temperature of the body. The hair, on being separated from the matter, was found to be attached to the wall of the cyst by distinct bulbs. A portion of the wall at the lower part of the cyst presented an appearance similar to the surface of the scalp; there was a thick layer of scaly epithelium mixed with fat covering the surface; numerous sebaceous glands were indented into this layer, and a canine tooth projected from the skin, fully formed; it was implanted into a fragment of bone, covered with periosteum. There was a third cyst situated near the fragment of bone, about the size of a walnut, the wall of which was delicately vascular, forming meshes resembling the pia mater; the contents of this cyst presented all the characters of brain. On microscopic examination, the ordinary elements of nervous matter were seen, consisting of varicose nerve tubules, intermixed with the elementary component parts of grey matter; nuclei, and nucleated vesicles containing granules. There was also a fifth cyst, the contents of which were much less like brain matter than the contiguous one. So far as the author had been able to ascertain, he believed that nervous matter had not been previously described as forming a portion of the contents of these ovarian cysts.

ERYSIPELAS OF THE HEAD AND FACE AFTER CONTUSION AND LACERATION OF THE SCALP: HÆMORRHAGE FROM THE PRINCIPAL BRANCHES OF THE RIGHT CAROTID ARTERY: LIGATURE OF THE VESSEL: RECOVERY. BY EVAN THOMAS, ESQ., M.R.C.S., RESIDENT-SURGEON TO THE WORKHOUSE IN MANCHESTER; ASSOCIATE OF KING'S COLLEGE, LONDON.

The hæmorrhage came from a wound in the temple, made for the evacuation of matter. Pressure proving unavailing, the common carotid artery was tied in the usual way, above the anterior belly of the omo-hyoid muscle. Some inflammatory symptoms occurred, referrible to the chest, but the patient recovered in the course of from two to three months.

FALSE ANEURISM OF THE POSTERIOR TIBIAL ARTERY (FROM A WOUND IN DIVIDING THE POSTERIOR TIBIAL TENDON IN THE OPERATION FOR CLUB-FOOT), SUCCESSFULLY TREATED BY INJECTIONS OF PERCHLORIDE OF IRON INTO THE SPURIOUS ANEURISMAL SAC. BY WILLIAM ADAMS, F.R.C.S., ASSISTANT-SURGEON TO THE ROYAL ORTHOPEDIC HOSPITAL.

The injection of perchloride of iron caused coagulation of the blood in the spurious aneurismal sac, produced by division of the posterior tibial artery in a child aged four weeks. The firm clot squeezed out the serum, which was seen oozing from the surface of the wound. The instrument used for injection was a glass syringe, with a long and slender tube, which was made to penetrate the clot, and convey the perchloride to the fluid blood.

ADDITIONAL EXPERIMENTS ON THE EXCITABILITY OF PARALYSED AND HEALTHY LIMBS BY THE GALVANIC CURRENT. BY R. B. TODD, M.D., F.R.S.

In the summer of 1847, Dr. Todd submitted to the Society the results of experiments tried with the view of testing the accuracy of Dr. M. Hall's dogma, that limbs paralysed by lesion of the brain became more excitable than the healthy ones by the galvanic current, in consequence of an increased irritability of the paralysed muscles. The present communication comprises the results of experiments to determine the difference on the influence of the current according to its direction, and also to ascertain whether any real difference of physiological effect exists when the galvanic trough, or the magnetic-electric or

electro-dynamic machine, is used. Thirteen healthy individuals were subjected to experiment, and with the following results:—

1st. That the obvious physiological effect was produced only on completing, or on interrupting, the galvanic circuit.

2nd. That more vigorous contractions were excited on the completion than on the interruption of the circuit.

3rd. That the completion or the interruption of the direct current produced more vigorous contractions than the completion or interruption of the inverse current.

These experiments were made with a Cruickshank's battery, charged with very dilute sulphuric acid. The magneto-electric rotation instrument and the coil machine (electro-dynamic) were afterwards used, and it was found that the same effects precisely were produced, and the same variation in the intensity of the contractions according as the current was direct or inverse. Fifteen cases of hemiplegic paralysis, caused by lesion of the brain, are afterwards detailed. The results of the galvanic experiments on these cases were as follow:—

1st. That of the fifteen cases, in only three was there any approach to a greater excitability of the paralysed than of the sound limb, and that in two of these it was manifested only under the influence of the inverse current.

2nd. That in three of the cases both the coil machine and the battery were used, and with precisely the same results; and that, in one of the cases, the coil machine alone was used, and with a result which corresponded with those obtained in similar cases by the galvanic battery.

3rd. That in each of the three cases in which a greater excitability existed in the paralytic limbs, the paralytic lesion in the brain was more or less of an irritative kind. In one case, the irritation was probably connected with an incipient process of cicatrization.

4th. That in many of the experiments all degrees of galvanic power were used, and with no other difference than that of degree; the amount of physiological effect being exactly proportionate to the power of the galvanic stimulus.

STATISTICAL REPORT OF FATAL CASES OF DISEASES OF THE BRAIN OCCURRING DURING THE LAST FOUR YEARS AT ST. GEORGE'S HOSPITAL. BY A. W. BARCLAY, M.D., MEDICAL REGISTRAR.

The report was confined to cases in which, by *post mortem* examination, the nature of the lesion was ascertained; and no reference was made to the proportion of cases admitted into the hospital, nor to the relative proportion of deaths and recoveries among persons supposed to be labouring under similar diseases. The cases were divided into—scrofulous inflammation, with or without actual presence of tubercles in the brain; simple inflammation; abscess; softening, of a non-inflammatory nature; delirium tremens; apoplexy, and tumours.

1. SCROFULOUS INFLAMMATION. These cases were 28 in number, and the age at which such cases proved fatal contrasted remarkably with other diseases of the brain. There were 9 under 15 years; 5 from 15 to 20; 7 from 20 to 25; 4 from 25 to 30; 2 from 30 to 40; 1 from 40 to 50; 1 over 50 years of age. No facts were recorded in the majority of the cases which threw any light upon the usual exciting cause of scrofulous inflammation of the brain. The symptoms were sometimes slowly and insidiously developed, at other times setting in with unexpected violence; while no point in the history of the case could be learned in any way accounting for their origin. This had frequently been the case when the patient was under observation at the commencement of the disorder. In 19 of the 28 cases, scrofulous or miliary tubercles were found in the brain or its envelopes, the proportion of yellow, cheesy, or scrofulous tubercle being far greater than those of the miliary kind. The mode of incursion of this form of brain disease was very various; but those in which it was most difficult to recognise it were the cases commencing with symptoms resembling ordinary continued fever. In three instances there had been previous attacks referable to the nervous centres; in another instance the symptoms were developed soon after a fall; in one, after exposure to the sun; in the remainder there was no satisfactory history. In 11 cases pain in the head was the earliest symptom; in 6, delirium was the first prominent symptom; in 2, convulsions commenced as the first evidence of mischief. In 11 out of 28 cases, pain of the head was not complained of; delirium was absent in 8 cases of this class. Convulsions may be said to be the rule, and their absence the exception, in childhood. Among the 28 cases there was no exception to this under the age of 13. The period at which delirium commenced, convulsions, paralysis, partial or general strabismus, were also carefully noted and recorded. The *post mortem* con-

dition of the cerebral mass, as well as of the membranes and vessels accompanying the scrofulous deposit, were next compared.

2. SIMPLE INFLAMMATION AND CONGESTION. The ages of these patients formed a contrast to those of the preceding class. Here the earliest period of fatal inflammation was 16 years, and only 5 were reported under the 27th year,—the period at which all but 5 of the scrofulous cases had terminated. Classed in periods of 10 years, there were 3 cases from 15 to 25, 8 from 25 to 35, 4 from 35 to 45, 3 over 45 years of age; the oldest occurring at the age of 57. Of the 18 cases, only 4 were of the female sex. The mode of incursion was less insidious, and more commonly traceable to a distinct exciting cause, than in the preceding class; and there were only three instances recorded in which the history of the case, and the character of the symptoms, rendered the diagnosis of acute disease in the brain by any means doubtful. The special symptoms characteristic of cerebral lesion, pain of the head, delirium, convulsions, and paralysis, were noticed in relation to their frequency, and the period of their occurrence. Of the *post mortem* appearances, lymph, or turbid serum, was found in 9 cases upon or under the arachnoid; in 14 cases fluid was found in the ventricles. The brain was soft in 4 cases, 2 with increased vascularity, and 2 with a watery state of the brain. It was congested in 11 cases, and wet and pale in 8.

3. ABSCESS OF THE BRAIN. Five examples were recorded of this form of disease. The history was somewhat obscure, and the causes which determined this action in the cerebral lobes, and the period at which suppuration actually commenced, were uncertain. Four of the cases were encysted; 1 was simple abscess; 2 were associated with caries of the temporal bone; 1 with suppuration on both sides of the cranium, opposite to a sloughing wound of the integuments.

4. SOFTENING OF A NON-INFLAMMATORY KIND. Only one instance of this form of lesion was recorded. Its duration was five months; its progress was chiefly masked by the existence of hemiplegia, with indistinct articulation; the whole of the medullary substance on the left side was softened and diffuent; the brain appeared congested.

5. DELIRIUM TREMENS. Ten fatal cases of this disorder were recorded. They were all of the male sex. The ages varied from 29 to 54. Various diseased states of other organs were noted, which probably exercised an influence, more or less decided, in causing the cases to terminate fatally. The heart was diseased in 7 cases; the liver in 6; the kidney in 2. In 4 cases tubercles were found in the lungs; once recent; five times in the form of a cretaceous mass. The membranes of the brain were congested in 4 cases; an excess of fluid was found under the arachnoid in 8 cases. In 6 cases, the ventricles contained an excess of fluid. The substance of the brain was in the majority of cases "wet".

6. APOPLEXY. There were 14 cases of this disease: 9 males; 5 females. Seven cases from 40 to 50 years of age; three from 50 to 60; three from 60 to 70; one over 70 years. Atheroma of the arteries at the base of the brain existed in 7 cases; healthy in 5. The heart was distinctly hypertrophied in 7 cases; in all of these cases the kidneys were also diseased. The anatomical conditions in the brain were various: in one case, an old apoplectic clot under the arachnoid; in another case, turbid serum under this membrane; there was effusion of blood in this case, limited to two small clots in the third and fourth ventricles. In 3 cases there was a good deal of blood effused at the surface, with large clots in the substance of the brain. In 9 cases the clots occupied a central position with reference to the hemispheres. Distinct softening in the vicinity of the clot was found in 5 cases.

7. TUMOURS. Of these were 6 cases; 3 males, 3 females; ages varied from 24 to 49. Four were examples of encephaloid disease; two of encysted growths.

8. ANOMALOUS CASES. Two cases could not be referred to either of the preceding classes. There was no evidence of any anatomical lesion in the cerebral structures; while the symptoms during life were distinctly characteristic of brain disease. In one the kidneys were in a state of degeneration; but the author doubted if albuminuria ever produced paralysis of one side of the face, and strabismus, which preceded the stupor and coma, terminating fatally.

The author concluded by a general summary of the symptoms during life, in relation to the anatomical lesions recorded after death.

ASSOCIATION INTELLIGENCE.

TWENTY-FIRST ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

[Held at Swansea, 10th and 11th August, 1853.]

WEDNESDAY.

THE members of the Association assembled at 10 o'clock, in the Nisi Prius Court of the Guildhall, by permission of the Worshipful the Mayor, J. J. Strick, Esq.

On the motion of Sir CHARLES HASTINGS, Dr. OGLE, Regius Professor of Medicine in Oxford, the Annual President of the Association, took the Chair. He briefly introduced, as his successor, Dr. GWYNNE BIRD.

PRESIDENT'S ADDRESS.

Dr. BIRD, on taking the Chair, said that in accordance with their will and pleasure, as agreed to at their former meeting, he stood there as their President. And first of all, he would take leave in the name of himself and professional brethren of the Principality of Wales, to bid them, as members of the Provincial Medical and Surgical Association, a most cordial welcome, and to offer them all their congratulations and thanks that they had selected Swansea as the place for holding the anniversary meeting of 1853. He assured the members that, whatever might be their short comings at Swansea in reference to the reception of the Association, it was the earnest wish of himself and his professional brethren to make its advent to this town both acceptable and agreeable to the members at large. In the next place, he begged to return his sincere and cordial thanks for the honour they had conferred on him by electing him President of this Association. It was an honour as beyond his expectation as it was beyond his merits. Nevertheless, he felt most grateful for the compliment paid him. He was well aware of the difficult position in which he was placed in having to follow so distinguished and accomplished a gentleman as Dr. Ogle—than whom, perhaps, they could not have a better President. But for himself, he would observe that he would endeavour to do the best he could; he must throw himself on their indulgence, and they must "take the will for the deed". Dr. Bird concluded by stating that, as there was much business to be disposed of, he would not trouble them with any additional observations, but proceed at once with the business of the day.

The Secretary read the following

REPORT OF COUNCIL.

"The Council of the Provincial Medical and Surgical Association, in meeting their brother associates for the twenty-first time, have much pleasure in stating the fact, that such has been the great increase of members in the Principality as to render it highly desirable that this general meeting should be held at Swansea, the capital of a vast mining district, and the centre of an industrious and prosperous population; where we can assemble but to witness the progress of medical science, and that peace, good will, and harmony, without which we have no security for the successful and honourable performance of our professional duties.

"Your Council are glad to have it in their power to state that there has been a considerable increase in the number of members since the last anniversary meeting.

"The number of members now on the list is 1853. When the assembly took place at Oxford, they were 1628. The increase consequently is 225. The members lost by death during the year, and who have resigned, and who have been removed from the list in consequence of their subscriptions being in arrear, amount altogether to 202. On the whole, we are induced to think that the list of members is more perfect than it has heretofore been, and fewer members are in arrear, although still £1093 are owing to the Association for subscriptions.

"Your Council can report favourably of the District Branches. They are generally in active operation. The South Wales Branch has been fully incorporated into our body since the last report, and many new members have been added from that district. The Metropolitan Branch has also been formed, and has been followed by the accession of several new members.

"FINANCE.—PUBLICATIONS. Since the first week in January, a Journal has been published weekly, and has been edited by Dr. J. Rose Cormack, of Putney. The name of the Journal has been altered, and instead of being called, as heretofore, the "Provincial Medical and Surgical Journal", it is now called "Association Medical Journal". This alteration of the name of

the Journal, and all the arrangements connected with its publication in London, have been carried out under the direction of the Committee specially appointed at Oxford.

"Your Council are not enabled to state very definitively what effect the alteration in the publications will have upon the finances. The weekly Journal has been published too short a time to justify any decided opinion; but, as the expenditure is now greater than at any former period of the existence of the Society, it is of the utmost importance that exertions should be made to augment the income. Members are still not sufficiently punctual in the payment of their subscriptions; but it is perfectly clear that the affairs of the Society cannot continue to flourish, nor the present expenditure be borne, unless the income be steadily increased. This we hope may be effected by the exertion of the present members bringing in recruits, and by a punctual payment of subscriptions by all the associates.

"Since the last anniversary, the nineteenth volume of the *Transactions* has been published, and a copy sent to every member whose subscription is not in arrear. The *Transactions* have always been a striking feature in the proceedings of the Society, and your Council therefore feel much regret in announcing that in all probability they will not be continued. The resolution of the last anniversary, to publish a weekly Journal, will necessitate so large an expenditure on that account, as to leave little room to hope that a surplus will be left for the publication of *Transactions*.

"This, your Council think will appear, from a view of the cost of the Journal for the six first months of this year, which is as follows:—

	£.	s.	d.
Gross expenses of Journal for six months	1327	1	4½
From which is to be deducted			
For advertisements received	213	5	4
For advertisements due	190	0	0
For sales of Journal and subscriptions for non-members	48	0	10
		451	6 4
Net expenditure	876	15	2½
Making a yearly expenditure of nearly	1800	0	0

TREASURER'S ACCOUNT.

The Treasurer's cash account is as follows:—

	£.	s.	d.
<i>Receipts.</i>			
Balance in hand	92	14	1½
Subscriptions	1785	5	5
Sale of "Transactions" and Journals	52	19	0
Advertisements:—Provincial Journal	165	6	7
" Association Journal	213	5	4
	2309	10	6½

Expenditure.

Transactions and General Printing Account	338	12	11
Provincial Journal	624	15	10
Association Journal	927	18	1½
Salary of Secretary	105	0	0
Medical Bill Committee	200	0	0
District Branches	39	14	7
Anniversary Expenses	37	14	6
Sundries	42	1	9
Balance	8	12	9
	2309	10	5½

N.B. These accounts are made up to July 31st.

ASSETS AND LIABILITIES.

<i>Assets.</i>			
Subscriptions due	1098	0	0
Due for Advertisements, Transactions, and Journals on hand	237	4	1
	1330	4	1
<i>Liabilities.</i>			
Sundry accounts due on account of Association Journal	378	4	5
Balance	951	19	8

"MEDICAL REFORM. On the subject of Medical Reform, great exertions have been made during the past year; and the Committee appointed at the last meeting have been anxiously engaged in endeavouring to bring about some comprehensive

settlement of this intricate question; and your Council have much pleasure in stating that appearances are more promising than on any former occasion, as will appear by the following report, presented by the Chairman of the Committee to your Council.

"The first object of the Committee, after their appointment at Oxford, was to carefully examine the bill, and to make such alterations as their further experience, and the recorded opinions of the profession at large on the subject, dictated. Accordingly, on the 10th of November, an amended bill was published in the *Provincial Medical and Surgical Journal*; and the Committee afterwards proceeded again to communicate, in various ways, with the parties who were interested in the bill, and to endeavour to obtain from the medical corporations, both in England, Scotland, and Ireland, their sentiments with regard to the measure.

"These negotiations have been attended with encouraging results. With the Royal College of Physicians in London, their communications have been the most satisfactory. This ancient and learned body have held out to the Committee the right hand of fellowship; and, after the draft bill of the Association had been submitted to a Committee of Fellows, intimation was sent to the Association, through the Registrar of the College, that, if certain alterations were made in some of the clauses, which alterations were in no respect unreasonable, it was the opinion of the College that the bill would work harmoniously with the new charter which the College of Physicians are hoping to obtain from government.

"With the College of Surgeons, also, the Committee have negotiated; but the result has not been of so favourable a nature as with the College of Physicians.

"One of the greatest obstacles to the bill, in November last, was the opposition to it by the Scotch medical corporations; but, as there was a strong desire expressed by the medical profession in Scotland that some measure should be introduced as early as convenient into Parliament, a deputation was sent from the Association to Edinburgh; and the issue was most beneficial, as it ended, after a lengthened negotiation, in an agreement, on the part of the profession in Scotland, to support the general principles of the bill proposed by the Association.

"There was thus apparently a general unanimity in behalf of the bill; but, about this time, the Committee received intimation from the South Western Branch, that they entertained strong objections to some of the clauses of the bill. The Secretary of the Committee, in an interview with the members of the Council, at Exeter, endeavoured to remove these objections; but the alterations proposed have not satisfied these parties. They still require further amendment, which will be fairly considered, and, if thought desirable, adopted when the bill is before Parliament.

"Having thus produced a general good understanding in the profession relative to the bill, the attention of the Committee was directed to the government, and they determined to attempt to make an impression in that quarter in its favour. Accordingly, on the 18th of March, an interview was obtained with Lord Palmerston, the Secretary of State for the Home Department, to submit to him the bill, and to urge him to take it up as a government measure. In order to give greater effect to this deputation, the Presidents of the District Branches were requested to attend, and also about fifty members of the House of Commons; and, much to the satisfaction of the Committee, the President of the College of Physicians and the President of the College of Surgeons of Edinburgh came purposely from Scotland to accompany the deputation, and to express to Lord Palmerston their approval of the bill.

"Lord Palmerston received the deputation very courteously; and, after remarking that several unsuccessful attempts had been made on the subject, he said now that a great approach of unanimity in the profession had been made, as was evident from the importance and varied character of the deputation, he should give his best attention to the measure that had been laid before him; and, if there was a good prospect of bringing it to a satisfactory settlement—and he thought he saw now such an opportunity—he should feel it his duty to bring it before Parliament, in conjunction with his colleagues, as a government measure, and to carry it out with energy. His Lordship added, that he should communicate with the Secretary of the Committee, Mr. Hastings, on the subject.

"So matters rested until towards the end of April, when Mr. Hastings received a communication from the Home Office, stating that, if practicable, Lord Palmerston would bring in a bill this session.

"Knowing how much the pressure of business is felt in the

House of Commons, and seeing that the session was wearing away, it was thought desirable not to allow the matter to sleep; and the Secretary to the Committee late in April addressed the Earl of Aberdeen, the First Lord of the Treasury, and requested an interview for the Committee with his Lordship. This was readily conceded, and, on the 12th of May, the members of the Committee waited upon Lord Aberdeen in Downing Street, and enforced upon his Lordship the necessity for immediate steps being taken. They were introduced on this occasion by Earl Beauchamp. The deputation were received very politely by his Lordship, who, after listening attentively to a statement of their principles, and also being put in possession of the draft bill, assured the deputation that he fully appreciated the importance of the Association, and the objects they had in view; and that he should be most happy to afford them every facility in his power, and, unless some unforeseen obstacle should arise, he hoped to be able to carry out their wishes. They regret, however, to state that, since that time, Lord Palmerston has declared in the House of Commons that government will not be prepared to introduce a bill for medical reform this session.

"Your Council have much gratification in thus submitting to the Association the results of these communications with Her Majesty's Government. The conviction has always been firmly impressed upon the minds of those who have entertained the question of Medical Reform, that, before it could be brought to a successful issue, it must be taken up by government, and carried by them through Parliament. The time has at length arrived when the First Minister of the Crown and Her Majesty's Principal Secretary of State have declared that they will do all in their power to settle this complicated question, and the final success of our prolonged exertions is therefore no longer doubtful; but the members of the Association must be aware that, even under the present promising aspect, they must not be supine. They should press the importance of an early settlement of the question upon their representatives in Parliament, and upon the House of Lords. Petitions should be sent to both Houses of Parliament; and, wherever a member of the profession resides, from thence a petition should issue."

It is deserving of record, showing the admirable zeal with which the Committee have been actuated, and to which, in a great measure, may be attributed the success that has hitherto attended their labours, that, although the members of the Committee reside many miles apart, in different parts of the kingdom, and many meetings have been held, yet, so punctual has been the attendance, that a sufficient number have always been present to transact the business.

"**BENEVOLENT FUND.** The Benevolent Fund has struggled on through many difficulties, continuing its unwearied course of purest charity. At present, its income cannot be told; but it is hoped that it will not be less than the preceding year. The number and the urgency of the cases relieved will, it is expected, be found to exceed that of any former year, augmented as it has been by cases sent for relief from the Medical Benevolent College. It is hoped that the difficulties of the Benevolent Fund will at once be removed by the liberal contributions of the members of the Association.

"The Council conclude with the hope that a long and prosperous career is yet in store for the Association, and that the success which has hitherto attended this excellent institution may be the means of calling forth the zealous exertions of the members, and of increasing its usefulness.

"**CHARLES HASTINGS, M.D., D.C.L., President.**"

Dr. DAY, Professor of Medicine in the University of St. Andrews, moved the adoption of the Report. He said he hoped it would not be necessary to discontinue the publication of the volume of *Transactions*.

Mr. BOWLING, of Hammersmith, seconded the motion.

Dr. TUNSTALL, of Bath, thought that it would be better simply to receive the report, and to consider along with it the Report of the Journal Committee, so that they might have the whole question of finance brought before them at one view. He might afterwards wish to move as an amendment, that those words be left out of the Council report which pledged the Association to discontinue the volume of *Transactions*.

The PRESIDENT thought there was no pledge given in the report, such as that which Dr. Tunstall dreaded.

Dr. TUNSTALL said that, if that were clearly understood he had less objection that the report should be adopted. At the same time he thought that no correct opinion could be formed as to the financial condition of the Association till they had heard the report of the Journal Committee. For that reason, the two

documents ought to be taken together; but he would not wish to divide the meeting on this question.

The motion of Dr. Day was, after some conversation, put and carried unanimously.

REPORT OF THE JOURNAL COMMITTEE.

Dr. COWAN, of Reading, read the following Report:—

"The Committee, appointed at the anniversary meeting of the Provincial Medical and Surgical Association, held at Oxford on the 21st and 22nd days of July, 1852, with power to carry out Dr. Cowan's proposition there adopted, "That the Provincial Medical and Surgical Journal be published weekly, and that it be edited and published in London", beg to present a report of their proceedings.

"The scheme of publishing the Journal in London at first met with opposition from the Central Council, on the ground of alleged informality in the proceedings of the meeting at Oxford. This opposition, however, was afterwards withdrawn by a resolution passed by the Council; and the Committee acknowledge with pleasure the readiness with which aid has been subsequently afforded to them by Sir Charles Hastings, the President of the Council, and Mr. Sheppard, the General Secretary. As the preliminary disagreements have long ago entirely ceased, it is neither necessary nor expedient to make any further allusion to them.

"The Committee originally consisted of Dr. Cowan of Reading, Dr. Forbes of London, Dr. Greenhill of Hastings, Dr. Webster of Dulwich, Dr. Edwards of Benarth, Conway, Samuel Crompton, Esq., of Manchester, and Thomas Hunt, Esq., of London. Of these, however, Mr. Crompton and Dr. Forbes declined to act. Dr. Cowan has acted as Chairman, and Mr. Hunt as Secretary to the Committee.

"Your Committee, at a meeting held on August 5th, 1852, offered to Dr. John Rose Cormack the appointment of Editor of the Journal, with a salary of £250 per annum; which offer was accepted by him. A copy of Dr. Cormack's letter of acceptance is subjoined.

"Putney, August 10th, 1852.

"DEAR SIR,—I have received your letter of the 7th instant, communicating to me a resolution of the Journal Committee of the Provincial Medical and Surgical Association, passed on the 5th, to the effect, that I "be requested to undertake the editorship of the Journal at £250 per annum, commencing from January 1853."

"In reply I beg to say, that I very highly appreciate the honour of having being selected by the Committee for so responsible an office; and that I accept it, under a deep conviction of the difficulties with which it is surrounded, but likewise with the faith that they can be satisfactorily overcome, provided that I earnestly devote myself to the work, and so secure the confidence and cooperation of the members of the Association.

"While I unconditionally accept the terms offered by the Committee, I trust that I may be permitted to say that an ultimatum of £250 per annum is not a sufficient encouragement to any one to embark in this enterprise with the needful toil and determination. It would be no burden to the Association to allow an increase in my salary, dependent upon an increased income from advertisements, the sale of the Journal, and from an increase in the number of members over the number on the roll at the Oxford meeting. I hope that there is no impropriety in my making this suggestion, as the increase in my salary would only come from funds which could be distinctly traced to the greater success of the new plan. If £250 were given for editing a fortnightly Journal, it does not seem wrong to point out the propriety of giving to the editor of the weekly paper an opportunity of getting a larger sum without taxing the Association.

"There is one other remark which I feel anxious respectfully to submit to the Committee. To carry out with vigour such a Journal as we are determined to have, diversity of talent and variety of style are required in the different departments; and were it even physically possible for an editor to write all the critical notices and scientific summaries, in addition to the strictly editorial duties, an uninviting sameness, and a want of familiarity with many topics, would be constantly appearing. An editor ought always to be able to know where to apply for sound information; but no editor, even though his qualifications far exceeded those to which I can lay claim, ought to venture to speak with authority on all the various questions which are constantly arising within the vast boundaries of medical science. It is, therefore, obvious that, as soon as circumstances permit, a certain sum of money ought to be placed

annually at the disposal of the editor for the payment of contributors. In the mean time, I have received promises of the most disinterested and generous aid, from several very able friends; but on a long continuance of unremunerated labour, the Association ought not to calculate.

"Sincerely thanking you for the confidence which you have placed in me, and trusting that I may be enabled to merit it,

"I remain, sir, yours sincerely,

"To THOMAS HUNT, Esq."

"JOHN ROSE CORMACK.

"Dr. Cormack commenced his duties in the beginning of Jan. 1853, since which time the Journal has been published weekly in London, under the title of the ASSOCIATION MEDICAL JOURNAL.

"At a meeting held on 29th September 1853, your Committee, having previously applied for and received tenders for the printing of the Journal, determined on making arrangements with Mr. Thomas Richards, of 37 Great Queen Street, Lincoln's Inn Fields, for the performance of that duty. The terms of Mr. Richards's contract included also accommodation on his premises for publication, and for the general commercial business of the Journal.

"Your Committee resolved that the Journal should generally consist of twenty-four pages, of the same size as the *Lancet*; but that it might, under certain conditions, occasionally contain thirty-two pages. During the six months ending 12th July 1853, the large sheet has been used on eight, and the small sheet on eighteen occasions. It was considered best to leave the carrying out of the arrangements entirely in the hands of the Editor.

"Your Committee also determined that a sum should be allowed for literary contributions and woodcuts, not exceeding £50 per quarter.

"As the details and working of the scheme were confided to Dr. Cormack, the report of his proceedings, as embodied in a letter from him, is subjoined.

"July 2nd, 1853.

"GENTLEMEN,—It is with much satisfaction that I lay before you a detailed account of the manner in which I have endeavoured to perform the duties entrusted by you to me, in the management of the Journal of the Provincial Medical and Surgical Association.

"In accordance with your directions, I have been regulated by the following general rules:

"1. That the size of the Journal should not exceed twenty-four pages, unless when the number of advertisements, or an available balance of money, justified the occasional use of a larger sheet consisting of thirty-two pages.

"2. That the expenses to be incurred for literary contributions and woodcuts should not exceed £50 per quarter.

"With reference to the size of the Journal, I have to report that, during the first half of this year, embracing twenty-six weeks, the large sheet has been used upon eight occasions, viz., January 7th and 21st, February 11th, March 11th, April 8th, 15th, and 29th, and May 27th. In accordance with your wishes, the following is the basis upon which the extreme limit of expenditure has been estimated. There has been considered as available for the Journal the amount of the annual subscriptions of members, except £305 per annum, the sum stated by Sir Charles Hastings to be required, or at least which might possibly be required, for other Association purposes. As this sum is probably more than will be required, it may be regarded as covering the non-payment of subscriptions by some members.

"To-day, the number of paying members on the list is 1,890, of whom 420 have entered the Association from Jan. 1st, 1853. Some days ago, when the subjoined calculations were made, the number of members on the list was 1,869; so that it must be borne in mind that the actual condition of the Association is in reality a little more favourable than appears from the figures about to be quoted.

"Assuming, then, 1,869 as the number of subscribing members, the Journal treasury for the year 1853 has been credited with £1,062:9:0, minus the £305 formerly alluded to; or, in other words, with £1,057:9:0, the half of which is £528:14:6. The gross income from advertisements during the twenty-six weeks has been £380:19:0. The sales of the Journal during the twenty-six weeks have produced £35:15:5. There have likewise been sold, but not yet paid for, Journals to the amount of £12:15:5. The value of the stock in hand may be considered as £54:12, being one-half of the annual subscriptions of 184 members, who may be expected to join before the conclusion of the year. It therefore follows that the money available for

Journal purposes during the first six months of the year is			
£1,390:6:10, viz.,	£	s.	d.
Proportion of subscriptions of members,	828	14	6
Estimated subscriptions of new members	54	12	0
Advertisements and sales	447	0	4
	1,390	6	10

"With regard to the expenditure for the six months, the amount for printing, as per estimate, with extra charges for tables, has amounted to £401:14:6. The actual price of paper and stamps has amounted to £404:10:11. The salaries of publisher and commercial assistant for the half year have amounted to £30:0:0: the items will be found classified in a table appended to this letter. I have kept considerably within the limits assigned to me by the Committee in expenses incurred for literary contributions and woodcuts. The saving in this department has resulted principally from the outlay for leading articles having been only one guinea, whereas a considerable expenditure was contemplated in that department. The Committee authorised an outlay of £100 for literary assistance during the first half of the year; but the expense actually incurred has amounted to only £58:17:6. I do not recommend so much parsimony in this department as either necessary or safe for the future.

"The mode in which the sum of £58:17:6 has been expended next demands attention. After careful deliberation, and consultation with Dr. Cowan and others, it appeared to me that the most economical and most efficient mode of obtaining a steady supply of the best literary assistance was to offer to Dr. Alexander Henry, of whose thorough competence for the work I had had ample opportunities of judging, the sum of £75 per annum for a certain amount of literary labour. In this way, by combining the two appointments of literary and commercial assistant, I am satisfied that a very large saving has been effected, and a plan adopted which has in every way worked well. The expenditure for other contributors has amounted to £14:14, which

has been shared among five individuals. Although numerous woodcuts have appeared in the Journal, the wood engraver's account for the half-year amounts to only £8:13:6; of which £1:7:6 has been paid by authors.

"It therefore appears that the expenses incurred in the production of the Journal for the first six months of the year have been £1280:4:9, viz.;

Commercial department and miscellaneous expenses -	1007	14	9
Editor's salary, payments for literary assistance, and woodcuts -	182	10	0
	£1280	4	9

"The excess of income over expenditure may thus be stated as £50:2:1. A small reduction may have to be made for bad debts; but, as the advertisements and sales are cash or quarterly transactions, the loss, if any, will be exceedingly small. The account of expenditure contains sums of money for preliminary expenses connected with fitting up the Journal office, etc., which will not again occur. In the subjoined table will be found a more detailed statement of the facts which have been presented to your view.

"The returns from advertisements far exceed the estimated amount which the Committee originally dealt with in making their calculations. It was naturally supposed that, as the Journal did not circulate much through the book trade, it was not likely to receive many advertisements from publishers. The Association Journal is now, however, becoming every day more and more recognised as one of the best media for advertisements; and, by means of an inconsiderable outlay, its sterling value might be so made known as to raise the income from advertisements to four times its present weekly average. The repeal of the advertisement duty, while it will be found by advertisers to be a great boon, will likewise be felt an equal benefit by the Journal.

FINANCIAL STATEMENT OF THE JOURNAL FOR THE SIX MONTHS ENDING 1st JULY 1853.

[Account made up to 4th August 1853.]

Dr.			Cr.		
RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
Proportion of £828:14:6, the sum available for the half year from the subscriptions of members:—			Literary Department.		
In cheques from Sir C. Hastings	617	0 6	Editor (Dr. Cormack)	125	0 0
Subscriptions paid in office	106	1 0	Literary Assistant (Dr. Henry)	37	10 0
	723	1 6	Other Contributors	14	14 0
Revenue from Journal.			Woodcuts	5	6 0
Sales of Journal	35	15 5		183	10 0
Advertisements	248	12 10	Commercial Department.		
	284	6 5	Printer (Richards)	212	1 6
	1007	9 9	Stationers (Hunt and Foundriner) for		
			Stamps and Paper	295	17 6
			Commercial Assistant (Dr. Henry)	12	10 0
				520	9 0
			Miscellaneous Expenses.		
ASSETS.			Commission to Advertising Agents	44	5 1
Remaining proportion of £828:14:6	106	13 0	Advertisement Duty	61	3 6
Revenue from Journal.			Advertising Journal	23	12 0
Sales of Journal	12	5 5	Postages and Parcels	17	12 7½
Advertisements	150	6 8	Books and Journals	4	4 1½
	162	12 1	Short-hand Reporter	5	13 0
Value of Stock in Hand, supposing 104 new Members to join*	54	12 0	Commission on accounts collected	6	0 6
	322	17 1	Stationery	0	14 10
			Sundries	0	5 0
			Preliminary and extraordinary Expenses	31	8 2
			Editor's Letter Box	1	5 0
			Part of two Subscriptions forwarded to		
			Worcester	1	14 9
			Petty expenses of Journal Committee	1	7 3
				199	1 4
				902	0 4
			LIABILITIES.		
			Commercial Department.		
			Publisher (Honeyman)	17	10 0
			Printer (Richards)	189	18 0
			Stationers (Hunt and Foundriner) for		
			paper	134	9 0
			Ditto, for Stamps	34	4 5
				375	16 5
			Miscellaneous Expenses.		
			Advertisement Duty	2	8 0
				378	4 5
			Balance	50	2 1
				£1390	6 10

* Since the 4th of August, when the above account was drawn up, a considerable number of members have joined: and some of the stock has also been sold.

From the above statement, it appears that in liquidation of £1280:4:9, expenses incurred, £902:0:4 has been paid, leaving an unpaid balance of £378:4:5. To meet this, there is £428:6:6; viz., Cash, £105:9:6, and Assets, £322:17:1.

I have examined the above, and seen the vouchers.

JOHN ROSE CORMACK.

"Since the commencement of the year, there has been a steady weekly influx of new members, as well as an increase in the average weekly receipts from advertisements and the sale of the Journal. Taking, therefore, into consideration the financial aspect of the Journal as represented in the subjoined account, in connexion with the circumstances just mentioned, the financial success of the Journal scheme is manifest. It must, however, be borne in mind that present prosperity can be sustained only by increased vigilance in regulating the expenditure by the income; and that permanent safety cannot with propriety be considered as obtained, until either the Association has a reserve fund, or until the Journal can maintain a considerable floating balance.

'I am, gentlemen,

'Yours very faithfully,

'JOHN ROSE CORMACK.'

"Your Committee have reason to know that the removal of the Journal to London has been the means of causing a great increase of members to the Association, including a very large number of the most respected and influential members of the profession both in town and in country, in Scotland as well as in England. The increased expense, it will be seen, is met by the increased income from all sources.

"Your Committee have much pleasure in expressing their high satisfaction with the manner in which Dr. Cormack has conducted the literary department of the Journal; and also their obligation to him for his great trouble and sacrifice of time in satisfactorily organising the business arrangements.

"They also would express their approbation of the manner in which the printer and publisher of the Journal have performed their duties."

(Signed)

CHARLES COWAN, M.D., *Chairman.*

JAMES EDWARDS, M.D.

W. A. GREENHILL, M.D.

GEORGE WEBSTER, M.D.

THOMAS HUNT, *Secretary.*

Mr. W. H. MICHAEL had much wished that the Report of the Journal Committee should have been read before the Report of the Council was adopted; especially as a right appreciation of the financial aspect of the Journal must exercise so great an influence on the question raised by Dr. Tunstall with reference to the continuance of the *Transactions*. In deference to the evident wishes of this meeting, he had not seconded the amendment which Dr. Tunstall proposed; but he, nevertheless, conceived that he was perfectly in order in now considering the subject of the financial position of the Association in relation to the Journal. He could see no reason to doubt but that under good management the Journal and *Transactions* may both continue to appear; and he, for one, should certainly regret were we to lose all hope of publishing, under the auspices of the Association, the valuable papers read at its anniversary meetings; some of which, from their nature, are not suitable for a weekly journal.

But in viewing this question—and without the slightest wish in any way to impugn the accuracy of the Council Report—it seemed to him that while the figures in themselves were perfectly true, yet from the manner of the grouping they might lead to untrue inferences, and might make it appear that the annual subscriptions of members were much more largely drawn upon than, upon examination, would be found to be really the case. He had most carefully examined and made an abstract of the Journal accounts, which, with the president's permission, he would read to the meeting. First, it would be found, from the printed financial statement which he held in his hand, that the total cost of printing and publishing the Journal for the first six months of the year amounted to £1280 : 4 : 9. From this must be deducted £35 : 15 : 5 received from sales of the Journal, and £248 : 12 : 10 received for advertisements; as well as a further amount of debts owing to the Association for sales and advertisements of £102 : 12 : 1, from which, however, as they were debts which, however good, still admitted the possibility of non-payment, he would, to ensure the avoidance of fallacy, deduct £22 : 12 : 1 as possibly non-payable, leaving the sum of £140. The sums realisable on the profit side of the Journal account would then be

Receipts for Sales	35 15 5
Receipts for Advertisements	248 12 10
Due for Journals and Advertisements ..	140 0 0

£424 8 3

There were also other expenses which had occurred in the last six months, and which happily could never again be a charge to the Journal. The total repeal of the advertisement duty

would take from the payments the further sum of £63 : 11 : 6. To this must be added those preliminary and extraordinary expenses inseparably connected with the establishment of any new concern or business, and which in the present instance were

Preliminary expenses	31 3 2
Editor's Letter Box	1 5 0
Petty Expenses of Journal Committee....	1 7 3

£33 15 5

This, with the sums already mentioned, made a grand total of £521 : 15 : 2 to be deducted from the working expenses of the Journal for the first six months; leaving the cost of the Journal to the Association in the future six months, if there be no increase of sales or advertisements, to be estimated at £758 : 9 : 7, or about £1500 per annum; a sum which little exceeded the amount named by Dr. Cowan at the Oxford meeting as the probable annual cost, and very different from the figures which at first sight appeared as the cost from the Council Report. But, continued Mr. Michael, could we believe that the Journal is to remain stationary in the immense progress it had already made? The happy opportunity which the repeal of the advertisement duty afforded for tradesmen to offer articles for sale, and to others in and out of the profession to make known their wants, rendered it certain that the revenue from advertisements must be largely increased. He had been quite astonished at noticing the large amount which had been already received for advertisements, taking into account the non-connection of the Journal with any bookselling or trading firm, and the difficulties and oppositions which every new undertaking of this character must have to encounter. From its past success he could not but believe that, when it became extensively known that the Journal had a guaranteed circulation of two thousand weekly,—penetrating alike to the rich man's library, and to the cottage of the hard-working surgeon; to the iron mines, and to the mountain fastnesses of our picturesque Principality—he felt that the number of advertisers, and the income accruing, must be very greatly augmented; and that the Journal required but to be generally known, to be universally adopted as the best advertising medium for subjects addressed to the medical profession. And here he would state that, in looking over the weekly accounts, which he held in his hand—accounts kept in the most accurate and business-like manner, where, under printed heads, every penny of expense was tabulated and set down for the inspection of any member of the Association—he found that above £40 in stamps and paper had been expended for gratuitous distribution of the Journal: a large sum, which, if saved, would still further diminish the actual cost. He believed, however, that here parsimony might not be true economy; and that, to secure the advantages derivable from increased knowledge of the Journal, it would be necessary occasionally to recur to these expenses. Looking at the unparalleled number of new members who had joined the Association during the present year, amounting to 429—21 of whom had joined during the few days of this month,—and to the fact that others, who had not yet joined the Association, had been proposed, he could not but feel that, while the Association was in the most hopeful and healthful condition, much of this great accession must be traced to the direct influence of the greatly improved tone and character of the Journal—an improvement universally felt and acknowledged by all the members of the Association with whom, by his position as District Secretary, he was daily brought in contact. This fact, indeed, he had used as an inducement to gentlemen to become members of the Branch to which he was attached; and he had found it generally responded to. [Cheers.] He could not but tender his hearty thanks to Dr. Cormack—and it was an expression of feeling in which, he was assured, every member would join—for the very able manner in which he had conducted the business of the Journal for the past six months; for, by the high tone which pervaded its articles, it tended not only to increase the interest attached to it as the organ of this Association, but to improve the status and the knowledge of the profession. [Cheers.] It was not to be supposed that any man, however talented and able, however competent and high minded, could on all occasions, and upon all subjects, please the various minds who would peruse his writings; for an independent thinker must strike out for himself his own path, and must pursue with earnestness, looking neither to the right nor the left, and fearing and courting no influence, however great, that way which a desire to benefit his profession might dictate to him. He looked forward to the time when the Association would be the means of improving the condition of the hard working medical practitioner; for he believed that a continuance of the Journal,

characterised by its present high intellectual and moral bearing, could not be without influence on the public mind, in teaching them how much they are indebted to the medical profession, and what that profession should receive at their hands. He had, therefore, great pleasure in moving—

“That the Report of the Journal Committee be received and adopted; and that the Committee be requested to continue their labours.” [Cheers.]

Dr. LINGEN, of Hereford, had much pleasure in seconding the motion.

Mr. NORMAN, of Bath, would not oppose the motion; he thought that in all the circumstances it was a proper motion: but he must be allowed to say, from the facts and figures which had been brought forward, that it would be necessary to take care that the expenses of the Journal were kept within legitimate limits; and that it did not lead the Association into debt. The Report of the Council on this point ought to be duly weighed.

Dr. TUNSTALL, of Bath, said that it appeared that the Association, and therefore the Journal, was at present depressed by an enormous amount of arrears of subscriptions; no less a sum than £1093. Now, he thought that such a state of affairs ought not to be, and need not be, if there was a proper machinery for collecting subscriptions. In the Bath and Bristol Branch, of which he was a member, there was not one of their hundred and thirty members in arrears; and this ought to be the case in every other district. He was surprised to see that there was such a heavy arrear of unpaid subscriptions due for the present and previous years. Every member who wished to see the Association flourish, and to see the Journal maintained in its present efficient and influential form, ought to exert himself to assist the Secretary in the collection of subscriptions, and also to impress the members generally with the duty of regularly paying up their subscriptions at the date when they become due. There was a rule of the Association, by which a very hurtful latitude was allowed in this matter; viz., that if arrears were not paid up within three years, the Journal should be discontinued: and thus some had actually been for three years receiving the Journal gratuitously. The existence of arrears, and its cause, had been, for several years past, regularly brought forward at the annual meetings; and yet each year they found themselves in the same position as on the previous year. As had been stated, the Journal was satisfactory to the profession; and he thought that, if a better system of payment were adopted, it would be quite practicable to continue the Journal in an efficient form, without losing their highly valuable annual volume of *Transactions*.

Mr. BOWLING, of Hammersmith, said that a paid collector would very soon bring up the arrears.

Dr. MCINTYRE, of Odiham, thought that the Journal ought not to be forwarded if the subscriptions were not duly paid. He thought, at all events, that when a member was three months in arrears, his Journal should be stopped; which would be a hint to him to remit his subscription. He would be inclined to move a resolution to that effect. To be supplying hundreds of Journals gratuitously every week was an expense, which of course the Association could not support.

Sir CHARLES HASTINGS said, that the proposition of Dr. McIntyre would interfere with the rights of members, and abrogate a law. As no notice of motion had been given, the improvement in the law suggested by Dr. McIntyre could not now be entertained.

Mr. SODEN, of Bath, fully admitted the great improvement which had lately taken place in the Journal, since it had been under the able superintendence of Dr. Cormack. He, however, very much questioned the propriety of the introduction into its pages of such irrelevant subjects as the opening the Crystal Palace on Sunday. He had been requested by several gentlemen in Bath to state that this was also their opinion on the subject. He did not for a moment call in question the great ability with which the Journal was at present edited; but he doubted very much the propriety of making it a vehicle for such extraneous views as he had referred to.

Dr. COWAN wished to say a few words before the motion was put from the chair. As regarded the financial aspect of the Journal, he had little to add to the admirable exposition of Mr. Michael. He (Dr. Cowan) was one of those who had advocated the removal of the Journal to London; and, indeed, on him had devolved the greatest amount of the responsibility which had been incurred in advocating and carrying out that great change. He had thought that the Association might, without any increase of their subscription, get a better Journal—a weekly in place of a fortnightly Journal—and a Journal of the highest talent, thoroughly up to the science of the day. All this had been accomplished; and it was to him a matter of the highest

gratification to see the approbation with which the high tone and scientific value of the *ASSOCIATION JOURNAL* was regarded. And here, he (Dr. Cowan) would pay off an old score. He had acted altogether apart from selfish motives. Personally, Dr. Cormack was not known to him when first he looked about for some one capable of carrying out the project. It was Dr. Cormack's public character and reputation alone which had recommended him to Dr. Cowan in the first instance, and ultimately to the Committee; and the experience of the last seven months had demonstrated that a better choice could not have been made. He did not think that there was any other man who could have done for the Association what Dr. Cormack had done, in his organisation of both the literary and the commercial departments. (Cheers.) He hoped that every member of the Association would exert himself to the utmost of his power in encouraging and sustaining the efforts of the editor; and in increasing the number of members by making known the merits of the Journal and the advantages of belonging to the Association. Hitherto the meetings had been the chief inducement to join the Association; but now every member could likewise have at his own home more than an equivalent for his subscription. He had no fear of its being ultimately found necessary to discontinue the *Transactions*: but, as compared with the Journal, he regarded that as a minor consideration.

Dr. CONOLLY, of Hanwell, felt that it was extremely difficult to make any observations upon this subject, without subjecting himself to the imputation of saying what was discourteous to the editor of their Journal. He had always opposed the removal of the Journal to London; and he thought that if its weekly publication interfered with the issue of a volume of *Transactions*, the time had arrived when they ought seriously to consider the propriety of returning to the old fortnightly periodical. As regarded his friend Dr. Cormack, the editor of the Journal, he fully concurred in what had been said of his learning, talent, and zeal, in conducting their Journal; but, having said this much, he hoped he might be allowed freely to say, as a member, that the Journal was deficient in general news and minor articles. The essays and letters of members occupied a disproportionate amount of space. In general intelligence, the *Lancet* and *Medical Times* were decidedly superior; and he thought that there ought to be improvement made in this department. He was far from thinking, however, that a weekly Journal, or a Journal at all, was necessary for the prosperity of the Association.

Dr. COWAN. No other man could have done what Dr. Cormack has done for the Journal. His experience, his talents, his perseverance, and his good feeling, had all been called into active exercise. As a member of the Journal Committee, he knew this: and therefore he (Dr. Cowan) could not sympathise with the remarks of Dr. Conolly.

Dr. SIBSON, of London, said, they must all feel that they had an editor who discharged his duties with the greatest ability, and the strictest honour; and one who had succeeded in giving general satisfaction. This he said, without by any means approving of all the sentiments which had been expressed in the Journal. As regarded the publication of *Transactions*, he felt that this was one of the most important features of the Association; and he was extremely happy to find that there was a fair prospect of both the Journal and the *Transactions* going on together.

The PRESIDENT (after a few words from Dr. Conolly) said that that gentleman had in no way called in question the ability and zeal of the editor.

Sir CHARLES HASTINGS said, that he concurred with the sentiment which had been expressed, that it was both undesirable and unnecessary to go back upon the past, and reopen former discussions. He would remark, however, that what he had foretold at Oxford, was now found to be true; and that a very much larger expenditure had been incurred, than had been stated to be necessary by his sanguine friend Dr. Cowan, who had then assured them that for £1,300 or £1,400, they might have a weekly Journal. Now, the expense had just been doubled. The expenses of the first six months amounted to about £1,300: and twice £1,300 is £2,600. His sentiments on the subject were so well known to most of the gentlemen present, that he would not have intruded himself upon the meeting, had not Mr. Michael called in question the accuracy of the figures in the Report of the Council: whereas he was prepared to demonstrate that every figure was strictly correct. There was a slight discrepancy in one amount. The Council had taken the figures as they had been forwarded to them by Dr. Cormack; and it was for Dr. Cormack to explain the discrepancy. It could not be tolerated that the statements of the Council should be con-

sidered incorrect, when he well knew them to be strictly correct, and, moreover, when they had been unanimously passed by that meeting; and to be, as regarded the Journal, exactly those which had been supplied by Dr. Cormack. He held in his hand Dr. Cormack's own statement.

Dr. CORMACK. I should like to see that paper. [Looking at the paper.] I see no discrepancy in the statement sufficient to affect any argument. This statement was sent as a draft supposed to be correct; but the accounts of receipts and payments were afterwards brought down a few days later; and two small payments on behalf of the current half year were removed to next account. I afterwards forwarded the correct summary, as now printed, and before the meeting.

Mr. MICHAEL must be allowed to say that he never even insinuated that the figures in the Report of the Council were inaccurate. What he had said was, that true accounts might be made to speak untruthfully or ambiguously, from the way in which they were placed in relation to each other.

The PRESIDENT. Mr. Michael, you have the right of reply; but I cannot hear you at present.

Sir CHARLES HASTINGS was, for one, not so very sanguine as his friend Dr. Cowan. He ventured to say that, unless they could raise their numbers to two thousand five hundred, they could not hope to have a volume of *Transactions* annually.

Dr. COWAN. We will raise them above that.

Sir C. HASTINGS. Unless we have this increase of members, the present scheme could not be regarded as either safe or successful. It would not do to calculate assets as receipts; and that was what had been done by the Journal Committee. There was a fallacy in saying that £248 had been received for advertisements; for advertisements had cost £105 expenses—expenses of a kind which had never been incurred at Worcester: so that the real receipts for advertisements had been only about £143. This was the way in which the accounts must be looked at. His candid opinion was, that they were not in so favourable a position as some gentlemen seemed to imagine. As to the great accession of new members, he could not ascribe this to the Journal. Some might have joined on that account: but in Swansea and its neighbourhood, for example, the increase of the Association was owing to the establishment of a new Branch; and in Manchester, the influx was owing to the prospect of the anniversary being held there next year. Then, among the new members, there might be a great number of defaulters—gentlemen who would say, after a time, "I do not wish to belong to your Association: I do not care about your Journal"; whereas, the truth probably would be, that they did not care to pay their guinea. Sir Charles said, that he considered it his duty as Treasurer, to place these facts before them. Before sitting down, however, he must be allowed to express his praise of the spirited manner in which the Journal Committee had carried out their project. He felt, in common with every other member of the Association, greatly indebted to them for the time and attention they had bestowed upon this work. He would also bear his testimony to the skill and ability with which Dr. Cormack had edited the Journal: and he hoped that, in the remarks which he had made, no one would suppose that he had intended to disparage the labours of that gentleman. He had only thought it right to give his candid opinion upon the matters which had been considered that morning; and he had also, as President of the Council, thought it his duty to vindicate the strict accuracy of the Report of the Council. He had no wish to urge them not to pass the resolution; he thought it was a very proper resolution: but he thought that increased expenses must be well looked into. [Cheers.]

Mr. W. H. MICHAEL, having been called upon by the President, replied. He concurred with Sir Charles Hastings in thinking that the Journal expenses ought to be curtailed if it were possible; but he believed that economy in this department could not be in any degree promoted by cramping the editor, by withholding the necessary supplies. A small outlay was no test of economy; it might be the greatest possible extravagance. If the Journal is to be cheaply carried on, it must be so liberally nourished by the Association as to be able as at present to yield a large portion of the funds by which it is maintained. It seemed to him that Sir Charles Hastings was stating an entire fallacy when he said that the expense of the Journal was £2,690 a year. If a man spent £1,280 in six months, and £400 were returned to him out of that amount, it could not truly be said of him that he had lived at the rate of £2,560 a year. The fact was, the man would only have been living at the rate of £1,760 a year: and this was the position of the Journal; with this advantage, that for the future, certain heavy expenses, which had been necessarily incurred, would not be repeated.

Sir CHARLES HASTINGS must correct Mr. Michael. He (Mr. Michael) was building a financial statement upon monies not yet received, and upon measures of economy not yet accomplished. His financial statements were entirely visionary. The Journal income as given in the Council Report was all that could be relied on, inasmuch as it was all that had been received. The accounts of tradesmen could not be paid by visionary sums of money.

Mr. MICHAEL. Is it visionary to say that, as the duty on advertisements is repealed, we cannot have £63:11:6 in our accounts of the current half-year for advertisement duty?

Sir CHARLES HASTINGS. True: but we are sure to have some equivalent source of expense.

Mr. MICHAEL. Well: that is certainly visionary finance. [Laughter.] The Journal accounts as exhibited in the summary and in the weekly statements, seemed to Mr. Michael so clear, so circumstantial, and so satisfactory in all their details, as not to warrant the application of the term *visionary* to the simple deductions from them which he had submitted to the meeting. As there was no amendment before them, it would not be necessary to recapitulate his former remarks.

The PRESIDENT then put the resolution, which was carried unanimously.

REPORT OF THE MEDICAL REFORM COMMITTEE.

The following report was read by Mr. GEORGE HASTINGS, Secretary to the Committee.

MEMBERS OF THE COMMITTEE. Sir Charles Hastings, M.D., D.C.L.; A. Robertson, M.D.; G. Webster, M.D.; Mr. Nunnely, F.R.C.S.; Mr. Noble, F.R.C.S.; Mr. Bottomley, F.R.C.S.; Mr. Walsh, F.R.C.S.; Mr. Cartwright, M.R.C.S.; Mr. Southam, M.R.C.S.; Mr. Bree, M.R.C.S.; Mr. Stedman, M.R.C.S. Mr. G. Hastings, (Secretary.)

"Your Committee, in resigning the trust that was imposed on them at the annual meeting at Oxford in 1892, desire to bring fully before the Association the measures which they have taken to fulfil the duty assigned to them. Your Committee have held five general meetings of their whole body, besides those of the sub-committees which they have from time to time appointed; they have sent deputations to Government and to several medical corporate bodies, and have received reports from them; they have constantly communicated by letter with their secretary and each other; and they have given a deep and anxious consideration to the measure submitted to their care.

"They conceived that their first object should be to ascertain the opinions of the different medical corporate bodies in reference to the draft measure; and they accordingly empowered their secretary at their first meeting to communicate by letter with the Universities and Medical Colleges of Scotland and Ireland. With those of England, another and more direct mode of communication was adopted, as will be afterwards shown in this report. At the same time a sub-committee was formed, who were directed to go carefully through the draft Bill, and to report to your Committee any alterations that might appear advisable to be made. In accordance with suggestions made by these gentlemen, and after the most careful deliberation on the part of your Committee, it was resolved to make several emendations in the bill, of which the principal were, the omission of the clauses relating to the Provident Fund, and the introduction of a provision compelling the proposed medical council to publish annually a statement of their accounts. At the same meeting, which was held on the 5th of October, a resolution which had been passed by the council of the National Institute, relative to the bill, was read to your Committee. Anxious to ascertain as far as possible the opinions of the whole profession on the subject which engrossed their attention, your Committee sent some members of their body to confer with the above named council; but unfortunately the result of that interview was not as favourable as your Committee had hoped it might be.

"At the same time your Committee determined to send a deputation to the medical bodies of Scotland, with whom they had already corresponded without any decisive result. Accordingly, in the beginning of November, two members of our body proceeded to Edinburgh, and there had the honour of an interview with the representatives of the Royal Colleges of Physicians and Surgeons of Edinburgh, and of the Faculty of Physicians and Surgeons of Glasgow. The result of this interview was satisfactory in the highest degree; so much good feeling was exhibited by our Scotch brethren, and so much desire was felt on both sides to waive minor differences for the sake of the great object in view, that arrangements were made, and shortly afterwards ratified by your Committee, by which the cordial cooperation

ation of the Edinburgh Colleges was secured for the Bill of the Association. This result was obtained, as your Committee believe, by keeping steadily in view the principle with which they started; viz., that in all those parts of the measure which related to Scotland and Ireland, the wishes of the profession in those portions of the United Kingdom should be as far as possible deferred to. Your Committee were at the time under the impression that all the medical corporations of Scotland were united together in the cause of medical reform; but they have learned with regret that a misunderstanding has since arisen between the Colleges of Edinburgh and the Faculty of Glasgow, in reference to the constitution of the Examining Board. Your Committee can only express their hope that this difference may be speedily and amicably arranged. Your Committee are happy to be able to state that from the Royal College of Physicians of London they have received the utmost courtesy and attention. That ancient corporation have throughout the negotiations carried on with your Committee, evinced an anxious desire for the welfare of the profession, and have candidly stated any objections they entertained to the proposed measure. A statement of these objections was forwarded to our secretary by the Registrar of the College, and your Committee are happy to state that they were able to accede to all, or nearly all, the suggestions contained in this document. A deputation from our body had subsequently an interview with the authorities of the College, and your Committee believe that there is now no point of any importance on which any difference exists between the College and themselves; and they have the assurance of the Registrar that the Bill of the Association, in its amended form, would harmonize completely with the provisions of the intended new charter of the college, and would effect a greater amount of practical improvement, and produce a better chance of a permanent settlement, than any plan that has hitherto been proposed to the medical profession of the United Kingdom.

"Your Committee are sorry to be obliged to state that from the Royal College of Surgeons of England they have not received either the same assistance or the same candid objections. Indeed, at the two interviews which deputations from your Committee have had with the authorities of the College, some difficulty has been experienced in arriving at any knowledge as to what the objections of the Council of the College are, further than that they have a general objection to medical reform in any degree. Your Committee trust that such objections, so alien to the feelings of the profession in the present day, will shortly be laid aside, and that the Council of the College may see the wisdom of acting more in accordance with the opinions of their constituents. But, should this hope not be realised, your Committee feel assured that the voice of this powerful Association, backed by that of the great majority of the profession throughout the United Kingdom, cannot fail to make itself heard within the walls of Parliament against any opposition.

"Objections having been made to portions of the Bill by some members of the South-western Branch of this Association, your Committee were desirous to ascertain their precise sentiments on the subjects; and our secretary had accordingly an interview with the President of the Branch and some others of its members, at which their suggestions were reduced into three heads, and put into writing for the information of your Committee. With regard to two of these points, the objections urged are met by alterations that have been introduced into the measure; but as to the third, which was a proposition that a certain number of the proposed council should be provincial as opposed to metropolitan practitioners, your Committee felt unwilling to accede to it. It is no doubt most desirable that the provincial profession should be adequately represented in any body governing the profession, and a provision to facilitate the appointment of provincial practitioners by giving a mileage in addition to the fee for attendance at the meetings of the council, has been introduced into the Bill; but it appears inexpedient to fix the exact proportion which they should bear in the numbers of the council.

"Your Committee have received a communication from the South-eastern Branch of this Association, urging the importance of having upon the proposed council a certain number of members elected by the whole profession. Your Committee are fully alive to the importance of the representative principle being carried out as far as possible; and though they found on deliberation that there are many practical difficulties in the way of such a mode of election, they consider that this subject, which is one entirely of detail, may fairly be urged on the consideration of Parliament when the measure is introduced into that assembly.

"Your Committee having obtained, as before mentioned in this report, such powerful cooperation in their exertions, and feeling assured that the Bill they had prepared had received the support of the great majority of the profession, proceeded in March last to place the measure in the hands of Lord Palmerston, as Secretary of State for the Home Department, and to urge on his lordship the necessity of taking up, as a member of the Government, the subject of medical reform. Your Committee were accompanied on this occasion, by the Presidents of the Colleges of Physicians and Surgeons of Edinburgh, by many eminent members of the Association and the profession, and by about sixty members of Parliament. The deputation were most courteously received by his lordship, who expressed his determination to turn his attention as soon as possible to medical reform. On a subsequent occasion your Committee had the honour of an interview with the Earl of Aberdeen, as head of Her Majesty's Government, who also expressed himself as deeply impressed with the importance of the subject in reference both to the profession and the public. Your Committee are happy to be able to state with confidence that early in the ensuing session of Parliament a Bill to promote medical reform will be introduced by Lord Palmerston. Your Committee have, therefore, in a great measure fulfilled the trust imposed on them. They have succeeded in preparing a measure which commands an unparalleled amount of sympathy and support from the profession at large, and they have also succeeded in drawing the attention of Government to that measure, and in thus preparing the way for its being laid on the table of the House of Commons. Whether it will pass into law will chiefly depend on the exertions made on its behalf; and on this head your Committee are sanguine in their expectations. An association of metropolitan practitioners has been formed in London for the purpose of supporting the Bill, and has already rendered valuable aid. Nor do your Committee doubt that when the measure shall be brought before Parliament the strongest efforts will be made by the profession throughout the kingdom to obtain its enactment into law. Considering the influence which the profession can exert, and the parliamentary support which your Committee have already been able to obtain, there can be little question that the noble Secretary of State for the Home Department will find himself powerfully supported in his attempts to carry out the measure.

"Your Committee entertain a confident hope that the members of this Association will see the wisdom of waiving any minor differences as to details, as your Committee have themselves set the example of doing, and of joining heartily together for the good of the profession in obtaining a settlement of this long agitated question; and while they congratulate the Association on the progress that has been made in the great cause of medical reform, they urge upon the members not to relax their exertions until they have achieved the object of their hopes, and placed the interests of the profession upon a broad and durable basis.

CHARLES HASTINGS, *Chairman.*"

Mr. NORMAN proposed a resolution, signifying the confidence of the meeting in the intentions expressed by Lord Palmerston; and also proposing that the Committee should be reappointed.

He said that the Association, and indeed the profession at large, was deeply indebted to Sir C. Hastings and the other members of the Committee for the energy with which they had discharged the difficult duties which had been entrusted to them. They also owed many obligations to Mr. George Hastings, for the able draft bill which he had prepared. It was not to be supposed, and indeed it was not desired, that the bill in its present form should be adopted unchanged by the legislature. The Association was pledged to great general principles, but not to details. A measure satisfactory to the profession and beneficial to the public could not now be much longer delayed; and if the public could only be made to understand how much their interests were at stake in the just settlement of this question, he believed that the House of Commons would be obliged to proceed with medical reform upon just and liberal principles. The suppression of the infamous practices of certain unqualified practitioners would be an obvious benefit to the public.

Mr. SODEN seconded the resolution.

Dr. BLACK, of Bolton, concurred in the resolution. He did not, however, believe that acts of parliament could crush empiricism, or protect the public from illegal practitioners. Large sections of the public would go on as now, patronising all kinds of quacks as their own appointed medical advisers; and when

one medical delusion was dispelled, another would always be ready as heretofore to succeed it.

Dr. DAY complained that the Committee had only conferred with three Scottish licensing bodies, the College of Physicians of Edinburgh, the College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow.

Mr. G. HASTINGS said that the bill had been sent to the secretaries of all the Scottish Universities and Colleges in common with those of England and Ireland.

Dr. DAY was not opposed to the general principles upon which the Association had been endeavouring to settle the question of medical reform; but notwithstanding what the secretary had stated, he must say that the University of St. Andrew's had not been consulted during the progress of recent negotiations; and he knew that Aberdeen had been in like manner neglected. In arranging the details, it was essential to success that all the licensing bodies should be consulted.

Mr. PAGET, of Leicester, differed from Dr. Black as to the probable effects of a good bill in restraining illegal practice. He thought that the College of Physicians ought not to get their charter before the general profession obtained a measure of reform and protection. The charter might be of such a nature as to interfere with such a reform measure as would be acceptable; and both ought therefore to pass through Parliament simultaneously.

SIR CHARLES HASTINGS explained that the College of Physicians, far from opposing the Association, were friendly to them. At the same time, he might inform Mr. Paget that it had been determined by Lord Palmerston that the College of Physicians was not to have its charter this session.

Mr. PAGET: I am glad to hear it.

The PRESIDENT then put the resolution; and declared that it had been carried unanimously.

EXPENSES OF THE MEDICAL REFORM COMMITTEE.

Some conversation arose as to the way in which the expenses of the Committee were to be defrayed. It was ultimately decided, upon the suggestion of Sir C. Hastings, that as the Association had voted £200 last year to the Medical Reform Committee, they could not, with their present financial responsibilities, grant an additional sum this year; but that a sufficient sum might be secured for the use of the Committee by opening subscription lists. This was done in the course of the afternoon, when a considerable amount was obtained.

In an early number we shall report the conditions and the result of the subscriptions. At present, we are not able to communicate exact information on these points.

[The meeting adjourned a few minutes after one, and re-assembled at two o'clock.]

EIGHTEENTH ANNUAL REPORT OF THE MEDICAL BENEVOLENT FUND, BEING FOR THE YEAR 1852-3.

Mr. NEWMAN, Treasurer and Secretary to the Fund, read the following report:

"The Committee of the Medical Benevolent Fund, in rendering the annual account of their proceedings, desire to record their thankfulness for the measure of prosperity which has attended their labours.

"The year has been one of unexampled trial and difficulty; their loss in the number of their original subscribers has been *great*; the misapprehension of their object has been *great*; and yet, in consequence of the accession of new subscribers, the entire amount of that income has not been lessened, and they have been enabled to relieve the urgent cases of distress brought before them, not, indeed, according to their wishes, but still with a degree of efficiency which has proved the cup of cold water to the fainting soul,—the morsel of bread to the famishing; and thus, in many instances, has been that seasonable boon, which has saved the wretched brother from starving, and has rescued the widow and the orphan from the miseries of the Union-house, and the total destitution of pauperism.

"Your Committee have witnessed, without feelings of rivalry, the success of a newly formed institution; and they have even rejoiced in that success, which has greatly arisen, no doubt, from its offers of a patronage which you could not hold out, and while the only motive which you could offer to your subscribers is the pure luxury of doing good for its own sake.

"With every kind wish for the success of the Benevolent College, your Committee are anxious to place before you the essential difference of the two institutions; and they are desirous that you should bear in mind the fact, that the College cannot relieve the cases which are continually presented to your notice; that the instances of casual destitution in professional life are

utterly beyond their province; that they are therefore frequently sending cases to you for relief which they cannot aid; that the real misery of the profession is left untouched by their arrangements; and that if their success should be as complete as their best friends hope, the necessity for your institution is not superseded—but that under the most favourable circumstances, there must remain a mass of misery which is *unrelieved* and *unrelievable*, except by a purely charitable institution such as the Benevolent Fund, which stretches out its hand to palliate distress, asking for nothing again—asking for no pecuniary resources in order to present a title to relief—asking for no peculiar claims except the established fact of the existence of misery and destitution among the regularly educated members of the profession, and that they should be persons of unblemished moral character.

"Your Committee therefore regret that many of their subscribers should have withdrawn their aid, because they had contributed to the Benevolent College; they regret that many others should have not subscribed, because they intended to support the Benevolent College; and they are particularly anxious to impress upon you the fact, that the Benevolent College is *unable* to relieve the cases which come under your notice; and that, in the most favourable circumstances, it is utterly impossible for the College to supersede the necessity for your fund, which becomes every year more apparent, and which they conscientiously believe a few years will demonstrate. Hence, they earnestly implore their subscribers to strengthen their hands, to renew their subscriptions, to increase their efforts, to augment their annual sums, and to enlist the feelings of their own hearts and their friends in their support.

"It is much to be regretted that a considerable number of old friends should have been thus alienated; but it is equally a subject for rejoicing that a large accession of new subscribers has been obtained, so that notwithstanding every difficulty the ultimate amount of your income has not been lessened. The amount of subscriptions for the year ending June 30th, has been £891:3:0, against a sum of £655:8:7 in the previous year, exhibiting an increase of £234:14:5 on this item, and leaving a balance due to the treasurer of £22:2:6.

"Your Committee beg to direct your especial attention to the economy with which your institution has been conducted, and they challenge a comparison with any other similar charitable society, in which so great an amount of real good has been effected at so small a cost; thus showing that almost the entire sum collected by subscriptions has been devoted to the exclusive relief of suffering humanity.

"The number of cases aided has been seventy, at a cost of £654, or about £22 less than the last year. The cause which will explain this difference is, that the amount of subscriptions has been somewhat smaller, and the number of your applicants somewhat larger. This result has been brought about, not by the diminished urgency of the cases relieved, but by the inadequacy of your funds. Your Committee are particularly anxious to impress upon you this fact, as well as that during the whole year they have been indebted for the payment of their grants to the advances of their treasurer; and they would remind you, that this state of things ought *not* to be, and cannot be expected to continue. They therefore exhort all their subscribers to remove this stain from your institution by increased energy and promptitude, and increasing self-sacrifice, and so to place your fund upon a pedestal of security, which will save it from being dependent upon the means, or the will, of a generous treasurer.

"It is, however, gratifying to record the increasing number of subscribers, to fill up the above mentioned vacancies; and they earnestly request the renewal of subscriptions, while they exhort their old subscribers to obtain fresh supplies from their friends and connexions, in order to relieve a distress which no other institution can effect; and thus to place your own fund upon a pinnacle of security, which neither the waves of adversity, nor the winds of changing circumstances, can impair.

"It is a fact, that for a few years your institution will yet require peculiar care and attention; but under its present auspices, if permitted to retain them, it is confidently hoped that in that period its efficiency will be proved, and that it will be shown to be the only society which can relieve its own department of casual professional distress.

"With these hopes, your Committee take leave of this part of their Report, imploring that you will enable them to realise their anticipations, and to establish your fund upon a rock which will not require the same amount of anxious care and unremitting solicitude that now bear upon their movements."

"By a reference to the cash account, you will find that your

trustees have invested a further sum of £229:19:6 in the purchase of Bank Stock; leaving a balance from the Donation Fund of £9:6:6 in the hands of your treasurer. This sum is not available for the relief of present distress, and the amount due to your treasurer from the Subscription Fund is £22:2:0, or about £18 more than at the commencement of the last year.

"The number of your annuitants has been increased in proportion to the increase of your annual income—the number is now seven; and your Committee rejoice to inform you that a legacy of £500 has been left to your fund by the late Mr. Terrett, of Tewkesbury, to be paid upon the death of his surviving sister. They have also been informed that another legacy of £300 has been left them by a gentleman now eighty years of age; and they hold out these examples to the imitation of their friends and supporters, reminding them that such legacies wholly go to the increase of their annuitants—a form of relief which as it is given to individuals to be enjoyed at home, in the domestic circle, and when once granted is inalienable, possesses peculiar claims to attention.

"At this part of their Report, the Committee beg to call your attention to the munificent gift of Mr. Bailey, of Chippenham, who has presented to your institution, and to individuals relieved from its funds, six houses, beautifully situated in that agreeable neighbourhood, abounding with every suitable convenience, and with the studied design of delicately considering the wounded feelings of the unfortunate of our profession.

"Mr. Bailey has also given to the trustees of the aforesaid cottages £500 in perpetuity, the income of which may be expended upon the necessary repairs of the said houses; and your Committee, while they feel quite unable to express their gratitude for these gifts, earnestly pray that the generous donor may be long spared to witness the success of his benevolent plans; and they hope to carry out all his views, with a religious attention to the wishes of their founder.

"Your Committee mournfully record the loss by death of one of their associates (Dr. Stilwell) during the year. He was present at one Committee, but before the next, had passed away from among their number. They would be stimulated by this fact, and by that other fact, "that they are all hastening to that country from whose bourn no traveller returns", to work while it is day, for the night cometh when no man can work; and they would urge this consideration upon all their subscribers and friends as a powerful motive to increase their subscriptions, and to augment their efforts in this cause of sacred misery. Death, too, has invaded in many instances the circle of their supporters; and in other cases the *res angusta domi*, a moral death, has abstracted much from your resources; to say nothing of that apathy which in some instances has deprived man of all his powers and privileges. Such considerations should induce all to exert a greater degree of providence, and a larger amount of self-denial, in order that, though circumstances may be strentened, the hand of charity, that bond of perfectness, may not be contracted.

"Your Committee refer to the following list of persons relieved during the year, and to the general sketch of appended cases, as to proofs of the energy and success with which your institution has been conducted, as well as to its indispensable necessity and importance:—

Physicians	-	-	-	-	-	5
Surgeons	-	-	-	-	-	20
Apothecaries	-	-	-	-	-	2
Wives or Widows of Physicians	-	-	-	-	-	2
Wives or Widows or Surgeons	-	-	-	-	-	19
Daughters of Physicians	-	-	-	-	-	2
Daughters of Surgeons	-	-	-	-	-	4
Families of the above, containing individuals numbering	-	-	-	-	-	283
Total	-	-	-	-	-	337

"It will be advisable in the course of next spring to hold the second biennial dinner of the Benevolent Fund, trusting thereby to augment the resources destined to granting annuities.

"During the past year, the conductors of the extinct British Medical Fund have transmitted a moiety of the balance left in their hands, viz., £11:14:0, which has of course been added to the Donation Fund.

"Several annuitants have died this year, but their places have been supplied by others; and your income during the year for this purpose, which is never exceeded, has been £110, whilst the amount invested in Bank Stock is now £1,600, which at the present quotations will produce £3680:6:0.

"The Committee have not been able to entertain the proposi-

tion of grafting a Sickness Relief Fund upon your institution, but they will zealously bestow their attention upon every legitimate proposition for diminishing the wants, or alleviating the sorrows of their unfortunate brethren.

"The number of cases aided during the year by casual grants or by annuities has been seventy-three, a proof that the wants of the profession have not diminished; and that your income has not been adequate to their relief. O suffer not this stain to be imprinted upon the pages of a future Report, but let it be clean washed away by the tear of pity, enlightened by the gilded ray of active benevolence.

"The amount of donations during the year has of course been less than in the preceding year, when the public dinner contributed so materially to your revenue; but it has been about the same as in the penultimate year, and the Committee hope for a large increase of this source of income during the next year, somewhat commensurate with their requirements, and with the extent of the evil they are called upon to relieve.

"To the renewed exertions of their lady friends, and the continued kindness of the medical press, to the uniform indulgence of their bankers, and to the unvaried kindness of their colleague, Mr. Churchill, in granting his rooms for the purposes of the Committee, as well as for the valuable services of their auditors, your Committee beg to express their deeply felt gratitude, as well as their request that they would continue their kind offices.

"And in conclusion, while entreating your support for the ensuing year, they would trustfully devote their aspirations of prayer and praise to Almighty God, that it would graciously please Him, the giver of all good, so to dispose the hearts of all towards your institution, that the abundance of their deep poverty may rejoice in the riches of your liberality.

"WILLIAM NEWNHAM, Chairman."

London, July 12th, 1853.

[We do not subjoin the list of cases relieved, as this would only be repeating our monthly reports of the proceedings of the committee who manage the Fund. EDITOR.]

Dr. CONOLLY, after passing a glowing eulogium on Mr. Newnham, moved the following resolution:

"That the Report now read be received and adopted; and that the cordial and heartfelt thanks of the Association are eminently due, and are hereby given, to Mr. Newnham, for his great and unwearied exertions in promoting the interests and increasing the amount of the Benevolent Fund; that he be requested to continue his valuable services as Honorary Treasurer and Secretary: and that the Committee be reappointed.

Dr. TUKE, of Chiswick, seconded the resolution.

THE PRESIDENT put the resolution, which was unanimously adopted.

Mr. NEWNHAM, in returning thanks to the meeting for the resolution, expressed his desire to devote to the Benevolent Fund the few and feeble years which might yet be granted to him by Providence. The Medical Benevolent College was not a rival institution: each had its own sphere of action; and he could not but regret deeply that any one should feel himself justified in discontinuing to subscribe to the Fund, because he had become a contributor to the College. The indispensable character of the Fund was evident from a single fact: viz. that of the seventy-three cases relieved by it during the past year, only one individual could have come within the scope of the College charity, supposing that that institution had been in operation. The College, he knew, had peculiar attractions to subscribers: it promised them patronage and education for their children; whereas the Fund offered no inducement to subscribe, except the luxury of doing good. He thought that the Fund Committee could not possibly avoid stating why they had lost subscribers. It was wrong that they should have lost them; but it was a fact; and a fact, moreover, which ought to be stated, and also explained. It grieved him (Mr. Newnham) very much to reflect upon the small number of members of the Association who had hitherto come forward as annual subscribers, or as donors to the Fund. Surely there was no member of the Association so poor as not to be able to contribute one guinea a year. It was not charity to give from our superfluities: true charity was given from the fruits of self-denial; and he was sure that, by the exercise of a little of this virtue, every one, or almost every one, might come forgard with his offering of a guinea. It was not creditable to the Association that its Benevolent Fund should be so inadequately supported.

Dr. CORMACK was inclined to differ materially from Mr. Newnham, as to the extent of the pecuniary ability of members to contribute. The total income of many members did not con-

sist of a very great number of guineas; and, when it was recollected that household and other expenses ought to have priority of payment over charitable donations, he (Dr. Cormack) was certain that a large deduction would have to be made from the number of members who could, or who ought, to subscribe a guinea annually to the Benevolent Fund. If members and their friends were invited to subscribe in sums varying from half a crown to a guinea and upwards, a larger sum would be realised than at present; as many now gave nothing, simply because they could not give a guinea. Small, as well as large donations ought, therefore, to be encouraged. Small amounts, in the aggregate, soon swell into a considerable total: and, by cultivating the humbler class of contributors, the benevolence of a much more extensive class of the community was enlisted, than could possibly be obtained in any other way. The chief weakness of the Fund lay, he (Dr. Cormack) thought, in a cause to which Mr. Newnham had not adverted, viz. the great error which had been committed of establishing a Committee, all the members of which, save one, resided in London. A centre of affairs was of course required: and London was the best centre, as it was the most accessible town in the kingdom. It had therefore been very naturally chosen; but the London trunk could not flourish and bear fruit unless the roots struck deeply down into the country, and unless it had auxiliary branches in every town. He was sure that if the Benevolent Fund had (like the Benevolent College) local secretaries and local committees, the annual subscriptions and donations would soon be more than quadrupled. The existing committee might carry out such a plan: and by enlisting the aid of the councils of the district branches of the Association, the basis of an effective machinery could soon be formed. He (Dr. Cormack) had ventured to make these suggestions to Mr. Newnham some time ago, and he was glad to think that they had been favourably received by that gentleman. The Benevolent Fund, like other departments of the Association, required a more representative organization to develop its vast latent power.

DR. OGLE, THE EX-PRESIDENT.

Sir CHARLES HASTINGS said, that those who had participated in the enjoyments of the meeting at Oxford last year, must be ready to concur in the propriety of the resolution which he was about to propose. They looked back with warm and grateful feelings to the splendid and hospitable reception which they had met with at Oxford: and they all felt how much they had been indebted to Dr. Ogle for his conduct during the year as their president. He therefore moved "That the thanks of the meeting be given to Dr. Ogle for his conduct as president during the past year, and that he be elected a Vice-President of the Association." [Cheers.]

Dr. CONOLLY seconded the motion, which was carried by acclamation.

Dr. OGLE, the vote having been announced to him by the Chairman, returned thanks. In doing so, he said that he could not but deplore his own deficiencies. [Cries of No, no.] He suffered from the infirmity of deafness, and he had thus been unable at all times to regulate the proceedings as he ought. He was grateful to those gentlemen who had yielded in the dispute as to the validity of the Journal decision; because, although he had explicitly stated his opinion, the question might easily have been made the source of protracted disagreeable feeling. Then, there was a passage in Mr. Hester's address, which, if he had heard when it was read, he would have noticed as out of place, and objectionable. It was not right, in his opinion, to make indirect attacks in the course of an address of an official character. If there is a charge against a man, let it be brought forward stripped of all ambiguities, and as an independent accusation. The accused is thus at once put fairly on his defence. He made this remark quite irrespective of the merits or demerits, the truth or the error of the charges contained in the passage of the Transactions to which he had alluded. He only meant to say that he regretted that, in his capacity of president of the meeting, he had not heard and objected to the passage, when it was read, as being out of place. As the subject was to be brought formally before the meeting, he would read a letter which he had received from Mr. Hester.

MR. SYME AND MR. HESTER.

Sir CHARLES HASTINGS, in reference to the remarks of Dr. Ogle, said, that Mr. Syme had become a member of the Association in January; and had very soon afterwards resigned in consequence of a passage contained in Mr. Hester's Address in Surgery, delivered last year at Oxford, and published in the recently issued volume of Transactions. Mr. Syme was no longer a member of the Association; but the subject had been brought before the Worcester Council by a gentle-

man eminent in his profession and an old member of the Association; he referred to Dr. Simpson, Mr. Syme's colleague. He was sorry to say that Dr. Simpson's letters were written in a very angry spirit. He had explained to Dr. Simpson that the question was one in which the Worcester Council could not interfere in their official capacity, as they had no right to sit in judgment upon an address for which the author had received the thanks of an anniversary meeting, and which, by the same meeting, had been ordered to be printed in the *Transactions*. He, in common with everybody else, regretted that such a passage had been published under the sanction of the Association; but he equally regretted that, in place of allowing time for friendly negotiation, Mr. Syme had, on perusing it, tendered his resignation so hastily, and so passionately, as to throw difficulties in the way. The Worcester Council could not interfere; and it was now his duty, as President of the General Council, to bring the subject before this meeting; and he hoped that it would be dealt with in such a way as would satisfy their friends in Edinburgh that the Association did not hold itself responsible for everything which appeared in an address ordered to be printed upon the ground of general merit.

Dr. OGLE was not going to enter into the details of this unpleasant dispute. When on the platform of the station at Oxford, about to start for Swansea, Mr. Hester had placed a long letter in his hands upon this subject, in which he expressed his regret at being unable to attend the meeting, and in which he likewise, in very proper terms, placed himself entirely in the hands of his fellow associates. [Dr. Ogle read the letter, which was a very long one. The object of Mr. Hester was to show that it was from a sense of public duty, and not from the slightest personal feeling, that he had condemned eminent surgeons resorting to courts of law to settle their squabbles.]

Some conversation took place among members, chiefly as to whether the subject was one which could be entertained by the meeting.

Dr. CORMACK then rose, and said that he agreed with everything which Sir Charles Hastings had said. It would be a most dangerous course for the Association to adopt every sentiment of every paper which was printed by its authority. This was not done by the Royal Society, or by the Royal Medical and Chirurgical Society; and why should it be done by the Association? As some had said—without any reasonable grounds, he admitted—that the Association had formally censured Mr. Syme, Mr. Lizars, and the whole profession in Edinburgh, by sanctioning Mr. Hester's address, it seemed expedient to pass such a resolution as would effectually silence such a statement, and prevent the possibility of the recurrence of any similar case. Mr. Hester was mistaken when he spoke of two "leading surgeons having appealed to a court of law upon a question of truth"; for Mr. Syme had simply been the successful defender in an action for libel, and the alleged libel was actually a defence from an attack by Mr. Lizars. He (Dr. Cormack) was sure that Mr. Hester, or any gentleman, having had this pointed out to him in a conciliatory manner, would have withdrawn the erroneous statement; but he believed that Mr. Syme's letter of resignation was the first intimation which Mr. Hester received of Mr. Syme's displeasure. This abrupt conduct on the part of Mr. Syme was not calculated to obtain for him their sympathy; but, nevertheless, it must not be allowed to operate in such a way as to prevent the Association from doing an act of justice to itself by passing such a resolution as he was about to propose. Before doing so, he would read the passage in Mr. Hester's address which had called forth this discussion:

"If we cast our eyes beyond the Tweed, we see the melancholy exhibition of a city, celebrated through long ages as the birthplace of genius, torn by two rival factions, and a petty squabble about the perineal section. It is not in these days a question whether the operation originated with Dessault or Syme, nor whether it be adapted for the cases in which it has been recommended. The ultimate condition of the patient is lost sight of in fierce animosity and personal invective; and the two leading surgeons have appealed to a court of law upon a question of truth. *Proh pudor!* It were vain to expect them to issue from the contest humbler, better, and wiser men. But should their repentance be ever so great, it will never efface the scandal such proceedings bring upon the profession."

The following resolution was then proposed by Dr. CORMACK, who stated that it was one which had, on the motion of Mr. Norman of Bath and after considerable discussion, been unanimously adopted by the Council on the previous evening as a suitable one to submit to the general meeting.

"That this Association regrets that there should be any misunderstanding between Mr. Syme and Mr. Hester relative to

the retrospective address on surgery; but that this misunderstanding is a subject in which the Association cannot interfere, inasmuch as it does not hold itself responsible for all the sentiments expressed in the papers which may be published in the *Transactions* of the Association, or recommended for publication on account of their general merits."

Dr. HENRY seconded the resolution.

Dr. SIBSON rose to offer an amendment, because he felt that the resolution proposed might be considered as a censure upon Mr. Hester; and he was not prepared to concur in any resolution which admitted of such a construction. He said this without at all giving an opinion upon the passage which Dr. Cormack had read; and most fully agreeing with that gentleman (Dr. Cormack) in thinking that the Association was not responsible for all the sentiments expressed in papers published under its authority. The letter to which he referred was not worthy of a man who occupied so high and so influential a position in the profession as Mr. Syme; and it had been very properly refused a place in the *Medical Gazette*. He (Dr. Sibson) could not give his vote in favour of any motion the tendency of which was to exonerate Mr. Syme and to blame Mr. Hester. Mr. Hester had placed himself in the hands of the meeting; but that was no reason why they should respond to Dr. Simpson's appeal by censuring Mr. Hester. He thought that the resolution ought to be expressed in the most general terms which could be found. He therefore proposed this amendment.

"That the Association regrets that there should be any misunderstanding between Mr. Syme and Mr. Hester; but that the Association does not hold itself responsible for the sentiments expressed in the papers which may be published in the *Transactions*, and recommended for publication on account of their general merits."

Dr. CORMACK: I see no difference between the amendment and the resolution.

Dr. SIBSON: Then will you withdraw the resolution in favour of the amendment?

Dr. CORMACK: No; because the resolution has already been unanimously adopted by the General Council.

Mr. HANSARD, of Oxford, as the friend and colleague of Mr. Hester, had no objection to the original motion. To express regret at a misunderstanding was not to fix an opprobrium upon the parties; he could not see how Dr. Sibson regarded the expression of regret as a censure upon Mr. Hester and not upon Mr. Syme. Both were spoken of in the same phrase; and neither was censured by it.

Dr. OGLE regretted the language which Mr. Hester had used; and Mr. Hester regretted that he had used it, as it had occasioned annoyance to others. He (Mr. Hester) had not withdrawn it, merely because he had received no information to lead him to doubt the correctness of his statements. Dr. Ogle did not perceive any censure upon Mr. Hester or Mr. Syme either in the motion or in the amendment.

Dr. RADFORD, of Manchester, concurred with Dr. Sibson, and seconded the amendment.

A desultory conversation ensued, in which some thought that there was a difference between the original motion and the amendment, and others maintained an opposite opinion.

Dr. CORMACK, in reply, said that he would not withdraw the resolution in favour of the amendment, because he did not see its superiority, and observed only a trifling difference in its phraseology.

The PRESIDENT then put the amendment, which was carried by 29 against 18. The original motion was then put, and lost; the numbers being the same as in the previous division. Sir C. Hastings, Dr. Ogle, Mr. Hansard, and others, did not vote.

ADDRESS IN SURGERY.

The Address in Surgery was read by AUGUSTIN PRICHARD, Esq., of Bristol.

Mr. NORMAN moved—

"That the cordial thanks of this meeting be given to Augustin Prichard, Esq., for his able and interesting address; and that he be requested to allow the same to be printed."

Mr. PAGET, of Leicester, seconded the resolution.

The PRESIDENT put the resolution, which was carried unanimously.

THANKS TO COUNCIL: REAPPOINTMENT WITH NEW MEMBERS.

It was moved by E. Y. STEELE, Esq., of Abergavenny:—

"That the thanks of the meeting be given to the Council of the Association, for their services during the past year; and that they be requested to continue the same, with the following additional members:

"Augustus Eves, M.D. (Cheltenham); Edward Ingram, Esq. (Boston, Lincolnshire); David Everett, Esq. (Worcester); R. H. McKeand, Esq. (Manchester); Thomas Mellor, Esq. (Manchester); John Robertson, Esq. (Manchester); William Smith, Esq. (Manchester); Sir James Lomax Bardsley, M.D. (Manchester); M. Eason Wilkinson, M.D. (Manchester); James Whitehead, M.D. (Manchester); Edmund Lyon, M.D. (Manchester); William Rowland, Esq. (Swansea)."

Dr. NICOL, of Swansea, seconded the resolution, which was carried unanimously.

REPORT OF AUDITORS.

The Auditors, Drs. TUNSTALL and LINGEN, reported that they had examined the accounts of the Association, and compared them with the vouchers, and that they found them perfectly satisfactory.

CONVERSAZIONE IN THE NATIONAL SCHOOL ROOMS.

In accordance with previous announcement, the President and members of the Monmouthshire and South Wales Branch, and the Local Committee, received the members of the Association, and many gentlemen of the town and neighbourhood, in the National School Rooms, at eight p.m. There was a large attendance, resembling very much the memorable meeting of the British Association at Swansea in 1848. In addition to the various members of the medical profession, we observed—J. J. Strick, Esq., Mayor of Swansea; J. H. Vivian, Esq., M.P.; Graham Vivian, Esq.; Admiral Warde; P. St. Leger Grenfell, Esq.; T. Edw. Thomas, Esq.; M. Moggridge, Esq.; J. Biddulph, Esq.; Rev. E. B. Squire, Vicar of Swansea; Rev. S. Davies (Rural Dean); Rev. T. S. Hughes; Rev. W. Thomas; Dr. Noon; Rev. Thomas Thomas, Pontypool College; W. Chambers, Llanelly House, Esq., etc. etc.

The appearance of the room excited general admiration. It was brilliantly lighted with gas, and most beautifully fitted up, under the superintendence of Mr. W. H. Michael, the District Secretary of the Association, on whom too much praise cannot be bestowed, for the taste and judgment displayed in the selection and arrangement of the products of the Welsh mountains, the *chefs d'œuvre* of native artists, and the floral beauties of the neighbouring gardens. The walls were hung with

"Pictures for the eye",

whilst the various tables were plentifully covered with

— "Exquisite and costly things,
Each sense to gratify."

The pictures, we understand, were procured and arranged by Mr. W. Palmer, of Wind-street, to whom much credit is due. A most agreeable and refreshing effect was produced by two water fountains (fitted up by Mr. Arnold, of Temple-street, Swansea) near the centre of the room, which played in the midst of rock work and water plants.

Many of the tables were highly interesting: that appropriated to the Ystalyfera Iron Works was especially so, from its containing very fine specimens, showing the results of the various processes in the manufacture of iron. The fourth of a plate of fine silver from the Landore New Silver Works, was an object of great attraction. It weighed about 150 lbs., and is estimated as being worth about £800. Mr. Michael Williams's Ynismudw Pottery ware, terra cotta wine coolers, and exterior architectural decorations, were very fine specimens, and were minutely inspected.

Mr. Hennessey, of Wind-street, Swansea, lent for the occasion some of his new "Model Barometers", exhibited to show at what a low price a highly efficient instrument may be supplied. He also exhibited the sympeirometer, which is much used at sea, from being more sensitive than the mercurial barometer: it is equally applicable for land purposes. Mr. H. likewise sent in his fine model of the "Koh-i-Noor" diamond, made from the stone known as the Cornish diamond, sometimes found in the copper mines of Cornwall. Specimens of malachite, both in the rough as well as cut and polished, ready for the jeweller's mounting, were shown. These elegant articles of jewellery attracted the attention of many; especially as they have a sort of local interest attached to them, being manufactured from the malachite imported from the Burra Burra mines of Australia, to be smelted at the extensive works in the neighbourhood of Swansea. This completed Mr. Hennessey's collection.

Mr. Gale, of Wind-street, Swansea, contributed some of his useful articles, showing the practical and varied uses to which gutta percha can be applied in the present day.

There was a large assortment of medical and surgical instruments, microscopes, etc. Mr. Weiss, of London, lent for the occasion a very interesting collection of instruments.

The staple manufactures of the neighbourhood were illustrated by many beautiful series of specimens. The manufactures of

copper, iron, tin, and silver, were represented by complete series, from the rude ore to the refined metal, variously suited for different purposes. There were specimens of all the kinds of coal, and the fossils of the coal formation of South Wales. The pottery manufactures were illustrated in a direct line from the raw clay to the most ornamental designs in delf and crockery ware; with specimens of porous ware, for useful and ornamental purposes, from the clay found in the coal strata; also, pipe-tiles, crests, pillars, fire bricks, and a variety of articles demonstrating a very important manufacture of the district. We likewise observed fine selections of all the minerals either found or used in the neighbourhood, and all the chemicals manufactured. Most interesting specimens were shewn of all the various descriptions of rails used on every road in the world; as well as iron in every variety, from its ornamental use to its forming a book no thicker than ordinary paper.

The plants and flowers, with which the rooms were decorated, comprised some of the rarest and most beautiful of the vegetable treasures of the tropics—the palm, the coffee plant, the chocolate plant, ornamental flowers, etc.

The company separated about eleven o'clock, highly delighted with the hospitality of their reception, and the greatness of the intellectual treat which had been prepared for them.

[Our report of the conversazione is nearly a reprint from *The Cambrian*, a Swansea newspaper.]

THURSDAY.

At half-past eight o'clock there was a public breakfast at the "Mackworth Arms", which was attended by about one hundred and fifty gentlemen. The President presided. He announced that the beautiful grounds of Singleton Abbey, as well as the various manufactories of the neighbourhood, were, by the kind permission of their respective proprietors, open for the inspection of the members of the Association. Many availed themselves of these opportunities. The provincial physicians occupied the time between the breakfast and the assembling of the Association at twelve o'clock, by attending a meeting, which we have reported in another page.

ADDRESS IN MEDICINE. BY DR. C. RADCLYFFE HALL.

The Address in Medicine was delivered by Dr. C. RADCLYFFE HALL, of Torquay. The subject was, "Nature's Modes of Arresting Tubercular Disease of the Lungs". [We regret that from the great extent, as well as the abstruse nature of this talented discourse, we cannot at present give an account of it without doing injustice to the author.]

Dr. TUNSTALL had sincere delight in moving—

"That the hearty and best thanks of this meeting be given to Dr. Charles Radclyffe Hall for his instructive and talented address; and that he be requested to allow the same to be printed."

Dr. THOMAS WILLIAMS, of Swansea, seconded the resolution; and in doing so, complimented the author upon having given a clear exposition of one of the most abstruse questions in medicine.

The PRESIDENT put the resolution; which was unanimously carried amid much applause.

MEETING NEXT YEAR AT MANCHESTER.

SIR CHARLES HASTINGS said that it was well known that there was a strong and a general feeling in favour of the next anniversary of the Association being held at Manchester. It was not necessary that he should remind the meeting of the many and the extraordinary circumstances which combined to give power and distinction to Manchester. It was the capital of one of the most important sections of the kingdom; and from all points the access to it was easy. Having received an influential requisition from the profession in Manchester to hold the next anniversary in that town, he thought that the Association ought to do so. (Cheers.) He would, however, be wanting in courtesy to the profession in Harrogate, if he did not state that they had likewise forwarded a requisition of the same kind as that which had been received from Manchester. It was most numerously and influentially signed; and in the absence of the Manchester requisition, would have been complied with. In all the circumstances, however, he was sure that their friends in Harrogate would not feel that there was any discourtesy in his proposing

"That the anniversary meeting for 1854 be held at Manchester; and that W. J. Wilson, Esq., be appointed President-elect." [Cheers.]

Mr. SODEN said that seventeen years ago the Association had held a most successful and agreeable anniversary at Man-

chester. He had therefore much pleasure in seconding the resolution.

The PRESIDENT put the resolution; which was carried unanimously.

ADDRESSES IN MEDICINE AND MIDWIFERY FOR NEXT YEAR.

Mr. NORMAN said that it had been usual to appoint gentlemen to deliver addresses in medicine and surgery at their annual meetings; but hitherto the important subject of midwifery had been neglected. It was now thought that, for next year, the address in surgery ought to give place to an address in midwifery. (Hear, hear.) He therefore proposed

"That Dr. Radford, of Manchester, be appointed to deliver an address in midwifery at the anniversary meeting of the Association in 1854."

The PRESIDENT put the motion; which was carried unanimously.

Dr. RADFORD highly appreciated the compliment which had been paid to him; but he also realised the difficulties of the proposed duty. He would, however, undertake it, by selecting some important and interesting subject in midwifery, and doing his best with it.

Dr. COWAN moved

"That Dr. Conolly be appointed to deliver the address in medicine at the anniversary meeting of the Association in 1854."

Dr. SIBSON seconded this resolution.

The PRESIDENT put the motion; which was carried unanimously.

Dr. CONOLLY feared that for the last fifteen years he had not kept up with all the departments of medicine; and that in fact he had become a man of one idea—or at least a man who was occupied with one pursuit in medical science. As, however, the example had been so ably set by Dr. Hall, of selecting a single subject for discussion, he was less reluctant to accept the duty of giving the address at the next anniversary. If he listened only to the voice of prudence, he ought, as he well knew, to beg to be excused. Manchester was, however, connected with his early attachment to the Association, to which he had through many years entertained a most faithful affection—an affection which could only end with his days. Under these circumstances, he was unwilling to decline the proposed honour. (Cheers.)

CLIMATE AND VITAL STATISTICS OF BATH. BY DR. TUNSTALL.

Dr. Tunstall, from the want of time, was only able to give a sketch of an able and elaborate work on this subject.

ORDER OF PROCEEDINGS.

Dr. WILLIAMS having been called on by the President, Dr. CORMACK requested permission to ask a question.

SIR CHARLES HASTINGS: Dr. Williams has now the right to be heard. To stop the proceedings in this way is most inconvenient. It is most important that the remaining business be got on with as rapidly as possible. I am very sorry to call Dr. Cormack to order; but I am sure he will see that I am right.

Dr. CORMACK: I can ask my question in a sentence; and the President can answer it by a monosyllable. I ask: Is Mr. Michael's motion on Medical Ethics to be discussed to-day?

Dr. MORRIS, of Chepstow: I was about to have asked the same question.

Mr. W. H. MICHAEL: I am here at great personal inconvenience; and it is—

SIR CHARLES HASTINGS: I knew how it would be. If the order of the programme be not adhered to, all our time will be consumed in doing nothing.

The PRESIDENT: Dr. Williams, you had better proceed.

ORIGIN, TRANSFORMATIONS, AND DECLINE OF THE FLOATING CELLS OF THE BLOOD. BY THOMAS WILLIAMS, M.D.

Dr. WILLIAMS illustrated his subject by many instructive diagrams. As a brief abstract would be of little use, we must postpone our account of this valuable paper.

ULTIMATE STRUCTURE OF THE AIR-CELLS CONSIDERED IN ITS RELATION TO CERTAIN OF THEIR DISEASES. BY THOMAS WILLIAMS, M.D.

This communication consisted of a brief explanation of drawings and diagrams.

ORDER OF PROCEEDINGS.

The PRESIDENT: Dr. Sibson's communication comes next on the programme.

Mr. W. H. MICHAEL: It is now nearly half-past three o'clock, and at great inconvenience I have been waiting all day to be called on to bring forward my motion on Medical Ethics.

The order of business as communicated to me by the secretary has been departed from. I wish to know why this has been done, and by whose authority it has been done? I shall divide the meeting as to my right to have these questions answered. [Cheers.]

The PRESIDENT: I shall be very happy to take the sense of the meeting upon any proposition which Mr. Michael may wish me to put. At the same time I assure Mr. Michael that I have strictly followed the order of proceedings as placed in my hands by the Secretary.

The SECRETARY (Mr. SHEPPARD): The statement from the chair is quite correct: but in justice to Mr. Michael I must say that I did inform him (Mr. Michael) that his motion would come on immediately after Dr. R. Hall's Address in Medicine. It was put down in the paper for yesterday afternoon; and as it was the first of those motions which were left over from yesterday, I thought that it would be taken to-day as the first thing after the Address.

Mr. MICHAEL had, within the last five minutes, seen, for the first time, the programme of business. He had never heard till now that his motion was set down for yesterday afternoon; and if he had been then called upon, he could not have responded, as he was engaged in concluding some necessary arrangements connected with the conversazione. He did not know by whom the order of business was fixed: but he thought the present plan most objectionable. Nobody knew what was about to be taken, till the subject was announced by the President, for immediate consideration. In place of one copy of the programme lying before the President, a list of the order of business ought to have been posted at the entrance to the building, in the lobbies, and in the hall of meeting, so that every member might know when the subjects in which he was interested were to be brought forward. He had months ago given notice of his motion: it stood first in the printed programme of business published weeks ago in the Journal, and he must say that he had good reason to complain of having his right of priority thus invaded—his right of priority, he said, because it had been officially announced by the Secretary that motions were to be taken in the order in which they had been intimated to the Secretary. He maintained that the proper order of business had been departed from: wherefore, and by whose authority, he knew not. To prevent such irregularities occurring again, he should move, if at Manchester next year, that a special committee be appointed to arrange the business during the reading of the report of the council, and be prepared to report at an early stage of the proceedings, so that printed lists might be at once prepared and circulated. [Cheers.] He wished this to be taken as a twelve-months' and formal notice of his intention. In the meantime he maintained that he ought, without further loss of time, to be allowed to proceed with his motion. [Go on, and cheers.]

The PRESIDENT said, he thought Mr. Michael was sufficiently well acquainted with him to know that he wished to be strictly impartial. As to the arrangements, which had been made with the secretary, he (the President) was in perfect ignorance till this discussion arose. He had followed the order of proceedings which had been placed in his hands. It must be perfectly obvious to every gentleman present that it could be no object to him in what order the business was taken. For his own part, he should be glad if it was the pleasure of the meeting that the important question of medical ethics should now be discussed.

Sir CHARLES HASTINGS would be sorry if Mr. Michael supposed that he (Sir Charles) had any other wish than to save time in recommending adherence to the appointed programme.

The PRESIDENT had abided by the programme which had been read to him: but from the explanations which had taken place, he thought that it would be desirable to allow Mr. Michael at once to proceed with his motion. [Cheers.]

MEDICAL ETHICS.

Mr. W. H. MICHAEL said, that at that advanced hour, and with several other subjects to be attended to before the meeting separated, he would detain them only for a very short time. Had he been aware, when he gave notice of his motion, that an Ethical Committee of the Association had been appointed three years ago, and was still in existence, he, probably, would not have taken that step; but as the Committee had not been able to agree upon any report, he did not now feel inclined to draw back. It might assist the labours of the old committee to alter its constitution, or infuse into it new blood. The ethical question was one which vitally affected the interests of the Association, and was one which conduced to exert a greater influence upon the profession than even the legislative enactments for medical

reform which the Association now sought. It was in their hands to influence, not only their own body and profession, but also, by union and acting in concert, in a great measure to influence the public and the legislature; and they only lost that power and that influence when they departed from the bonds of union which should regulate their conduct. [Cheers.] They were at present a great Association, all aiming at one common object and endeavouring to promote the same end; and it would therefore be evident to every gentleman that when they had to contend with great and serious difficulties they should be united,—and it was in consequence of not having proper rules for the guidance of their body that so much of disunion, of difference and of jealousy existed at present. [Hear.] The true view of the medical profession was that of a body of men contending against a giant evil; and by union, and mutual support, waging war against sickness, disease, and death—admitting no intestine feud, and allowing no jealousy of superior merit to interfere with their holy mission, which was the relief of suffering, and the alleviation of distress. To promote this union, to aid in this warfare, must be the object of any code of ethical laws; to bind closer together brethren striving for the common good and well-being of suffering humanity. [Cheers.] To them the amelioration must be from within more than from without, for he had more confidence in the help from internal concord, than from external assistance.

He (Mr. Michael) had received letters maintaining that it was not desirable that the Association should have a code of ethical laws; as they would only be the means of creating and spreading discord. But he did think that gentlemen who were of that opinion could have but a very imperfect idea of the true objects of medical ethics. For what was meant by ethics? it was a subject comprised in the motto "*Ars bene vivendi*". It was merely placing upon paper those rules which guided, or should guide them in the every day occurrences of life. It was but converting the *lex non scripta* into the *lex scripta* of the medical profession. How often was it requisite that they should have a code of rules for the guidance of their body, in the many circumstances which arose in their relations to the public, which would make it proper that they should fall back upon these rules, and would enable the public to understand the reason of their action? He would not now allude to any illustrations, because the facts to which he referred must be familiar to every member of the Association. It must therefore be evident that by having a well-digested code of rules drawn up for the guidance of the members of the Association, they had thereby given them the opportunity of avoiding personalities, and being aided in those trying circumstances which so often occurred in the intercourse of the public with the profession. He did not mean to say that, by their having a certain code of rules drawn up, it would make every member act on all occasions as a gentleman; but he did believe it would be the means of doing much good, and would enable them to place in a much better position than he now occupied the hard-worked and ill-paid union surgeon, "passing rich on £30 per year." [Laughter.] Boards of guardians could now feel perfectly indifferent when the resignation of a surgeon was sent in; and the reason of that was, they well knew that the medical profession was so disunited and divided, that they would be secure in calculating on many applications for this situation, with its enormous salary of £30. [Laughter.] But, whilst he thought it was highly desirable, and even necessary, that they should have rules for their guidance, he believed that, after all, upon each member must chiefly depend the duty of elevating the profession. If every individual member would strive by every means in his power, strictly in accordance with the laws of right and truth, to advance the interests of the profession, it would be seen that their object was not merely their own self-aggrandisement, but the interest of the public at large; and he believed that, as a body, they would be more highly estimated by the public. They would perhaps meet with many obstacles, which would have a tendency to cripple their efforts; but, at the same time, if they set about the matter in the right spirit, success was certain. The Association possessed within itself a potent influence for good; but it likewise had a power which could be diverted to evil.

As at present constituted, the membership of the Association afforded no guarantee of honorable conduct; for its wide portals admitted all, without inquiry, upon the recommendation of two members. To effect the main object of the Association, the elevation of the status of the medical profession, this laxity must be in future avoided. He wished to have it considered as a high honour to be a member of their Association. He would make it an assurance of moral integrity, and a guarantee of honorable action in all the varying and trying scenes of profes-

sional live. How true in the profession is the maxim—"Aide toi et Dieu t'aidera"! Union here is indeed strength; for by it are attained increased knowledge, and improved means for its acquisition; power to grapple with disease in its varying forms, and assistance to combat with distress in its direst and worst forms. To be united, is to show the public how much they are indebted to us as a profession; and to obtain from them a better opinion, and a more just remuneration. By clearly stating the laws for their governance, and by an adherence to those laws, he could not but believe that the Provincial Association, the profession, and the public, would be equally benefited. He would not further detain the meeting, because the appointment of a committee for this purpose, on a previous occasion, proved that the Association had estimated its importance, and had admitted the truth of the general principle which he had endeavoured to advocate. He should therefore move

"That a Committee, consisting of Dr. Cowan, Dr. Sibson, Dr. Cormack, [and four others, whose names we lost,] along with the Secretaries of the District branches, be appointed to frame a code of ethical laws for the Association; and to report to the next anniversary meeting." [Applause.]

Sir CHARLES HASTINGS said that it would be an ungracious act not to reappoint the existing Committee, which consisted of Dr. Conolly, Dr. Greenhill, and Mr. Flint. He had lately received letters from two members of the Committee, in which they expressed regret at their inability to report, and to be present at this meeting. He thought that it would be much better to wait for the report of the Committee which had already been appointed. For his own part, without disparaging the new Committee which had been proposed, he had more confidence in the old Committee, who had already given their attention to the subject, and discovered its difficulties.

Dr. CONOLLY believed that the existing Committee had suspended their labours, from the great difficulties which they had to contend with, in fixing the limits of the subject with which they had to deal. For his own part, he thought that the way to promote sound ethics within the Association, was for each individual to look to his own conduct. When he saw that in their body there were individuals of the very highest character—men with whom it was an honour to associate—and that there were likewise others of a very different description, he felt that very great difficulty must be experienced in drawing up a suitable code of rules for the guidance of their conduct to each other and the public. Glad should he be to entertain hopes as sanguine as those of his friend Mr. Michael; but he feared that Mr. Michael's hopes would pass like a dream, and never be realised. He had no wish to throw any obstacle in the way of Mr. Michael's resolution; and he was sure that the absent members of Committee would be equally unwilling to do so. He only feared that the good results which were anticipated would never be obtained.

Sir CHARLES HASTINGS suggested to Mr. Michael, that it would be better to reappoint the old Committee, with the addition of two or three new names.

Mr. W. H. MICHAEL had no objection to include the old Committee in the new; but he thought that, as the old Committee had never been able to agree to any report, no progress was likely to be made with the inquiry, unless a considerable number of new members were added. He had no objection, with the permission of the meeting, to modify his resolution as follows:

"That the Medico-Ethical Committee be reappointed, with the addition of the Secretaries of the District Branches—any five to be a quorum; and that they do report to the next anniversary meeting of the Association."

A desultory conversation followed, which was terminated by Dr. TUNSTALL moving as an amendment:

"That the consideration of the subject of Medical Ethics be deferred."

He said that, although the subject was important, no injury, but good, would result from delay. When the College of Physicians got its new charter, they would issue new bye-laws, which would be useful to guide the profession in forming ethical laws: and as at Manchester there was a Medico-Ethical Society, they might with great advantage defer the consideration of this subject till they met at Manchester next year. If anything was now done, it ought to be the reappointment of the Committee, with the addition of a few names, as suggested by Sir Charles Hastings.

Dr. Sibson hoped that Mr. Michael would be satisfied with adding a few names to the old Committee. Dr. Tunstall's amendment might not then be necessary.

Mr. SODEN thought that, considering the difficulty of the subject—the task of framing rules for the guidance of a large and diversified body—a little more time ought to be allowed to the Committee before they were superseded. He knew that Mr. Flint had given much attention to the subject; and a valuable report, he thought, might ere long be expected from the present Committee.

Dr. CORMACK differed very much from those who considered that the postponement of this subject from year to year was a matter of indifference. If the Association was to go on in a career of prosperity, it must aim at increasing its respectability as well as its numbers. Its rights of membership must be given only to honourable men; and membership must be made a certificate of professional propriety. [Hear, hear.]

Sir CHARLES HASTINGS doubted whether any system of admitting members could be adopted better than that which had hitherto been adopted.

Dr. WILLIAMS seconded Dr. Tunstall's amendment.

Mr. W. H. MICHAEL replied. He still thought that it would be wrong to delay another year; and, as regarded what had been said of Manchester, he would remind them that it was only by preferring his resolution to the amendment that a code of medical ethics could be prepared for discussion at Manchester. The Committee, as proposed in his amended resolution, was perhaps the best which could be devised. It contained the experience of the former Committee; and, by adding only the district secretaries, all idea of partial selection was got rid of, as the secretaries were named in compliment to their official position, and not from their individual qualifications. He believed that the district secretaries possessed an amount of knowledge of the state of the profession within their bounds which would be found to be materially useful. They would also be able to collect in each locality the general sentiments of members.

The PRESIDENT put the amendment, when the votes stood thus:

For the amendment,	. . . 10
Against it,	. . . 27

Majority against amendment, 17

The resolution was then put, when the votes stood thus:

For the resolution,	. . . 27
Against it,	. . . 16

Majority for resolution, 11

Dr. Conolly and others did not vote on either division.

[The votes were counted several times before everybody was fully satisfied. As this confusion when a division occurs frequently happens, it might not be amiss to adopt some more satisfactory and uniform method than any of those now usually adopted. It was suggested that each associate, when he voted, should stand up, and that his name should be announced and taken down by the secretary. This plan would certainly secure accuracy; but there are other plans which might be adopted.]

The PRESIDENT said that as the question had now been decided, he might be allowed to say that he hoped that the labours of the Committee might result in the formation of a good code of ethical rules. He trusted that members would always pay due respect and deference to the opinions of that eminent individual who had been mainly instrumental in founding the Association, and who had so long and so well managed its affairs. [Hear, hear.]

Mr. W. H. MICHAEL said that he hoped no one would for a moment entertain the idea that he had said or done anything which was either intended or could possibly be construed into disrespect for the founder of the Association. [No, no.]

MEDICAL BENEVOLENT COLLEGE.

Dr. COWAN moved

"That as the Provincial Medical and Surgical Association is established to promote, among other objects, the social improvement of the profession, this meeting hails with infinite satisfaction the establishment of the Medical Benevolent College—an institution which is intended for the benefit of the medical profession throughout England and Wales, and which will confer inestimable blessings by relieving the distress that exists among many deserving members, and the widows of those deceased by affording also to the sons and orphans a collegiate education, whereby they will be qualified to fill any situation in life."

Dr. CONOLLY seconded the resolution.

The PRESIDENT put the resolution; which was carried by acclamation.

CONSTITUTION, LAWS, AND FINANCES OF THE ASSOCIATION.

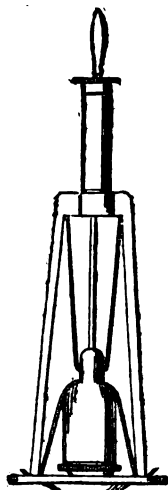
Dr. CORMACK believed, in common with many others, that the laws of the Association required to be consolidated, revised, and made more catholic: and also that a definite system of finance, embracing the formation of a sinking fund, was a desideratum. Deeply impressed with the urgency and importance of these questions, he had given notice of certain resolutions bearing upon them. He had no pet scheme to promulgate; and his only object was to obtain the appointment of an impartial committee to consider these subjects, as he thought that better results were likely to arise from the deliberations of such a body than from the vote of an unprepared general meeting. He also had thought that if the differences of opinion which prevailed on the subjects to which he referred were to be made topics of unrestrained discussion in the Journal, much valuable space would be wasted without any good being accomplished. He would not, however, at so late an hour bring forward his resolutions. It would be impossible to do justice to the subject. He therefore withdrew the resolutions of which he had given notice at p. 533 of the Journal of June 24th, in the hope that the objects which he had alluded to would not be lost sight of.

MEDICAL ANATOMY IN RELATION TO DIAGNOSIS. BY DR. SIBSON.

Dr. SIBSON made a short and very interesting communication, which he illustrated by diagrams.

DR. SIBSON'S SPRING PLEXIMETER. BY DR. SIBSON.

Dr. Sibson exhibited his pleximeter, which consists of a combination of Piorry's ivory pleximeter, and the hammer of Dr. Winterich introduced into this country by Dr. Hughes Bennett.



The hammer strikes upon the piece of ivory by means of a spring. Dr. Sibson prefers the fingers as a general rule, with or without the aid of Piorry's pleximeter, to any other mode of percussion. It is, however, sometimes impossible to percuss with the fingers with equal force on the two opposite sides, as for instance, in the axillæ. In such instances, Dr. Sibson's spring pleximeter may often be used with advantage, since the successive strokes are exactly equal, and ought to elicit, under similar circumstances, exactly the same sound. Another advantage possessed by the instrument is the ease and precision with which it can be applied over the clothes. In this respect it is particularly suitable in percussing children and females, and males during the cursory examination for life assurance.*

BED FOR DIRTY LUNATICS. BY DR. DAVEY.

Dr. CONOLLY, on behalf of Dr. DAVEY, of Northwoods, Bristol, exhibited the model and drawings of a bed for the use of dirty patients.

POCKET MICROSCOPE. BY DR. DAY.

Dr. DAY exhibited a pocket microscope, which he stated that he had found very useful while visiting patients. In reply to a question from Sir Charles Hastings, Dr. Day said that the instrument could be obtained from Pillischer, of New Bond Street, London.

THANKS TO AUTHORS.

Dr. HOWELL, of Swansea, moved

"That the thanks of the Association be given to those gentlemen who have read cases, and made communications to the meeting."

Dr. NICOL, of Swansea, seconded the resolution; which was put by the President, and unanimously carried.

THANKS TO THE MAYOR OF SWANSEA.

Dr. DAY moved

"That the thanks of the Association be given to the Worshipful the Mayor of Swansea, for his kindness in granting the use of the Guildhall on this occasion."

Mr. SODEN seconded the resolution; which was put by the President, and unanimously carried.

THANKS TO THE PRESIDENT.

Dr. TUNSTALL proposed

"That the thanks of the meeting be given to Dr. Bird for the very kind manner in which he has received the Association; and for his able conduct in the chair."

Dr. RADFORD seconded the resolution; which was put by the President, and unanimously carried amid much applause.

The PRESIDENT said that he felt exceedingly obliged—deeply obliged—for the vote of thanks which they had accorded to him. He assured them that he was proud and happy to receive such a vote of thanks from his professional brethren. With respect to his conduct in the chair, he wished that it had been better. He had, however, done his best, and he was grateful for their kind acknowledgments. To each and all of them he tendered his grateful thanks, most cordially wishing them health, happiness, and prosperity. [Loud cheers.]

The meeting then broke up a few minutes past six o'clock.

THE DINNER.

At seven o'clock, a party of above a hundred of the members and friends of the Association sat down to dinner in the Assembly Rooms. Dr. Bird (President of the Association), occupied the chair, supported on the right by J. H. Vivian, Esq., M.P., R. H. Miers, Esq. (High Sheriff of the County), J. J. Strick, Esq. (Mayor of Swansea), etc.; on the left, by Sir Charles Hastings, M.D., the Rev. E. B. Squire (Vicar of Swansea), Admiral Warde, etc. The vice-chair was filled by W. H. Michael, Esq., supported by Dr. Tunstall, Dr. Cormack, James French, Esq. (Mayor of Neath), Dr. Williams, etc.

At intervals during dinner, the celebrated harper, Mr. Williams, of Aberdare, played on the triple-stringed Welsh harp. After dinner, speeches and glees enlightened and enlivened the party. The following is a list of the toasts:—

1. THE QUEEN.

The PRESIDENT, in proposing this toast, said that within the last few days the Queen had conferred honour on two of the oldest and best members of the Association: he alluded to Sir John Forbes and Sir James Bardsley. [Cheers.] Her Majesty had formerly given proof of her regard for the profession, by honouring one who was very dear to them: he referred to Sir Charles Hastings, a gentleman who was an ornament to the profession, and eminently deserving of every honour. [Cheers.] He (Dr. Bird) was sure he need not appeal to their loyalty to do justice to the toast, for British loyalty, like the British oak, was indigenous to the soil, and he hoped that it would be the characteristic of Englishmen as long as the world lasted. [Cheers.] The toast was drank with every demonstration of loyalty.

Tune, "God save the Queen".

2. PRINCE ALBERT AND THE ROYAL FAMILY, by the President.

3. THE BISHOP AND CLERGY, by the President. The Rev. S. Davies returned thanks.

4. THE ARMY AND NAVY, by the President. Admiral Warde and Mr. Soden returned thanks.

5. THE MEMBERS FOR THE COUNTY, by the President.

6. THE MEMBER FOR THE BOROUGH OF SWANSEA, by the President. J. H. Vivian, Esq., M.P., returned thanks. He congratulated the members of the Association on their visit to Swansea; and expressed the pleasure which it would afford him to be able to forward the parliamentary business of the Association.

7. THE PRESIDENT, by J. H. Vivian, Esq., M.P. Dr. Bird returned thanks.

8. THE PRESIDENT OF THE COUNCIL, in a feeling and eloquent speech by Dr. Conolly.

Sir CHARLES HASTINGS on rising was greeted with enthusiastic cheers. He said that he felt most grateful, deeply grateful, for the manner in which Dr. Conolly had thought fit to introduce him to the company, and for the kind heartfelt manner in which they had responded to the toast. He did feel that upon this occasion he had received a greater degree of approbation from his brethren, than in his conscience he thought he had deserved

* The instrument is made by Mr. Becker, 9, Little Tichfield Street.

[Cries of "No, no."] But whether he was mistaken or not in the estimation of his labours, he did not hesitate to say that it was one of the proudest distinction to which a member of his profession could aspire, to live in the minds and enjoy the good will and the approbation of nearly 2000 members of his brethren. [Cheers.] Whatever had been the labours, the anxieties, and the cares which had been brought on him by the position to which he had been called, as one of the founders of this Association, they had been more than repaid by the manner in which his humble services had been approved. Indeed, he could not but feel that, whatever distinction had been conferred on him, he owed it mainly to the estimation in which his services had been held by the profession. [Cheers.] It was now full twenty-one years since he became the servant of this Association. His hairs had grown grey, and his locks had been thinned in that period; but he trusted that his heart was still warm in the cause, and whatever energies he may still possess, they would be devoted to its promotion. And although he might say, "*Non sum qualis eram*," still, as long as he had life, his energies should be devoted to the service of the Association. [Cheers.] The period of twenty-one years which had passed must remind them that if much had been done, much more was required of them. The Association had gone through the trying period of infancy, and of adolescence; it had now arrived at the age of manhood. They were, therefore, called upon now more than ever, one and all, to push forward the noble cause in which they were engaged. He was happy to see the zeal which animated especially the younger members of the Association, and if he sometimes proved a "drag" on them, he was bound to admit that the go-a-head system within certain limits was the best to be adopted by the Association. [Applause.] And although they would always find him ready to stand out against unnecessary innovations, still he would be ever ready to go with them when their object was to render more perfect the organisation of the Association. The future destiny of the Association now depended mainly on the younger members. If they were imbued with the noble objects which it was calculated to effect, no power could prevent progress, or retard a destiny which was as high as it was great. [Applause.] If the Association fell, it must fall by intestine disunion. Peace and harmony were the objects they had in view, and he trusted that the medical profession would always have such an inscription as that placed on their banners. The state of the medical polity was now such as to be unworthy of the civilisation of the age. The cooperation of laymen of local influence was therefore an important means of securing success. At the meeting of the Branch at Swansea last year, he well remembered the promises of the son of the hon. Member for Swansea to render them his assistance. Such aid from various localities was most acceptable, and its effect was exemplified in the recent interview they had had with Lord Palmerston. The first gentleman that he saw at his post on that occasion was the son of the hon. Member for Swansea. [Cheers.] The public were now sympathising with them, and it was that which had at length prevailed on the Government to acknowledge that the state of the medical polity was not worthy of its civilization, and both Lord Aberdeen and Lord Palmerston had at last promised to take up the question with the view of bringing about a better state of things. [Hear.] He was now convinced, therefore, that the long-agitated question of medical reform was at last about to be taken up in earnest, and when disposed of, the exertions made by this Association would not only shed a lustre on it, but add, to use a figure of speech, another wreath to deck its brow. [Cheers.] Sir Charles then referred in eloquent terms to the claims of the Medical Benevolent Fund and the Medical College, and concluded by making a powerful appeal to the members to unite and conquer, and not leave the business of the Association to be performed by a few. If they co-operated heartily, they would conquer all difficulties, ennoble their own names, and render important services not only to the profession, but to suffering humanity. [Loud cheers.]

9. The PRESIDENT-ELECT, Mr. WILSON, by Dr. Howell.

10. The MAYOR OF SWANSEA, by Sir C. Hastings. J. J. Strick, Esq. returned thanks.

11. The MEDICAL BENEVOLENT FUND and Mr. NEWNHAM, by the Rev. E. B. Squire. Dr. Tuke, in the absence of Mr. Newnham, returned thanks.

12. The MEDICAL BENEVOLENT COLLEGE, and Mr. PROPERT, by P. Grenfell, Esq. Mr. Propert returned thanks.

13. The EX-PRESIDENT, Dr. OGLE, by Dr. Morris.

14. The MONMOUTHSHIRE AND SOUTH WALES BRANCH, and Dr. MORRIS ITS PRESIDENT, by Dr. Tunstall. Dr. Morris returned thanks.

15. SUCCESS TO THE JOURNAL, AND THE HEALTH OF Dr. COR-

MACK, by J. French, Esq., Mayor of Neath. Dr. Cormack returned thanks.

16. Dr. HALL and Mr. PRICHARD, the gentlemen who had delivered the addresses in Medicine and Surgery, by Dr. Thomas Williams. Mr. Prichard, in the absence of Dr. Hall, returned thanks.

17. Mr. MICHAEL, the LOCAL SECRETARY, by Sir Charles Hastings, who thanked and complimented Mr. Michael and the profession in South Wales for their kind hospitality and successful arrangements for the meeting. Mr. Michael returned thanks.

18. Dr. EVANSON, AND THE MEDICAL PROFESSION IN IRELAND.

19. Dr. CONOLLY. Dr. Conolly returned thanks.

After a few appropriate words of parting, the company separated at midnight: and thus terminated the delightful and successful Swansea Meeting.

LIST OF MEMBERS PRESENT.

The following is a list of those members who entered their names in the book kept for the purpose.

ABERGAVENNY. F. C. Batt, Esq.; E. Y. Steele, Esq.
 AMMAN IRON WORKS, CARMARTHENSHIRE. John Jones, Esq.
 BATH. George Norman, Esq.; John Smith Soden, Esq.; James Tunstall, M.D.
 BAYSWATER. Thomas Workman, Esq.
 BIRMINGHAM. T. W. Williams, Esq.
 BLAINA IRON WORKS, MONMOUTHSHIRE. Joseph Hinton, Esq.
 BODMIN. Theodore Boisragon, M.D.
 BOLTON. J. Black, M.D.
 BRISTOL. J. G. Davey, M.D. (Northwoods); Augustin Prichard, Esq.; S. H. Swayne, Esq.
 CARDIFF. W. T. Edwards, M.D.; Edward Evans, Esq.
 CARMARTHEN. Henry Lawrence, M.D.
 CHELTENHAM. A. W. Gabb, Esq.
 CHEPSTOW. Thomas King, Esq.; Trevor Morris, M.D.
 CHIPPENHAM. Charles Bailey, Esq.; William Colborne, Esq.
 CHISWICK. Harrington Tuke, M.D.
 CLIFTON. George Rogers, M.D.; T. L. Surrage, Esq.; W. C. Trotman, M.D.
 CLYDACH, BRECON. R. Jenkins, Esq.
 COWBRIDGE, GLAMORGANSHIRE. Charles Sylvester, M.D.
 CWMAVON, GLAMORGANSHIRE. F. M. Russell, Esq.
 DARTMOUTH. R. F. Burroughs, Esq.
 FARNHAM. William Newnham, Esq.
 FERRYHILL, DURHAM. Hugh Clark, M.D.
 GLAN-TWRCH, GLAMORGANSHIRE. W. Price, Esq.
 GLYN-NEATH, GLAMORGANSHIRE. F. G. Evans, Esq.
 GREENHITHE. J. S. Seccombe, Esq.
 HANWELL. John Conolly, M.D., D.C.L.
 HEREFORD. Charles Lingen, M.D.
 KIBWORTH, LEICESTERSHIRE. John Marriott, Esq.
 LEICESTER. Thomas Paget, Esq.
 LLANDILO. John Jones, Esq.; David Prothero, M.D.
 LLANELLY, CARMARTHENSHIRE. B. Thomas Esq.
 LONDON. John Bowling, Esq. (Hammersmith); John Rose Cormack, M.D. (Putney); Samuel Hare, Esq.; Alexander Henry, M.D.; John Probert, Esq.; Francis Sibson, M.D.
 LOUGHOR, CARMARTHENSHIRE. T. W. Jones, Esq.
 MAESTEG, CARMARTHENSHIRE. James Lewis, M.D.
 MANCHESTER. Thomas Radford, M.D.; George Southam, Esq.
 MERTHYR TYDVIL. G. Davies, Esq.; T. J. Dyke, Esq.; John Russell, Esq.; H. S. Wharton, Esq.
 MORRISTON, SWANSEA. J. Cook, Esq.
 NEATH, GLAMORGANSHIRE. James French, Esq.
 NEWPORT, MONMOUTHSHIRE. W. James, Esq.; W. W. Morgan, Esq.
 ODIHAM, HANTS. John McIntyre, M.D.
 OSWESTRY, SALOP. Peploe Cartwright, Esq.
 OXFORD. R. J. Hansard, Esq.; James Adey Ogle, M.D. (Retiring President).
 PONTYPOOL, MONMOUTHSHIRE. John Williams, Esq.
 READING. Charles Cowan, M.D.
 RISCA, MONMOUTHSHIRE. E. Robotham, Esq.
 RUGBY. Abraham Duke, M.D.
 ST. ANDREWS. George E. Day, M.D.
 SIRHOWY, MONMOUTHSHIRE. N. Coats, Esq.
 STOCKPORT, CHESHIRE. George Turner, M.D.
 SWANSEA. George Gwynne Bird, M.D. (President); T. A. Essery, Esq.; W. P. Evans, Esq.; J. G. Hall, Esq.; Edward Howell, M.D.; W. H. Long, Esq.; W. H. Michael, Esq.; D. Nicol, M.D.; Thomas Williams, M.D.

STRATFORD-ON-AVON. David Rice, Esq.
 TAUNTON. Henry Alford, Esq.
 TIMBURY, SOMERSET. James Crang, Esq.
 TORQUAY. C. Radclyffe Hall, M.D.; C. B. Nankivell, M.D.
 WORCESTER. Sir Charles Hastings, M.D., D.C.L.; J. P. Sheppard, Esq.
 YSTALFYFER, NEAR SWANSEA. James Rogers, Esq.

NEWS AND TOPICS OF THE DAY.

MEETING OF PROVINCIAL PHYSICIANS.

A meeting of the provincial physicians attending the Association at Swansea, was held at the Guildhall, on Thursday morning, August 11, Sir Chas. Hastings in the Chair. Among the gentlemen present, we noticed Dr. Day, of St. Andrews, Dr. Howell and Dr. T. Williams, of Swansea, Dr. Morris, of Chepstow, President of the South Wales Branch of the Association, Dr. Duke, of Rugby, Dr. Lawrence, of Carmarthen, Dr. Sylvester, of Cowbridge, and Dr. Tunstall, of Bath.

The following report was then read.

REPORT.

The Committee of British Graduates practising as provincial physicians, appointed at Oxford "to confer with the Royal College of Physicians in relation to the proposed new charter", in presenting their report, beg to congratulate you on the prospect now held out by the Government of a speedy settlement of the question of Medical Reform.

Your Committee report that immediately after the general meeting of provincial physicians at Oxford, your Honorary Secretary, Dr. Tunstall, transmitted the resolutions, then unanimously adopted, to the Royal College.

In November 1852, Dr. Hawkins, the Registrar of the College, communicated with your Secretary, and in a letter which your Committee considered highly satisfactory, as showing that the College were most anxious to do justice to the provincial physicians *de facto* in practice (both in reference to the fees, and the exorbitant stamp duties on their diplomas), trusted that the College would meet with the cordial cooperation of the British Graduates in the attempt to obtain the proposed new charter. Your Committee resolved, with the concurrence of Dr. Hawkins, to give publicity to this important document, they accordingly caused it to be printed, with an address from themselves, in order that it might be freely circulated among the parties interested; copies were sent to the medical periodicals, and to the Universities of Great Britain and Ireland.

Shortly after the publication of these letters, the physicians of Sheffield addressed the following letter to the Charter Committee of the College.

"We, the undersigned, at present engaged in Sheffield, in the practice of our profession as physicians only, beg to draw the attention of the Charter Committee to the fact that we have paid already to the Government of this country, a very large sum for stamp duty on our diplomas. We therefore request the College seriously to urge on the Secretary of State for the Home Department the justice of remitting the stamp duty to all those at present engaged in the practice of their profession as physicians only, who may be admitted into the Royal College of Physicians of England, within one year after the granting of the proposed new charter."

A correspondence took place between Dr. Tunstall, on the part of your Committee, and Dr. Wood, the secretary to the Royal College of Physicians of Edinburgh, which led to the presentation of a petition from that learned body to the House of Commons in February 1853; a copy of this petition appeared in the ASSOCIATION JOURNAL, No. 7, p. 141, and urges the following considerations on the legislature.

"That it appears unfair and injurious that the graduates of Scotch Universities should pay three taxes: *first*, on graduation; *secondly*, on admission to the Royal College of Physicians of Edinburgh; and *thirdly*, on admission to the Royal College of Physicians of England. That it also appears that the exemption of the London University, and the Queen's University of Ireland, which are new institutions, entirely supported at the public expense, is calculated to injure the schools of medicine in Scotland by creating an invidious distinction which ought not to exist."

A copy of the abovenamed petition, with the address issued by your Committee, was transmitted to the Secretary of State for

the Home Department, and by him was courteously acknowledged.

Your Committee having learned from authentic sources that the government were not prepared to deal with the question of a remission of the stamp duties during the present session of Parliament, and that the charter to the College was likely still further to be delayed, resolved to address Lord Aberdeen on the subject, and in July last transmitted the following memorial to that nobleman:—

"To the Rt. Hon. Lord Aberdeen, First Lord of Her Majesty's Treasury.

"The humble memorial of the undersigned graduates in medicine of British universities, appointed at a meeting of provincial physicians held at Oxford on July 22nd, 1852, to confer with the Royal College of Physicians in relation to the proposed new charter, humbly sheweth,—

"That your memorialists have heard with extreme satisfaction that it is the intention of Her Majesty's Government to advise Her Most Gracious Majesty to grant a new charter to the Royal College of Physicians, whereby the provincial physicians now practising in England and Wales, without the diploma of the College, may be incorporated as members of that body on payment of certain fees and stamp duties. Your memorialists therefore humbly pray,—

"First. That the said charter may be granted to the said Royal College.

"Secondly. With a view to induce all provincial physicians in practice as aforesaid to avail themselves of the privilege of incorporation proposed by the said charter during the first year after Her Majesty shall be graciously pleased to grant the same—an event your memorialists earnestly desire,—your memorialists humbly pray that the stamp duties payable on diplomas issued to provincial physicians already in practice may be reduced; your memorialists being decidedly of opinion that, however desirable the new charter may be to those who may hereafter practise as provincial physicians, those already in practice will not be bound by its provisions; in other words, that the taking of the new diploma will be a purely voluntary act on the part of those already in practice as physicians in the provinces. Having already paid a large stamp duty on their diplomas as doctors of medicine, your memorialists humbly pray that the case of the provincial physicians, graduates of recognised British universities, may be taken into the consideration of Her Majesty's Government.

"And your memorialists will ever pray", etc.

This memorial was signed by every member of your Committee, and transmitted to his Lordship, who courteously acknowledged its receipt.

With reference to the stamp duties, your Committee would urge this consideration, that, in all other professions and trades in which stamp duties are required to be paid, the imperial government affords its protection to the legitimate pursuer by restricting the exercise of these callings to those only who are licensed by the payment of such duties. In the profession of physic, however, no such protection is afforded; the ignorant and unblushing pretender can with impunity usurp the titles which belong only to the profession, the better to cloak his villainies and conceal his crimes; and the government derives a large revenue from the sale of quack medicines, and lends its aid to the most detestable robbery of the public induced by their sale, whereby the most obscene and indecent advertisements, destructive alike to modesty and virtue, are daily obtruded in the public prints. Your Committee, therefore, is strongly of opinion that the legislature has no right to impose stamp duties on the license or diplomas of medical men, until it is prepared to protect the profession against unlicensed pretenders, and the public against the evils of empiricism; and your Committee earnestly hope that not only the provincial physicians, but the profession generally, will earnestly contend for an exemption from stamp duties, or for that protection from unlicensed competition which the payment of such duties entitles them to expect.

It was moved by Dr. WILLIAMS, seconded by Dr. SYLVESTER, and resolved,—

"That the report now read be received and adopted."

Dr. LAWRENCE moved, and Dr. DUKE seconded,—

"That the Committee be reappointed, with the addition of Dr. THOS. WILLIAMS, and that they have power to add to their numbers; that the best thanks of the meeting be given to Sir Charles Hastings and the members of the Committee for their services; and that they present a report at the next meeting at Manchester."

It was proposed by Dr. TUNSTALL, seconded by Dr. HOWELL, and carried,—

"That the best thanks of the provincial physicians are due, and hereby given, to Lord Dudley C. Stuart, M.P., for his kind attention to their interests."

ROYAL COLLEGE OF SURGEONS.

(House of Commons, Tuesday, August 16.)

The following Returns were applied for by Mr. EWART.

Returns of the number of persons who presented themselves for examination to be admitted Members of the Royal College of Surgeons of England, in each year, from the 11th day of July 1834, to the 18th day of August 1853, stating the number of rejections in each year, the average duration of each examination, the subjects examined on, the average age of candidates, the number educated at each medical school in Great Britain and Ireland, or foreign schools, and the number rejected belonging to each school. Of the number of persons admitted to the Fellowship of the Royal College of Surgeons of England, in the years 1843-44, and the rules observed by the Council in regulating their admission. Of the number of persons who presented themselves for the examination of Fellowship in each year, since the 1st day of January 1845, to the 6th day of July 1852, stating the number who were Members of the College, the number of rejections in each year, together with the number refused examination. Of the number of candidates for the classical examination required for the Fellowship, since the 1st day of January 1850, to the 18th day of August 1853, stating the number who were already Members of the College, the number of Members rejected for this examination, together with the gross amount of rejections and the subjects examined on. Of the number of candidates for examination for the Fellowship, from the 6th day of July 1852, to the 18th day of August 1853, stating average age, and number rejected. Of the number of members of the College of Surgeons of England admitted for the fellowship by seniority on payment of ten guineas, since the 6th day of July 1852, to the 18th day of August 1853, stating the number refused admission and the number on whose admission divisions of the council took place. Of the various fees received by the Council and Court of Examiners. Of a detailed statement of the annual income and charges, and of the actual receipts and payments of the College, during the last three years, ending the 18th day of August 1853. Of the different professors, office bearers, and servants of the College of Surgeons of England, from the 1st day of January 1834 to the 10th day of August 1853, the names of the different officers, together with the amount of salary or gratuity paid or voted to each and every such professor, officer, or servant, with the dates of appointment, dismissal, or resignation. Of the different editions of the bye-laws of the College of Surgeons of England, regulating the education and examination of candidates for the fellowship and membership, from the 1st day of January 1834 to the 18th day of August 1853. Of the number of medical schools and hospitals from which the recognition of the College of Surgeons has been withdrawn within the three last years, ending the 18th day of August 1853, together with a list of schools and hospitals that have applied to be recognised as schools of instruction for medical students in the same years, and the causes which led to the withdrawal of any schools or hospitals. Of the number of volumes purchased for the Library of the College of Surgeons from the 1st of January 1834 to the 10th of August 1853, together with a list of the number presented. Detailed accounts of expense of the Library of the College of Surgeons of England for the last three years, ending the 18th day of August 1853. Of the expense of Museum of the College of Surgeons of England for three years, ending the 10th day of August 1853. Of the expense of entertainments to the Council and Court of Examiners of the College of Surgeons of England in each year for the three last years, ending on the 18th day of August 1853. And, of all monies paid to each Member of the Council and Court of Examiners within the last three years, ending the 10th day of August 1853, stating the amount paid in each year.

VACCINATION EXTENSION BILL.

The Vaccination Extension Bill was read a third time, and passed in the House of Commons, on Monday last. On Tuesday the House of Lords, on the motion of Lord Lyttelton, approved the amendments and alterations which had been introduced into the Bill during its progress through the lower House.

COMPLIMENT TO THE MEDICAL PROFESSION. The Lord Chancellor, on the recommendation of the Lord Lieutenant, the Earl of Warwick, has nominated William Sands Cox, Esq., a deputy Lieutenant, to the commission of the peace for the county of Warwick.

ROYAL COLLEGE OF SURGEONS:—LIBRARY. According to annual custom, the Library of the Royal College of Surgeons will be closed during the ensuing month of September, for the purpose of cleaning and arranging the books.

UNIVERSITY OF LONDON. PASS LIST. M.B.: FIRST EXAMINATION, 1853. *First Division:* Robert Henry Bartrum, Thomas Edwin Burton Brown, Guy's Hospital; St. John Edwards, University College; Joseph Ravenscroft Elsey, Guy's Hospital; David Conway Evans, King's College; James Fawcus, Wm. Price Jones, and Henry Walter Kiallmark, University College; Wm. Whytehead Morris, Leeds School of Medicine; George Mayris Pittcock, Guy's Hospital; Augustus Pout, King's College; Frank Powell, St. Bartholomew's Hospital; John Dewherst Scurrah, University College; Fred. Porter Smith, King's College; Clement Williams, Guy's Hospital. *Second Division:* George Aug. Fulcher, St. Bartholomew's Hospital; Edward Ash Hadow, Bristol Medical School; Robert George Hardwick, Leeds School of Medicine; Vaughan Henry Alex. Holberton, King's College; Riners Mantell, London Hospital; James Lewis Sjordet, Wm. Isaac Spencer, University College; James Howard Thornton, King's College.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. MEMBERS admitted at the meeting of the Court of Examiners on July 18th:—Frederick Tydd Abbott, Nenagh, co. Tipperary; Edward Jacomb Asbury, Enfield, Middlesex; Thomas Bramah Diplock, Chelsea; Decimus Filius De Hodgson, Carlisle; Chas. Julian Jackson, Macclesfield, Cheshire; James Scarborough Loe, Leeds, Yorkshire; Robert Modlin, Castleside, Durham; Frederick William Moore, Charlmount Terrace, Dublin; Charles James Roe, Greenock, Scotland; John Smith, Caseley, Staffordshire.

July 22nd:—Robert Brown, Wintershields, Cumberland; William Lee Dawson, Cloughran, co. Dublin; William Henry Jones, London; John Macloghlin, Liverpool; Edward O'Neill, Michellstown, co. Cork; John Segar, Ainsdale, near Southport, Lancashire; George Moulas Slaughter, Farningham, Kent; Evan Pierce Williams, Denbigh, North Wales; Isaac Mennell Williams, York; Thomas Windsor, Piccadilly, Manchester; Christopher Young, Yarm, Yorkshire.

July 25th:—John Barnett, Moneymore, co. Derry; William Collins, Kingston, co. Dublin; George Craven, New Worthy, Yorkshire; Chamney Graves Irwin, Raphoe, co. Donegal; Robert McKibbin, Ballymacarrett, near Belfast; Archibald Nicolls, Kilmakenny, co. Leitrim; William Brown Pepler, Tinhead, Devozes; Henry Tyrwhit Smith, Melton Mowbray.

July 20th:—John Carey, Shacklewell; Henry East, Sydney, South Australia; William Noble, Linton, Herefordshire; Edward Prentice, North Walsham.

LICENTIATES IN MIDWIFERY admitted at the meeting of the Board of Examiners on July 6th:—John Jones, Swansea; John William Howard, Fenchurch Street; Cecil Calvert Cogan, Winsley, Wilts; Henry Joseph Hurschell Griesbach, Pocklington; William Bass Smith, Louth, Lincolnshire; Peter William Rolston, Devonport; George Elin, Kent Terrace, Regent's Park; Joseph Ewart, Holmhead, Cumberland; Daniel Gwynne, Halsey Terrace, Sloane Street; William Hall, Ryath Thirsk, Yorkshire; Henry Stiles, Spalding, Lincolnshire; Clarence Cooper, Brentford.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

HESLOP, Dr., Physician to the Queen's Hospital, Birmingham, appointed Joint Professor of Materia Medica in Queen's College.

*PEMBERTON, Oliver, Esq., Surgeon to the General Hospital, Birmingham, appointed a Demonstrator of Anatomy in Queen's College.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXIV.

LONDON: FRIDAY EVENING, AUGUST 26, 1853.

New Series.

ADVERTISEMENTS.

Three lines and under	-	-	-	20	2	6
Every additional line	-	-	-	0	0	6
Half-column	-	-	-	1	10	0
A whole column	-	-	-	2	15	0
A page	-	-	-	5	5	0

A line contains ten words, so that any one can calculate the cost of an Advertisement.

Advertisements ought to be delivered at the office on the Wednesday preceding publication, and paid for at the same time.

Post-Office orders are to be made payable to THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London.

TO CONTRIBUTORS. We have received within the last week several MSS. accompanied by a request for payment if they were inserted. We therefore take this opportunity of stating that no literary work is paid for unless executed in accordance with a previous agreement. To secure unity of plan and harmony of sentiment, it is essential that the editor communicate directly and frequently with those who assist him.

Letters referring to the commercial department ought to be addressed to MR. HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields; and communications for the Editor to Essex House, Putney, London, or to the Office. The Editor is generally at the Office on Wednesdays, from four to five P.M.

MEDICAL METEOROLOGY.

At the present time, when Physiology, Chemistry, and the Revelations of the Microscope are so extensively pressed into the service of medical observers, and made to elucidate the origin and nature of various diseases, it would be strange if we remained contented with vague notions on the important subject of Meteorology in its relations to medicine. To dilate upon its great importance would be a mere waste of time; for the fact that, in all times and places, the common sense of mankind has ascribed to atmospheric changes a serious effect upon the health of human beings, is just as clear and unquestionable as another fact—that, of the nature and operation of atmospheric changes upon the human body in health and disease, we have many guesses, some vague notions, but *no strict sciences*. In this interesting region of inquiry, that inductive science which has explored the bowels of the earth, and has classified the productions of its surface, has hitherto done little. The atmosphere and its changes, though immediately surrounding us, and constantly affecting our daily experience, are less understood than the movements of distant stars and planets!

Our present object is, I. To notice the present vague condition and defective study of Meteorology in its medical aspect; and II. To suggest the modes in which this interesting branch of study may be more scientifically and advantageously cultivated. Great are the difficulties—as in all beginnings; but we believe that, by a judicious division of labour, earnest cooperation, and a strict adherence to the inductive method of research, victories may be achieved here, as in other departments of science.

I. We already have observations on Meteorology in some sort of connexion with disease and death; but they are not definite enough for our purpose. This is the first point on which we must insist. Let us first notice the Registrar-General's weekly tables of mortality in London. These give

the week in which the deaths were registered; not the times when the deaths occurred. What can be induced, in a medico-meteorological point of view, from such facts?—Nothing. Let us suppose a case:—that a patient was seized by an attack of *bronchitis* on the seventh of April in any year, and during the prevalence of a cold north-easterly wind; that the patient died on the fourteenth; and that on the seventeenth the death was registered; but meanwhile, that, on the thirteenth, the wind had changed to a mild south-westerly breeze: it is obvious that the registration of the death on the seventeenth could have no value as a medico-meteorological fact. The dates especially wanted are those of the first seizure, and also of the changes of weather, and the symptoms during the progress of the disease.

The Registrar-General, in his returns for the week ending March 19th, 1853, remarks that—"The effect of sudden changes of temperature does not immediately become perceptible to its full extent in the register of deaths." The fact is, we want, for medical purposes, a correct registration of the very day on which the attack of disease commenced, and of the meteorological observations of *that day*, side by side; and this will be the new and important feature of the tables to be inserted in this Journal. Obviously, medical men are the only persons who can be competent to make the two-fold observations on meteorology and pathology which we require. It must always be kept in mind that our observations have not a *general* scientific purpose; but a *specific* aim—the advancement of medical science.

Dissatisfaction with *vague observations* is common to all who have thought on the relations of Meteorology with Pathology. Dr. Addison of Maidstone, and Dr. Moffat of Hawarden, in their excellent letters inserted in this Journal (pp. 80, 139), have already insisted on the necessity of *daily* observations. As examples which may serve to indicate the course to be pursued, we may briefly allude to the valuable papers by Dr. Tripe, in the *Medical Times* (1848-49). During a long and extensive experience of scarlet fever, Dr. Tripe has observed that, in London, a high barometrical pressure is frequently coincident with a low rate of mortality from scarlatina; that extreme and long-continued variations of the barometer indicate a condition of the atmosphere adverse to the progress of the disease; that the mortality from scarlatina is low in a cold January, and *vice versa*; but that, in the summer quarter, a temperature lower than the average is somewhat favourable to increased mortality from scarlatina. This is not the place to inquire into the certainty of these results of Dr. Tripe's researches; but we refer to them as good specimens of that kind of investigation which is required with regard to the connexion existing between meteorological changes and several diseases. For another example, we may refer to the valuable paper of Mr. R. D. Grainger, "On the Influence of Noxious Effluvia on the Origin and Propagation of Epidemic Diseases"—at pp. 164, 184 of the ASSOCIATION JOURNAL. We would suggest that, in addition to the *local* causes, so well described by

Mr. Grainger, it will be interesting, in future, to investigate the simultaneous influence of *meteorological* causes; to ascertain the atmospheric conditions by which a general tendency to certain diseases is induced, becoming most fully developed wherever it is favoured by local circumstances. That local and atmospheric conditions often concur to produce disease, is already clearly manifest. The local nuisances which would be harmless during a hard frost, may spread disease and death over a neighbourhood during the dog-days. Mr. Grainger and other sanitary inquirers have made out the strongest possible case to prove the influence of *local* causes on the zymotic class of diseases: further inquiries into the *concurring meteorological causes* are now required. It has been frequently observed that, while local circumstances have remained unchanged, the propagation and progress of epidemic diseases have varied considerably. A disease of this class has appeared in a certain locality, has raged with greater or less violence for a certain time, then has disappeared, again to be developed under certain conditions. What are these conditions? Can they be clearly

explained by meteorological observations? These are instances of the numerous interesting queries to be answered by the medical meteorologist; but in order to give a character of certainty to his answers, he must make his observations in a strict and definite method, which we have now to explain.

II. We cannot open our suggestions on improved medico-meteorological observations better than by a quotation from the *British and Foreign Medico-Chirurgical Review* (No. xv)—“The subject is beset with difficulties; and, in order that *correct results* may be obtained, the investigation must be conducted with logical precision.” Before entering into details, we may give, as an example of the method of observation required, the table constructed by Dr. Moffat, based upon his practice in 1851-52, and read at one of the meetings of the British Meteorological Society. It gives observations of a few diseases, with their percentage of prevalence, during the increase and decrease of readings of the barometer; with observations on the winds, and on the presence of ozone in the air:—

Name of Disease.	Increase of barometer readings.	Decrease of barometer readings.	Increase of tem- perature.	Decrease of tem- perature.	Ozone.	No Ozone.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
	per cent.	per cent. 80.0 & 10.0 day after.	per cent.	per cent.	percent.	percent.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.
Paralysis	20.0		40.0	60.0	90.0	10.0	0.0	0.0	0.0	1.7	0.7	3.9	0.0	0.9
Epistaxis	37.0	74.0	12.0	75.0	50.0	25.0	2.7	7.6	0.0	3.4	0.0	0.6	0.0	1.4
Toothache.....	19.0	90.0	29.0	65.0	77.6	22.3	5.4	11.5	4.7	22.0	11.0	9.1	5.0	13.0
Rheumatism	28.5	71.4	28.5	71.4	85.7	14.2	0.0	0.0	0.0	0.0	0.7	1.9	0.5	0.9
Pleurisy	50.0	50.0	50.0	50.0	100.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4
Per-centage of deaths from all causes	40.4	50.6	48.4	57.6	68.7	31.2	35.1	42.3	52.3	25.5	25.1	24.1	36.0	76.2

Among the interesting points for consideration presented by the above table, we can notice only one—the increase of deaths from the southern or warm towards the northern or cold points of the compass. It appears that the greater number of diseases occur in the equatorial, and the greater number of deaths in the northern or polar points. The probable connexion between this indication and the presence or absence of ozone, forms one of the important points left for future researches. The rotation theory of the winds, as developed by Professor Dove of Berlin, has been adopted as the basis of the observations made by Dr. Moffat. Of this theory, especially in its medical aspects, some account will be given in another paper, as it would occupy too much space in these introductory observations.

Dr. Moffat, in his papers on Medical and Agricultural Meteorology and Atmospheric Ozone, read at meetings of the British Meteorological Society, has arrived at very interesting conclusions. Our readers are no doubt aware that, according to the rotation theory, it is believed that there are two currents of air in each hemisphere of the globe, viz. the polar, which blows from the poles to the equator, and the equatorial, which returns from the equator to the poles. It is supposed that, were the earth at rest, these currents would have a course direct from north and south to the equator; but as the earth turns upon its axis, they are influenced by its motion, and veer; the polar in the northern hemisphere from a north to north-east and east, and in the southern hemisphere from a south to a south-east and east

wind. Within the tropics, these currents form the lower and upper trade winds; the former, the polar, blowing (in the northern hemisphere) from north-east to south-west, and the upper, the equatorial, from south-west to north-east. As the upper current approaches the polar latitudes, by being cooled, it gradually descends to the surface of the earth; and in latitudes north and south of 28 degrees, or thereabouts, the two currents blow side by side, and constantly endeavour to displace each other. In the northern hemisphere, the polar occupies the north of Asia, and north-east of Europe; while the equatorial is more commonly prevalent on the western coast of the latter continent. Dr. Moffat (as stated in his papers) has observed that ozone is peculiar to the equatorial points of the compass—that is, in points between south-east and north-west by way of south and west; and that it is not detected in the polar current, viz. in points between north-west and east by way of north and north-east. He has also observed that the greater number of diseases occurs when the wind is in equatorial or ozone points; and that the greater number of deaths take place when the wind is in polar or no ozone points. He attributes the more frequent occurrence of diseases to the frequent atmospheric changes that take place while the wind is in southern points, as indicated by the more extensive and more frequent oscillations of the barometer. And the greater number of deaths in the polar points, he concludes to be the result of reduction of temperature, and gives the following as a type of general statement:—

cesses, and states that he believes that it forms the basis of all processes in these latitudes. At the termination of an ozone period, the wind veers through north-west to north, north-east, and east points of the compass. The sky becomes cleared of clouds, and the barometer attains its maximum readings. If when the wind is east the barometer remains stationary, or increases in its readings, the wind is again perceived to set in from the north, the same process is repeated, and there are no new cases of disease, and there is no ozone. If, however, when the wind is east, a case of toothache, neuralgia, diarrhoea (with or without cramps and vomiting), convulsions, epilepsy, apoplexy, hæmorrhage, epistaxis, hæmoptysis, or premature uterine action, should occur, the barometer readings decrease, either immediately or in a few hours afterwards. The equatorial current sets in as a north-west wind, or a current from more southern points, and ozone is detected. When the barometer readings begin to decrease with the occurrence of the diseases, cirri are observed to advance from points of the horizon between north-west and south-east, the sky becomes overcast, and there may be rain. Should the barometer read-

ings begin to increase, while the wind is in the south points, the current will gradually veer to west and north-west points, and ozone will again disappear; but should any one of the above diseases take place while the wind is in north-west points, the barometer readings will again decrease, the wind will increase and fall back upon southern points, ozone will increase in quantity in proportion to the force of the current, and the number of diseases will be greater or less, just as the equatorial has the ascendancy for a longer or shorter period. Dr. Moffat also observes that clouds of the cumulo-stratus, and cumulo-cirro-stratus class, are more common when the wind is in south-west and north-west, than when it is in other points of the compass; and that hail and snow showers seldom occur with any other direction of the wind. He also observes that apoplexy, epilepsy, and sudden deaths, invariably occur with a prevalence of hail and snow showers.

We may now briefly explain the use of the several columns of the Meteorological Tables, henceforward to be inserted in this Journal. We insert an outline, in order that our description may be better understood:

Place, lat. long. height.	Month and Day.	Barometer		Thermometers.				Wind.	Amount of Ozone.	Amount and class of cloud for day.	Hall, snow, sleet, fog, frost.	Thunder, lightning, thunder and lightning, aurora, haloes, etc.	Rain.		Diseases.		Deaths.		Name of Observer.					
		9 A.M.	3 P.M.	Maximum.	Minimum.	Maximum in Sun.	Minimum on Grass.						Mean daily temperature.	Range of temperature.	Temp. of dew-point.	Degree of humidity.	Mean direction for day.	Mean force.		No. of	Name and time of commencement.	No. of	Cause and time of death.	
	14 Aug. S.																							
	15 M.																							
	16 T.																							
	17 W.																							
	18 Th.																							
	19 F.																							
	20 S.																							
No. of column		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	

N.B. The readings of the Barometer have been corrected for index-error and capillarity, and reduced to the constant temperature of 32 degrees Fahr. In column headed "rain fell on" the letter R denotes that rain fell on the day opposite to which the letter is placed. In column headed "amount and class of cloud" the contractions are the same as those used by the British Meteorological Society.

Columns 1 and 2 represent the pressure of the air by the barometric readings at 9 A.M. and 3 P.M. Liebig's researches on the evaporation of liquids through membranes, and his experiments on endosmosis and exosmosis, illustrate the effects of atmospheric pressure on the circulation of the blood, and the evaporation from the skin and pulmonary or bronchial membrane. The amount of evaporation from the skin and the lungs is modified by the temperature of the air and its hygrometrical condition, and, as the circulation of the blood and the absorption of the alimentary contents of the digestive canal are both accelerated by an increased amount of evaporation, we must admit the medical importance of the observations included in columns 3 to 10 inclusive. To give some instances:—it is owing to the dryness of the air at great elevations, that the evaporation from the skin and the consequently increased motion of the fluids within, produce oozing of blood from the gums, etc., during the ascent of high mountains.

It is a fact quoted from Edwards by Matteucci, that the quantity of cutaneous exhalation from the human body is, sometimes, ten times greater in dry than in moist air, and that it is doubled in passing from 32° F. to 64° F. It cannot be

doubted that such a transition as this must exert a very serious influence on health. During rapid falls of the barometer such as occur before thunder storms, effluvia arising from drains, cess-pools, privies, etc., are felt as more serious nuisances than at other times. This is owing to the rapid rarefaction of the air by diminished pressure. Such extreme and rapid falls of the barometer are frequently followed by hæmoptysis in some patients—the diminished pressure of the air giving rise to oozing of blood from the pulmonary membrane, and this is especially likely to occur, when a diminished temperature takes place to such a degree as to produce congestion of internal organs, by decreasing the determination of blood to the surface. The degree of humidity of the air has also a considerable influence on hæmorrhages from the mucous membranes.

As another example of the relation of atmospheric changes with human life, we may incidentally notice here, that rapid falls of the barometer should be observed with reference to precautionary measures in mines, where the diminished pressure of air allows fire-damp and other gases to escape more freely from crevices, etc., so as to endanger the lives of the miners.

Observations on ozone will be given in column 13, and must be regarded as very interesting and important. By careful observation and collection of a sufficient number of facts, we shall be able to determine the part which this substance plays in connexion with disease, and whether or not its presence in the air produces, as has been suspected, bronchitis, conjunctival ophthalmia, and other diseases. As the presence of ozone in the atmosphere is often coincident with a decrease of temperature, we cannot now say which of the two may be the real cause: and bronchitis is often known to occur when ozone is not detected in the air.* This is one of the problems to be solved by medico-meteorological observation.

The amount of cloud, in column 14, may be noticed as preventing the scorching effect of the sun's direct rays in the day-time and as modifying radiation during the night. It is also important to notice the prevailing class of cloud. For example, the appearance of *cirri* is generally indicative of a fall of the barometer; and this never takes place, as Dr. Moffat has observed, without sensible effects on patients labouring under certain diseases.

Storms of hail, snow, sleet, thunder and lightning, with the phenomena of frost, fog, aurora and zodiacal lights, will be noticed in columns 15 and 16. Columns 17 and 18 will be devoted to observations on the fall of rain.

It has been remarked that a great majority of cases of some diseases, are accompanied, or immediately preceded by a fall of the mercurial column; and this statement would suggest, that as *mean readings* of the barometer do not indicate the *sudden changes* which appear to be so productive of many diseases, they cannot suffice for *medical* meteorologists. The time of a *change* of weather, and the precise date of the commencement of disease, or of a change of symptoms, or of sudden death: these are the points on which we must especially fix our attention. With this object in view, the next four columns, 19, 20, 21, and 22, will be essentially important in a medico-meteorological aspect. They will record the number of deaths, causes of death, number of diseases and names of diseases, occurring under the notice, or in the district, of each observer. This will be the new and important feature of the observations inserted in our Journal, and these four columns, conjointly with the meteorological observations, must supply the data from which true conclusions may be deduced, respecting the connexion between atmospheric changes and the manifestation of diseases. Each observer is fully aware of the difficulty and importance of this department of his labours, and will, therefore, be doubly careful to render this part of the meteorological table correct and trustworthy. The Registrar-General has kindly allowed the Registrars of deaths in the respective districts, to furnish the observers with weekly information as to the number, dates, and causes of deaths; so that this information, together with the medical practice of the several observers, will afford ample facts with which to fill these columns.

Having thus explained the leading features of our scheme,

* Should any of our readers wish to make observations for themselves, carefully prepared ozone test paper, with full instructions, may be obtained, at moderate charge, of Mr. John Cox, 8, Rye Lane, Peckham, Surrey. The following is the mode of registering the quantity of ozone in the air, as followed by Dr. Moffat:—

If the test paper be not tinged brown in 24 hours 0.
If the test paper be perceptibly tinged brown in 24 hours 1.
If in 18 hours, 2; in 12, 3; in 10, 4; in 8, 5; in 6, 6; in 4, 7; in 2, 8; in 1, 9; and in $\frac{1}{2}$ hour to $\frac{1}{4}$ hour, 10.

we shall reserve some other considerations of practical details for future articles; but we may here express our hope, that a plan which promises to yield valuable data towards an extension of medical science, will be carried into operation with industry and perseverance. The zeal and hope of good and great results manifested by our coadjutors in the task, encourages us to believe that, in this humble beginning, we may lay the basis for an extended system of medico-meteorological observations, and that eventually by such a system, several truths now only dimly seen, lying among guesses and suppositions, may be established on sure scientific principles.

Some time before the appearance of the letters by Dr. Addison and Moffat (to which we have already referred), arrangements were made for the insertion of a medico-meteorological report in this Journal. For the plans, and for a large share of the practical measures necessary to carry them into operation, our readers are indebted to the Bedford observer. Assisted by those gentlemen who have kindly consented to contribute reports, especially by Dr. Moffat, of Hawarden, Dr. Barker has now brought all necessary arrangements near to completion, and it will be gratifying to our readers to know that our plans have been submitted to the notice of that eminent meteorologist, Mr. Glaisher, and have received his approbation.

It would be desirable to have reports from medical observers in each degree of latitude and longitude in England; but to accomplish this, twelve contributors would be necessary, a number too great for the space to which our tables must be restricted, and we are not aware that medico-meteorological observers could be found for every degree. As we have already said, we must employ the services of *medical* men exclusively, as observers; because our object in inserting meteorological tables in this Journal, is solely to render them conducive to the advancement of medical science, and improvement in practice—especially with regard to prophylactic measures against atmospheric changes.

Observations will be forwarded from the following places:

Place.	Latitude.	Longitude.	Height.	Observer.
Guernsey	49.33. 0 N	2.40. 0 W	123 ft.	Dr. Hoskins.
Ryde, I. of W...	50.45. 0	0. 4.46 W	110	B. Barrow, Esq.
Exeter	50.45. 0	3.41. 0 W	140	Dr. Shaper.
Uckfield	50.58.59	0. 5. 0 E	180	C.L. Prince, Esq.
Bedford	52. 8. 0	0. 1.51 W	100	Dr. Barker.
Grantham	52.54.52	0.36. 0 W	190	J.W. Jeans, Esq.
Hawarden	53.11. 0	3. 2. 0 W	260	Dr. Moffat.
Wakefield	53.40.50	1.30.26 W	115	W. Milner, Esq.

We would solicit the aid of other medical men who do not make regular meteorological observations: they may at least note from day to day the most striking barometric changes, and the dates of commencement of diseases, especially those which assume an epidemic character. This will require some care. Only clear cases of coincidence should be noticed. When possible—and it often will be—the precise *hour* of the seizure should be given; but when a true date for the commencement of a disease is not satisfactorily known, the case should be rejected on account of its uncertainty.

Every medical man may contribute data of some value, if he will only make notes in a meteorological diary of the most striking atmospheric changes, with the accompanying diseases observed in his practice. Extracts of the most important instances we shall be glad to insert from time to

time in this Journal; and from a collection of such data, obtained from various localities, valuable inductions may be made on surer grounds than could be afforded by the unaided experience of any individual observer. It is a work which especially demands extensive co-operation, such as we trust it will call forth. Such a diary as we have referred to should be kept by every medical man, who wishes to aid the progress of this comparatively new department of medical science; but something more must be done. On looking over such notes, he may be led to suspect that a connexion exists between the changeable weather and the coincident cases of diseases in his district. But these coincidences may have been local and accidental. How shall he discover if they have any sure value as scientific data? Let him occasionally publish a selection of the most striking and accurately observed instances. Let these be compared with the notes of other similar observers in other parts of the country, and the guesses and suspicions may be changed into certainties. The materials which, while lying scattered in the hands of several unconnected observers, might be almost useless, may, when brought together and carefully compared, be found to contain the data for new discoveries in science, and may give to mere opinions and vague suppositions the character of well-founded and important conclusions.

Cui bono? We scarcely anticipate that any well educated medical man would attempt to discourage our labours by this shallow question. It is obvious enough that, if we can attain sound scientific results, they must be associated with practical utility. To give only one example, we shall, at least, be enabled to prescribe more definitely and certainly the prophylactic measures against atmospheric changes, as they affect several diseases. Let us first discover the truth, and we shall be sure to find some good in it.

We reserve for another number several remarks on practical details, the choice of instruments, etc.; but we may observe at present, that all the instruments employed by the observers who will contribute to the weekly reports in this Journal have been compared with standard instruments.

Though we have explained that, hitherto, little has been done for meteorology regarded strictly in its medical aspects, we must not conclude this paper without distinctly referring to the valuable services of Mr. Glaisher, the meteorological superintendent at the Greenwich Observatory. To this gentleman we owe the improvements in instruments and some plans of observations of which we shall make use. Enthusiastic in his favourite science, and possessing rare qualifications for the difficult investigations in which he has for years been engaged, Mr. Glaisher has contributed probably more than any other observer to the increasing popularity of meteorology as a study. The valuable papers published in the *Philosophical Transactions*; the Hygrometrical Tables; the Meteorological Report appended, for some years past, to the Registrar-General's quarterly return of marriages, births, and deaths in England; the observations given with the Registrar-General's weekly return of births and deaths in London;—these are some instances of our obligations to Mr. Glaisher. He was the first to introduce the Dry and Wet Bulb Hygrometer into general use, thus, with the aid of the Hygrometrical Tables, superseding the use of the instrument invented by Daniell, which is too delicate to be generally useful; he has ascertained the corrections to be applied to monthly means of meteorological observations at

any hour; the amount of radiation of heat from the earth, etc., during night; and, in several points of view, has placed us on a vantage-ground at the commencement of our specific study of medico-meteorology. We must not forget to notice here, that Mr. Glaisher is always ready to give valuable information and advice to other less experienced observers.

To Mr. Glaisher we are also indebted for the institution of the British Meteorological Society,* which now includes nearly all the meteorological observers in England, with a considerable number of general lovers of science. These remarks on the great services which have been rendered to science by Mr. Glaisher seem necessary in this place; for, as we have endeavoured to show that, after all, little has been done directly for the object which we now have in view, it is our duty to acknowledge that the advance of general meteorological science during late years, the improvements in instruments, the construction of various tables and publication of observations, extending over some years, are all advantages for which, at the commencement of our special undertaking, we ought to be grateful.

OUR WEEKLY PROGRAMME.

ONE of our leading aims in conducting the Journal has been to make it a faithful exponent of the sentiments of all classes of our fellow associates upon questions of medical polity, science, and practice. We have endeavoured to supply substantial and scientific reading more abundantly than ephemeral discussions; believing that a Journal published under the auspices of an Association, embracing within its pale the ablest physicians and surgeons of this country, ought to take higher ground than the medical newspapers, which, with their "notices to correspondents", their autobiographies, and their "analytical commissions", have obviously a distinct mission of their own. We make this remark from no wish to disparage our weekly cotemporaries, and simply for the purpose of enabling us to state that the reason why we do not imitate them is because we have another destiny. We know that ninety-nine out of every hundred of our readers expect weekly at our hands a substantial contribution towards a library volume of reference, such as we indicated in the following paragraph of our inaugural address:

"We confidently hope to be able to make the Journal what it ought to be—a luminous and practically available epitome of the medical science and literature of the age—such as men of learning and leisure may read with profit and pleasure; and which will supply, in a well digested form, to our more toilsomely occupied majority, all that they have time to peruse, or can conveniently procure." [Jan. 7, p. 2.]

* The British Meteorological Society is under the presidency of Samuel Charles Whitbread, Esq. who, at great expense, has erected an excellent astronomical and meteorological observatory in the garden of his country residence, at Cardington, Bedfordshire. It may be remembered that this spot was the scene of the meteorological researches of the philanthropist, John Howard. The construction of philosophical instruments has been wonderfully improved since the time of Howard! His biographer tells us—"At the bottom of his garden at Cardington, he had placed a thermometer; and as soon as the frosty weather had set in, he used to leave his warm bed at two o'clock every morning, walk in the bitter morning air to his thermometer, examine it by his lamp, and write down its register, which done to his satisfaction, he would coolly betake himself to bed again."—See Hepworth Dixon's *Life of Howard*.

As the Journal is the great bond of union among the members of the Association, we have always reported Association Intelligence at a considerable length, and have likewise given up a good deal of space to the letters of members; but we have yet to discover that this has been either an unprofitable or an unacceptable course of proceeding. We have expressed our own views freely; and therefore, unless we had also given latitude to others to do the same, the Journal would have been perverted from its legitimate use, as the organ of the whole of our body. Regarding gratuitous advice, compulsory vaccination, Sabbath observance, chloroform in midwifery, etc., etc., we have, as in duty bound, stated our own views, as those questions arose before the medical world; but we have also given fair scope to those colleagues who differed from us in opinion. It ought to be obvious to those who grumble at the amount of space which is occasionally occupied by letters, that the Journal is equally the property of all the members of the Association, and that we are bound, as far as possible, to enable those who have something to communicate to their colleagues, to communicate it through the medium of their own Journal.

The daily correspondence which we have with our fellow associates in all parts of the kingdom convinces us that the plan which we published in our first number, under the sanction of the Journal Committee, has given general satisfaction both in its promise and in its performance. We therefore feel no inclination to alter the character of our programme, though we shall steadily strive for ampler resources wherewith to enhance the efficiency of the performance. We regard the introduction of Medical Meteorology into our weekly table of contents as a great step in this direction. This important addition to our original programme has anxiously engaged our attention for many months past, and it has also involved the writing and the reading of some hundreds of letters during that period. We felt that, until the details of our plan were fully matured, we ought not to broach our project, as we knew that the public discussion of the difficulties which we had to encounter was more likely to impede than to facilitate the progress of our arrangements.

An honourable and a lasting renown will belong to the Provincial Medical and Surgical Association, if it be able to maintain the lead which it is about to take in collecting and arranging the facts of a department of science which, though yet in its infancy, has commenced to shed the rays of morning upon fields of pathology which have hitherto been wrapped in clouds of impenetrable darkness. Let the Association be ever animated in this and all its enterprizes by the conviction that, if it make a right use of its great resources, it can do more than any College or Corporation has yet done or can do to give to the medical profession its legitimate and salutary influence in the economics of the state. The Association cannot but be ennobled in the eyes of the world by maintaining a healthful purity of ethics within its pale, and by applying its organization to the elucidation of grand problems in hygienics and pathology which do not admit of being tarnished with even the suspicion of selfishness.

ORIGINAL COMMUNICATIONS.

ON THE TOPICAL TREATMENT OF HOOPING-COUGH.

By EBEN WATSON, A.M., M.D., Professor of the Institutes of Medicine in the Andersonian University, Glasgow.

It is now nearly six years since I began to use topical applications to the pharyngo-laryngeal membrane, in cases of hooping-cough, in the hope of mitigating the paroxysmal spasms of the glottis which form so important a feature of that disease; and, being well satisfied with the results of the treatment, I published an account of it in the *Edinburgh Monthly Journal of Medical Science* for 1849, p. 1287. Seeing, moreover, that no therapeutic measure can be successful, or ought to be adopted, unless it is founded upon a true pathology of the disease for which it is proposed as a remedy, I endeavoured to point out, in the paper referred to, the theory of hooping-cough which commended itself to my mind, and which seemed to me at once to establish the reasonableness of the topical plan of treatment, and to explain the want of success which had attended the employment of general means in cases of that disease.

All experience bears me out in stating that the first and second stages of hooping-cough are marked by catarrhal inflammation of the larynx, trachea, and bronchi. In severe cases, this inflammation involves the whole thickness of the mucous membrane, and may even spread to the minute air-tubes, or to the pulmonary cells, before the spasmodic stage has well commenced. More or less speedily, however, the pharyngeal and bronchial branches of the vagi nerves become involved in the morbid action. It is a common opinion, that this nerve becomes inflamed; but we are not warranted by the results of *post mortem* inspections, nor by any data of "living pathology", in assuming that opinion as proved. At all events, a small amount of inflammatory action, such as may be called irritation, is sufficient to account for the symptoms of the second stage, in which the hoops occur. This feature in the pathology of hooping cough is interestingly proved by Romberg (*Diseases of the Nervous System*, Sydenham Society's edition, vol. i, p. 349), by experiments on the lower animals, performed by himself and others. But probably the cases which happened to Sir Astley Cooper and to M. Gendrin, both shortly stated by Romberg in the passage referred to, may be still more convincing to most minds. They were cases of inflammation, the one of the parotid gland, and the other of an aneurismal sac, in the vicinity of the pneumogastric trunk, and occasioning paroxysms of cough and dyspnoea. To these we might add the cases of small bodies, such as fish bones, etc., sticking about the pharynx, and causing similar symptoms; many of which are now on record.

It would seem, then, to be satisfactorily proved that the morbid agent in cases of hooping-cough commences its operation by producing inflammation of the pharyngeal and bronchial mucous membrane; and secondarily, irritation of the pneumogastric nerves. Now, it is obvious that such cases only differ from ordinary bronchitis, so far as their mechanism is concerned, in the amount of irritation produced in the pneumogastric nerves. In ordinary bronchitis, this is nothing more than what will suffice to produce those expulsive efforts in which coughing consists; while in hooping-cough it is so great as to excite again and again a spasmodic closure of the glottis, which at once prevents the expulsion of the offending mucus, and so impedes inspiration as to occasion the well known crowing sound that accompanies the act. In this stage, the stomach likewise becomes affected, and vomiting is a common termination of a fit of coughing; but this is easily explained on the acknowledged truths of physiology—the irritation of one set of branches, or of the trunk of a nerve, is capable of producing action in organs supplied by the same

having a common centre, and, *à fortiori*, by other branches of the same nerve-trunk.

Two questions are yet necessary to be considered, in order to complete a theory of whooping-cough. These are: first, In what relation does it stand to its so called complications? and second, What is the nature of the agency which starts the train of morbid effects of which we have been treating?

There would be little need of remark on the first of these points, were it not that almost all its attendant symptoms have been considered as part of the disease, and not as complications at all. It is indeed difficult to draw the line of demarcation between the bronchial inflammation which is essential, and that which is accidental to the whooping-cough; but, as we have certain well marked cases of the latter, in which the former state is either absent, or confined to the pharyngo-laryngeal membrane, I think it fair to consider all inflammatory action beyond that as complicating the primary disease. The same, in my opinion, is true of inflammation of the air-cells, and still more so of those complications which cannot be considered as extensions of the primary effect of the morbid agent. I refer to cerebral and abdominal complications, to dilated bronchi or ruptured vessels, all which may be traced, more or less directly, to the violence of the paroxysms of dyspnoea.

On the second point, I have only to remark, that the almost invariable occurrence of whooping cough, once in the life of every person exposed to its influence, its exhausting his susceptibility to suffer from it in the first attack, and its undoubted communicability from one patient to another, in the same manner as other diseases which are usually considered infectious or contagious, warrant the common belief that the disease is due to the operation of a morbid poison in the blood, the effects of which are manifested in the manner formerly explained. This poison seems to circulate in the system for a time before producing decided symptoms of the disease. About eight days usually elapse, during which the patient is affected with fever and other symptoms of common catarrh, before the stage of whooping commences at all. But as soon as the spasmodic stage is fairly established, all the symptoms of general disorder in most cases subside; and, unless some complication occur, the disease remains, during its future course, a local affection of the larynx and bronchi, without any evidence of a morbid condition of the circulating fluid. I think it more than likely, then, that the poison of whooping-cough is generally eliminated or rendered innocuous by the time that the spasmodic stage of the disease has reached its acme.

The objection, then, which I have heard urged against the topical treatment of whooping-cough, viz., that it does not aim at neutralising the morbid poison which originated the disease, but only at removing or mitigating the local effects thereby produced, must lose its point, if the facts just alluded to be admitted; and I believe few will doubt them, who have had much experience of the disease; for these facts prove that the whooping-cough is, for a long period of its course, the evidence rather that a peculiar morbid poison *has been* than that it *is then* present in the blood; and if it be remembered that it is in this very period that complications are most apt to arise and to endanger the life of the patient, the importance of checking the progress and counteracting the results of the morbid poison will not be denied, even though the measure by which this is to be accomplished lays no claim to the doubtful title of a hæmatic or blood medicine. For it ought not to be forgotten, that we have no very satisfactory proof that any of the remedies in use for other zymotic diseases act as direct antidotes to the morbid poisons which originated them. The action of quinine in cases of intermittent fever is by no means so uniform or certain as we should expect in an antidote to the paludal poison; while at least one other substance of a totally different nature, viz. arsenic, has produced results almost, if not quite as favourable. And besides, many other therapeutic agents, evidently acting upon the local and secondary effects of the poison, such as bleeding, mercury, etc., nearly approach, in their curative influence

upon the disease, those which are usually considered the more direct and antidotal remedies. The prevention of small-pox by vaccination is hardly a case in point; because it is merely an instance of one morbid poison exhausting from the blood the substance on which the other poison acts. It must therefore be confessed that we at present know little either of the nature or *modus operandi* of the morbid poisons, and perhaps even less of the antidotes that may be capable of counteracting them in the blood. While, then, we eagerly seek for the elements of induction regarding zymotic diseases; nay, while we admire the beauty of Liebig's fermentation theory of their origin, so ably supported by Dr. Carpenter in a recent number of the *Medico-Chirurgical Review* (No. xxi, p. 159), still it is useless to dream of founding, *as yet*, any rational system of therapeutics on such imperfect though beautiful hypotheses.

If, then, we cannot at present hope to be able to treat zymotic diseases by remedies aimed at neutralising the morbid poisons which remotely excite them, the only reasonable plan of dealing with them is to shorten or cure the secondary effects of these primary agents. To take the case of whooping-cough; we do not yet know of any medicinal substance that deserves to be called an antidote to the poison which at first excites the disease. We have, however, learned by observation that it produces two secondary diseases; viz., inflammation of the mucous membrane of the air-passages, and next, irritation of the vagi nerves. While then we have no means of treating, with any hope of success, the remote cause of these morbid states, we can, with almost certain success, treat the latter; and having cured them, it is matter of experience that the poison becomes speedily eliminated, and does not reproduce itself. I consider this a sufficient defence of the topical treatment against the objections of those who would have us, in fact, cease to treat zymotic diseases until we discover antidotes to their remote causes.

Let us now consider shortly in what way the solution of caustic, applied to the interior of the pharynx and larynx, acts in curing the local effects of the poison of whooping-cough. M. Joubert seems to think that the topical remedy only affects the inflammatory state of the mucous membrane, and the excessive secretion of mucus which results therefrom, and to which he attributes the spasmodic element of the disease. I have not been able to see his memoir, which is published in the *Recueil des Travaux de la Société Médicale de l'Indre et Loire*, 1er et 2de trimestre de 1851: but the following passage sufficiently indicates his opinion. "M. Joubert n'a pas, du reste, été conduit à employer ce traitement dans la coqueluche par le désir de modifier l'élément spasmodique en agissant sur les nerfs qui se distribuent aux voies respiratoires, mais seulement par l'idée théorique de modifier la disposition en vertu de laquelle s'opère la sécrétion morbide, à la présence de laquelle il attribue la toux convulsive." (*Bulletin Général de Thérapeutique*, tome xlii, p. 41.) Now, as the only disposition in the mucous membrane which determines the secretion is its inflammatory excitement, so it is upon that alone that M. Joubert considers the topical remedy to act. Nor do I seek to dispute the fact that such an action is effected, nay, that it is *first* effected in every case of whooping-cough in which the topical treatment is employed. But if the case be well watched, it will be found that, after the inflammation of the pharyngo-laryngeal mucous membrane is subdued, and after the expectoration has diminished in amount and in bulk, the whoops continue, though, in general, they are less frequent and less severe. In most cases, the remedy must yet be continued for a short time before the cure can be accounted complete. When, however, the inflammation of the larynx or trachea happens in any case to be peculiarly severe, the cure by topical means is always postponed for a longer time than usual; and this would seem to show that the nervous or spasmodic element seldom gives way before the inflammatory.

Not long ago, I treated two children in the same family, who were attacked at the same time by the whooping-cough. The one was a baby at the breast, and was very severely

affected, inasmuch that his life was for a time in danger. I began the topical treatment about the middle of the spasmodic stage; and in eight days he had ceased to hoop, and in a short time, to cough at all. His sister, the other patient, was about two years and a half old, and apparently much less severely affected with the hooping-cough; but she had just recovered from an attack of croup when she was seized with that disease, and at first her cough had much of the croupy sound. I treated her *pari passu* with her brother; and yet her disease continued two weeks longer than his.

On the other hand, I have known of cases irregularly treated by the topical method, in which the inflammatory element was subdued, and in which the hooping continued, though in a mild degree, for a considerable time longer. But the most convincing proof that the solution of caustic has a decided and sedative influence on the spasmodic element of hooping-cough, or, in other words, on the excited state of the extreme branches of the vagi nerves in the throat and larynx, is the fact, which my experience demonstrates, that the topical plan is most speedily effectual in the last stage of the disease, when all the previous symptoms of inflammation have disappeared, and the hoop alone remains. I have seen a number of such cases, in which the children seemed worn out by the disease, and in which general remedies had been long but vainly employed. In all these cases, the very first touch has a markedly beneficial effect; and its repetition for a comparatively few times suffices to perfect a cure.

When, however, we remember how much the nerves of any part are implicated in its inflammation, it may be, after all, that the affection of the pharyngeal and bronchial nerves, which occasions the spasmodic paroxysms of hooping cough, is of the same nature; and that we are warranted in agreeing in the main with M. Joubert, that the topical application of solution of caustic operates solely in subduing inflammation. Since, then, that morbid state exists in the bronchial mucous membrane as constantly in cases of spasmodic asthma* as in those of hooping cough, the rationale of the topical remedy becomes reduced to the counter action of only one morbid state; and we may call it an antiphlogistic sedative of the pharyngo-laryngeal mucous membrane. But this, in my opinion, can only be said with truth of the less sthenic degrees of inflammation, as I have explained in another paper (*Dublin Quarterly Journal of Medicine*, August 1852). The practical rule, however, remains importantly true, that the remedy should be continued so long as the slightest hoop is heard, although all the ordinary symptoms of inflammatory action, such as bronchitic rales or bulky expectoration, have been subdued for some time. If this rule is not strictly attended to, a relapse will ere long be the consequence; and the treatment will have to be continued nearly as long as if it had never been commenced at all. But if the disease be thus thoroughly subdued in its first attack, no recurrence of it need be apprehended during the patient's life. I make this statement in full knowledge of the succeeding history of all the cases in which I have employed the topical treatment; and many of them have been again freely exposed to infection.

Regarding the mode of prosecuting this topical treatment, I may now be allowed to make a few remarks, suggested by the statements or objections of other physicians, which I have either read or heard expressed in conversation.

1. The most convenient instrument for applying any solution to the throat or larynx, is the sponge and whalebone. The forceps suggested by Dr. Cotton, and which has one limb covered with sponge, is needlessly complicated, and much more apt to injure the delicate glottis. Nor is it fitted to obviate the supposed danger of the detachment of the sponge in the windpipe of the patient, which gave rise to the idea of Dr. Cotton's instrument at the first. It is, indeed, quite a mistake to think that there is any strain upon the sponge, when once it is within the

larynx. That organ cannot contract so as to detain the sponge; and it must have been very carelessly fixed on the whalebone, if the glottis could detach it during its withdrawal. Indeed, a skilful operator will seldom feel the contraction of the glottis at all; for, as the patient inspires immediately on the introduction of the sponge into the larynx, the muscular valve becomes relaxed and permits its easy withdrawal. The strong contraction which I have myself often felt, and which I have known many to mistake for that of the glottis, is in reality a proof that the sponge is not in the windpipe at all, but is caught by the pharynx immediately behind it. And this gives colour to the amusing story of the musician, whose larynx was being touched by a learned physician, who, on withdrawing the whalebone, found it destitute of the sponge. The physician was in great alarm; but the patient neither choked nor died. Ere long, however, he vomited the sponge from his stomach. It had been caught by the pharynx, and swallowed.

If the instrument is at all well made, this could never happen, except from one circumstance, which ought to be known by every person who attempts the topical treatment of the larynx, especially among children. It is, that the caustic solution in a short time destroys the thread with which the sponge is fastened to the whalebone. The simple and certain way, then, of avoiding any such accident as that to which I have been referring, is to have the sponge frequently renewed.

2. It would appear, from the following passage, that M. Joubert supposes me to have recommended the indiscriminate employment of a solution of the nitrate of silver of uniform strength: "Il n'y a pas une grande différence entre le procédé opératoire suivi par M. Joubert et celui de M. Watson; seulement le premier emploie des solutions concentrées à des degrés différents, depuis 1 gramme jusqu'à 4 grammes de nitrate d'argent pour 30 grammes d'eau distillée, et qu'il désigne par les numéros 1, 2, 3, 4." (*Bulletin de Thérapeutique*, tom. xlii, p. 41.) Now, saving the designation of the solutions by the numerals 1, 2, 3, and 4, which is doubtless a convenient plan when employing them on a large scale, there is no novelty in this practice of M. Joubert. For in my original paper on the hooping cough (*Edinburgh Monthly Journal*, Dec. 1849), I distinctly state that "the ordinary strength of the solution which I have used in the treatment of hooping cough, is gr. xv of the nitrate of silver to the ounce of distilled water; but, in some cases, I have with advantage increased it to ʒij of the salt in the ounce of water." From an enlarged experience of the treatment in question, I can now be still more precise; for I have found that in the early stage of the disease, and just in proportion to the intensity of the inflammatory process which may be present, so ought the solution employed to be proportionally weak. Afterwards, when the nervous symptoms predominate, the solution may with advantage be strengthened; but it is impossible to lay down rules that will universally apply to different cases, or even to the same case on different days. This must be left to the judgment of the practitioner; and he will find it quite necessary, for the favourable progress of the case, that he should use his discretion in regard to it, as much as to the administration of emetics or laxatives.

3. Dr. Scott Alison has lately drawn the attention of the profession to the application of several other substances to the larynx; and perhaps some of them, such as solution of morphia, may be occasionally used with advantage in cases of hooping-cough. I merely make this as a suggestion; but I have, from some little experience of its effects, a better founded opinion of another substance, which has not hitherto, I believe, been used as a topical application to the larynx. I refer to the hyposulphite of soda and silver, to which my attention was first directed by a notice in the *Medico-Chirurgical Review* (No. xxii, p. 567). This salt has a very soothing effect on the larynx when its lining membrane is irritated by a vitiated, and, as is generally the case, an acid secretion; and I entertain the hope that its solution will form a useful topical application in the first stages of hooping-cough. I intend, however, some time to lay before the profession a fuller account of its

* I have recommended the topical treatment of the larynx in cases of spasmodic asthma, in another paper: See *Glasgow Medical Journal*, No. 1, p. 37; and the *Periodic Review of the Association Medical Journal*, No. xxi, p. 462.

which I am at present making, of the value of this salt in laryngeal cases.

4. In some cases of whooping-cough, an obstacle is presented to the topical treatment, by a state of matters which is, in other respects, by no means unfavourable to the patient. I mean the irritability of his stomach, which makes the slightest touch of the sponge in the throat the signal for violent retching and vomiting, if the stomach be full. I very often, therefore, find it necessary to prescribe for this symptom frequent small doses of heavy magnesia, combined sometimes with a few grains of the trisulphate of bismuth. Such simple treatment seldom fails to mitigate the vomiting sufficiently to admit of the continuance of the topical applications.

5. These applications should be renewed at least every second day; but, if their commencement has been delayed till the disease is at its height, or if the whoops are very violent from the first, they should be repeated more frequently: and, for the reason stated above, the time of making them should be selected so as to have the stomach empty; and the patient should not be allowed to eat for an hour or two afterwards, else the feeling of rawness in the throat, which follows each application of the remedy, will be unnecessarily increased, and occasionally whooping and vomiting will be induced.

6. In making these applications of solution of caustic to the throats of children, everything in the shape of a formidable spatula should be dispensed with, and either a common teaspoon, or the index-finger of the left hand, should be used. In all cases in which it is important to pass the sponge into the larynx, I consider it quite necessary to introduce the finger into the patient's mouth, and to touch with it the tip of the epiglottis, along the surface of which the instrument may be glided down with certainty to the rima glottidis. And if this proceeding be performed at once with firmness, few children either can or will resist it by struggling, or by biting the operator's finger; but much patience and tact is sometimes necessary to school them to submission in the beginning of the treatment. After a few times, no more trouble is experienced.

Pursued in this way, with these precautions, and with a prudent attention to the diet and regimen of the patients, the topical treatment of whooping-cough wonderfully shortens the disease, and renders it nearly as mild as ordinary catarrh. Complications seldom occur, and thus the disease is stripped of its most formidable characteristic. Hence it is that I can give the following favourable numerical account of the results of the treatment in question.

	Cured within a fortnight.	Cured in 3-4 wks. treatment.	Resisted	Total
M. Joubert's cases	40	20	8	68
Cases treated through- out by myself	46	20	8	66
	86	40	8	134

In contrast with this table, I subjoin another of the ordinary duration of the disease when treated in the usual manner, as stated by a few of our best and most recent authorities.

Dr. R. Williams* states it at from 2 to 4 months, or more than a year.

Dr. Copland† states it at from 32 days to 5 months, or more.

Dr. C. J. B. Williams‡ states it at from 6 to 10 weeks, or more.

Dr. Walsh§ states it at from 8 to 13 weeks, or more.

Dr. West|| states it at from 8 to 14 weeks, or more.

MM. Barthez et Billiet¶ state it at from 1 to 3 months, or more.

Average of all the statements from 1½ to 3½ months.

* Williams on Morbid Poisons, vol. i, p. 311.

† Dictionary of Medicine, pp. 236, 237.

‡ Library of Medicine, vol. iii, p. 94.

§ Walsh on Diseases of the Chest, pp. 413, 419.

|| Lectures on Diseases of Children, p. 272.

¶ Traité Pratique et Clinique des Maladies des Enfants, 2me édition, tom. ii, p. 694.

I think it right to add to the above computations, the following statement of Dr. Robert Watt, whose treatise on the chin-cough, though published in 1813, may still be consulted with advantage, especially in regard of the history of the disease. "Nothing," he writes, "can be more uncertain than the course and event of this disease. In the mildest form in which it appears, it usually continues for two, three, or four months; in the more severe, it may last twice, or even thrice as long." (*Treatise on the Nature, History, and Treatment of Chin-Cough*. Glasgow, 1813, page 69.)

I have no ready means of shewing the proportion of deaths to attacks in this disease; but no one can dispute that it is a very considerable cause of the enormous mortality occurring among young children in this country. According to the reports of the Registrar-General, the deaths from whooping-cough in London stand in the proportion of 8.9 per cent. among females, and 6.2 per cent. among males, to the deaths from all causes under ten years of age. And in Glasgow, the proportion is nearly the same; the deaths from whooping-cough being 8.7 per cent. of the deaths from all causes under ten years of age.

Surely, then, a treatment which promised to diminish, or, perhaps, to annihilate, this very great mortality, ought to have been received with consideration by the profession. Such, however, has not been the case in the present instance: for, though such a promise has not only been given by it, but rendered almost certain by the results of an extensive trial, yet such a reception has not been accorded to the topical plan of treating the whooping-cough; at least if I may judge from the circumstance that few or none of our recent writers on children's complaints have noticed, far less recommended, the plan. Thus Dr. West, though he confesses that there is nothing "unreasonable in the expectation that a remedy (for whooping-cough) may some day or other be discovered which shall cut short its course with as much certainty as quinine arrests an intermittent fever, or which shall render the constitution insusceptible of its poison as infallibly as chicken-pox (cow-pox) preserves from variola;" yet he adds, "at present no such remedy has been discovered; and though the severity of an attack of whooping-cough, or its duration, varies greatly in different individuals, during different epidemics, and at different seasons of the year, yet we are unable, by any medicinal agents, to produce effects such as in these cases flow from causes quite beyond our control."* But surely the numerical results just given prove in a manner beyond all cavil, that the simple treatment which I have suggested is capable of cutting short the whooping-cough with as much certainty as quinine arrests an intermittent fever; and moreover, that it renders the disease, while it lasts, both milder in type and safer to the patient than the most favourable circumstances of season or epidemic could possibly do. For it should be borne in mind, that the results alluded to have been obtained at different seasons of the year, in different countries, during different epidemics, and by different observers. Seldom, indeed, has any new remedy so well stood the test of such a varied and extensive trial. At the same time, I hope that the theoretical considerations which I have stated so fully, and which are the general expressions of so many individual facts, sifted and weighed according to the strictest method of induction, remove the topical treatment of whooping-cough from among the vague class of *specifics*, and place it among the agents of rational medicine.

In contrast with the disregard, which is indicated by the silence of English physicians, as to the topical treatment of whooping-cough, I could quote the favourable opinions of many continental writers. For example, not only has M. Joubert put the treatment to the test of an extensive trial, but Dr. Debaud, in giving an account of it, alludes to his own experience in the following terms:—"Nous avons eu depuis, nous-mêmes, l'occasion de vérifier les effets favorables de cette pratique dans plusieurs cas de cette maladie."

* West on Diseases of Children, p. 208. Second edition: 1868.

(*Bulletin de Thérapeutique*, tome XLII, p. 41.) And in the recent edition of the elaborate treatise of MM. Barthez et Rilliet, the topical treatment of hooping-cough obtains a place amongst the available remedies for the disease. I shall be excused for quoting their brief but sufficient description of the method:—"Le Docteur Watson a conseillé l'emploi de la cautérisation pharyngo-laryngée avec une solution de nitrate d'argent de 75 centigrammes à 2 grammes 40 centigrammes pour 30 gr. d'eau distillée. M. Watson se sert d'une éponge solidement fixée à une baigne accourbée; la tête du malade étant fixée par une aide, et la langue préalablement abaissée, il porte l'éponge jusqu'à l'ouverture de la glotte; il résulte de cette petite opération une sensation de suffocation très légère et temporaire que l'enfant a bientôt oublié." (*Traité Clinique et Pratique des Maladies des Enfants*, 2me édition, tom. II, p. 657, published in 1853.)

I hope, then, that it may not be utopian to expect that the day is not distant when the treatment, so well described by these excellent writers, and the usefulness of which I have now been enabled to establish, very mainly, through the generous zeal and untiring perseverance of another French physician, will be more favourably received in this country, and more generally adopted by British practitioners of medicine. Were such to be the case, I do not doubt that the result would be displayed in a marked diminution of mortality among children, and in the removal of a long-standing opprobrium to the healing art.

Glasgow, August 1855.

ON CHOLERA, AND ITS TREATMENT BY COLD WATER AFFUSION OR DOUCHE.

By E. M. MACPHERSON, Esq., late Surgeon in the Army.

HAVING had various opportunities of treating cholera, during a service of nine years in India, and of testing the efficacy of cold water affusion in many cases of the worst description, since June 1845, I believe that a report upon this mode of treatment, which has been found so immediate in its effects, and beneficial in its results, will merit attention. And, if conclusions may be drawn from the ostensible principle of its action, the real nature of cholera cannot fail to be more distinctly recognised than has yet been acknowledged.

Before entering upon this report, it may be advisable, for the elucidation of the subject, to glance at the difference supposed to exist between cholera in Europe and cholera in Asia; and, for the better appreciation of the treatment proposed, to determine, from the copious and accurate data recorded of cholera, what is the leading characteristic of the disease, and what ought to be the object of our treatment in regard to it.

That the difference supposed to exist between the Asiatic and European forms of cholera is one of degree only, not of kind, will be evident on a cursory inquiry. Hence it will also be evident that the treatment applicable in the one form, is equally so in the other. In Asia, where the disease may be said to be indigenous, cholera, true to its history, bursts forth in all its vigour, and from the first appears in its advanced stage, or stage of collapse—in this country denominated its second stage. But when, after its onset in this advanced stage, it subsides in the virulence of its attacks, and the cases become milder, more amenable to treatment, and less rapidly fatal, it will be found to assume that form of the disease in which vomiting, purging, and cramps, prevail, and to be in every respect identical with the so-called European cholera.

In Europe, on the other hand, where the disease is almost invariably ushered in by vomiting, purging, and cramps, these symptoms constitute its first stage; but when these symptoms have ceased, and when, as dissolution approaches, the first has passed into the second stage, or stage of collapse, cholera in Europe will be found identical with cholera in Asia, where so many are struck down almost lifeless from the first.

How far these symptoms, viz. the vomiting, purging, and cramps (upon which so much stress has been laid in the pathology and treatment of the disease), ought to be taken into account, the known history of cholera in all places, and under all circumstances in which it has shown itself, will satisfactorily decide.

If the value of a symptom, with a view to treatment, is to be regarded in proportion to its influence on the fatality of a disease, then neither the vomiting, nor purging, nor cramps, will be found worthy of any consideration whatever in the treatment of cholera.

In the words of Dr. Copland, in his treatise on cholera: "The vomiting and purging, which are far from being the most dangerous symptoms, and are often the most remarkable in the least urgent cases, are generally slight, or at least not profuse, in those attacks where the sinking of the vital energies is the most rapid and greatest, and are readily allayed by medicines. The spasms are often slight, or nearly absent, in some of the most rapidly fatal cases."

That these remarks are fully borne out by the history of the disease, all who enter into the subject, and extend their observations beyond their own doors, may satisfy themselves. They may also infer, what must be obvious to most who have had experience of cholera in India, that the symptoms in question,—the vomiting, purging, and cramps,—if at all constant in their relation to the disease, seem to be so in an inverse ratio, as in compression of the brain, to the depression of vital energy. In other words, the collapse or asphyxia, which, with its sequelæ, oppressed respiration, impeded circulation, coldness, blueness, etc., is the only invariable symptom, and therefore the leading characteristic of cholera, and ought to be the object of our treatment; not only because it is the only constant symptom, but also, perhaps, rather, on the proof which experience will give all who have treated cholera, that reaction is the forerunner of every amelioration in the symptoms during an attack, and the only sign to be depended upon in forming a prognosis. It was in producing this reaction that the cold water effusion or douche was found so beneficial.

At Cawnpore, in June 1845, cholera broke out in the 53rd regiment, to which I then belonged, with the same virulence as attended it in various localities throughout India during that and the succeeding year. Two men, the last survivors of several who had been attacked within two days, were sinking under that fatal collapse which alone, without any other symptoms, marked all the cases that had occurred in the regiment.

Every remedy that could be devised to produce reaction had been tried in vain; they might as well have been put into the patients' breeches pockets, or applied to the bed-post. The exhibition of the nitrous oxide gas was not only fruitless, but far from encouraging. The breathing under its use became more oppressed and hurried; there was no pulse, nor was it rendered perceptible by the gas; and, as its continued exhibition distressed the patient, it was thrown aside as worse than useless. In despair at the utter want of the most trivial effect from the remedies employed, I made trial of the cold water affusion. I desired the water-carrier to pour water from his leathern bag over one of the patients; and, as the effect was good, then over the other patient, placed naked on a bedstead in the verandah. Attendants were at the same time employed in rubbing the limbs and trunk with their palms, and afterwards with dry towels. A refreshing sensation and comparative reanimation having followed each repetition of this operation, it was had recourse to at intervals, though only with the success of having prolonged life, which was ebbing fast for some hours.

This success, poor though it was, seemed to warrant the conclusion that, had the remedy been applied while somewhat more of life remained, recovery might have been the result. To test this conclusion by experiment, an opportunity was not long wanting.

On the same evening, as if by some fatal blast sent over the barracks, several men were suddenly struck in a state of collapse. Some retained consciousness, and

asphyxia); a few lost it, and were in a state of complete coma (*apoplexia*), with stertorous breathing; in three cases, attended with convulsions; others, especially towards morning, and during the two following days, were affected by vomiting, cramps, purging with rice-water dejection, and the usual concomitants of cholera in Europe.

How many came under treatment at this time, I cannot now venture to affirm; but I believe I am correct in stating that, of all admitted, but two died—one of apoplexy; the other, who was allowed a warm bath, of cholera. The rest, all of whom recovered from the cholera, were treated by the cold water affusion.

Since the period above alluded to, I have not had an opportunity of treating cases of epidemic cholera. Several cases, however, of endemic cholera among Europeans, while it was, as often happens, epidemic among the natives, have been treated by me in every instance with success.

One of the most remarkable of these endemic cases occurred at Meerut, in August 1848. A corporal of the 9th Lancers, an atrabilious subject, was brought to hospital at 4 P.M., almost pulseless, having been purged during the morning, and having passed several rice-water dejections on admission into hospital. There were slight cramps, and occasional efforts to vomit. He was immediately placed in a hip-bath, and water was poured over him, while hospital attendants rubbed the limbs and trunk. This was continued until he became chilly, and shivered. He was then removed from the bath, dry rubbed, and placed in bed, much revived by the operation, as was shown by less oppression in breathing, and a more distinct pulse. After remaining in bed for about half an hour, he began to relapse; the pulse sank; vomiting, purging of rice water, and cramps, returned. He was replaced in the bath, with the same effect as before. Being again placed in bed, he again relapsed. The water was again had recourse to, and repeated at intervals as above, according to symptoms, until 10 P.M., six hours after its first application. The respiration then became free, the pulse soft and distinct; the natural warmth was restored, and remained; and the patient slept until morning, when he awoke with a furred tongue, feeling weak and drowsy, but without that consecutive fever so often more fatal than the disease itself, and which has always seemed to me to follow most in those cases in which brandy, opium, ammonia, or other stimulants, have been freely administered.

Meagre and unsatisfactory as the above statements must appear, taken as evidence of the efficacy of the treatment advocated, yet, if the action of the remedy shall be thought to afford a satisfactory explanation of its curative effect, one case successfully treated in the manner prescribed will carry more weight than accurate details of numerous cases, treated by the unknown action of some occult remedy.

The first effect of cold water, poured over the head and chest in a small stream from a water ewer, held at a greater or less height by a person standing on a chair or raising his arm over the patient placed in a bath while frictions are applied to the trunk and limbs, is to produce, as in cases of ordinary asphyxia, a convulsive gasp or forced inspiration, succeeded by two or three strokes of quickened respiration. With each gasp, as by a convulsive throe, the parietes of the thorax, before immovable, will be observed to expand, and the diaphragm will descend. Simultaneously with each effort of inspiration, the impeded circulation will be found to flow, the pulse to partake of the impulse, and the sluggish pupil to resume its wonted sensibility. These are the first and immediate effects of the water douche. When continued, they constitute reaction; and if this is maintained, the vital energy, even at its last ebb, the natural heat of the surface, and the colour of the skin will be restored. This is effected by the imbibition into the blood, through respiration, of atmospheric air taken in at each forced inspiration; the entire surface being at the same time stimulated by frictions to the limbs. It being evident, according to this view, that the stimulating effect of the cold water douche is to be attributed to its power of exciting the respiratory function to take oxygen into the system, it may be inquired how the

experiment with the nitrous oxide gas above alluded to failed so signally. One essential condition to its action was wanting; viz., that expansion of the thorax for the reception of air into the lungs, upon which the effect of the water douche so much depends. Since I have become aware of this as an essential condition in the effect produced by the water douche, I have not had an opportunity of repeating it in conjunction with the gas; but may it not be presumed that, taken together, if they do not prove an antidote to the disease, they are at least worthy of a trial. That the want of oxygen in the blood is the cause of cholera, has often been advanced, if not generally admitted; but the effect of this want upon the brain in producing vital depression seems to have been overlooked; while its effect, or that of some poisonous miasm in the system, upon almost every other organ of the body, has been fully insisted upon as indicative of some particular line of treatment to be pursued.

How symptoms are to be regarded as indicative of treatment has already been noticed. Is it not, however, a general law of the system that any violent shock inflicted upon it, as in concussion, compression, some cases of poisoning, and in cholera itself, is followed by vomiting, purging, cramps, and suppression of urine, in a greater or less degree according to the nature of the shock, unless vitality shall have been so overwhelmed by the force of the injury as to pass away without any attendant symptoms, save suppression of urine, which being in proportion to the collapse, gives, by its cessation, one of the surest indications that a generous reaction has set in?

In cholera, as in cases of drowning or poisoning by carbonic acid gas, in all of which the *post mortem* appearances are so strikingly similar, may not suspended animation, collapse, or asphyxia, be ascribed to the paralyzing effects of carbonized blood upon the brain? For, precisely in proportion to the removal of this effect by the stimulating agency of oxygen imbibed through the respiration, will reaction ensue, and the powers of life return, and all the symptoms that characterised the affection disappear. The mode of using the cold water affusion has been pointed out in the case detailed as having been under its operation for six hours. The most essential requisite for the successful application of this mode of treatment was found to be undaunted perseverance, so long as after each relapse reaction could be induced by its repetition. It was a want of a knowledge of the good effect of this perseverance, that caused those two cases first mentioned to be given up in despair. Each time that the douche was resorted to, its effect was of longer duration; until at length, by watching and perseverance, the respiration, "the pendulum of life," was set in motion; every part of the vital machine dependent upon it moved in concert, and the brain, the main-spring of life, was restored to its wonted power of maintaining the just equilibrium.

With respect to the state of the atmosphere during the time that cholera prevails, much has been said. One simple fact, familiar to many, I would mention, as I have not seen it alluded to before; the dimness of lights, and the dulness of fires in cholera seasons, are as striking as their brightness and briskness in this country in frosty weather. If the presence of oxygen is allowed to be the cause of the latter, the former may be imputed to its absence; and the opposite states of feeling in all animated nature, induced upon those who have experienced both, is beyond question.

The mode of applying the cold water douche merely consists in placing the patient in any convenient position, so that, while water is being poured over him, frictions may be applied to the limbs. After the gasping has ceased, this process is to be continued until the depressing effect of cold, shivering, and chattering, sets in, when the pulse will begin to fall. The patient is then to be placed in bed, having been well rubbed. In a short time, when warmth begins to return, relapse will take place. The water is to be repeated in the same manner as above, and persevered in so often as collapse recurs. After each repetition, its effect will be found to be more palpable and more pro-

longed; until at length, through the agency of the imbibed oxygen, the system is restored to its wonted power.

Many have mentioned in a general way the good effect of cold water in cholera; but none, I think, have understood the reason of this good effect, and therefore it has not been carried to its full extent.

It may be well to add, for the satisfaction of those who cling to the idea that cholera is a disease of vomiting, purging, and cramps, that under the water treatment, as described, these symptoms will soon cease to be objects of attention. They will in general subside on the first application, and seldom reappear after the third or fourth.

As to internal remedies, water to drink freely will be found the most agreeable to the patient's taste, less productive of nausea and depression, and not so prone to give rise to the often fatal consecutive fever.

As to the premonitory diarrhoea, on which much stress is laid, I would remark that in the worst cases of cholera it neither precedes nor accompanies the disease; that often, where it subsides, cholera sets in; that where it continues, cholera does not necessarily follow; that it is not part and parcel of the disease; that to view it as such, and to treat it accordingly, can only be in accordance with that style of medical reasoning which has ever puzzled the profoundest lawyers.

August 1853.

PERISCOPIC REVIEW.

SURGERY.

CASES OF CHRONIC INFLAMMATION OF THE KNEE-JOINT.

The following cases are reported in the *Lancet* for June 4th and 11th.

CASE I. Thomas T., aged 8½ years, a scrofulous looking child, was admitted into Isaac's ward, in St. Thomas's Hospital, under Mr. South, on September 23rd, 1851. The patient had been ailing from infancy, and was attacked about three years previous to admission with severe pain in the knee-joint. This acute inflammation subsided after a little while; a twelvemonth passed with comparative ease, when the pain returned, and the child entered Guy's Hospital, where he remained fifteen weeks, and then repaired to St. Thomas's. On examination, the knee was considerably swollen, the pain not very severe, but the boy complained when pressure was made on the patella. There was much swelling and fluctuation above the inner condyle, and between the ham-string muscles, and also on both sides of the head of the tibia. The leg could be moved without assistance or pain, and the child did not recollect having struck the knee, or received a blow upon it.

Emollient applications and rest were ordered. The swelling gradually increased for the next three weeks; and in about six, the matter came to the surface, and pointed. An opening was made in a bulging part below the knee, and about four ounces of thin whey-like matter were evacuated. The boy's health kept up pretty well, but the discharge weakened him. Five months after admission, four sinuses had formed around, above, and below the knee; they all discharged thick purulent matter, of laudable colour and consistence. The ends of the bone seemed somewhat enlarged, the leg was flexed on the thigh, and the boy's health was declining, although he had been kept on nutritious diet.

Five months after admission, amputation was performed, whilst the patient was under the influence of chloroform. Very little blood was lost, but the boy vomited several times during the operation. There were found thickening of the synovial membrane, absorption of cartilages, and caries of bone.

CASE II. A. B., aged 15 years, a strumous girl, but in tolerable general health, stated that her left knee had been in a morbid condition for twelve years. Enlargement and inflammation of the joint were supposed to follow an injury with which the patient met when only three years old. Rest and the usual mode of treatment enabled her after some time to move about on crutches; but she remained liable to attacks of inflammation, which necessitated rest and confinement to bed.

It was after a fall, and a consequent injury to the joint, that

Mr. BIRKETT first saw this patient in Guy's Hospital in the summer of 1852: the joint was then almost fixed, but allowed slight flexion, which gave great pain; the patella was immovable, and the tibia drawn backwards on the femur. After the patient had been kept at rest for about two months, the inflammatory action subsided, but again commenced as soon as movement of the joint was permitted.

The girl now became quite worn out, and wearied by the idea of confinement to the horizontal posture. At her earnest entreaty, the limb was amputated on 21st September 1852.

On examination of the joint, the cartilages could no longer be seen; isolated points of inflammation, with a little pus here and there, were observed; and some vascular fringe-like fibrous formations were in contact with the bones, which were soft and spongy, and contained much adipose matter.

CASE III. William B., aged 14 years, was admitted into St. Bartholomew's Hospital, September 14th, 1852, under the care of Mr. STANLEY. He had been employed at saw-mills, had generally enjoyed good health, and stated that, while working one day, a boy darted a piece of pointed wood at him, which entered the flesh at the knee. He withdrew it; the wound bled very little, but the pain was so great that he was obliged to leave his work and go home (about five minutes' walk). His mother bathed the part with warm water and applied a poultice. This treatment was continued for ten days, but the swelling increasing, the patient was brought to the hospital.

On examination, Mr. Wormald considered that fluid was effused in the joint, and he made an incision over the articulation, but not into it. Purgatives and a spirit lotion were ordered. The swelling at first diminished, but it increased in a few days, and pain towards the inner part of the thigh was complained of. The leg was now put into a splint-box, small doses of mercury were prescribed, and twelve leeches applied to the joint. As no improvement took place, the leeches were repeated. Two days after this, an indurated and painful spot was noticed on the thigh. Leeches relieved the pain, but the boy was becoming emaciated, and signs of hectic fever appeared.

One month after admission, an opening occurred spontaneously on the external part of the knee; much pus escaped, and pressure on various parts of the joint caused purulent matter and blood to escape.

Mr. Stanley, on taking charge of the case, enlarged the opening into the articulation, and gave exit to a great deal of pus mixed with blood. No change of importance occurred for the next few days, except that the whole texture of the thigh assumed a boggy feel, and fluctuation was detected on its inner side. An exploratory incision was made both on the inner and outer aspect of the thigh. Serum mixed with blood was evacuated, and the probe, passed into the wound, struck upon bone. Mr. Stanley removed the thigh high up by the flap operation, the patient being under the influence of chloroform. There was destruction of the synovial membrane and cartilage, abundant purulent secretion, principally from the denuded bones, and infiltration of pus in the tissues surrounding the joint.

The boy progressed extremely well for the first eleven days, when he fell into an apathetic state, after being very restless. The next day, severe pain in the left side of the chest was complained of, accompanied by rigors. A pericardial friction sound was heard over the apex of the heart, but at no other part of the organ; and a pleuritic rubbing sound was detected, after each inspiration, below the left axilla. On the right side the breathing was coarse and loud, but no morbid sounds were made out. Delirium was the chief sign for the next few days, with some abatement of the pain. A consultation being held with Dr. Roupell, sedatives and stimulating expectorants were ordered; but the patient fell into a state of coma, the wound ceased discharging, and he died on the 4th of November, sixteen days after the operation.

EXAMINATION OF THE BODY. The left pleura was full of thin puriform fluid, which flowed out when the thorax was opened. The lung was covered by a thick layer of rather firm lymph, extending over the whole surface, and also partially between the lobes. The organ itself was considerably compressed, not consolidated, and much heavier than natural. The interior of the lung was full of puriform deposit, consisting in every part of circumscribed masses of soft lymph, which yielded under pressure. Towards the inferior margin, the pulmonary substance was seen through the pleura to be of yellow colour, and on cutting into this part pus flowed out; the tissue itself was soft, easily broken down by the finger, and appearing to have had suppuration. The lung and pleura were removed on the right side, save two circumscribed deposits of lymph.

base of the lower lobe. Puriform fluid issued from the trachea on an incision being made into it. The pericardium and heart were quite healthy.

The stump presented complete want of activity, the ligatures were not detached, and the femoral vein, to the extent of about two inches from its extremity, was plugged with a firm coagulum; above this spot the vein was found filled with pus and blood, as were also the deep femoral and iliac veins, as high as the inferior cava. On the coats of the vessels, which were much discoloured, were deposits of lymph in various places.

CASE IV. William H., aged 18, a labourer at a wholesale corn-dealer's, was admitted into St. Bartholomew's Hospital, April 12th, 1853, under the care of Mr. STANLEY. No scrofulous taint was traceable in the family, and the patient had enjoyed very good health up to a few days before his admission, when he began to feel uneasiness in the left knee. This turned to actual pain, though he had experienced neither blow or fall upon the joint.

On examination, the left knee was found swollen and extremely tender to the touch; the least motion of the joint gave pain, and the febrile symptoms ran high. Mr. Stanley had leeches applied to the affected part, and subsequently emollients; internally the patient had diaphoretics, mercury, etc., and was well supported.

The progress of the inflammation was somewhat checked by the vigorous antiphlogistic measures employed; but formation of pus took place, and the purulent matter burrowed up the thigh. The abscess was opened in several places successively, and fistulous tracts became established, the pain and distress not thereby diminishing. Tonics, opium, good diet, wine, etc., were sedulously had recourse to; but it soon became evident that the local mischief was bringing on hectic fever, and that no means could save the patient's life but amputation. To this measure, however, the patient would not give his assent.

The patient became more and more weak, in consequence of irritation and abundant suppuration; and one week after Mr. Stanley had mentioned the necessity of operation, the boy requested that amputation should be performed. On the 14th of May, 1853, one month and two days after admission, Mr. Stanley removed the limb.

On examination of the joint, it presented thickening of synovial membrane, destruction of the cartilages, and caries of bone. It was thought that the periosteum of the femur had suffered, as a large abscess was discovered in front of the thigh; but the bone and its covering were found healthy. The apertures on the tegumentary surface around the joint were observed to communicate with the latter, and extensive suppuration had evidently taken place in the articular cavity.

The patient did well.

CASE V. A youth, aged 19, was admitted into Bentley ward in St. Bartholomew's Hospital, under Mr. LAWRENCE, May 21st, 1852. He had been suffering from gonorrhoea about one month; the discharge on admission was very slight. He had, however, for some days past been suffering from acute pain in both ankles and in the right knee. On examination, these parts were found very tender to the touch, some swelling existed in the knee-joint, and severe pain was occasioned when passive flexion of the articulations was attempted. Half an ounce of lemon-juice in camphor-mixture was ordered to be taken every sixth hour. Mr. Lawrence also desired leeches to be applied to the affected joints. This medication was continued for several days, but the lemon-juice produced no distinct effect upon the arthritic symptoms; it was therefore left off, and the pure antiphlogistic treatment pursued. The pain and inflammation in the ankles gave way in a short time, but these symptoms became more and more intense in the knee, and suppuration took place, and all the unmistakable signs of hectic fever set in.

Mr. Lawrence amputated the leg, by the circular operation, six weeks after admission. The joint was found much disorganised, and presented acute inflammation of the synovial membrane, suppuration, and loss of cartilages.

The recovery was rather slow, a portion of the femur having become necrosed, but the boy was eventually discharged with a good stump. About a twelvemonth after the operation, the patient was in good general health, with a serviceable stump.

CASE VI. George D., aged 37, a thin, weakly looking man, with fair complexion and red hair, a ladies' shoemaker by trade, was admitted October 8th, 1852, into St. Bartholomew's Hospital, under the care of Mr. STANLEY. At the age of sixteen, the patient slipped on a frosty day, and fell upon his right knee; he was forthwith taken to the London Hospital, and placed under the care of the late Mr. Andrews. He stayed two months in that institution. The acute symptoms were relieved by appropriate treatment, and he was discharged in good con-

dition, being able to use the right limb as well as before the accident.

A few months afterwards, the patient sat for some time on damp grass, and was immediately attacked with severe pain in the knee; the joint swelled very rapidly, and he repaired to the London Hospital. When the more urgent symptoms had been subdued, and the chronic stage had set in, Mr. Andrews proposed amputation, which was accepted by the patient. When the latter had been placed on the operating-table, the late Mr. Scott remarked that the limb might perhaps be saved. The patient was eventually discharged, and placed himself under Mr. Scott's care, who for a twelvemonth applied his strapping to the patient's knee. Partial ankylosis was at last obtained, and the man, for the following twenty years, could use the joint to a limited extent, and with tolerable comfort; he, however, was liable to occasional fits of pain, and seldom walked without a stick.

At Christmas 1851, about twenty-one years after the original accident, the patient caught cold, and was seized with severe pain in the joint. It swelled rapidly, and he was incapacitated from walking. When these symptoms had partially abated, the man repaired to a place where this chronic affection was treated with cold applications and globules. Not having experienced any benefit after six weeks' stay, (as might easily be foreseen), he placed himself under the care of Mr. Stanley. Good diet, tonics, poultices, and subsequently gutta serena splints to the knee, were employed; the general health improved slightly, but it was plain that the carious state of the joint was such that the irritation might shortly destroy the patient. He was, however, discharged two months after admission, but returned soon afterwards with renewed pain in the joint. Mr. Stanley now stated that no course but amputation was left, and the patient returned to Gravesend (his place of abode) to consider the matter.

The patient was subsequently seen in the London Hospital, where he remained but a few weeks; no measures short of amputation being available.

CASE VII. J. W., aged 14, was admitted into St. George's Hospital, under Mr. HAWKINS, Dec. 8th, 1852. The patient had, about a twelvemonth previous to his present admission, been received into the hospital for acute inflammation of the synovial membrane of the right knee-joint. He remained several months under treatment, the inflammation was subdued, and he was discharged with a partially ankylosed knee. He was desired to wear a splint for some time, so that the process of ankylosis might be favoured; but he did not attend to the directions given; the splint was soon cast off, the limb freely used, and new inflammation excited.

He was re-admitted, and it was soon observed that pus had formed in the joint. The abscess was opened some time after admission, to give the patient a chance of ankylosis forming again; but the system now gave way under the irritation of the articular suppuration. Amputation was performed on March 17th, 1853, almost three months after the boy's re-admission.

Mr. Hawkins found a small quantity of pus within the knee-joint; the cartilages both of the articulating surfaces of the femur and tibia were absorbed, a granulating surface appearing in their stead. This boy progressed very well, and the stump was, on May 10th, completely cicatrized.

CASE VIII. W. C., a brick burner, aged 57, was admitted into Charing Cross Hospital, under Mr. AVERY, September 6, 1852. About two years before admission, he slipped and almost fell upon the right knee, in which joint he had for a considerable period had rheumatic pains. The uneasiness following the accident was not severe, for the man bore it about five months. At the expiration of this period, swelling and pain occurred, without any fresh cause. The usual remedies were then resorted to, and temporary improvement was several times obtained; but the external enlargement of the joint, the constant, though not very distressing pain, and the inability to walk with comfort, continued. The right knee-joint was found considerably enlarged; it felt tough, slightly elastic, and neither flexion nor pressure seemed to give the patient very great pain. No external opening was noticed, and no symptoms of suppuration in the joint was present.

Mr. Avery ordered the joint to be painted with the æthereal tincture of iodine,* and prescribed at various times iodide of potas-

* The fluid consists of sulphuric ether, which is made to take up the maximum amount of iodine, the tincture thus becoming very strong. The effect being powerfully derivative, has been found very satisfactory in several instances.

sium, colchicum, liquor potassæ, etc. The local application of iodine procured some improvement.

Severe inflammation recurred after several months, and suppuration took place in the joint; the abscess was opened, and a considerable quantity of pus evacuated.

Several months elapsed, during which the patient had generous diet and stimulants; but the morbid state of the knee-joint at last produced alarming exhaustion, and amputation was performed on 25th April 1853, by Mr. Luke's antero-posterior flap method. The joint, on being opened, presented thickening of the synovial membrane, connected with the suppurative process; but the articular cartilages were not attacked. The patient did well.

CASE IX. R. G., a grocer's shopman, aged 34, of dark hair and complexion, and nervous temperament, was admitted into the London Hospital, under Mr. ADAMS, on the 5th of April, 1853. When sixteen years of age, he had a slight fall upon the right knee, which caused very little pain at the time of the accident; but a few weeks afterwards the joint was attacked with severe inflammation, matter quickly formed, and a considerable amount of pus was evacuated on the abscess being opened. The patient was laid up for a twelvemonth, during which time active suppuration continued. The openings made around the joint healed up. Partial ankylosis probably took place, and for sixteen years the man contrived to attend to his occupations, sometimes requiring the support of one or two sticks. Pain and uneasiness recurred at intervals.

The patient now and then fell, but he generally experienced little pain or trouble from these accidents; but about five months before admission, he fell over a piece of orange-peel, and injured his knee so severely that he was unable to get up. He was now laid up for several months at his own house; matter formed in the joint, the abscesses opened spontaneously, the tibia became dislocated backwards, and the pain was very severe. The patient at last applied at this hospital.

The knee was found considerably enlarged, the outline of the joints lost, the tibia dislocated backwards, and the textures unyielding. Movements of flexion, extension, or rotation, gave very great pain; there were several apertures around the joint discharging pus, and the general health was much impaired.

Mr. Adams endeavoured for four weeks to improve his health by good diet and tonics. Amputation was performed on 7th of May, 1853.

When the joint was cut open, it was found that none of its textures could be recognised; the suppurative process had destroyed the originally thickened synovial membrane, and nothing was discernible but carious bone. At first traumatic fever ran high, and the patient's great debility was very alarming; but he struggled through this stage by the aid of good diet, tonics, and wine.

CASE X. W. S., aged 19, was transferred to Mr. ERICHSEN from the Physician's Ward, in January 15th, 1853, with chronic inflammation and thickening of the synovial membrane of the right knee. The limb was encased at once from the foot to the hip in a firm starch bandage. Very great relief was experienced, the pain and startings seeming much controlled. Small doses of bichloride of mercury in decoction of sarsaparilla were ordered. The apparatus was worn for twelve days, when the patient complained of pain in the joint; to relieve this the starch bandage was removed, twenty-four leeches applied to the knee, and the limb placed on a pillow. A week after this the starch bandage was again put on, as the inflammatory symptoms had subsided. The patient now remained free from pain, and soon began to walk about the ward with his leg in a sling. The apparatus was left on for almost one month, when it was cut up, and the limb ordered to be rubbed with the following liniment, to promote absorption: iodide of potassium, one drachm; soap liniment, one ounce.

A few days afterwards, Scott's strapping plan was adopted for the knee, and in a fortnight's time the patient could bear considerable weight on the limb. Cod liver oil was now substituted for the bichloride of mercury, and on the 29th of March, the patient could walk on the affected leg.

SECONDARY DISEASE OF THE KNEE-JOINT FROM DISEASE AND INJURY OF NEIGHBOURING STRUCTURES.

The *Lancet* for June 18th and 25th contains an account of several cases, in which the knee-joint became affected in consequence of disease or of injury of the structures in its vicinity.

CASE I. J. H., aged 37, a stout, plethoric man, who had much indulged in drinking, was admitted into King's College Hospital, under Mr. HENRY LEE, in September 1852.

Six months before admission, he snapped the patella transversely on the right side. For this injury he went to St. Bartholomew's Hospital, where he remained three months. The fragments were then half an inch apart, and the patient able to walk fairly. A month after this, he slightly hurt the knee again; but he was well in a week.

On September 17th, 1852, three days before admission, the patient was attacked at two o'clock in the morning with a fit of shivering, which lasted until the middle of the day. Since the first accident he had experienced a sense of tightness in the popliteal space; this left him when the shivering came on. As soon as the rigors had ceased, he began to feel pain in the injured knee, which became swollen, red, and tender.

Leeches were applied above the patella, and a blister on either side of the joint. These, however, gave no relief.

Shortly after the patient's admission, the knee being much swollen, and fluctuation easily discernible at the side, an incision was made on either side of the joint, and about three ounces of thin purulent matter escaped from an abscess between the fractured ends of the patella.

On the third day the knee was more swollen and red, and on passing a probe into the wound on the inner side of the joint, some clear fluid exuded. This opening was then extended towards the back of the knee for about two inches, and downwards for about one inch.

On the following day the skin over the joint was of a deep red colour, and the parts around much swollen; there was considerable tension about the wound, and on introducing the finger, the lower part of the inner condyle was distinctly felt, as also the rough exposed surfaces of the patella. Both the incisions were enlarged, and a quantity of purulent matter escaped.

On the fifth day the swelling and redness had much subsided, but the patient remained in a very precarious state for the next eleven days; the wounds discharged profusely, and he had several shivering fits. Mr. Lee had him placed under the influence of chloroform, and made an incision on the inner side of the upper part of the leg, from which much pus escaped.

For the next few days the patient suffered repeated rigors, and Mr. Lee made more incisions in the leg. The man died October 16th, twenty-six days after admission.

EXAMINATION OF THE BODY. The patella was broken transversely, the fragments being about half an inch apart. From the apex of the lower fragment a small piece was detached and necrosed; the cartilages were in several places absorbed on the articular surfaces of the femur and tibia; the crucial ligaments were destroyed, and extensive suppuration between the hamstring muscles, the soleus, and gastrocnemius, had taken place. The femoral vein appeared healthy, and its lining membrane was not discoloured; but at the junction of the profunda vein was some whitish matter, which Mr. Lee judged to be softened fibrin. In the lungs there were small purulent deposits. On making a longitudinal section, the femur was found perfectly healthy.

CASE II. J. G., a cab driver, aged 36, who had not been very temperate, was admitted into the Middlesex Hospital, under Mr. SHAW, April 12th, 1853. He received a short time before admission a kick from a horse, by which the upper part of the left tibia was injured. The wound was not alarming, and matters went on well for a few days; but the soft parts having ulcerated, the bone became exposed, and exfoliation commenced. The wound became unhealthy, and the superficial veins of the leg and thigh showed signs of inflammation. A slight attack of erysipelas also took place. Severe pain was complained of, and it was suspected that suppuration was taking place in the articulation. The fever ran high; the matter came to the surface, and the abscess which had formed in the cavity of the joint was opened. The discharge of pus was profuse, and it became apparent that irritative fever would destroy the patient. Mr. Shaw therefore took off the leg on the 20th of May, 1853. On examination, the joint was found distended by offensive pus; the cartilages and ligaments were softened, the former presenting a flocculent appearance. The abscess of the joint had burrowed under the extensor muscles, and formed an enormous sac.

The patient remained very weak, and in spite of the exhibition of tonics and stimulants, he died nine days after the operation.

CASE III. R. S., aged 48, was admitted into St. George's Hospital, under Mr. H. C. JOHNSON, July 14th, 1852. About six months before admission, he had swelling and pain at the lower part of the femur. An abscess subsequently formed there, and was opened on the inside of the thigh. On admission, the internal part of the latter presented a sinus leading down to the bone; pain was still continuing, and there was a copious discharge of matter. Examination

tonics, good diets, etc., were resorted to; but, after a few weeks, the knee-joint became involved; and the patient's health was giving way under the disease. Amputation was performed Oct. 21st, 1852. Mr. Johnson found the articular cartilages destroyed, the cavity full of pus, the inner side of the joint partially ankylosed, and the patella attacked with caries. Numerous sinuses opening by the inner side of the femur communicated with the articulation. The femur was enlarged and hardened.

After the operation, the patient went on pretty well for a few days, except that the bowels were obstinately constive. On the sixth day, however, the man had rigors, followed by vomiting, profuse diaphoresis, and the well known symptoms of purulent infection. He died on the ninth day after the operation.

CASE IV. W. M., a gamekeeper, aged 30, who had apparently lived freely, came to St. George's Hospital Jan. 5th, 1853, under Mr. HAWKINS. He presented, in the vicinity of the right knee, a fluctuating swelling, which had existed for about nine months, the exciting cause being unknown. The tumour was circumscribed, and situated over the head of the tibia; but the joint was not obviously involved, as the patient complained of no pain, and the synovial cavity did not seem enlarged, though the knee was stiff. It was a question whether the swelling was the result of a collection of purulent fluid, or of the distension of a bursa. An exploratory puncture was made; and, as the liquid which escaped was clear, it was determined to excite absorption by blisters and solution of iodine.

This course was persevered in for about two months, but the swelling did not diminish; it was again punctured, and this time contained pus. The tumour was therefore laid open. The abscess had in the meantime increased in size, the affected limb was much larger than its companion, and the patient's appearance worse than on admission.

The sac was at first thought to be superficial to the joint, and was opened by a small incision almost two months after the first examination; but soon after this the collection of matter increased rapidly; the patient was seized with intense pain in the knee; he had startings in the limb, and slept very badly. He had slight cough, but no disease of the lung was detected. The urine was high coloured, but healthy; the abscess extended to a great depth; and bone could be felt by the probe, apparently close to the head of the tibia.

After about three weeks, as the patient's health was suffering, amputation was performed by Mr. Hewett, in the absence of Mr. Hawkins, on April 14th, 1853. The incision was circular, and made about the lower third of the thigh; it ran through the cavity of the abscess. The anterior portion of the stump was much thickened by serous infiltration, and rendering it impossible to bring the margins of the wound into apposition immediately after the operation. This also prevented the small vessels from retracting, so that almost thirty ligatures were required.

On examination of the joint, its cavity was found to communicate freely with that of the abscess, the cartilages were almost destroyed, and the exposed surfaces of bone carious and partly united by soft ankylosis.

The patient progressed well for sixteen days, but on the seventeenth day he had a severe rigor, followed by an abundant perspiration, and the symptoms of purulent infection became manifest. The face turned very yellow; rigors and perspiration recurred at intervals; the bowels became very weak; the tongue foul; and, after a few days, delirium set in. Still the stump looked healthy; there was plenty of soft parts to cover the bone, and they did not retract. The patient died on May 8th, 1853.

EXAMINATION OF THE BODY. The body was enormously obese, the integuments very yellow. The left leg had been amputated above the knee; the stump was well formed; and the flaps uniting well, but not quite cicatrised. On exposing the divided bone, the muscles around were found very soft and pale; dark looking purulent fluid enclosed about three-fourths of the circumference of the femur, the periosteum being destroyed to a corresponding extent; the bone itself, as well as the medulla, were healthy. The superficial veins of the thigh were natural, but the femoral and tributary branches were full of discoloured red and brown pus-like fluid, and of coagulated fibrin, adherent and non-adherent to the coats of the vessels. Some of the smaller veins, near the lower part of the thigh, contained pure, light coloured, yellow pus. The lower part of the vena cava inferior, as high as within two inches of the diaphragm, as also the left common iliac, the left internal and external iliac veins, all contained similar material to that within the left femoral vein. The right common iliac and its subdivisions were natural. Nothing remarkable was noticed in the abdominal viscera; the pleural cavities were healthy, but the

lungs were congested; and in the lower part of one of them was a small yellow deposit of fibrin, surrounded by firmer structure than the rest, and beginning very slightly to soften. There was secondary lobular pneumonia; and the blood was generally very fluid.

CASE V. Amelia M., aged 15, was admitted into University College Hospital, under Mr. ERICHSEN, November 26, 1852, with pain and swelling of the lower part of the left thigh, which she attributed to cold taken about three weeks before. The girl presented the signs of a strumous diathesis. Mr. Erichsen, on examining the part, convinced himself that very rapid formation of matter had taken place; an incision was made three inches above the patella, whereupon about ten ounces of very foetid, oily pus escaped. A probe could be carried for four or five inches along the denuded bone. Poulices were placed around the affected parts, and stimulants and diaphoretics were given. Three days after this, a large quantity of foetid pus was evacuated by another incision, the same treatment being continued. Soon after the opening of these abscesses, the patient began to show symptoms of exhaustion, and Mr. Erichsen proposed amputation. The friends of the girl objected to the operation. Under these circumstances, efforts were directed to counteract, by tonics and stimulants, the debilitating effects of suppuration. Good diet, wine, quinine, the mineral acids, etc., were therefore ordered.

For five days the wound poured out up to ten ounces of pus *per diem*, and the patient became accordingly very much emaciated, and hectic set in. The appetite remained, however, good, and the perspirations at night began to diminish. On the twenty-eighth day, the discharge was about ten ounces a day, the feverishness continued, the pulse was 130, the skin hot and dry, and the appetite falling off. The patient began also to complain of the knee on the affected side. The joint was found to present an abnormal fullness. The knee became gradually flexed, and the discharge from the abscesses around the thigh began to diminish. The contraction increased; and in about fourteen days from the time when the swelling of the knee was first noticed, the leg had been drawn up at a right angle with the thigh. The knee now presented a considerable uniform enlargement, the integuments were red and shining, and fluctuation was quite distinct. The probe could still be passed very high along the sinuses of the thigh; but the girl's spirits were better, her appetite became ravenous, and the bowels remained very regular.

On the 1st of February, the abscess in the cavity of the joint broke spontaneously, and the pain and swelling almost disappeared. The discharge from the thigh and knee gradually lessened in quantity, and the wound in the joint healed in one month. The patient's general health improved, the purulent matter coming from the thigh became very trifling, and the knee was getting ankylosed in a state of extreme flexion. At the fourth month of her stay in the hospital, the girl was put under the influence of chloroform, and the limb was forcibly extended; it was then placed on a splint, and given a few days' rest. The patient was finally discharged in a fair way to complete recovery, with a very small sinus in the thigh.

CONTRACTION OF THE KNEE-JOINT: DIVISION OF THE HAMSTRING TENDONS.

The *Medical Times and Gazette*, for February 10th, contains the following cases.

CASE I. W. C., aged 14, a tolerably healthy looking boy, was admitted into the Royal Orthopædic Hospital, under the care of Mr. LONSDALE, on July 7th, 1852. His right knee was contracted at an acute angle. The foot was everted, and the tibia partially dislocated backwards and outwards. By forcible extension some movement could be accomplished. The lad stated, that the disease had resulted from a "white swelling" in the first year of infancy, which had been attended by long continued inflammation, but never produced an abscess. He had ever since walked with crutches, and was but just able to touch the ground with the toes of the right foot. All inflammatory symptoms had disappeared some years ago, and he had himself also much improved in health. The hamstring tendons were tense. On July 8th, subcutaneous division of the tendons of the semitendinosus and biceps muscles was performed. The puncture in the skin was in each case small; and the limb having been bandaged to a splint which had been previously moulded to its bent position, the wounds were, in the course of a few days, quite healed. On July 15th, a week after the operation, the apparatus for effecting extension was adjusted, and without pain the knee was considerably extended. Once in every two or three days, the extending

force was increased by turning the rack-screw at the knee, the infliction of pain being carefully avoided.

On Sept. 20th, the limb was almost straight. The tibia of the diseased side was nearly an inch shorter than that of the other. An apparatus was prepared, consisting of a high soled boot, to each side of which was attached a flat steel bar, extending to the middle of the thigh, and having, on each side of the knee-joint, a hinge permitting flexion and extension at the will of the surgeon.

On Oct. 6th, he was allowed to return home, being able to walk about, with the apparatus above described, with great ease.

CASE II. M. A. M., a fair complexioned girl, aged 7, when two years old, had suffered an acute inflammation of the left knee-joint, which terminated in abscesses. These broke externally, and continued to discharge up to the present time. For a considerable period her life appeared in danger, but she ultimately rallied, and the acute inflammation subsided, leaving her knee contracted. When admitted into the Orthopaedic Hospital, under Mr. TAMPLIN, on June 8th, 1852, there was very little swelling and no pain; a sinus on the outer side of the joint continued to discharge a small quantity of thin pus. The knee was contracted at a right angle, and had but a very slight extent of motion. The tibia was considerably behind the femur; the foot and leg were everted. Mr. Tamplin determined to at once perform subcutaneous division of the hamstring tendons. Precisely the same steps were gone through as in the foregoing case. The operation was performed on June 8th, and in December the knee was all but straight. She had in the meantime much improved in health under the exhibition of cod liver oil; and the sinus formerly existing had quite healed. The head of the tibia remaining displaced outwards, Mr. Tamplin had a broad strap of webbing passed round it, and fixed to the inner bar of the apparatus. By this means constant pressure is kept against the bone, tending to draw it inwards. On February 10th, the position of the bones might be said to be natural, and the patient walked about with great ease, though with a limping gait, on account of there being scarcely any motion in the joint. Throughout the treatment she suffered scarcely any pain.

CASE III. M. S., aged 32, fair complexioned and delicate looking, and bearing the remains of strumous affections of the eyes and ears, was admitted into the Orthopaedic Hospital on the 4th of August. Her right knee was contracted at an acute angle, the hamstring tendons being very tense. The tibia was displaced backwards and outwards. There was slight power of motion in the joint, around which were the scars of several sinuses. She stated, that when six years old she had fallen and bruised her knee, which afterwards became swollen and painful. Abscesses formed, and her general health suffered so severely, that several of the surgeons who were consulted advised the removal of the limb. The abscesses continued to discharge for seven years, after which they gradually closed, and all pain ceased. She had never since been able to walk about without crutches, being but just able to reach the ground with the tip of the great toe of the right foot. There was now no existing inflammation of the joint, all swelling and pain having long ago subsided. A few days after her admission, Mr. LONSDALE divided the hamstring tendons, and in a week, the extending process was commenced. She at different times suffered more from pain than is usual during this treatment.

ANGULAR ANCHYLOSIS OF THE KNEE-JOINT TREATED BY FORCIBLE EXTENSION.

The following case is reported in the *Lancet* for Jan. 29th.

CASE I. Harriet H—, aged 26, a waistcoat maker, of dark complexion and nervous temperament, was admitted into Charing Cross Hospital, Dec. 13th, 1852, under the care of Mr. HANCOCK. The father and mother were alive, and no scrofulous manifestations had been noticed in her brothers and sisters. Six years ago, without any violence, the knee began to swell and become painful after exposure to wet. For three years she did not resort to remedial means, though much inconvenienced by swelling and pain. The patient then went to a surgeon, who leached and blistered the joint; this did not relieve her, and incomplete anchylosis became established; some motion remained in the limb, being, however, accompanied with much pain. Six months after this, another surgeon cupped the joint; and, lastly, as the knee was forcibly and permanently flexed, the patient was made to wear steel rods and circular fastenings, with a screw at the back, so as to promote gradual extension of the limb. She would have improved under this treatment, had she worn the apparatus long enough; but it gave her so much pain that after seven months she left it off, and the joint was as contracted as ever.

Mr. Hancock considered that the articulation might be forcibly extended under the influence of chloroform. The knee was very much swollen, and there was a great deal of pain in the joint. On the 10th January the limb was forcibly extended whilst the patient was insensible with chloroform, and it was immediately placed upon a splint and firmly secured to it by a roller. There was much pain in the joint for the first four days; this, however, decreased gradually, as well as the size of the swelling. The limb became straight, the patella lying very high over the condyles, and the knee remained painful. The general health was good.

Mr. Avery also treated cases of this kind with great success; in one of them, a boy about ten years old, the pain persisted, however, a long time.

The next case is related in the *Lancet* for June 11th.

CASE II. A woman, aged 20, was treated in St. Bartholomew's Hospital, in 1842, by Mr. STANLEY, for acute inflammation of the synovial membrane of the knee-joint, which gradually subsided under appropriate means, and passed into the chronic form. Setons, moxas, etc., were used, and when the woman's health began to fail, she was advised to submit to amputation. She objected, however, to the operation; and was eventually discharged with a contracted knee.

This patient returned to the hospital eight years afterwards to have the limb straightened. This was done forcibly whilst she was under the influence of chloroform, and she again left the hospital after a few weeks' stay, with an angular splint and screw.

In July 1852, the woman had worn the apparatus for some time; the leg was straight, and there was slight motion in the knee-joint. Mr. Stanley advised her to use support at the back of the leg, and to be careful of herself, the more so as she had occasional pain in the articulation.

DISEASES OF CHILDREN.

INFLAMMATION OF THE LYMPHATIC GLANDS IN A CHILD, FOLLOWING VAGINAL CATARRH.

In the *Deutsche Klinik* for April 16, Dr. F. GUENSEBURG relates the following case.

On March 10th, he was called to see a child aged 5 months, who, after having had a mucous discharge for three days from the vagina, had hardness, swelling, and redness of the labia. An intense general redness extended also to the inner part of the thighs. There was no discharge from the mucous membrane, which was thickened, and of a dark red colour. The pulse was 140; the respirations were 48; the tongue was dry. The child took the breast, and appeared cheerful; the brain was unaffected; it had two stools daily.

In the following days, the redness of the integument, with much swelling of the subcutaneous tissue, extended as far as the knees, and as far as the middle line of the abdomen; and the back part of the body and the extremities became of a dark red colour. On the anterior part, as far down as the knees, and as high as the umbilicus, there was a red network, of which the cords were in some parts visible, and in others could be felt.

On March 13th, the swelling and redness of the genital organs had diminished; but the knees and feet were much swollen. The redness was general, and limited to the level of the umbilicus; the fever was diminished; the child slept tolerably quietly, and took the breast, but constantly moaned. The inguinal glands were felt as little globular masses.

On March 15th, there were severe rigors for two hours; after which the redness extended over the whole of the back as high as the neck. Broad serpentine lines extended also on each side, from the axilla to the middle line of the sternum; and the axillary glands were swollen. Tartrate of potash and calomel were given; but the progress of the disease was not thereby interrupted.

On March 16th, the swelling of the feet diminished.

On March 17th, there was another violent rigor; after which the redness extended over the shoulders as far as the insertion of the deltoid muscles, and up the neck over the whole of the head. Bunches of red lines extended outwards behind the ears, and forwards on the neck. The submaxillary glands were swollen. Since the 15th, chlorinated water had been used.

On March 18th, a repetition of the rigor was followed by swelling and redness of the upper arm and chest. The redness extended also as far as the hand.

After March 19th, the rigors did not recur. The skin gradually became brown; while the swellings of the feet

axilla, groins, and maxillary regions, were removed, the streaks of congestion on the skin gradually changed colour, and totally disappeared on March 27th. Two lymphatic glands on the feet remained hard longer than in other parts.

REMARKS. The anatomical position of the lines of redness and swelling, as well as the sequence of the symptoms, shewed that the ingestion of the cutaneous capillaries, as well as the exudation into the subcutaneous tissue, were results of inflammation of the lymphatic glands. The rigors constantly preceded the extension of the exudation from one region to another. Whether there was also a local transplantation of putrid matter, cannot be ascertained.

Dr. Günsburg was unable to determine the causes of the affection, on the supposition that putrid matter had been transmitted through the lymphatic vessels of the patient. There was nothing in the hygienic condition of the child to account for it. The parents lived in a healthy dwelling, and were of clean habits.

ASSOCIATION INTELLIGENCE.

MIDLAND BRANCH: NOTICE OF QUARTERLY MEETING.

The Quarterly Meeting of this Branch will be held at the Town Hall, Leicester, on Thursday, September 1st, at 2 o'clock.

JOHN BARCLAY, M.D., *Hon. Secretary.*

SUFFOLK BRANCH: FIRST SOIRÉE MÉDICALE.

Members of the Suffolk Branch are requested to observe that the first of a proposed series of Soirées Médicales will be held at the White Horse Hotel, Ipswich, on Friday, the 2nd of Sept., at 7 o'clock P.M.

JOHN KIRKMAN, M.D., *Hon. Secretary.*

EDITOR'S LETTER BOX.

CHLOROFORM IN MIDWIFERY. REPLY TO DR. SIMPSON.

LETTER FROM J. C. BLOXAM, ESQ.

SIR,—Some advance may be made towards settling the question as to the use of anæsthetics in labour, by exposing the errors in reasoning of the authorities who have discussed this subject. Dr. Simpson has endeavoured to shew the errors of Dr. Meigs; and it may be well now to point out the fallacies in Dr. Simpson's arguments.

Dr. Simpson, in his letter to Dr. Meigs, published in the *ASSOCIATION MEDICAL JOURNAL* for July 8th, makes liberal use of a very common, but, at the same time, very fallacious mode of argument; which consists in substituting some other proposition for the one primarily under consideration. The adopted proposition is made good, or it is perhaps admitted to be so, or it is at any rate assumed to be so. No attempt is made to shew that the two propositions are similar, analogous, or parallel to one another; but as there is an obvious or apparent resemblance in some point of view, they are assumed to be parallel cases for the purpose of the argument. This is a very hazardous mode of proceeding, though a very convenient one in some respects. The analogy ought to be closely examined before it is trusted to.

The two cases advanced as analogous ones, in the fourth paragraph, are glaringly unlike, as regards the point in which they ought to be alike. Certainly the sensations, or the expressions, of the patient would afford a very bad indication as to what structure was being injured during a surgical operation; and far more trustworthy indications would be at the operator's command; but this does not shew that the parturient patient's sensations would not give more trustworthy evidence than any anatomical knowledge on the part of the operator, as to whether her structures were or were not being injured by him. In the one case the operator, no doubt, ought to trust his own eyes; but in the other it is evident he ought not; and if he is not allowed to use his eyes, it may be very right to get what assistance he can from his ears. Dr. Meigs proposes to substitute ears for eyes; not ears for anatomical knowledge.

The two propositions that are placed in the same category, in paragraph 14, p. 584, beginning with the words "In your practice", are so placed, with less violence to sound reasoning than occurs in other places: but if these two propositions are to be placed in the same category, as parallel cases, the following proposition may also be ranged with them, viz., if a man be suffering pangs consequent upon the commission of crime, it would be our duty to relieve his suffering, by rendering him drunk with alcohol, or by putting him to sleep with opium. The question of counteracting a depraved action—of relieving the pain of disease—is quite different from that of depriving a human being of reason and consciousness whilst subjected to the natural sufferings, as well as the dangers of a natural process. It is clearly quite *wrong* to render a person insensible to the natural pangs of a wounded conscience. The propriety is, at least, *doubtful*, of rendering a person insensible of the natural pains of childbirth. It is clearly quite *right* to relieve the sufferings of disease. In the last case, we have full authority for the proposition stated. In the second case, we have no authority against the proposition, but rather for its support. In the first case, if there be no authority directly bearing on the proposition, there is much to support it indirectly.

The proposition of Dr. Meigs, which is argued in paragraph 21, p. 184, beginning with the words "But waiving", is not that no means should be employed to moderate the pains of labour, but that women should not be deprived of their reason and consciousness whilst enduring these pains. The act, here objected to, bears no analogy to that of increasing the power of the eye, or of any other organ, in the performance of its natural function by any mechanical contrivance. Neither does it bear any analogy to that of using the means which nature offers plainly to every one for the purpose of protecting the body from mischief. To preclude evil is very different from rendering a human being insensible of its existence. Would Dr. Simpson recommend the use of anæsthesia as a remedy against cold? If not, does not this prove the want of analogy in the cases he brings forward. Or would he, consistently with his doctrine, abrogate life whenever it became a source of discomfort?

The proposition advanced in paragraph 23, p. 585, beginning with the words "The argument", affords a strong example of that want of analogy which is supposed to exist, and yet, so far as any analogy does prevail, it rather serves to discountenance the proposed use of anæsthetics. It certainly is unwise to renounce the ordinary amount of fatigue that attends upon ordinary progression and natural walking. That such fatigue is conducive to the health and well-being of animals there can be no doubt; and, so far as carriages are used, through the lazy and cowardly desire of avoiding such inconvenience, they are highly detrimental. But the legitimate and ordinary purpose for which horses, carriages, and railways are used, is that of effecting what *can* not be effected by the natural means of progression.

There is, with everybody, a limit to what can be effected by the ordinary use of legs; and when something is required beyond this limit, railways and other means are had recourse to. In parturition there is, on the other hand, a very limited object to be effected, and the natural means, in ordinary labour, are quite adequate to accomplish the object. If it were proposed to enable women to produce a dozen, or a score of children at one birth, by the employment of anæsthesia, the two cases would then be sufficiently analogous to one another, and the same principles would, perhaps, justify both. It is difficult to imagine upon what grounds it can be said that "the practice of wearing a covering for the head was doubtlessly stoutly resisted at first"; probability seems to be quite opposed to such a notion.

No doubt many wise projects and innovations have been objected to for very foolish reasons, and the historian Acosta may have been guilty of such an error; but this does not, by any means, prove every new project to be a wise one. The new project, alluded to in paragraph 25, beginning with the words "Some day", was intended to effect objects which were attainable, or which were supposed to be attainable, by no other means: it was not proposed for the mere purpose of escaping the bodily discomfort which attended upon the means then in use. Moreover, it has not yet been ascertained that this project is a wise one.

In paragraph 26, p. 585, beginning with the words "The truth", the use of forks is alluded to as a means of assisting our hands in lifting portions of meat, etc.; and this innovation is then likened to the employment of anæsthetics in *aiding* the function of human parturition. But there is no objection made apparently to the use of anæsthetics for the purpose of *aiding* parturition, and consequently the two cases are not analogous.

The argument contained in paragraph 29, beginning with the

word "Few", has, in fact, already been answered. However, if a person, having to travel from Philadelphia to New York, should inquire of his medical adviser whether he should make the journey on foot, the doctor would, very probably and very properly, give his professional opinion that it should be made on foot. But the querist would, very probably and very properly, adopt the railway: he would determine to disregard the benefit he might gain to his health by walking, considering that the saving that the railway would effect, in point of time, would be a full equivalent for what he might lose in other respects: and this he would do, consistently with admitting the soundness of the medical opinion.

The analogy between the two cases, in paragraph 31, p. 586, beginning with the words "But let", is by no means strong. Would Dr. Simpson, if he were travelling on a railway, and found that some accident had happened to the engine, which made it likely to explode, or to overturn the train, or to render a continuance of progression in any way painful, wish to be subjected to the influence of chloroform? It is to be presumed that he would not; and yet this case is surely more analogous to that of the parturient woman than the one which he advances. The parties, in each case, would wish to prevent the pain and danger, but they might very reasonably object to deprived of consciousness during their continuance. In the case suggested by Dr. Simpson, the party concerned would prevent the evil by not incurring it. The case of the parturient woman would be far more analogous to the case suggested, if the question at issue were, whether the woman should subject herself to the pains of parturition, instead of whether she should be deprived of consciousness during their continuance.

The two cases advanced in paragraph 33, p. 586, beginning with the words "And indeed in a new practice", are not analogous. In the case of the parturient woman, that she incurs additional danger to her life, in order to escape merely temporary pain. In the case of the traveller (taking the case precisely as it is given), there is no additional danger incurred. Railway travelling appears to be the safest travelling; and the railway advocate need not reproach himself, if the safer plan of the two, which he advocated, happened to terminate in mischief. Even if the two plans were, apparently, equally safe, or if the advocated plan merely substituted one danger for another, the argument would stand the same; but it is quite different when danger is substituted for pain. If a person were consulted and trusted, in a professional capacity, as to which of two modes of locomotion should be adopted, and he selected the dangerous mode as opposed to the painful—the duration of the pain being coterminous with that of the act occasioning it—and the selected dangerous mode should prove fatal, the adviser would then perhaps very properly reproach himself for the advice he had given; he would perhaps for the future advise his client, or his patient, to adopt the safe mode; or, if the pain of this could not be borne, that the journey should not be undertaken at all. That is to say, he would advise that the inconvenience should be endured with courage and resignation, or else, that the alternative between pain and danger should not be incurred. As to the traveller being destroyed by making the journey on foot, there is no moving in any way without danger from unforeseen occurrences; but her being destroyed by the fatigue of the journey would depend, not upon the length of the journey, but upon the expedition with which it was effected, and other circumstances.

The analogy suggested in paragraph 35, p. 587, beginning with the words "But I proceed", is, to some extent, a repetition of what had been advanced before; but, as it is connected with other supposed analogies, in several following paragraphs, some observations may be made upon them together, and these may not perhaps always be limited to the question of analogy. Dr. Simpson appears to use the expression, "the general condition of man", in a different sense from that in which Dr. Meigs uses it; and it becomes desirable to consider what ought to be included in the expression, as well as what each party does include in it. Dr. Simpson appears to give a much larger scope to the meaning of the expression than Dr. Meigs does. There is a natural, normal condition of man; and there is an abnormal, perverted condition of man. There is a condition of man which is brought about by disease, accident, folly, or vice; but this surely is not the condition that ought to be understood as Dr. Meigs's "general condition of man". Disease is, no doubt, very general, and death is incurred by all; but, nevertheless, it is not the general condition of man to be suffering from any individual disease, nor to be dying at any particular time, or in consequence of any particular disease; and we may, very properly and consistently, cure any particular disease, which is

a perverted condition of man; or prevent death, at any particular time, which is no more a part of the condition of man than life is; and yet feel that we are not attempting to abrogate the "general condition of man". Dr. Simpson appears to confound disease, as the general condition of man, with a disease, as the particular disease of a man. There is no doubt that it is quite legitimate to abrogate any abnormal condition, however common it may be, of man; but it does not follow from this, that it must in all cases be legitimate to attempt the abrogation of the normal condition of man. Speaking in a wide sense, man is quite justified in relieving his own or his neighbours' sufferings, and improving their comfort; but much depends, nevertheless, upon the extent to which, and the circumstances under which, this is done. The desire to relieve existing discomfort is, under many circumstances, neither more nor less than temptation to wickedness. If the immediate relief of existing bodily suffering were, in all cases, justifiable, drunkenness, lasciviousness, perhaps all the vices that flesh is heir to, would stand justified. Without attempting to define all that is included in the normal, natural, general condition of man, it may safely be affirmed that the pains of parturition and the toils of labour are within its range; and, if any effort to improve our condition is universally justifiable, that of relieving the sufferings of disease must be so. Dr. Simpson applies Dr. Meigs's doctrines to different circumstances from what Dr. Meigs himself does, and so makes them appear erroneous or ridiculous; but Dr. Simpson's doctrines might be applied to different circumstances, equally analogous with those in the other case, and thus be made to justify acts which he himself would be far from approving. One of the general conditions of man is that of exercising his mind to provide himself with appliances whereby he may enhance the powers of his body; and this extension of the powers of man may continue indefinitely, without offence to the doctrines of Dr. Meigs. The use of railway cars, steamboats, coaches, etc., etc., enables more to be effected with less proportionate danger to life, though with an increase, in many cases, of bodily suffering; and these aids to human industry would not be opposed by Dr. Meigs's doctrines, even if they were attended with an increased mortality; because the benefits to be gained by their use may fully compensate for the increased mortality. But, according to Dr. Meigs, there is no adequate compensation for any increased mortality in parturition through the use of anaesthetics.

Dr. Meigs's theory does not go to show that the practice of medicine should be abandoned. It may fairly be contended that the search for the philosopher's stone, which was to abrogate disease itself, should be abandoned, in accordance with the theory; but not that the existing treatment of individual diseases should be so. The philosophers of a former age, however, might have argued for their proposed innovation in Dr. Simpson's language; pointing out how many innovations had been objected to which eventually proved to be useful. The fact, again, that medicines sometimes do fatal mischief, is not to the point. Dr. Simpson will not deny that, on the whole, human life is economised by the practice of medicine, and that this is its aim and object, whilst the same cannot be said of the employment of anaesthesia. In regard to the use of opium, it must be a very uncommon thing for it to occasion death, except when it is either given for that express purpose, or it is given to children in the same way as anaesthetics are to adults, viz., to abolish their sense of suffering, or else when it is given by some accident or blunder. All the fatal cases quoted by Dr. Simpson most probably come under one or other of these heads.

It seems pretty evident that the use of those things which are absolutely necessary for the preservation of life, and which are referred to in paragraph 37, p. 587, have no analogy to the use of anaesthetics.

The arguments that are advanced by Dr. Simpson in reference to the fifth text are of a different nature from those referring to the preceding texts. If it be the fact, that parturition is rendered more safe by the exhibition of anaesthetics, this constitutes a sound and legitimate, but perhaps not conclusive reason, for their use; but the evidence advanced to establish the fact is very weak. It is very manifest that the same thing may be, and frequently is, salutary and conservative within certain limits, but destructive, nevertheless, when carried beyond certain limits; and this may very well be the case with the pains of labour. It by no means follows that, because short and easy labours prove less destructive than protracted ones, therefore the use of anaesthetics must lessen the danger. It does not at all follow that, because patients, when subjected to the pain and shock of surgical operations without the use of anaesthetics, recover in smaller proportion than those who use anaesthetics, therefore

under their influence, that, therefore, women undergoing the physiological pain of parturition should obtain a corresponding benefit from the same means. It does not follow that this must be the result, by any means; and there is no evidence advanced that the result is so. Neither does it at all follow that, because the parturient female amongst red Indians, and other uncivilised tribes, experiences little pain and little danger, that, therefore, anaesthesia should annul danger in civilised society: the immunity of the savage is not connected with *unconsciousness* of her pain. It will not be disputed by any one, probably, that pain, speaking generally, is deleterious and injurious; but ordinary pain is the result, itself, of some deleterious action; and this certainly cannot be said of the natural pain of labour. May we not fairly presume, then, that the morbid pain and the physiological pain differ as much in their consequences as in their antecedents? Probably neither of the authorities quoted would admit that their remarks are applicable to the pain of labour.

I am, etc.,
JOHN C. BLOXAM.

Newport, Isle of Wight, August 1853.

NEWS AND TOPICS OF THE DAY.

SIR JAMES L. BARDSLEY, M.D.

At a meeting of the Committee of the Manchester Medico-Ethical Association, held on Thursday, Aug. 17th, 1853, it was moved by R. Allen, Esq., seconded by T. Mellor, Esq., and unanimously resolved—"That the following congratulatory address be presented to Sir James L. Bardsley, M.D., President of the Association."

Manchester, Aug. 18th, 1853.

SIR,—Her Majesty having been graciously pleased to confer upon you the honour of knighthood, the Members of the Medico-Ethical Association of this city beg to offer you, the President of this Society, their most cordial congratulations on this distinguished recognition of your high professional character and your individual worth.

While the Association regards this well merited honour as one done to the entire profession, they cannot fail to applaud the selection of yourself, as the person through whom the tribute has been paid—a selection that recognises your eminence as a physician in the largest provincial city in England, and the inheritor of a name that will long be remembered in the profession with respect and admiration.

That you may long live to enjoy the honour which Her Majesty has so appropriately conferred upon you, and thus be a living testimony to your junior professional brethren, of the practical advantages that attend the possession of intellectual superiority and moral excellence, is the earnest wish of the Members of the Manchester Medico-Ethical Association.

(Signed on behalf of the Association.)

W. J. WILSON, } *Vice Presidents.*
J. ROBERTSON, }
D. NOBLE, *Treasurer.*
J. AIKENHEAD, M.D. } *Hon. Secs.*
W. C. WILLIAMSON. }

To Sir JAMES L. BARDSLEY, M.D. etc., etc.

VACCINATION: SUPPLY OF LYMPH. It is perhaps not sufficiently known that fresh vaccine lymph can be at any time procured by application to Dr. Hue, the Registrar of the National Vaccine Establishment, through the Secretary of State for the Home Department. We subjoin a copy of the circular which is forwarded with each supply of lymph.

"National Vaccine Establishment, No. 8, Russell Place, Fitzroy Square, London. Medical practitioners, in all parts of the empire, may be supplied with vaccine lymph, without any expense, from the National Vaccine Establishment.

"You are particularly requested, as soon as you can, after the receipt and use of this lymph, and whenever you repeat, at any time, your application for lymph, to report to the establishment the number you have vaccinated from each supply, and with what result. Pray have the kindness to attend to the above request. (Signed) C. H.

"Surgeons are advised to employ recent *liquid vaccine lymph*, whenever it is in their power; and with this view, to vaccinate their patients in succession, for the purpose of keeping up a supply.

"Letters of application for lymph, and communications respecting vaccination, are to be addressed, *unsealed*, to 'Dr. Hue, Registrar of the N. V. E., Russell Place, Fitzroy Square.' And inclosed in an outside cover, directed thus: 'To the Right Hon. the Secretary of State, Home Department, Whitehall. National Vaccine Establishment.'

"As inoculation of the small-pox is altogether unjustifiable, the Board have resolved, that if any vaccinator of this establishment shall so inoculate, his name be erased from the list.

"It is proper that it should be known, that persons exposing patients affected with the small-pox, and medical practitioners and others who inoculate that disease and concur in such exposure, are liable to a criminal prosecution for the offence."

OZONE: DR. SCHONBEIN'S OZONOMETER. The following circular has been issued by Dr. Drew, of Southampton, who will be happy to receive communications from members of the Association on the subject.

"Winsor House, Southampton, July 28th, 1853.

"SIR,—At a late interview with Dr. Schonbein, at Bâle, I engaged to bring before the notice of meteorological observers in this country, his simple method of ascertaining the amount of *ozone* in the atmosphere. Dr. Schonbein's ozonometer is in general use throughout Germany; and he is anxious that corresponding observations should be taken in England. I beg to inquire whether, to promote this object, you are willing to undertake daily observations for a year, forwarding the results to me every three months, for transmission to Bâle. The expense of ozonometer and register would be about five shillings: the results would be highly interesting, as supplying the means of ascertaining approximately the electric state of the atmosphere. I subjoin a description of the ozonometer, and will thank you to let me know your decision without delay, in order that I may order the proper number, and that observations may be forthwith commenced.

"I have the honour to be, sir, yours faithfully,

"JOHN DREW, F.R.A.S., Ph.D. Univer. Bâle,

"Memb. Council Brit. Meteorol. Soc."

The following is a description of Dr. Schonbein's ozonometer:—

The ozonometer consists of twelve bundles of paper, prepared with iodine and starch: each bundle contains sixty strips, and serves for one month's observations: a spare set is added for additional observations during thunder storms, or whenever the air may appear to be overcharged with electricity. At nine o'clock every morning, a strip of the prepared paper is to be suspended in a spot to which the air has free access, but not the sun. It must be removed from dung heaps, stables, etc., where gases are developed, which would vitiate the observation. At nine o'clock in the evening the exposed strip is dipped in water. It will be found to assume a purple tint. The depth of this tint is compared with the corresponding colour on a scale, on which there are ten gradations, and the number is to be inserted in the register with which it agrees in depth. Another slip of paper must be exposed at 9 p.m., and examined and registered in like manner at 9 a.m., on the following morning. At the close of each month, the mean is to be deduced, by dividing the sum of the numbers registered by the number of observations.

GENERAL BOARD OF HEALTH. On Saturday, a return, obtained by Mr. A. Pellatt, M.P., was printed, showing the operations of the Central Board of Health. Since the formation of the board, in 1848, the amounts received to the end of last year were £55,161:10:8, out of which sums amounting to £51,492:17 have been paid, leaving a balance of £3,668:13:8. The amount repayable by local boards is stated at £10,575. The amounts voted for the annual expenditure during the operations of the act were £53,879:15, exclusive of nearly £3,000, a further sum to be received, and the total expenditure was £51,492:17, as already stated, out of which £40,031:9:5 was expended under the Public Health Act, and £11,461:7:7 under the Nuisances Removal Act. The total amount voted last year was £10,745, and three-fourths were included in the amount stated. The liabilities for expenses incurred to the end of last year were £1,250. The excess in the amount voted over the amount expended for the whole period is £1,130:18. The average annual expenditure under the Public Health Act, after deducting the amount repayable, is stated to be £4,813. The remainder of the return has reference to the documentary business of the board.

APOTHECARIES' HALL:—PASS LIST. Thursday, June 30th, 1858:—St. John Edwards, London; Kennedy Gill, Acerington; Richard Clee Heighway, Shrewsbury; Thomas Hillier, Stroud, Gloucestershire; George Yeates Hunter, jun., Marn Gate; William Naylor Kempster, Whitechurch, Salop; Michael Fenton Manifold, Dublin.

Thursday, July 7th:—John Bolton Adams; John Evans Howard, Llangollen; Joseph Beauchamp Matthews, Oxfordshire; Henry Cooper Rose, Canterbury; Peter Leigh Saddler, Warrington; James Syme, Cumberland; John Henry Thomas, Llanamlet.

Thursday, July 14th:—Cecil Calvert Cogan, Royal Mail Steam Packet Service; Major Greenwood, Wakefield Street, St. Pancras; Griffith Griffith, Saltrenddyn, Merionethshire.

Thursday, July 21st:—Reginald Bayley Walters, Winchester; Alderman Thomas Houghton, Waters; George Skrimshire.

Thursday, July 28th:—William Henry Barber, Longtown; William Fisher Favell, Sheffield; William Smallpage, Knottingley; Joseph Stephens, Probus, Cornwall; Henry Tournay Stiles, Pinchbeck, Spalding.

Thursday, August 4th:—Henry Adge, Bradford, Wilts; John Mathew Butler, Woolwich, Kent; Ephraim Matthews Cridge, Stoke, Devonport; Richard Staines Davey, Walmer; Richard Nowell Halliwell, Dewsbury; Thomas Henslip, Hutton Garden; Thomas Edmund Jacobson, Sleaford, Lincolnshire; John Withington Roe, Malpas, Cheshire; William Salt, Betley, Staffordshire; Richard Sykes, Drightington, Yorkshire; Frederick Savignac Stedman, India; John Tudor, Bronhanloy, Denbighshire.

Thursday, August 11th:—Robert Austen Allen, co. Tyrone, Ireland; John Fox, Weymouth, Dorset; Alfred William Stocks, Salford.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

GOODEVE, E., M.D., appointed Professor of Materia Medica in the Bengal Medical College, Calcutta.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

BANKIER, Dr., R.N., late of H.M.S. *Minden*, at Hongkong, lately.

BROWLEY, C., M.D., at Cleveland Place, Dawlish, Devon, on August 3.

COOPER, Bransby Blake, Esq., Senior Surgeon to Guy's Hospital, suddenly, on August 18, aged 60. Mr. Cooper had for some time been labouring under illness, but had partially

recovered. He was crossing the hall at the Athenaeum Club, when he stopped, and called for a glass of water; before this could be brought, blood spouted from his mouth; he fell, and was almost instantly a corpse.

DEAKINS, Robert Thomas, M.D., Staff Assistant Surgeon 67th Regiment, at St. John's, Antigua, of yellow fever, aged 27, on June 8.

OWEN, William Charles, M.D., at Midnapore, Bengal, of Cholera, aged 27, on May 24.

JUSSEAU, M. Adrien de, Member and President of the Academy of Sciences in Paris, lately.

PHILL, Richard Spear, M.D., Assistant Surgeon 91st Regiment, aged 31, on July 24.

RUSSELL, Robert, Esq., Surgeon, in Mexico, on June 10th. He was attacked by fourteen robbers, and cruelly murdered, after fighting bravely for his life.

STEELE, William Palmer, M.B.Lond., Surgeon to the *Conway* (Royal West India Mail Steamship), third son of William Steele, Esq., of Aberavenny, at Kingston, Jamaica, of a second attack of yellow fever, aged 26, on July 4.

STOKES, John, Esq., of Herne Bay, Kent, at 5, Essex Court, Temple, aged 60, on August 5.

THOMSON, Thomas, M.D., Inspector General of Hospitals, at Belvidere, Tunbridge Wells, aged 77, on August 4.

WRANGHAM, William, Esq., Surgeon, of Wragby, Lincolnshire, aged 44, on July 30.

WRAY, Christopher Wright, M.D., Assistant Surgeon of H.M. 87th Royal Irish Fusiliers, from the fall of an avalanche in one of the valleys of Cashmere, aged 27, on May 15th.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

CUST, the Honourable Lady. *THE INVALID'S OWN BOOK: a Collection of Recipes from various Books and various Countries.* 12mo. pp. 144. London: 1853.

HOGG, Jabez. *DOMESTIC MEDICAL AND SURGICAL GUIDE.* pp. 156. London: 1853.

PART. *MEDICAL AND SURGICAL POCKET CASE BOOK.* London: 1853.

BOYLE, J. F., M.D. *MANUAL OF MATERIA MEDICA AND THERAPEUTICS.* pp. 801. Second edition. London: 1853.

SKEE, F. C. *THE PREVALENT TREATMENT OF DISEASE.* pp. 68. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

[ADVERTISEMENT.]

THE BRITISH MEDICAL DIRECTORY FOR ENGLAND, SCOTLAND, AND WALES.

TO BE PUBLISHED ON THE 1ST OF JANUARY NEXT, 1854.

PRICE SIX SHILLINGS.

ALL Legally-Qualified Members of the Medical Profession are earnestly and particularly requested to refer to the last leaf of "THE BRITISH MEDICAL DIRECTORY" for the present year, and make the "returns" forthwith as there indicated. By attending to this application *instanter*, the accuracy of the DIRECTORY for 1854 will be much promoted, and its value greatly increased.

The Editors of "THE BRITISH MEDICAL DIRECTORY" feel infinite pleasure in announcing, that in consequence of the unparalleled success of the work, the Proprietors have authorized them to state that ONE-HALF of the PROFITS arising from the Publication of "THE BRITISH MEDICAL DIRECTORY" will be handed over to MR. PROPERT, the Treasurer of the MEDICAL BENEVOLENT COLLEGE, as a Contribution to the FUNDS of that splendid Institution.

The Profession having by their powerful and universal patronage and assistance completely identified themselves with the principles and success of "THE BRITISH MEDICAL DIRECTORY", the allocation of a moiety of the Profits arising from its Publication is made as a free and graceful offering in aid of an Establishment which is dedicated to the noblest of charitable purposes.

The Editors of this Directory consider it right to make the Profession acquainted with the fact that the compilers of "THE LONDON AND PROVINCIAL MEDICAL DIRECTORY" have just made the following admission in reply to a letter of complaint that had been addressed to them by a homoeopathic practitioner: "We have omitted the appointments and the publications, because the profession declared they would not support the 'Directory' if these obnoxious addenda were inserted; but it was contrary to our judgment, and we must admit it was contrary to the professed objects of the 'Directory.' . . . The doctor must look upon us as caterers for the profession, subject to dismissal and defeat if we do not satisfy the appetites, whether depraved or otherwise, of our supporters.—EDITORS OF THE MEDICAL DIRECTORIES."

Thus it is perfectly evident that if "THE BRITISH MEDICAL DIRECTORY" were not in the field, "THE LONDON AND PROVINCIAL MEDICAL DIRECTORY" would again contain descriptions of all the titles, distinctions, and public appointments of all the quacks in the kingdom. The compilers of "THE LONDON AND PROVINCIAL MEDICAL DIRECTORY" even admit that the appointments, titles, &c., of the homoeopaths have been omitted in the last edition of their Directory, contrary to their own judgment and the proposed objects of that work; and then they remark that the homoeopathic practitioner by whom they have been addressed "must look upon them only as caterers for the profession, subject to dismissal and defeat if they do not satisfy the appetites, whether depraved or otherwise, of their supporters."

Now the possibility of a doubt, therefore, cannot be entertained as to what would have been the contents of "THE LONDON AND PROVINCIAL MEDICAL DIRECTORY" for the current year, and of the volumes of that work in future years, had it not been for the publication and extraordinary success of the "BRITISH MEDICAL DIRECTORY." With respect, then, to the different Medical Directories, the confession of the offending parties has made the profession acquainted with its exact position.

Published at THE BRITISH MEDICAL DIRECTORY OFFICE, 423, STRAND, LONDON.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXV.

LONDON: FRIDAY EVENING, SEPTEMBER 2, 1853.

NEW SERIES.

ADVERTISEMENTS.

Three lines and under	-	-	-	40	2	6
Every additional line	-	-	-	0	0	6
Half-a-column	-	-	-	1	10	0
A whole column	-	-	-	2	15	0
A page	-	-	-	5	5	0

A line contains ten words, so that any one can calculate the cost of an advertisement.

Advertisements ought to be delivered at the office on the Wednesday preceding publication, and paid for at the same time.

Post-Office orders are to be made payable to THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London.

A REPORT OF SCIENTIFIC COMMUNICATIONS READ AT THE SWANSEA MEETING was not given, simply because most of the papers will be published in the volume of Transactions, should it be resolved on to venture upon such a work. If the authors desire it, we shall be glad to print the communications referred to, provided no volume of Transactions is to appear: but it would not do to print the same papers both in the Journal and in the Transactions. We trust that this explanation will satisfy those correspondents who have expressed surprise and regret at no report having been given in the Journal of certain very valuable scientific papers read at the recent anniversary meeting.

FINANCIAL STATEMENT. More than one correspondent asks how there can be odd pence in the amount of annual guineas reported as received during a year? We presume this arises from the net sum being stated which was received by the Treasurer, and that expenses were incurred in collection, through the remissness of some members.

PECUNIARY VALUE OF MEDICAL OPINIONS TO LIFE ASSURANCE COMPANIES.

IN the August number of the *Monthly Journal of Medical Science*, is an able and laborious investigation by Dr. Christison of the causes of death in the Standard Assurance Company during five years, ending in November 1850; and no one can read it without being strongly impressed by the vast and increasing pecuniary benefit to such companies of medical experience. It is impossible for a medical referee to determine if a healthy man will not be cut off by fever, cholera, or acute disease; nor can he prophesy whether an invalid life may not be as long as an apparently healthy one: but the increased power of distinguishing diseases which results from the advance of medical science, enables him to state, with an exactness not possible fifty years since, what deviations from perfect health do exist, and thus point out the cases in which an increased premium should be required.

In carefully investigating the medical reports given many years since, on the health of those who have died during this period, Dr. Christison meets with many lives which would not have been accepted in the present day as assurable on ordinary terms. And why? Because our advance in patho-

logy, as well as in the knowledge of symptoms, shews us the more precise value of these symptoms. We now understand better the material causes on which those symptoms depended, and are therefore better able to determine their probable influence on life. It is only by looking back some thirty or forty years, that we can appreciate the improvement in our art which renders our opinions of so much more value to these companies.

Our present more exact knowledge of the diseases of the heart and lungs, owing to the labours of Laennec and his followers; of the diseases of the nervous system, from the physiological discoveries of C. Bell; of the causes of dropsies, and of general decay, from our better acquaintance with morbid anatomy since Dr. Baillie, and especially from the labours of Dr. Bright; and of the connexion between rheumatism and diseased heart, so carefully investigated by Dr. Latham, are a few of the discoveries of modern science which bear on this subject, and which have given to medical examinations a value which it is difficult to estimate sufficiently. For the labours of these discoverers are the common property of all well educated practitioners, and are brought to bear in every town and city and village on the elucidation of those questions on which the prosperity of assurance companies depend. Without the data with which we furnish assurance companies they could not exist. On our reports are founded their true stability, and their hold on public confidence.

The refusal, therefore, of some offices to pay for the report of the medical attendant of the patient is one of the most unwise kinds of economy. It is a principle in the best regulated public companies to remunerate liberally all those who actually work, so as to make them sharers in the prosperity of the great undertaking; and not to screw them down to the lowest point, in order to increase the dividend to an amount perhaps insignificant to any individual shareholder. And this wise and just principle should guide all assurance companies. To withhold the due payment for the most important evidence, in a mere business point of view, is a mistake likely to defeat itself. Here we have abundant statistical evidence that the increased exactness of modern medical science, in distinguishing and detecting diseases, directly increases the profits of assurance companies, by enabling them to charge higher rates on lives which some years since would have been accepted on lower terms; and yet many offices are shortsighted enough to dispense with this evidence from the medical attendant of the assurer (who knows his past history), rather than pay a fee small in proportion to the value of the evidence supplied.

We would urge the shrewd secretaries and actuaries of assurance companies to read carefully Dr. Christison's Report, and to judge for themselves of the importance to the interests of their establishments of obtaining the fullest medical evidence they can command on all the lives submitted to them with reference to this single point. Such a report is also useful to ourselves, in giving a due sense of the value of medical evidence, and consequently of medical certificates. It may seem to the medical practitioner himself but a trifling effort to run his eye over the person submitted to his examination, to examine him physically, and to answer a few printed questions. He may forget the time when such a scrutiny would have afforded him no insight; he may not remember the long course of preparation and of active practice which has made him able to pronounce a safe opinion; nor may he estimate the value of the knowledge he has gained of his patient's constitution. Reports of this kind, which prove that the business foundation of assurance companies rests on medical evidence, and that the increase of their profits and the safety of their risks depend greatly on accurate diagnosis, will tend to strengthen many in their determination to make the offices pay for the most important article they need—the labour of medical men's brains. It may be repulsive, in a strictly scientific sense, to look at these questions in a mere pecuniary view; but the conduct of assurance companies, which are mere trading bodies, forces this upon us.

THE CLUB SYSTEM.

We print, to-day (at page 781), a letter on the "Club System", which conveys, in terse and excellent language, the more important, if not all the enormities of that system, and which wants but one thing—the writer's signature. There is no reason why any man should withhold his name from such a straightforward letter as that of our esteemed colleague, S. T.; and we do hope that, when he again favours us with a communication, he will declare himself as boldly as we do ourselves, and give evidence that he is no supporter of the prevalent opinion, that men in general are more ashamed to be seen performing *good* than *indifferent* deeds.

We are quite prepared to bear witness to the statements contained in the letter before us; and we cannot too earnestly point out to all whom this Journal may reach, the fact, that our Association does possess the power, not only to take up the important question of the payment of medical men by sick clubs, but to remove many—perhaps every one—of the evils connected with the system. The subject, we imagine, comes within the sphere of the medico-ethical committee appointed at Swansea.

Our correspondent has hit upon the right mark, when he says, that "the founders and conductors of such societies (clubs) are not ignorant of what ought to be proper professional remuneration; only they are tempted, for the sake

of showing a flourishing balance sheet, to commit the injustice, and medical men are foolish enough to submit." This, we reassert, is the secret cause of all the mischiefs that occur to the profession through club appointments. The penny wise and pound foolish practice is one which the world will be a long time in discarding, even in the matter of private family concerns; and much longer in public affairs. For, in conducting the latter, another mental element, *vanity*, comes into play. The conductor of a club follows, in his small way, like an Indian scout, in the very footmarks of him who in his great way conducts the affairs of the republican or free monarchical government. To stand well in the eyes of the governed; to catch from their unloosened tongues the magical words, "hear, hear"; to receive from them a vote of thanks, increased in value, it may be, by a vote of unoxidizable metal, are the great objects of almost every man who stands at the head of a public institution, be it little or great. And to obtain these distinctions, the penny wise and pound foolish system is, as a general rule, the best card to play; for, say what one will about the blessings of health and such like matters, the blessings of money are with nine out of ten of the multitude those for which they in their hearts most crave.

We wish it to be understood, however, that we are not advocating the introduction of a system of extravagance into sick clubs. We would as soon think of advocating the abolition of such societies, while we recognize in them principles of great and lasting value. But it is our impression that these societies need considerable and immediate reform.

Our correspondent tells us that the publicans inflict great injustice on medical men, by securing attendance on the club principle whilst they are well able to pay a fair doctor's account. This leads us to state, that one very useful reform in sick clubs would be altogether to remove them from the influence of publicans and public houses. A club might be held in *its own rooms*, at a much cheaper rate, and in a much more reputable way, than in any public house in the kingdom. Connected with such clubs, reading rooms, self educating classes, and constant friendly and *sober* intercourse might also be established.

In country districts, we know that medical men have often considerable influence in the management of clubs and friendly societies; and we throw out the hint to them, that they would act in a manner worthy of their humanising mission, were they to instil into the minds of their poorer brethren, the idea that it is neither essential to happiness nor to the success of a friendly institution to have meetings amongst volumes of tobacco smoke, and in houses from which scenes of debauchery are rarely absent.

In reforming the "Club system" as in all other matters of medical polity, our Association can exert great power; and now that the subject has been so well brought forward, we trust that the evils which have been pointed out may be speedily removed.

ORIGINAL COMMUNICATIONS.

EXAMINATION OF DIFFERENT OPINIONS AS TO THE VALUE OF THE CLIMATE OF MADEIRA IN CHEST DISEASE.

By GEORGE LUND, M.D., of Funchal, Madeira.

REMEDIAL agents used in the practice of medicine have, in all ages, had various degrees of importance attributed to them. In some cases, the assumption of the almost infallibility of newly introduced medicines in effecting cures has gradually led to their disuse; for, the exaggerated promises of the recommender not being fulfilled, the opposite view has become general. Thus, unmerited neglect has often been thrown upon many really useful adjuncts of the remedial art, which, highly beneficial when applied in proper cases and under right circumstances, have failed when used improperly; the error being unjustly attached to the remedy, and not, as it ought to have been, to its misapplication. The generality of mankind are too apt to look to specifics for the cure of ailments, overlooking the fact that diseased action rarely continues long the same. The products of diseased action, as effusions, depraved secretions, etc., often become themselves the disease to be treated, the primary state having ceased or changed. We thus ascertain that no one remedy can be universally applicable to the varying phases of a disease; and although it may be, and often is, an essential link in the chain of treatment, it can be correctly viewed only as contributing its subordinate though necessary help in assisting the whole means used, and aiding the natural powers to throw off diseased action, and thus ensure a return to healthy function.

Climate appears at the present time to be placed much in the position of the remedial agents just alluded to; at one time being too highly estimated, and by many looked upon almost in the light of "a cure", which necessarily has led to disappointment. Such an extravagant expectation not being realised, the idea has gradually spread that climate has little or no effect as a remedial agent, and its undue depreciation has thus ensued. Hence, in this as in many other cases where opinions differ, we shall find that a middle course is nearest akin to truth; and that by following it we shall not be so far misled, as others who adopt extreme views. No one personally acquainted with the effects of a well selected climate in disease can deny its great efficacy in many complaints, especially in various chest diseases, and in consumptive cases, when these are sent out in an early stage, and the patient behaves with common prudence. Unfortunately, such favourable results induce a host of most unsuited, often literally dying people to try this remedy, of course for the most part unsuccessfully; and then climate is declared by the surviving friends to be a useless agent. To such an extent had this influx of unsuitable cases arrived at one time in Madeira, that the late Dr. Renton published a paper, pointing out the great evils of the practice, and forcibly showing the inutility and cruelty of sending far advanced cases abroad, in the vain hope of recovery,—a remonstrance which, for some time, had the beneficial effect of preventing such indiscriminate abuse of climate.

The beneficial effects of Madeira in suitable cases are well known to the resident medical men; but, to ensure favourable results, the invalid must shew prudent conduct and follow hygienic rules. Such persons generally do well; and there is no doubt that many, who would have been in their graves if they had remained in a variable climate, have been restored to their friends by a temporary residence in one more genial, where, while avoiding most of the exciting causes of lung disease, they could invigorate the general health by means not available in England during the winter and spring months; thus enabling the system to throw the tubercular materials out of the blood, if they exist only there, and, if deposit has already ensued, to keep it unirritated and unsoftened, and so to arrest the onward progress of disease. I have witnessed, in cases very recently

landed, and where the physical signs have been exceedingly slight, rapid and extensive tubercular deposit ensue in the lungs from excesses combined with imprudent exposure to the midnight air. Slight catarrh has come on; and this fixed irritation has appeared to be all that was necessary to cause a rapid accumulation of the deposit in the lungs. Had there been no imprudence, and no lung irritation, in all probability the consumptive materials might, in the course of time, have been safely eliminated from the system, without being deposited in the lungs.

It is greatly to be regretted that much of the benefit of climate is entirely lost, from the imprudent conduct of many who come out, and act as if climate were to do everything, themselves nothing. These persons, content at home, and, whilst under the watchful eye of anxious relatives, considered and acting as invalids, on becoming their own masters abroad, throw off all previous restraints, freely indulge in various imprudencies, and, when their disease has gained ground, declare (in Madeira at all events) that their impaired health arises entirely from "the relaxing effects of the climate". Of these alleged effects their friends and doctor at home are duly informed; nothing, however, being said of late dinners, evening parties, dances, concerts, cigars, and stimulants of various sorts, etc.; these, of course, not having in their opinion aided in breaking up the general health.

The leading members of the medical profession give sufficient evidence of their favourable opinion of climate, by recommending their patients to avail themselves of its benefits. In confirmation I shall quote the opinions of Sir J. Clark and Dr. C. J. B. Williams, and shall afterwards investigate the grounds upon which an unfavourable opinion has been advanced by others.

Dr. C. J. B. Williams writes thus: "Under treatment and favourable circumstances of air and climate, these symptoms and signs have been gradually removed, in some cases entirely, in others partially, but to such an extent, that the patient's health has been in a great degree restored. It may perhaps be said, that we have no certain proof that these cases were phthisical, or, if they were so, that the phthisical lesions were entirely removed. I admit this, but maintain that the existence of phthisis was as much proved as it ever can be in its early stage—that precisely similar cases, when neglected, commonly run a consumptive career; and we are not aware that such a combination of signs and symptoms can be produced but by lesions, which essentially have a phthisical tendency."

Dr. Mackness, quoting Sir J. Clark, writes: "A cold, damp, and variable climate not only gives the predisposition to this disease (*i.e.* consumption), but becomes its exciting cause, and determines in an especial manner its local manifestation in the lungs. While, therefore, invalids thus predisposed continue to reside in a climate which fosters their disease, but little relief must be expected from any medical treatment, however judiciously employed. It becomes an imperative duty for physicians to advise such patients to resort to a more genial climate."

Sir James Clark thus proclaims his opinion: "The influence of climate over disease has been long established as a matter of fact; and physicians have, from a very early period, considered change of climate and change of air as remedial agents of great efficacy. This opinion is supported both by reason and experience. From the application of climate to unsuitable cases (*i.e.* its misapplication), and the resorting to it as a last resource, it need not excite surprise that success has not more generally attended the practice of sending invalids abroad; nor even that the result should have been such as to bring the remedy into discredit. The fault, however, is to be sought for, not in the remedy, but in the manner in which it has been applied." Sir James Clark then states his conviction, that we possess in change of climate, and even in the more limited measure of change of air in the same climate, one of our most efficient remedial agents, and one, too, for which in many cases we have no adequate substitute.

The late Dr. Andrew Combe, so well known by his pub-

lications on the subject of preserving health, was most earnest in always inculcating and practically demonstrating the importance of hygienic rules for the preservation and restoration of health. Climate was always ranked by him among remedial agents of high efficacy, and he carefully secured its advantages in his own case; for, in writing to a friend, after having resided in Madeira, he says, "If I must go abroad, I shall most likely return to Madeira, simply on the ground that, if I must forego the pleasures of home, it is better to resort at once to the *most advantageous* climate, than to adopt the half measure of going to Italy, Jersey, or the south of England." (White's *Madeira*.) When in Italy, Dr. Combe considered the climate as unsuited for invalids in an advanced stage of disease, though he did not take such an extreme view as Dr. Burgess, a recent author on the climate of Italy, who declares change of climate in disease to be a delusion. He (Dr. Burgess) writes, "There is no greater popular delusion than the belief in the existence of some undefinable specific virtue in the climate of Italy for pulmonary consumption. This 'foreign climate delusion' is not confined to the rich invalid;" he adds "it is only when the disease is confirmed, and softening exists, that, in the great majority of instances, the patient seeks in a foreign climate that relief or cure, which he believes nature has denied him in his own."

Sir James Clark has clearly explained that climate is not beneficial in such unsuitable cases; and that to use it only as a last resource is merely to abuse a remedial agent of acknowledged efficacy. When it is properly used, and under the most favourable circumstances, the invalid is to remember that the change only places him in a better position for the hygienic treatment of his disease; and that, without prudence and self-control on his part, little good will ensue from mere change of locality. The idea of climate being a cure for phthisis, Dr. Burgess says, is "a popular delusion". It is to be hoped that no medical man of the present day ranks it higher than a curative agent of great efficacy when properly applied. He remarks, in continuation, that the influence of climate on health and disease has of late attracted considerable attention; hence, instead of vague assertions or traditional fame, authenticated facts are essentially requisite to establish the sanitary character of any given climate. At the end of his preface, Dr. Burgess concludes thus: "Although several of the subsequent statements may be opposed to various popular notions prevalent in England, no opinion has been hazarded without the support of positive data; consequently, readers can judge whether the conclusions I have enunciated are fully warranted by the evidence upon which they are virtually founded." Fully admitting the importance of these remarks, and the great desirableness of receiving only well authenticated facts, I shall proceed, in compliance with Dr. Burgess's request, to ascertain whether or not his conclusions with respect to the climate of Madeira are erected on such a foundation as to warrant his readers in receiving them as correct.

Amongst other remarks, I shall test the following: "That the popular faith in the virtues of this climate in pulmonary consumption is founded, for the most part, on tradition and romance; that, in short, the climate of Madeira, as regards the cure of phthisis, is as great a delusion as the climate of Italy." This is strongly put, and in forcible language; but I hope to give sufficient proof that, while the Madeira climate does not fulfil the popular delusion of being a cure, it is an agent of great curative efficacy in aiding proper treatment.

Dr. Burgess, having no personal knowledge of the island, of its climate, or of the results of cases sent out, forms his opinions from two works, viz., White's *Madeira*, and Dr. Mason's *Treatise on the Climate and Meteorology of Madeira*; and from the latter, the opinions of the late Drs. Heiniken and Gourlay are incidentally brought in. Mr. Harcourt's book on Madeira, published by Mr. Murray at the time when Mr. White's came out, is not mentioned; his opinion is in favour of the climate. Dr. Burgess first quotes from White's *Madeira*; but, before proceeding to examine the

extracts he has made, I may remark, that Mr. White is described as enthusiastic in his praises of Madeira, and grateful for restored health. Any one having the pleasure of being acquainted with Mr. White must be well aware that he is not of an enthusiastic disposition, and that he is peculiarly well qualified to afford correct information concerning Madeira, for the following reasons, viz., a residence of more than fifteen years on the island, his acquaintance with the people and their customs, and correct knowledge of their language. It is pleasing to find Dr. Burgess recording Mr. White's gratitude for restored health, attributed entirely to his sojourn in Madeira; and it is equally gratifying that I am enabled to add, that he is now living in continued good health in his native land—one out of many proofs of the good effects of climate.

In the quotations which Dr. Burgess makes from Mr. White's book, he writes, that Mr. White is obliged *reluctantly* to make the following confessions:

1st. That pulmonary consumption and scrofula do occur, but *less frequently* than in more changeable climates.

2nd. That there are different eddies or currents caused by the vicinity of mountains, which render a vane or anemometer of little use.

3rd. That the sky is not so clear, nor the atmosphere so calm, as in Italy.

I shall consider these remarks in the order in which they are placed above.

First, with regard to the statement "that consumption and scrofula do occur (in Madeira), but *less frequently* than in more changeable climates." To proceed with Dr. Burgess's extract: "Mr. White, a non-medical writer on the subject, is enthusiastic in his praises of the climate, and evidently grateful for the blessing of restored health, which he attributes entirely to a sojourn at Madeira." He (Mr. White) "remarks, without advancing any pretensions to medical knowledge, or the physiological effects of climate, that a residence of many years at Madeira, and a lengthened pursuit of health among the most favoured localities of Europe, enable the writer to add his testimony to the decided superiority of the climate of Madeira over all those he has visited. Cold winds, or close, sultry weather, are little known: and a continuous summer may be enjoyed, without suffering from extreme heat or cold, or a continuance of damp or wet weather. The most remarkable feature of the island is probably the mildness and equability of its climate, and its consequently beneficial effects in pulmonary and other complaints." Dr. Burgess remarks upon the preceding, "Notwithstanding this eulogium, the writer (Mr. White) has some misgivings as to the perfection of the climate, and reluctantly admits that, though so 'very equable', the climate of Madeira is not altogether free from changes, which constitute there, as well as elsewhere, the exciting causes of pulmonary affections. Pulmonary consumption and scrofula occur among the natives of Madeira, but *less frequently* than among the natives of more changeable climates." Upon referring to Mr. White's book, chapter ix, it appears that Mr. White is not the author both of the eulogium and subsequent misgivings as to the equability of the climate; for it is expressly mentioned, that the following brief remarks were obtained from one of his medical friends, who gives his opinion thus: "Although the climate of Madeira is so very equable, it is not altogether free from changes which constitute here, as well as elsewhere, the exciting cause of pulmonary and inflammatory affections." Dr. Burgess omits the following, which follows in continuation: "These, however, as may be supposed, are comparatively rare among the better classes, and occur chiefly among the hardworking poor, who are more exposed to this cause, and to sudden chills of the surface while perspiring profusely. An epidemic catarrh not unfrequently makes its appearance about the months of August and September, or before the annual rains which usually occur in October. It is now pretty well understood, that no climate affords entire exemption from scrofulous diseases. Whenever the exciting causes are applied,

in whatever part of the world, these diseases manifest themselves. Pulmonary consumption is connected with what is called the scrofulous diathesis, and occurs among the natives of Madeira, but prevails much less among them than it does among the natives of more changeable climates." That it should occur is not to be wondered at, when we find many of the causes of the scrofulous diathesis in full operation among a large proportion of them, viz., imperfect food and clothing, deficient ventilation of their low, damp huts, combined with overwork.

A short extract, like the one made by Dr. Burgess, seldom affords a clear insight into an author's meaning; and I trust that, by supplying the sentences entire and unmutated, the writer's real meanings have been placed in a more distinct point of view; and that, being so viewed connectedly, they simply show the well known and acknowledged fact, that *causes* of disease, such as imperfect food, scanty clothing, deficient ventilation, damp wet dwellings, joined to overwork, do exercise their baneful influence in Madeira, as elsewhere, but with this important limitation, that they do so with less effect than in other places; that scrofula and consumption occur among the natives of Madeira, but *less frequently* than in more changeable climates. The diseases attributed to the changes in the weather are especially noted in Mr. White's book to be "pulmonary and inflammatory, chiefly occurring amongst the poor hard-working people, from sudden chills causing checked perspiration."

The second quotation extracted by Dr. Burgess is also imperfect, from beginning in the middle of a sentence. It is thus given: "Yet, in this almost perfect climate, the same writer (Mr. White) informs us that the different eddies or currents render either a vane or anemometer of little use." The *entire* sentence gives the reason: "From the position of the basin of Funchal, open only towards the south, it is difficult to ascertain the true course of the winds, and [here Dr. Burgess only begins] the difficult eddies or currents caused by the vicinity of mountains render either a vane or anemometer of little use."

Dr. Burgess's third quotation is to the following effect, "That the sky cannot be generally so clear, nor the atmosphere so calm, as that of Italy, from the position of the island, and nature of its surface." I again supply the whole sentence, as the extract begins in the middle of one, after a comma: "From the position of the island of Madeira, and the lofty and rugged nature of its surface, it will appear sufficiently obvious to every one conversant with the causes of the formation of clouds and the trade wind [here Dr. Burgess commences the extract], that the sky cannot be so clear, nor the atmosphere so calm, as that of Italy." Mr. White proceeds: "The preceding tables, however, though compiled during a season of unusual severity, certainly one of the coldest for a great number of years, still afford a favourable result."

We subjoin Mr. M'Ewen's table of the comparative appearance of the sky, from Dr. Mason's work, and quoted by Mr. White:

Blue or clear sky, . . .	240 times.
Cloudy,	223
Hazy	30
Overcast,	30
Threatening,	19
Rain,	13
Showers,	11
Fogs (none)	0

566 observations.

Thus, showers or rain fell twenty-four times in 566 observations. The clouds rarely descend lower than the Mount Church, an elevation of more than 1,800 feet; and form a most necessary and agreeable screen from the sun's rays.

The atmosphere is stated by Dr. Burgess not to be so calm. I append the following table in refutation:

Calm,	102
Light winds,	130
Fresh winds,	82
Strong winds,	9
Presumed gale,	1

324

So that, out of three hundred and twenty-four observations in this climate, alleged to be deficient in calmness, we find only nine strong winds, and one presumed gale.

Dr. Burgess gives, on the authority of Dr. Mason, the following quotation, with reference to the variability of the weather at Madeira, and adds, that it will perhaps surprise his readers. If the reader has ever resided at Madeira, we think he will be astonished at the following statement: "The very frequent and remarkable variations in a series of years, incontestably prove that Madeira is no more to be relied on than any other place for certainty of fine weather; and that it has equally its annual variations of temperature." Dr. Burgess's own opinion as to the requisites in climate for an invalid is as follows: "It is not heat, but equality of temperature, even if it were at a low range, that is needed by the class of invalids referred to; and, whenever an approximation to that quality of climate can be found, there should the consumptive invalid reside." I quite agree with Dr. Burgess's opinion, that equability is an essential element in any climate used for invalids with delicate chests; and I think that Madeira supplies that desideratum, in addition to having home comforts which most other foreign places of resort sadly lack. Certain I am, that changes injurious even to delicate persons do not occur there, and that the most sensitive invalid need never suffer more than a temporary feeling of discomfort. True it is, that invalids often ascribe their various ailments to the effects of climate, which would be more justly ascribed to their own frail bodies, and to the usual complications of disease.

As to the variability of the Madeira climate, alleged by Dr. Mason to exist, we extract the following, to show that other observers do not (as in other observations) confirm his opinion. Sir James Clark, on the authorities of Drs. Renton and Heiniken, both scientific men, and many years resident on the island, writes thus: "When we take into consideration the mildness of the winter, the coolness of the summer, together with the *remarkable equality* of the temperature during the day and night, as well as throughout the year, we may safely conclude that the climate of Madeira is the finest in the northern hemisphere." The winter at Madeira is 20° warmer than at London, and has no fogs; the summer is only 7° warmer, and is free from the oppressive closeness so common there. "No one", writes Sir James, "need breathe, night or day during winter, a lower temperature within doors than 64°, or in the country 74°." That is only ten degrees of mean difference of Fahrenheit between summer and winter; whereas a summer day in England has often greater changes. The following tables show how little variability of temperature there is; two of the years' observations having been made nearly one hundred years ago:

Date.		1847.	1749.	1750.	1850.
January	59-50	57-71	63-50	—	64-00
February	58-50	60-28	63-14	—	63-80
March	61-06	61-86	64-22	64-66	66-50
April	62-50	63-03	64-40	66-07	66-47
May	63-50	63-44	64-76	66-53	66-25
June	65-00	66-90	68-72	68-75	69-06
July	70-00	70-04	72-50	74-58	73-00
August	73-00	71-88	73-58	75-07	75-40
September	71-50	71-28	71-94	76-53	74-93
October	67-50	66-76	71-06	72-20	73-87
November	62-70	63-96	67-64	68-60	70-82
December	60-50	61-44	63-86	64-90	66-27

Authorities: Sir J. C. White, Harcourt. Mr. White.
(Interval of a century.)

Sir James Clark states the mean annual temperature of Madeira to be 64° 56' Fahr.; the mean difference between

summer and winter, $9^{\circ} 38'$; mean difference between the coldest and hottest months, $14^{\circ} 50'$; the mean difference between successive months, only $2^{\circ} 41'$; differences between winter and spring, $2^{\circ} 70'$; between spring and summer, $7^{\circ} 13'$; between summer and autumn, $2^{\circ} 10'$; between autumn and winter, $7^{\circ} 73'$. The differences of successive months are: between January and February, 1° ; between February and March, $2^{\circ} 56'$; between March and April, $1^{\circ} 44'$; between April and May, $0^{\circ} 50'$; between May and June, 2° ; between June and July, 5° ; between July and August, 3° ; between August and September, $1^{\circ} 50'$; between September and October, 4° ; between October and November, $4^{\circ} 80'$; between November and December, $2^{\circ} 20'$; between December and January, 1° .

Mr. Harcourt, writing from his personal experience of the climate, gives his opinion as follows: "The mean temperature of Funchal throughout the year may be stated at 66° Fahr.; February and March being the coldest, August and September the hottest months. Even between these months there is not a greater mean difference of temperature than 12° . It is this uniformity in which the excellence of the climate consists. The causes which are instrumental in forming such a climate in Funchal are threefold: 1st. The lofty hills, which immediately surround it on the north, completely shelter it from the weather at all points of the compass except from south-east to south-west. 2ndly. The absence of wood, while it impairs its beauty, improves its climate; and 3dly, the regularity of the alternations of the land and sea breezes tends to preserve a delicious equality of temperature."

"This climate is certainly fine enough to please even fastidious people. A range of 12-14 degrees between summer and winter, surely does not amount to 'frequent and remarkable variations'; and even this small amount of difference between the hot and cold months may be greatly, and almost entirely, avoided, by going out of Funchal during the summer, which it is the custom to do. In the mountains the summer heat is less than in England; but, at this elevation, there is too much damp for an invalid, though healthy persons enjoy such mountain air, and are braced by it. Lower down the air is drier, and an invalid can have summer with the thermometer rarely exceeding 72° or 74° ." In the Isle of Wight, the most favoured of English places for consumptive persons, the difference between the hot and cold months is 28 degrees, being fully double what it is at Funchal.

I shall now proceed to investigate the extracts in Dr. Burgess's book, taken from Dr. Mason. Before, however, detailing the results of Dr. Mason's observations, Dr. Burgess informs us, that the instruments used were improperly placed, a fact which alone vitiates the whole of the results. The instrument chiefly used was the hygrometer, which is very easily affected by the slightest causes, arising from local currents of air, moisture, or ill-chosen locality: and it is much to be regretted that so much zeal and industry as the late Dr. Mason exhibited, should be rendered of no avail, not from one, but from many causes of inaccuracy. Dr. Burgess says: "I shall now place before the reader the leading facts contained in Dr. Mason's book"; and a little farther on, "a summary of Dr. Mason's observations will enable the reader to form his own opinion as to their merits, and the reliance to be placed on them." Mr. White, as usual, explains matters more fully and correctly. He writes: "The situation, where Dr. Mason's observations were made, is notoriously one of the least favourable for that purpose in the outskirts of Funchal; and this circumstance, together with the fact of his hygrometer being placed in a close room, between two windows, near an open tank, and surrounded with trellised vines and vegetation, independent of the acknowledged severity of the season during which they were made, will sufficiently account for the difference existing between his observations and those of other parties." Independently of other sources of error, the immense exhalation from the leaves of plants would vitiate hygrometrical observations. An experimenter, placing his instruments in a place which has marked peculiarities, can obtain only

results appertaining to that locality, and cannot correctly affirm, that observations thus made truly indicate the general climate of a country. No one would place an hygrometer in a Lincolnshire fen, or an Irish bog, to decide the general humidity of the climate in either country; nor can more weight be justly allowed to Dr. Mason's observations, than that they indicate the humidity of the atmosphere near his own water tank. At one time it was thought that the greater humidity observed by Dr. Mason must have originated in the observations having been made in a damper season than usual; but this opinion is apparently erroneous, because the year in which they were noted, 1834-5, was a particularly good wine year, and, to secure a good vintage of full flavour, a dry season is necessary; consequently we must look to other sources for the discrepancies observed between his remarks and those of other persons. On the island, it is well known that the locality is damper than the neighbourhood around it; but the accuracy of the whole series of observations is vitiated chiefly from the improper position of the instruments, etc. Dr. Mellermair, who has made careful observations, informs us, that the results obtained by him confirm Mr. White's, and that both prove Dr. Mason to have placed the humidity of Madeira one-third too high.

The following letter from Mr. Wilkinson of Madeira more fully explains the above:—

"Funchal, 1st June 1853.

"SIR,—In reading the book on Madeira, by Dr. Mason and Mr. Driver, edited by Sheridan Knowles, the suspicion occurred to me, that the conclusions there made with regard to the climate of the island, and drawn from the meteorological tables said to have been kept by the late Dr. Mason, were not trustworthy.

"I was personally acquainted with the late Dr. Mason, and had the pleasure of enjoying a good deal of his society while he resided in Madeira; and I know he did not reside at Sta. Luzia during the whole time the tables are given as having been kept there by him, but that he made frequent and long excursions into the country. Neither, to the best of my recollection, did he leave any one to carry on the tables during his absence. True, he always carried a small thermometer and hygrometer with him into the country; but that could have nothing to do with observations on the climate of Funchal or its neighbourhood.

"When Dr. Mason commenced his observations on the temperature, etc., of the atmosphere here, it was solely, I believe, to assist him in some improvements he was attempting in hygrometers; but, at the same time, he noted down his conclusions with regard to the value of the climate in the treatment of disease. Certainly his means of arriving at these conclusions were very imperfect. His attention was chiefly directed to the working of a Leslie's hygrometer, and of a common thermometer, hung in a cupboard. All this, of course, casts no imputation on Dr. Mason; as Mr. Driver and the editor of the book are alone answerable for the use they have made of the imperfect notes left by that gentleman at his death.

"Another circumstance, that would make his observations of little value for hygrometrical purposes, was the situation in which his instruments were placed; viz. a corridor about eight feet from the ground, and about fifteen feet from a tank holding about three hundred gallons of water. The water in the tank was renewed about every fifteen days, by a stream running into it; but was never entirely emptied, as it contained fish. The tank is of stone, entirely open at the top, and nearly on a line with the corridor. The surface of the water lies exposed to the afternoon sun, and to the current of air from the valley of Sta. Luzia. In fact, no one, who had a choice, would choose such a situation for purely meteorological purposes.

"All this is matter of personal knowledge with me; and you will easily understand why I should be of opinion that the late Dr. Mason, had he lived, would never have published his notes in the form we find them in this work.

"I remain, sir, yours truly,
"G. LUND, Esq., M.D."

"SAMUEL WILKINSON."

The objections made to the climate of Madeira, on the authority of Dr. Mason, may be classed under the following heads:—dampness, rains, injurious effects of the l'este, and precipitation of dew.

It is mentioned that London, at its mean temperature of 58°, can contain 100 parts of moisture; whilst Funchal, at 68°, can hold 200. Both calculations being made by Fahrenheit's thermometer, commence at the freezing point, 32°; add 18°, and we have the London temperature; double the temperature by 18° again, and we get 68°, the Funchal temperature, simply shewing that double the heat and double the quantity of moisture will be suspended in the atmosphere. Further, in Madeira it is suspended, and is never visible in the shape of fogs, except on the mountain tops.

Mr. Harcourt thus expresses his opinion on the alleged damp of Madeira:—"Whatever may be the moisture of the air, it is not sensible as dampness to the feelings, and certainly is not unfavourable to the healthy action of the lungs. There may be spots in Madeira, either near yam grounds, where much irrigation is carried on, or where the soil and rock, usually very porous, are so close as to retain the wet, which may be too humid for some constitutions; but, for the greater part, in the neighbourhood of Funchal, there is no visible excess of moisture, there is no fog, and there is comparatively little dew. If dampness has ever been alleged as an objection to the salubrity of this island (Madeira), it must be regarded as a complaint due to the unlucky choice of some dwelling house unfavourably placed, or to the common fastidiousness of ill health."

Dr. Mason pronounces Dr. Heiniken in error, for stating "that at the level of the city of Funchal, no perceptible dew is produced, but up the mountains it is profuse."

It is surprising how Dr. Mason could have committed such a mistake; for every resident is well aware that Dr. Heiniken is in the right, and Dr. Mason glaringly in the wrong. Sir J. Clark gives the following direction:—"Invalids particularly sensitive to humidity, are recommended to live within the limits of the town, on account of its greater dryness." Again, Dr. Mason makes the following erroneous statement:—"That, on a clear night, the quantity of dew precipitated is so great, that in a few hours many drachms of fluid may be collected." This is palpably incorrect, the experiment having been often tried in other localities, without the plate being even damped.

The l'este, a warm wind from Africa, which is not common, is described by Dr. Mason as injurious in its effects: he says that at one time it made him very well, and at another very ill. We presume that this opinion is of no more value than as it denotes the morbid feelings of a nervous invalid. The l'este does not occur every season, and is felt to produce only temporary inconvenience, and that in summer, when few invalids remain on the island: its general continuance varies between three and six days. Never having had to prescribe for any one made ill by the l'este, I conclude that Dr. Mason has overrated its bad effects. Dr. Mason corroborates the opinion of Dr. Gourlay, as to the frequency of phthisis amongst the Madeirans: the relative value of these may be gathered from the following. Dr. Mason did not speak the language of the people whose diseases he affirms that he knew, nor did he practise amongst them; consequently his opinion must have been secondhand. Dr. Gourlay did practise amongst the Portuguese, but before the stethoscope was used on the island; consequently his means of detecting chest disease must have been very imperfect. The late Dr. Renton, an excellent physician and good stethoscopist, writes:—"With respect to the question relative to the frequency of consumption among the natives, Dr. Gourlay, if he alluded to tubercular disease, has greatly overrated it." Dr. Heiniken also says:—"It has been asserted that no malady is more prevalent than phthisis with the natives of Madeira; but, so far as my own personal experience and the result of inquiries go, I incline to a contrary opinion." (Clark.)

Dr. Burgess thus sums up:—"Madeira, with all its sanitary fame, is no exception to this rule"—that is, it affords

no proof of salubrity, or of the beneficial effects of climate,—"as (to pursue the quotation) the meteorological observations of Drs. Heiniken, Gourlay, and Mason, incontestably prove." Setting all other considerations aside, we do not think that these three observers bear out this assertion in their own cases. Dr. Gourlay was not consumptive. Dr. Heiniken was originally sent out as a dying case, lived nine years on the island, and ultimately died from accidental exposure to the night air in an open boat, when returning from an adjacent island. Dr. Renton opened the body, and was astonished to find how little lung he had left. Dr. Mason, notwithstanding his neglect of means for preserving or obtaining health, and devoting himself instead "most assiduously to meteorological observations", lived in Madeira two years, this time being the full average duration of the whole different stages of phthisis in England. After this, he went to Nice. We are informed that he first visited Madeira with the belief that he would recover his health, under the alleged sanitary influence of that climate. Whilst there, he most assiduously occupied himself in meteorological investigations. From this, the conclusion Dr. Burgess arrives at is, "that the climate of Madeira, as regards the cure of phthisis, is as great a delusion as the climate of Italy." Previously, we were informed that the idea of cure was a popular delusion; but this shews its adoption by at least one medical man. The belief of medical men generally is, that no climate can cure; but that it is an essential and important aid of other means of treatment, which cannot be so efficiently carried on in a variable climate, especially during the winter and spring months.

Dr. Mason, it is stated, always felt persuaded that Nice was a place better adapted to his case than Madeira. Why he remained at Madeira two years, the ordinary duration of a consumptive case in England, with this impression on his mind, and of course, in his opinion, losing vital time, is not explained. Dr. Burgess continues:—"The fate of the author was a melancholy one, and a telling comment on the blind credulity which prevails respecting the virtues of foreign climates in pulmonary consumption." During his journey to Nice, he travelled twenty-four consecutive hours in a diligence, his only sustenance, during that period, being fruit and bread, *accidentally* obtained on the road: upon arriving, dysentery (it is said) attacked him, and proved fatal in a fortnight. Dr. Burgess remarks on this catalogue of imprudences, committed by a dying invalid:—"How many consumptive invalids have fallen victims abroad to the same delusion!" In my opinion, the delusion would have lain in expecting any other result than what happened. Over-fatigue, with improper food, in an advanced stage of consumption, produced the usual diarrhoea (not dysentery), and speedily proved fatal; nor, in fact, could any other termination be looked for.

We have now to consider how far the assertion is correct, "that the popular faith in the virtues of the Madeira climate, is founded for the most part on tradition and romance." The following tables, I think, prove the contrary, and shew that climate, in the majority of cases, saves the life of consumptive people, when they are sent out in the early stage, and before the disease has worked irreparable mischief. The tables of confirmed phthisis speak for themselves.

Dr. Renton's Tables, extracted from Sir J. Clark's work on Climate.

TABLE I. CASES OF CONFIRMED PHTHISIS, 47.

Died within six months after landing in Madeira.	32
Went home in summer, returned and died	6
Left the island, of whose death we have heard	6
Not since heard of; probably dead	3

47

TABLE II. WITH TUBERCULAR LUNGS, 56.

Died here	30
Left the island	22
Still here	4

56

TABLE III. INCIPIENT PHTHISIS, 35.

Left the island, much improved . . .	26
Improved, but not since heard of . . .	5
Have since died . . .	4
	35

TABLE IV. THREATENED WITH PULMONARY DISEASE, 108.

Remained free from symptoms . . .	93
Fell off . . .	13
Lost sight of . . .	2
	108

Table by Dr. Lund, from White's Madeira, shewing the number of patients, in 100 cases of Consumption, landed in different stages of the disease, in whom it was arrested, progressed, and proved fatal.

FIRST STAGE: 48 CASES.

Arrested—37.	
Duration of arrestment.	
From 4 to 10 years . . .	13
For 3 years . . .	2
From 8 to 20 months . . .	11
From 7 to 12 months . . .	11
	37

Relapses occurred in 2 cases.

Progressed—11.	
Living.	
Passed in 14 months into third stage, and slowly progressing . . .	3
Passed in 16 months, 2 years, and 5 years respectively, into second stage . . .	3
	6
Died.	
Died 5½ months after landing . . .	1
Remained one winter at Madeira, and died the next winter abroad . . .	1
Went out for 7 winters, and then died . . .	1
Remained nearly 8 winters, and then died . . .	1
Remained 1 winter, returned home, and supposed dead . . .	1
	5
	11
	48

SECOND STAGE: 24 CASES.

Arrested—5.	
Duration of arrestment.	
Arrested for 15 months; relapsed, and passed into third stage. Disease again stopped for 3 months; general health as good as before the last attack . . .	1
For 15 months . . .	2
For 5 years . . .	1
Came out about 10 years ago; relapsed in 1847: disease again arrested, and continues so . . .	1
	5

Progressed—10.

Living.	
Much ameliorated . . .	2
Still remain in the second stage; but the disease is slowly gaining ground . . .	4
In the third stage: but the disease is arrested, and general health is good . . .	2
	8
Died.	
Remained one winter; and, having left the island in a sinking state, supposed dead . . .	1
Remained one winter at Madeira, and died the next winter at home . . .	4
Died at home, 8 months after first landing in Madeira . . .	2
Ditto, 10 months, ditto . . .	1
Ditto, 12 months, ditto . . .	1
Died at Madeira, 14 months after first landing . . .	1
Ditto, 4 years, ditto . . .	1
	11
	19
	24

THIRD STAGE: 28 CASES.

Arrested—5.	
Duration of arrestment.	
Remained so for upwards of 12 years . . .	1
For 8 years . . .	2
Left the island after 3 years . . .	2
	5

Progressed—28.

Living.	
Arrested for 14 months, and then began slowly to progress . . .	1
Has progressed slowly for 15 months . . .	1
Remained one winter, and then left, their only symptoms being moderate morning cough and expectoration . . .	3
	5
Died.	
Died 48 hours after landing . . .	1
" 6 weeks " . . .	1
" 7 " " . . .	1
" 9 " " . . .	1
" 3 months " . . .	3
" 3½ " " . . .	1
" 4 " " . . .	2
" 5 " " . . .	1
" 6 " " . . .	1
" 7 " " . . .	2
" 10 " " . . .	1
Died 15 months after first landing in Madeira; went home in summer, and died 9 months after returning . . .	1
Died 4 years after first landing . . .	1
Came to Madeira 18 years ago, and remained 7 winters; went home for 3 years; returned to Madeira for 3 winters and 2 summers; and died at home . . .	1
	18

LIVING.	First stage . . . 43	
	Second stage . . . 13	66
	Third stage . . . 10	
DEAD.	First stage . . . 5	
	Second stage . . . 11	34
	Third stage . . . 18	
		= 100

It is well known that, in chest disease, the general health must be invigorated as much as possible; and that injurious causes, exciting lung irritation, as cold, damp, and variable weather, are all especially hurtful, and carefully to be avoided. Now, in such a climate as that of Madeira, these injurious changes, and their consequent lung irritations, rarely, if ever, occur; and, when lung irritation does come on, it is much milder than at home; and there is this further advantage, that the tone of the system can be improved at the same time, by means not available in Great Britain during the winter and spring months. Cold or tepid bathing, sponging baths, moderate clothing, constant out of door exercise, riding, boating, sitting in the open air, or with open windows, are habitually used.

From the preceding observations and tables, we may consider it fully proved, that the opinion long held and expressed by the more experienced members of the medical profession, regarding the beneficial effects of a genial climate in chest disease, is the correct one; and that the statements promulgated against that opinion are not supported by facts, certainly not so far as relates to Madeira, and most probably not to Rome, Pau, or Egypt, with the proviso that properly selected—not dying—patients are sent to these localities. So far as regards Madeira, I could strengthen the details of its beneficial effects by relating individual cases; but that would unnecessarily lengthen this paper. Of one thing I am fully convinced, after many years' residence in Madeira; namely, that, in the early stages of phthisis, a person has in that place an infinitely better chance of having the disease arrested, than in England, or any other place that I am at present aware of; and that, in the latter stages, the disease is much delayed, the invalid enjoying all the comforts of life before finally sinking; and that a few cases occur, where the prolongation of life is very great. Many in Madeira live longer (say from three to four years) than the average duration of the whole three stages in Great Britain, which is limited to a period extending only from eighteen to twenty-four months. I have cases, where this retardation of disease has extended to ten, twelve, even twenty years; and one to twenty-five years. Many have lived on the island in perfect health.

brothers and sisters have, from a contrary cause, all died; or have originally come out as phthisical, and have lived free from all tubercular complaint.

August 1853.

TWO FATAL CASES OF SNAKE-BITE: WITH REMARKS.

By R. H. POWELL, M.D.Lond.

(Read before the Harveian Society of London.)

CASE I. The following particulars of a case of snake-bite were furnished by A. MacKean, Esq., late in medical charge of Mhairwara Local Battalion.

The accident occurred to a Sepoy, who was, I think (says the reporter), in the district on command; and when he was brought in, of course there was nothing to be done but to give spirits of ammonia from time to time. No particular symptoms supervened, if I except a disposition to drowsiness, and latterly acute inflammation of both conjunctivæ, for which leeches were applied to the under eyelids, and cooling purgatives administered. After the leeches had been applied, it became apparent that the leech-bites continued to bleed, and neither dossils of lint, applications of turpentine, nor of lunar caustic could command the partial bleeding from them. After the case had been altogether some three or four days in hospital, the man gradually fell into a lethargic state, from which he never could be roused. His leg was somewhat swollen on admission to hospital; and as no very urgent symptoms showed themselves, I was in hopes the case would have done well; but in this I was disappointed. It is impossible for me to say what kind of snake bit the man; nor can I positively assert it was a snake that bit him, but in all likelihood it was a case of snake-bite.

There are no further particulars to communicate.

(Signed)

N. COLLYER,

Assistant Surgeon, Mhairwara Local Battalion.

February 3rd, 1841.

The second case is reported by Mr. Davidson, surgeon, —th Light Infantry.

CASE II. Lieut. C. A., —th Light Cavalry, aged about thirty-three years, was bitten by a snake on the left instep, through a thin cotton stocking, on the night of the 11th June 1840, between nine and ten o'clock, when walking home from the regimental mess-house, and was brought to me about twenty minutes after the accident. Immediately on his being bitten, a ligature was tied tightly round the leg, and in a few minutes after a large dose of eau-de-luce (about 3 iiss), was given. On arriving at my house, he had no particular symptoms of the effect of the poison. He was anxious; the pulse was soft; he complained of soreness of his throat from the eau-de-luce. He had slight pain in the part which was bitten, the punctures were very distinct, and had a black appearance, and the foot was very slightly swollen. The part was cut out with a scalpel;* it consisted of the common integuments and cellular substance, to the extent of about nine lines in length, and eight in breadth, over the os navicular, and on the inner side of the extensor proprius pollicis pedis. It was allowed to bleed a little; and was then touched with lunar caustic, and a poultice was applied.

About two hours after the bitten part was cut out, he became restless, giddy, and sick, with a strong inclination to go to stool, and bleeding took place from the wound. On removing the poultice, the blood was found oozing out as from a sponge; and pressure having no effect in stopping it, though no vessel of any size was cut, or could be seen, ligatures were applied at every place where any distinct point could be discovered, and then a compress and bandage were applied. In spite of this, however, the bleeding continued, and the actual cautery was had recourse to, and a firm com-

press and bandage put on. Two doses of eau-de-luce, the first of 3j, and the second of forty minims, were given by me; and afterwards, from the pain in the throat, liquor ammoniæ in forty minim doses, and then compound spirit of ammonia in drachm doses, in camphor-mixture, repeated at longer or shorter intervals, from half an hour to an hour. As the pulse became weak and slow, and as no further symptoms of the effect of the poison continued, except the oozing of blood from the wound, early on the morning of the 12th, the ammonia was discontinued. As the bleeding from the wound, though much diminished after the application of the cautery, did not stop entirely, he, on the afternoon of the 12th, commenced taking subacetate of lead, in three grain doses, with half a grain of opium, every three hours, and this was continued regularly up to the morning of the 15th.

On the forenoon of the second day (the 13th), the foot and leg were swelled and painful to the touch, but cool. The part had a *blueish* appearance, and several *purple blotches* were observed on different parts of the body, particularly on the left arm; which spots afterwards became larger and of a *darker* colour. His bowels were acted on by pilul. colocynth. c. aloes grs. viij, with pilul. hydrarg. gr. ij, at bed time, followed by an enema the next day when necessary, and his strength was supported. Excepting a slight oozing of a light-coloured watery blood from the wound, he appeared to be getting on well till the afternoon of the 15th, the fourth day after the bite. His pulse then increased in strength and frequency; he complained of headache, sickness, and loss of appetite; and became much heated, with swelling, heat, and pain of the foot and leg, nearly up to the knee. Cold lotion was applied to the foot and leg, and eight grains of extract of colocynth, with the same quantity of calomel, were given; and the bowels not having been acted on in three hours, a solution of three drachms of Epsom salts, in two ounces of water, was given every two hours. After the third dose of this, as his bowels had not been acted on, a purgative enema was given, which operated freely. After his bowels were opened, he began to take a draught consisting of

Liquor. acetat. ammoniæ 3 ij.

Vini antimon. tartarizat. ʒ. xx.

Mist. camph. 3j.,

every second hour. Under the use of this the febrile symptoms subsided. During the night he was restless, and suffered a good deal from sickness, which was relieved by effervescing draughts.

Early on the morning of the 16th, he complained only of great weakness. Suddenly, in the forenoon, a little before twelve o'clock, a profuse damp perspiration broke out all over his body, followed immediately by convulsions. He was after this unable to speak. Slight convulsive twitchings of the extremities continued, and he gradually sank and died at a quarter past two P.M., of the 16th.*

EXAMINATION OF THE BODY three and a half hours after death. Externally nothing particular was observable, with the exception of the blotches on the different parts of the body, which had, from an *inky blue* colour, become *brownish*; and the discoloured state of the left leg, which had a *blueish* tinge extending up nearly to the knee. On examining the wound, a thin slough appeared to be separating, and there was a slight formation of matter round its edges, but no arterial branches could be traced into it. On cutting into the parts, there was slight extravasation of blood in the cellular substance around the wound.

Abdomen. The viscera were generally healthy; but the liver was rather large, particularly the right lobe, on the convex surface of which there was a mark of an old cicatrix, about two and a half inches long, and there was a red patch on its surface near to this place.

* A curved instrument, somewhat like a tenaculum, has been lately recommended for cauterising the punctures; following up their track, and effectually destroying the bitten tissue.

* It may be surmised that the treatment pursued subsequently to the exhibition of depressing astrigents proved too active for a system labouring under the sedative influence of a virulent poison. The latter part of the treatment was, however, judicious; and in such cases little room is left for critical remarks, from their all but universal fatality. N. H. P.

Thorax. The chest appeared rather small. There were chronic adhesions of both lungs, which were otherwise healthy. The pericardium was thin, and contained about two ounces of a pale-coloured fluid. The heart was very large, but not apparently changed in structure. The blood in the heart, as also in all the large vessels, both arteries and veins, of the thorax and abdomen, was quite fluid; and no coagulum of blood was found in any part of the body: its colour was also very light, and its consistence watery.

Head. The membranes and substance of the brain showed no diseased appearance. The lateral ventricles contained a small quantity of fluid, and the choroid plexus was of a rather pale colour. The cerebellum was soft. There was a considerable quantity of fluid in the spinal canal. The blood here, as in all other parts of the body, was of a light colour and very thin.

REMARKS upon this case by the reporter. The patient remained in my house. Mr. Griffiths, surgeon, 74th Regiment, N.I., saw him early on the morning of the 12th at my request, and continued to attend upon him with me till death occurred, and was present at the examination of the body. In this case the active effects of the poison were counteracted, to a certain extent, by the large dose of *eau de luce*; but the system was much affected by the virus, as was evident from the change produced upon the blood, the oozing of it from the wound, and the blotches on different parts of the body. Death was caused from the poison acting so severely upon a constitution which was much weakened by former illnesses. The snake was seen by Lieut. A., as well as by servants who were with him; and, though it was not killed, I have no doubt that the bite was inflicted by the *Karait*, a most venomous snake, which is common at this place. The effect of its bite is to produce a great change upon the blood, and to cause discharges of it to take place from the wounds inflicted by the animal—whether the parts be cut out or scarified or not,* as also from other parts of the body, as from the nose, or mouth.

Lieut. A. was of a spare habit of body, middle size, dark complexion, and of regular but rather sedentary habits. When coming out on board of ship, he had a fall on his back, which injured his spine so severely, that for some months after his arrival he was unable to do his duty. He did duty with the cavalry for a few months in the cold season of 1828, and was afterwards posted to it and joined in December 1829. During the time he was with the regiment, in 1830 and 1831, he was more or less an invalid, suffering from affections of the liver, and obstinate constipation, for which (besides other means) he was obliged daily to have recourse to purgatives and enemata. On the march of the regiment, in January and February 1832, he was attacked with fever, from which he suffered severely, and afterwards was so reduced and debilitated, that in this year he was sent on sick leave to England, but was a long time before he derived benefit from the change of climate, and for a considerable period he was obliged almost constantly to have recourse to the use of purgatives. In April 1837 he joined his corps on his return from England, and continued pretty well for some time afterwards. In 1838 and 1839, he was three times on the sick list, for considerable periods, for the treatment of primary and secondary symptoms, for which it was absolutely necessary to put him through protracted courses of mercury (it being difficult to bring his system under the influence of it); *sarsaparilla* and nitric acid being afterwards given. In December 1839 he got his right ankle hurt by falling over a tent-pin. Inflammation took place, for which leeches were applied; but the wounds ulcerated, and did not heal up for nearly a month. In April and May, he suffered from chronic disease of the liver; when blistering, counter-irritation, and mercurial alteratives and purgatives were given, with the effect of re-

moving the symptoms. With the exception of suffering from gonorrhoea, he continued pretty well after this up to the time of being bitten by the snake.

(Signed)

ALEX. DAVIDSON,
Surgeon Light Cavalry.

It may be doubted whether, in the above case, the lead and opium acted beneficially; as, while they moderated the discharge of blood from the wound, secretion and excretion were probably checked, and the eliminating process usually set up by the glandular apparatus was arrested in its salutary operation of freeing the blood and system from deleterious agents: the supervention of low congestive disorder being also proportionally facilitated.

GENERAL REMARKS UPON SNAKE-POISONING. With regard to the nature of the snake virus, it would appear to be related to those bodies, occasionally present in the blood as the result of or in connexion with defective excretion, and which, though differing greatly in degree of virulence from the former, exert an injurious influence not very dissimilar in kind.

The mode of operation of the snake virus on the blood, seems to consist of and originate in a catalytic influence, whereby the essential properties of the blood becoming altered, its constituent parts are broken up, and fall into lower and more simple organic combinations. These changes probably take place in those composite bodies formed by the mineral and azotised constituents of the blood conjointly. It would appear, from the foregoing and similar cases, that the fibrin and red globules are especially attacked and modified, as by other noxious agents; the plasticity of the blood being diminished and its fluidity increased, as in death from lightning, and from diseases in which those ingredients are affected. The cachectic state of the patient in the second case, related above, still further promoted the baneful operation of the snake-poison, in spite of the treatment occasionally found useful in this form of toxæmia. It is worthy of remark, however, that the antidote (ammonia) to those subtle and rapidly acting poisons, contains nitrogen; and that when promptly exhibited, it may be concluded to bear the early impression and attack of the snake venom rapidly gaining access to the circulation, and there neutralising its lethal activity, and thus preventing the decomposition above referred to.

It is obvious that, if the blood become chemically altered, congestion and other secondary disturbances of function may readily ensue, and make up the train of symptoms characterising such cases. There appears to be some analogy between the poisonous action of the snake secretion and that of belladonna; both producing tumefaction of the throat and of the eyelids, affection of the pupils; cerebral congestion, etc., supervening. Further, the excretion from the kidneys of uric acid and non-combustible salts is diminished by the latter agent, thereby permitting the accumulation in the blood of those injurious compounds previously mentioned. The alleged prophylactic power of belladonna in scarlatina, in which the presence of a zymotic agent may be assumed, may be derived from the incompatibility of two concurrent morbid operations in the economy, or to the fact of one catalytic agent, as it were, using up the pabulum required in the evolution of the other.

Moreover, Dr. Prout signalled the peculiar state of combination in which sulphur, iron, phosphorus, etc., are found in the organic principles of the blood. It may be in virtue of the poisonous ferment breaking up this combination that we are, in part at least, to attribute the formidable change of properties, and ultimate dissolution of the blood; either directly, by the formation of some less highly complex bodies; or indirectly, by the subtraction of the influence exerted by those elements in conserving the organised bases of the tissues from the operation of extra-organic chemical affinities.

Edward Street, Portman Square, August 1853.

* Why excise the bitten part in this case, if the absorption of the virus be not thereby arrested? It is probably a question involving the time and mode of performing the operation; speed and dexterity, with the subsequent use of additional means likely to still further promote the object in view, being the requisites for success. R. H. F.

BIBLIOGRAPHICAL NOTICES.

ON THE PATHOLOGY AND TREATMENT OF ACUTE RHEUMATISM, being the Lumleian Lectures delivered before the Royal College of Physicians in 1853. By JAMES ALDERSON, M.D., F.R.S. London: 1853.

THE attention which is now paid to acute rheumatism (judging from the number of books on the disease) is owing to the obscurity in which it is still involved, and the frequency of its occurrence. It is one of the most frequent of acute diseases now left; and, unlike the common inflammations, we suspect that very few practitioners feel any very great confidence in the best mode of its treatment. Dr. ALDERSON's object is to set forth a theory of the disease based on our more recent chemical knowledge, which will include and explain its causes, symptoms, and principles of treatment. Dr. Alderson is a believer in the value of thought. He considers that it is not enough to accumulate isolated facts and to leave them, but rather that we must endeavour, by reflection, to turn these materials to account by discovering causes. And no one will deny this; although in the present state of public opinion it requires some boldness to advance a new generalisation. To a certain extent this caution is a right one, as few minds are capable of true generalisation, though many may be able to reflect soundly on single cases. When, however, an earnest man shews that he has well thought over, and weighed, and endeavoured to balance and to estimate the evidence on a complicated subject, his labours demand attention; and no one will deny that our author has brought to his theme a well-stored mind, an acquaintance with the modern chemistry of the disease, and a disposition to investigate thoroughly its nature.

In acute rheumatism there is an excess of fibrin in the blood, and a deficiency of blood-corpuscles; so there is also in common inflammations. The peculiarity of rheumatism lies in its affecting the joints, and in its liability to metastasis. The chemistry of the morbid blood, therefore, proves rheumatism to be a species of the genus inflammation. Important questions to be solved are, How is this excess of fibrin caused? Why are the joints affected? How is it that metastasis occurs? A right theory of the disease should explain the phenomena; and the following is a slight sketch of Dr. Alderson's views. Respiration increases fibrin; and, on the contrary, fibrin diminishes in blood not brought into contact with oxygen. Thus, blood passed more frequently through the lungs becomes highly fibrinated by appropriating to itself more oxygen: blood which stagnates in vessels loses fibrin, for the fibrin is there used, and no fresh supply of oxygenated blood renews it. But in what way is the blood over-fibrinated in rheumatism? Cold (says Dr. A.) to the surface is the common cause of rheumatism, especially when the patient comes out of hot rooms, where he has been breathing a highly carbonised air. His carbonised blood eagerly seizes an over supply of oxygen, and an excess of fibrin is the consequence. This over-fibrinated blood circulates, and at the surface is chilled; the fibrin is not appropriated at the periphery to nutrition, but passes into the veins and to the heart, which it over stimulates, and thus the vicious circle is kept up with increasing effect. This over-fibrinated blood becomes obstructed in the fibrous textures of the joints owing to their peculiar structure, as their capillaries lie amongst unyielding fibrous tissue, and the natural relief of these obstructed capillaries is effusion into the textures. When this effusion happens, the obstructed vessels are relieved, and another joint is affected, which, in its turn, partially gets rid of the fibrin. This is the explanation, on a simple principle, of metastasis.

Such is Dr. Alderson's theory. The objection which immediately strikes us to the explanation of the over-fibrinated state of the blood is, that in a practical point too much is attributed to cold, and too little to the condition of the blood before cold was applied. This over-fibrinated state of blood is common to all inflammations; and, as a

general rule, what is called the predisposition to acute inflammation consists in a plethoric state of the system, usually produced by errors in the quantity and quality of food and drink for some time previously. Now, as fibrin is a constituent of chyle, the inference would be, from a consideration of the symptoms of the disease, together with its chemical history, that the excess of fibrin was owing to the digestive organs. But this could not be determined unless the condition of the blood, previously to an attack of inflammation, had been ascertained. So that the necessary data for an explanation of the over-fibrinated state of blood are not here given. Nor can we agree to Dr. Alderson's mechanical theory of obstructed capillaries as the cause of the joints being affected; for he himself admits that there is no such obstructing cause in synovial rheumatism, though there is in fibrous, and this admission seems to us fatal to his theory.

Why certain morbid states of blood affect certain tissues is a very curious and important question, and one still involved in great obscurity. Inoculate one man's blood with the syphilitic virus, and the poison will affect in succession the mucous membrane of his throat, his skin, his iris, his periosteum, and his bones. Another breathes the effluvia of a patient with typhoid fever in Paris, and Peyer's glands invariably ulcerate. Another inhales the poison of scarlatina, and his skin inflames in quite a peculiar way. Will any mere mechanical theory of obstruction of vessels from peculiarity of the structure of parts, throw any light on this large class of facts, which is much more extensive, when we also consider the effect of various medicines in acting (some-what like these morbid poisons) on different living tissues, both in health and in disease? Taking the whole facts into consideration, it seems most probable that the peculiarity in rheumatism should be sought rather in some morbid matter in the blood, than in the structure of the joints themselves. The old doctrine that there is a morbid matter in the blood in rheumatism, to explain its difference from common inflammation, may be the truer solution. Why that affects the joints, may be known when we have ascertained why the matter of inoculated syphilis affects the iris, or half a grain of calomel increases the secretion of bile, or acetate of potash acts upon the kidneys, or belladonna dilates the pupils. We fear that the consideration of this great class of facts shows that our knowledge is not yet sufficient for their explanation, but that we must be content to reserve our judgment.

Dr. Alderson's explanation of metastasis seems a very happy one. There can be no doubt that effusion is a natural relief of inflammation; and we see no reason why it may not be the case, that the so-called metastasis is simply the fact that, as one joint has done its part towards a partial relief of the overfibrinated blood, another goes through the same process in its turn.

No new plan of treatment is proposed; but the present modes are tested by the ascertained facts of the chemistry of rheumatic fever, and this is a legitimate and satisfactory proceeding.

Happily, the French plan of bleeding frequently, as a cure for rheumatic fever, is given up. Practice proved its inefficacy, and chemistry explains the reason; for bleeding increases the fibrin and decreases the blood-globules, and thus adds to the mischief. Its moderate employment at an early stage, in diminishing the quantity of the blood, and in thus diminishing the force of circulation, is its legitimate application. Local bleeding by leeches or cupping the joints is often very useful, when the pain, and heat, and local inflammation are very severe, and especially when they are limited to one joint. Now, chemistry shows that the blood taken from the surface capillaries contains a larger proportion of fibrin than that which circulates in the arteries and veins. It is richer in solid constituents than arterial or venous blood. The good effect of purgatives is, that they relieve the blood of its richer constituents, and of water (which is in excess in rheumatic blood), without depriving it of blood-corpuscles. Dr. Alderson approves of purgatives on purely chemical grounds; but objects to them as they in-

crease pain by the movements required. But as this may be much obviated by good nursing and the use of bed pans, we think the objection (which is commonly made by writers) unsafe, if the foul state of the tongue, and the light and offensive, or dark bilious stools, indicate their repeated employment.

As alkalis and acids are alike in their chemical action, from the salts of vegetable acids passing through the system as alkaline carbonates, the argument that they merely remedy effects, and not causes, is applicable to both. The alkaline treatment has been directed to the results of the disease—the acid perspiration, saliva, and urine—to the effects, not to the causes; but “the blood being essentially at all times alkaline, and being at the same time the medium through which all the characteristics of the disease, the inflammatory state, the fever, the affection of the joints, are induced, an attempt merely to saturate the system, as it is called, by alkalies, must be ineffectual as a curative measure”. As the nature of the acid of the skin and saliva has not ever been ascertained by chemists, chemistry alone can throw no light on the treatment of this symptom. Neither can chemistry explain why mercury checks the deposit of fibrin, or why acetate of potash acts on the kidneys.

It has been Dr. Alderson's object to discuss the old plans in the light of chemical science, and not to propose a new one: indeed, he has an antipathy to new plans. “I never feel more humbled than when I hear any regular practitioner proposing to try the efficacy of this or that plan. It ought to be for us not to try plans, but to know disease, and then use plans with confidence.” But supposing that this aversion had been universal, how could new remedies have been introduced. The use of tartarised antimony in acute pneumonia is eminently successful; so is the treatment of serous inflammations by calomel and opium. Both of these were not long ago new plans; and, if all had “felt humbled” when they were proposed, instead of adopting them, would mankind have been benefited? The fallacy is in the implied assumption that the knowledge of the nature of the disease gives us a knowledge of its cure. But the object of our art is to *cure* disease, not merely to know what it is; and when we merely know, or partly know the disease, and do not know its right treatment, the only justifiable way of discovering this is by judicious experiment—not letting the patient die while we are trying to reason out an appropriate treatment. This method may be carried too far, by incompetent persons; and we agree so far with Dr. Alderson as to believe that, whenever we can, the most judicious course is to treat disease according to the known principles of our art, applied to the particular case with our best judgment.

We must refer our readers to Dr. Alderson's book. Those who wish to know the chemical relations of rheumatic fever will find the facts here; and, whether they agree or not with his explanation, they will gain good by bringing their own minds into contact with one so thoughtful and full, and may be led to a closer study and to deeper views than they have yet had of the nature and relations of this important disease.

MEDICAL AND SURGICAL POCKET CASE-BOOK, designed for the Registration of Important Cases occurring in Private Practice. By JAMES PART, M.R.C.S. London: 1853.

THIS is a very well constructed Case-Book. We strongly recommend it to the busy practitioner who has not time to make copious notes of his cases, and is desirous of preserving some record of the more important of his daily observations of disease.

MANUAL OF MATERIA MEDICA AND THERAPEUTICS. By J. FORBES ROYLE, M.D., F.R.S. Second edition. 12mo., pp. 801. London: 1853.

IN this new edition of his admirable Manual, Dr. ROYLE has brought up his subject to the present time. In the

preface, he acknowledges the assistance which he has derived from Mr. F. W. Headland in making the formulæ and preparations correspond with the new editions of the Pharmacopœias of London and of Dublin, and for several new articles.

PERISCOPIC REVIEW.

ANATOMY AND PHYSIOLOGY.

SKELETONS ARTICULATED WITH CAOUTCHOUC.

In the *Glasgow Medical Journal* for July 1853, Dr. G. BUCHANAN describes a mode which he employs of articulating the skeleton by means of bands of India-rubber. A principal object is, to explain more readily the phenomena of dislocation. We quote, with slight abridgment, Dr. Buchanan's description of the apparatus.

“Reflecting on the various preparations of joints in common use, it occurred to me that a great improvement might be effected by the introduction of some elastic substance, the contraction of which would represent the action of the muscles. I had a skeleton prepared, with straps of vulcanized India-rubber, so disposed around the joints as to simulate the action of the muscles while the limb is at rest, and to imitate the direction in which they pull upon the bone when the position is altered. The result has been much more satisfactory than I anticipated. Most of the important dislocations can be imitated with the utmost nicety; and on artificial dislocation being produced, it is easy to notice the forces which act on the bone in its new position, and the direction in which the limb should be extended, in order to overcome these.

“In the shoulder joint, the muscles which act upon it may be resolved into three sets, and the direction of their forces may be represented by three bands of caoutchouc. One should be fixed to the upper surface of the clavicle near its scapular end, brought over the acromion process, stretched, and then attached to the anterior bicipital ridge of the humerus, near the surgical neck. This will represent the combined forces of the elevators, the upper fibres of the pectoralis major, the deltoid, the biceps, and the coraco-brachialis muscles, and will pull up the head of the bone towards the coracoid and acromion processes. A second piece of India-rubber should be attached to the front of the sternum, between the articulation of the first and second costal cartilages; it should be put on the stretch, and fastened to the bicipital groove of the humerus, a little way below the tuberosity. This will represent the action of the pectoralis major, and partly of the internal rotator muscles. Another band should be extended from the base of the scapula, just below the spine, to nearly the same point of the humerus as the last. This will act in the line of the depressors and external rotator muscles. The triceps has not much power over the motions of the joint, and its action is sufficiently represented by the weight of the limb. When these bands are properly stretched, as the arm hangs by the side, the bones of the joint will be found in their normal position. In the skeleton, as usually constructed, the bones are separated by the hinge or joining, nearly a quarter of an inch, so that the prominences are not seen in their proper position; but by the bones being kept in apposition, the exact shape of the joint is preserved, while the utmost freedom of motion is permitted. When the joint is dislocated, the bands give an excellent idea of the action of the muscles. The head of the bone being pushed back on the dorsum of the scapula, the posterior band holds it there, the upper one pulls it towards the spine, while the front one has little action. If the arm is held straight out from the body, and a slight downward stroke given to it, the ease with which dislocation into the axilla can take place is at once seen. When this dislocation has been produced, the upper band pulls the head against the neck of the scapula, and at the same time tends to raise or abduct the arm, while the other two pull it inwards against the ribs, and thus the elbow is kept projecting slightly from the side. A slight twist or shake will loosen or dislodge the bone, and enable the bands to act more forcibly upon it; so that the consecutive dislocation of its head upwards between the coracoid process and the second and third ribs, which not unfrequently happens if reduction has not been accomplished soon after the occurrence, can be seen taking place. In these, and similar instances, the bands kept on the stretch will indicate the muscles which help to produce or retain the abnormal position, and point out the direction in which force should be applied for the purpose of overcoming

their action. The necessity of waiting till the muscles have been well stretched, before attempting to push the bone into its proper place, is also well shewn.

"In order to represent the groups of muscles which move the hip-joint, the following bands of India-rubber should be attached:—One from the great trochanter, to a point on the dorsum of the ilium, nearly straight above it. This will represent the action of the glutei. Another from the body of the pubis to the lesser trochanter, to represent the action of the psoas and iliacus, and direct flexor muscles. Next, one from the ramus of the ischium, to a little below the femoral attachment of the last, indicating the adductor group. Lastly, the external rotators may be imitated by a strong band placed in the line of the pyriformis muscle. When these are well stretched with the weight of the limb, the bones are kept perfectly close, and the relation of the trochanter to the adjacent prominences of the innominate bone can be exactly ascertained, while the joint can be moved in any direction.

"Although the position of the head of the bone can be very well exhibited with a femur and pelvis, yet the most characteristic marks of the accident have to be imagined; while, on a skeleton of this kind, with one side normal and the other side dislocated, the altered position of the head and trochanter, length of the limb, and direction of the toe, are shewn with the most perfect accuracy.

"The muscles of the ginglymus articulation, as the elbow, knee, etc., are easily represented by four straps, one before, behind, and on each side, if the ligaments are strong."

CASE OF TRANSPOSITION OF THE VISCERA.

In the *Glasgow Medical Journal* for last July, Dr. ALLEN THOMSON relates a very interesting case, of which the following is an outline.

The subject was a man aged 48, who died in the City Poor-House of Glasgow. The malformation was not discovered until the body was being examined after death. It will be seen that there was not perfect transposition; the stomach, with some adjacent organs, retaining in part their position on the left side.

The heart pointed to the right side, and the arch of the aorta passed over the right side of the trachea and gullet. On opening the pericardium, the pulmonary ventricle and the systemic auricle were seen to the left of the heart, with the vena cava superior descending on the left side. The main pulmonary artery wound round the right side of the aorta, to pass below its arch. The arteria innominata, dividing into the left carotid and subclavian arteries, arose from the arch of the aorta, while the right carotid and right subclavian arteries arose separately, and in succession, from the arch. The remains of the ductus arteriosus joined the hollow of the arch towards the right, and was connected with the right branch of the pulmonary artery. The left vena innominata was short and vertical, and the right one long, and passing obliquely across the arteries rising from the arch of the aorta. The principal vena azygos was situated on the left of the bodies of the dorsal vertebrae, and passed over the root of the left lung. The pneumogastric nerve gave off its recurrent branch round the subclavian artery on the left side, and round the arch of the aorta on the right side. The relative position of the descending aorta to the vena azygos and thoracic duct, and to the vena cava inferior, was similarly modified; the latter vessel passed through an opening of the diaphragm between the middle and left divisions of its tendon. The right lung was divided into two lobes, and was hollowed out for the accommodation of the heart. The left was divided into three lobes. The intestines were found only partially covered by the omentum, which was thrown up to the left side. The liver was in the left hypochondriac and epigastric regions, the large (right) lobe towards the left. The gall-bladder, etc., were similarly inverted. The caecum coli was situated in the left iliac fossa, from which, after ascending a little way into the left lumbar region, it passed in front obliquely across the abdomen, deeply into the right hypochondriac region. A considerable part, therefore, of what might have formed the transverse part of the colon was sunk in the right hypochondrium. The descending colon was on the right side; the sigmoid flexure was attached in the right iliac fossa, and joined the rectum over the right brim of the pelvis. The greater part of the small intestines occupied the middle and right side of the abdomen, and the mesentery and great mesenteric artery and vein presented the same transposition. But the stomach, spleen, pancreas, duodenum, and a small part of the jejunum, had not undergone a change of place to the same extent. The stomach, somewhat elongated, was placed chiefly in the left hypochondriac region, below the

larger part of the liver and gall-bladder; but as the gullet passed through its usual place, the cardiac portion of the stomach was much drawn up, first below and next behind the smaller part of the liver, while the body of the organ lay lower down than the liver, in the left hypochondriac and lumbar regions, and the pyloric portion stretched forward and downwards towards the middle of the abdomen. Here, or a little to the left of the middle line, it joined the duodenum, which was raised from its usual deep situation, but otherwise nearly in its natural place, being directed towards the right, then curving downwards, and lastly, joining a portion of intestine which crossed the middle line towards the left, and making a sudden turn back to the right, passed behind the mesenteric vessels to terminate in the part of intestine corresponding to the commencement of the jejunum on the right side. This portion, directed towards the left, was not attached to the pancreas, and appeared to be a portion of the jejunum drawn out of its place. On this part of intestine a small rounded sacculated diverticulum existed, about an inch and a half in length and width. It was precisely in the situation in which we might expect it, supposing it to arise in connexion with the remains of the ductus vitello-intestinalis of foetal life. The spleen was attached to the great curvature of the stomach, and placed with it lower than usual under the liver in the left hypochondrium. The position of the pancreas departed only slightly from that of the natural organ, in consequence of the deviation of the duodenum. The kidneys were naturally placed, excepting that the left was somewhat the lower of the two. Complicated adhesions between the abdominal and visceral peritoneum in the vicinity of the duodenum prevented the state of the foramen of Winslow, and of the lesser cavity of the peritoneum, together with the attachments of the great omentum, from being ascertained with precision.

This is apparently not a very uncommon affection. In apparently the greater number of cases, the transposition affects all the viscera; in others, only one or more of them. The heart especially, and the liver, appear to be most constantly transposed. This state does not appear to exert any harmful influence on the functions. Its existence has been detected in persons at various ages during life. Isidore Geoff. St. Hilaire mentions his having seen living instances; and Dr. John Thomson detected this state of the heart in a medical student who suffered no inconvenience.

The earliest observation recorded is that by Riolan, in 1652, in the history of the dissection of a robber who had been broken on the wheel, in whom the malformation had not been detected during life. The first case which was ascertained during life, was that of a pensioned soldier of seventy-two years of age, observed and described by Morand, and reported on by Méry, in the *Memoirs of the Academy of Paris*, for 1666. The case is supposed to have suggested to Molière the transposition of the heart and liver, which he puts into the mouth of Sganarelle in his play of *Médecin malgré lui*, which was first published about the same time.

Dr. Thomson next enters into an examination of the probable causes, in the development of the ovum, giving rise to this malformation. He arrives at the conclusion, that "the partial or entire change of the non-symmetrical viscera is most immediately related to the change of position which occurs at the earliest period of formation of the heart and its main blood-vessels, the liver in connexion with one of those blood-vessels, and the alimentary canal."

PRACTICE OF MEDICINE AND PATHOLOGY.

VERATRIA IN ACUTE ARTICULAR RHEUMATISM.

According to the *Union Médicale* for April 2nd, M. M. TROUSSEAU and PIEDAGNEL, of Paris, have for some time employed veratria in the treatment of acute rheumatism. Its introduction appears to be due to M. Piedagnel, who states that, from the observation of numerous cases both in hospital and private practice, he finds that rheumatism is in this way generally cured in seven or eight days. He administers the veratria in the form of pills, each containing five milligrammes (about 1-13th of a grain). Of these, one is taken on the first day, two on the second, three on the third, etc., up to the sixth day; it is rarely necessary to give seven pills. When the general and local symptoms have abated, which generally takes place on the fourth, fifth, or sixth day, the dose is maintained for two or three days at the point at which it had arrived, and is then gradually decreased daily as the symptoms disappear; and when, after four, five, or six days of convalescence, the cure seems perfect, the medicine is discontinued.

If, during the administration of this medicine, colic, diarrhoea, or vomiting appear, indicating intolerance of the medicine on the part of the gastro-intestinal mucous membrane, no larger dose must be given than can be taken without producing this effect.

A great recommendation of this medicine, according to M. Trousseau, is the lowness of its price, especially as compared with that of the disulphate of quinine.

The following is an outline of some cases treated on this plan by M. Trousseau, in the Hôtel-Dieu.

CASE I. M., aged 17, had acute articular rheumatism, with endocarditis. All the joints of the upper and lower limbs were affected. Veratrin was administered; and the disease began to be subdued in three days. She left the hospital four weeks after admission; having remained there fifteen days after the disappearance of all symptoms, in order that the permanency of the cure might be established.

CASE II. B., aged 37, a day-labourer, had had rheumatism several times. He was admitted on March 12th, 1853, with acute articular rheumatism affecting most of the joints. The heart was unaffected. He took the veratrin in the manner described above, until March 22nd, when M. Trousseau discontinued it, in consequence of the presence of gastro-intestinal disturbance. The next day, the rheumatism, which had nearly left him, began to return in several of the joints. M. Trousseau then ordered four pills to be taken; after which he rapidly recovered.

Two other instances are related, of acute articular rheumatism; in these veratrin was employed with similarly favourable results.

EPIDEMIC (?) GOITRE.

At the meeting of the Société de Chirurgie de Paris, on March 10th, 1853, a communication was made from M. NIVET, of Clermont, relative to an epidemic of goitre, which he had observed among the students of the college in that place, and among the soldiers. He attributed the disease to the habit of frequently drinking very cold water when heated with exercise. The nature of the water, and the topographical conditions of the place, were not believed by him to be connected with the development of the goitre. The tumours were removed in a few weeks by the application of poultices, and friction with ointment of iodide of potassium.

M. DEGUISE, in reporting on this communication, considered that the author had not paid sufficient attention to the composition of the water and of the soil.

M. ROBERT doubted whether the disease observed was anything more than simple inflammatory engorgement of the thyroid gland. M. Deguise agreed in this opinion.

M. LARREY said that he had often seen soldiers attacked with acute engorgement of the thyroid gland. It was chiefly observed in men who had recently come from the country, and had been accustomed to have the neck bare. After wearing for a day the stiff military collars, they would in the evening, perhaps after a long march or some laborious service, throw off these, and thus expose the neck to the cold air. Hence there were two causes of the engorgement: the compression to which they had not been accustomed, and the suppression of perspiration from the sudden chill.

SPURIOUS PNEUMONIA PRODUCED BY A FOREIGN BODY IN THE AIR-PASSAGES.

Dr. THEILE, of Berne, relates, in the *Deutsche Klinik* for April 23rd, the case of a little girl, aged two years, who was admitted into the hospital at Berne, on February 11th, 1853. She had been suffering from cough for fourteen days. On examination, the respirations were from 70 to 80, and the pulse from 140 to 150 in a minute. The action of the intercostal muscles was very powerful on the right side, but scarcely perceptible on the left. On the right side, the stroke-sound was sonorous, and the respiration puerile. The left side was dull, and the respiratory murmur could not be heard there; but posteriorly there was some tubular breathing. There was violent dry cough, and much thirst. The bowels had been open four times in twenty-four hours. The urine deposited a copious sediment. The case was considered to be one of general pneumonia of the left lung; and was accordingly treated with calomel and frictions with oil of hyoscyamus and mercurial ointment. The child appeared to improve under this treatment until the 14th of February, when dyspnoea, frequency of the pulse, restlessness, hot skin, and retching, came on in the night; and the patient died on the 15th, at noon.

On examination of the body, the left pleura was found slightly

adherent. The whole of the left lung had a dirty grey colour, and presented no trace of the cellular structure. On section, a foetid, greyish, purulent fluid escaped, which was contained in small cavities from the size of a pea to that of a hazel nut, thickly spread through the whole lung. At the apex of the lung, and in the lower lobe, were two large cavities; in which there appeared to have been gangrenous destruction of the tissue. The proper pulmonary tissue could not be distinguished; in one or two places only could something like vessels be seen. The right lung was healthy. The other organs presented nothing worthy of remark.

In the left bronchus, five or six lines from the point of division of the trachea, was found a piece of charcoal, five lines long, three and a half lines broad, and one and a half thick. Where it lay, the mucous membrane of the bronchus was destroyed in the whole circumference; from this point to the trachea, and extending into this tube, there was inflammatory redness.

The supposed pneumonia was thus explained. It had arisen from total obstruction of the left lung, while the secretion of epithelium and mucus continued, and the secreted matters accumulated so as to simulate abscesses. The puriform fluid contained no pus-corpuscles.

Hasse (*Pathological Anatomy*, Sydenham Society's edition, p. 230) relates, from the *American Journal of Medical Science*, the case of a girl, aged 5 years, into whose trachea an iron nail fell. She died at the end of twelve months. On examination, the nail was found impacted in the fourth or fifth division of the right bronchus, and the lung contained several deposits of pus (?), communicating with the bronchial tubes.

CASE OF DIABETES FOLLOWING FRACTURE OF THE CRANIUM.

In the *Union Médicale* for April 23, Dr. E. SZOKALSKI relates the case of a man, aged 38, who fractured the parietal bones by a fall from a rock. Part of the left parietal was driven in at the sagittal suture, and the edge of the right parietal could be felt projecting. There was a sense of numbness and formication in the right side; motion was perfect in the leg and thigh, but not below; sensation was dull at the knee, and almost lost in the sole of the foot. Over the right deltoid muscle, sensibility was increased; though there was no redness nor swelling.

In a day or two, it was found that the patient was passing urine in large quantity. Dr. Szokalski found it to exceed the drink in amount; and, by the tests recommended by Mialhe and Bouchardat, he detected sugar in it. He attributed the diabetes to injury of the floor of the fourth ventricle, and treated it merely by withholding farinaceous food, by alkaline draughts, and by saline purgatives; expecting that the disease would disappear, in accordance with the observation of M. Bernard, that it soon ceases in animals in whom it has been induced by injury of the rachidian bulb.

In the fifth week there was marked improvement in every respect; the sugar in the urine had diminished. At the time of making his report, Dr. Szokalski found the urine normal in quantity, and free from sugar. The right foot had regained its power of motion; but the shoulder, though less painful, was still tender.

TANNATE OF QUININE IN THE NIGHT-SWEATS OF PHTHISIS.

In the *Union Médicale* for April 12th, M. DELIQUX describes several cases in which he has administered tannate of quinine with the effect of arresting night-sweats in cases of pulmonary consumption. He says that, though it is sometimes inferior to pure tannin, it is superior to disulphate of quinine; and that it combines the action of a tonic and antiperiodic. He gives it in powder, the quantity taken daily being from half a gramme to a gramme (seven and a half to fifteen grains), in three or four doses, taken at intervals during the afternoon or evening, so that the last may be administered three or four hours before sleep.

DRY CUPPING IN NERVOUS COLIC.

The *Journal de Médecine et de Chirurgie Pratiques* for April 1853, gives an account of the treatment followed by M. SANDRAS in cases of neuralgia of the abdominal viscera.

In certain cases, a patient is suddenly seized with symptoms resembling those of acute peritonitis; but the suddenness of the attack, and the absence of tenderness on pressure over the abdomen, point to the neuralgic nature of the affection. Sandras finds no means more efficacious than dry cupping, which instantly causing the cessation of the intolerable pain, he does not explain how this acts; but he has been successful in its employment.

COMPOUND ANODYNE APPLICATION IN SCIATIC NEURALGIA.

At the meeting of the Academy of Sciences in Paris, on April 16th, M. POGGIALE read a memoir on the treatment of sciatic neuralgia. He proposed the following formula.

R ^x Extract of belladonna . . .	5 parts.
Hydrochlorate of morphia . . .	0.4
Ointment	16.
Lard macerated with Stramonium leaves . . .	0.16
Essence of lavender	a few drops.

The ointment is applied by gentle and prolonged friction. The author related ten cases in which sciatica had been cured; all having been remarkable for the previous duration of the disease, the failure of the treatment previously employed, and the rapidity and persistence of recovery after the use of the application described above.

M. Poggiale believes that pain is a more important element in disease than is generally believed. In his opinion, it may be a powerful cause of disease, and may produce most severe symptoms. In many affections, pain is a predominant symptom, if indeed it does not constitute the disease; and on arresting it, the entire disease disappears. He also thought that it is too much the custom in the present day to prescribe simple formulae. A combination of substances of similar properties often produces better effects than the employment of each alone in succession.

GALIUM PALUSTRE (BEDSTRAW) AS AN ANTISPASMODIC.

The *Union Médicale* for April 30th, quotes from the *Revue Thérapeutique du Midi*, a letter from Dr. MIERGUES, junior, in which he speaks of galium palustre (bedstraw) as a powerful antispasmodic, and a remedy to be depended on in epilepsy.

The following is the manner in which it is prepared and administered. A quantity of the fresh plant is bruised in one-sixth of its weight of spirit. The expressed juice is then exposed to a temperature of 212; it is then filtered, and sufficient sugar is added to form a concentrated syrup, to which a fourth part of orange-flower water is added. The syrup is of an agreeable taste; and children take it with pleasure. The dose is a spoonful every hour when the attacks are imminent; and two or three morning and evening in other circumstances.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

ADMINISTRATION OF ETHER IN CAPSULES.

In the *Journal de Médecine et de Chirurgie Pratiques* for April 1853, M. CLERTAN, of Dijon, states that he has for some time been accustomed to give ether in capsules in nervous affections. After several years of observation, by himself and others, he concludes that ether, when introduced in a known dose, pure, and without loss, into the stomach, has an effect which was totally unknown until the preparation of the ether-pearls (*perles d'éther*). According to the old plan, the ether became partly volatilised before passing half way down the œsophagus; and what arrived in the stomach was dissolved in water, and in a state favourable to rapid and sudden volatilisation. M. Clertan has several times seen neuralgia, hemicrania, and gastralgia, arrested instantaneously by from one to three of these capsules; while ether draughts, and ether in syrup, had been largely given without any effect.

The editor of the *Union Médicale* for April 12th, in noticing M. Clertan's preparation, states that the ether capsules are already employed extensively by M. Trousseau, M. Pidoux, and other practitioners in Paris. The advantages of the capsules are:

1. The ether can be administered in a known dose—each capsule containing four or five drops.
2. The capsules are inodorous; so that ether can, without their knowledge, be given to persons to whom its smell is repulsive.
3. The capsules permit neither evaporation nor decomposition of the ether; they may be kept a year at least, or indefinitely, according to M. Clertan.
4. The ether arrives in the stomach without irritating the membrane of the mouth or pharynx, or producing cough; and it produces its sedative action by its rapid absorption.

DISEASES OF CHILDREN.

SACRAL CYSTS, COMPLICATED WITH SPINA BIFIDA, SUCCESSFULLY TREATED BY LIGATURE.

In the *Deutsche Klinik* for May 7th, 1853, Dr. SCHINDLER, of Greiffenberg, relates the following case.

Anna U., aged 2 years, was born with a tumour over the sacrum, of the size of a hen's egg. At the age of eighteen months she began to walk, and at two years old uttered only a few unintelligible words: in other respects she was healthy, and appeared tolerably well nourished and strong. Latterly, she had fallen several times, always backwards; which caused her much pain. The tumour, when examined, was not excessively distended; it presented more or less fluctuation at various parts; it was not very tender, and could not be reduced by pressure. On its surface, there was an appearance as of cicatrices; at its base, on the right side, it was covered with long light coloured hairs. It could not be felt what connexion the tumour had with the spine, or whether there was a defect in the bones; it was only felt that the tumour extended inwards, and was not confined to the subcutaneous tissue.

On June 7, 1852, Dr. Schindler introduced three pins; a clear serous fluid spouted out, and continued to ooze for some time; the tumour became flabby, but again filled in the course of the day. On June 12, puncture was repeated, with the same result. On June 15, the tumour was again distended; it was punctured, and a compress of plasters was applied. Subsequently, the tumour became more distended than before; Dr. Schindler therefore removed, by means of a small trocar, some spoonfuls of fluid, and injected a weak solution of iodine. This produced no inflammation nor diminution of the tumour.

After careful consideration, Dr. Schindler determined to apply a ligature. He was, he says, aware that ligature had been objected to, on the ground that, if the inner membrane of the swelling were formed by a prolongation of the dura mater, adhesive inflammation would not be likely to occur, and the spinal cavity would therefore remain exposed after the removal of the tumour; and, moreover, that union of the corresponding walls would be impossible, on account of the impediment afforded to the apposition of the surfaces of the arachnoid by the presence of nervous fibres; and, finally, that the removal of the tumour by ligature might be followed by the formation of false membranes, and that inflammation might become so intense as to remain localised, and to extend to the spinal cord and its membranes. To these objections, Dr. Schindler offers the following reply.

Pathological examination teaches that, in sacral cysts complicated with spina bifida, the fluid is, in by far the greatest number of cases, effused into the subarachnoid space; and that the arachnoid, with the dura mater, forms the lining of the sac, while the pia mater covers the spinal cord. In other cases, the fluid is contained in the so-called arachnoid space; and one layer of the arachnoid lines the dura mater in the sac, while another is applied to the pia mater in the spinal canal. In both cases, the inner lining of the sac is a serous membrane; and these are the most favourable conditions for the occurrence of adhesive inflammation. Those cases, also, in which cure has taken place spontaneously, or after puncture, show that adhesive inflammation can occur in the walls of the sac.

With regard to the presence of fibres from the lumbar or sacral nerves, Dr. Schindler observes that the ligature, if it be effectually applied, is preferable, as regards them, to the removal of the entire tumour by the knife. The objection, that the presence of the nerves will impede union, is of no force. The success of the ligature depends on the circumstance, that the sac does not contain the whole circumference of the spinal cord or the cauda equina; that the anterior lumbar or sacral nerves do not enter it; and that there is only partial effusion, and that this has no connexion, or very little, with the spinal canal. In the present case, it was plain that there was no part of the cauda equina present in the sac, as shewn by the absence of paralysis of the lower limbs, and by the absence of reaction after the employment of puncture and injection.

On June 20th, Dr. Schindler made a circular incision at the base of the sac, through its thick coverings, as far as the inner layer; he then applied a strong silken ligature, and tied it as tightly as possible. The child cried much, and passed feces and urine. The ligature was tightened daily, until, in a few days, this could be no longer effected. The tumour, nevertheless, continued distended, and of its natural colour. On the ninth day, there appeared a small bluish spot on the left side, and the tumour began to diminish; while the ligature was daily

drawn more towards the spinal canal. On the fifteenth day, the tumour was removed with scissors: the ligature was left. On the eighteenth day, Dr. Schindler drew the ligature from the cavity in which it lay: he had intended to apply another, but it became detached, and left a deep aperture, which, under the most simple treatment, became filled with granulations, and was cicatrised at the end of four weeks.

The child suffered much during the progress of the cure, though there were no nervous symptoms nor convulsions. When Dr. Schindler reported the case, she was perfectly well, cheerful, and strong, without any disturbance of health. It was not easy to ascertain by the touch whether there was any deficiency in the osseous structures at the part operated on.

The tumour had very thick walls, which were, however, of unequal thickness; and the cavity, which was unilocular, was moderately small. Two large nerves passed into the cavity; they were not connected with the lining membrane. They formed branches and anastomoses, and terminated in the integument at the apex of the tumour. M. Meckel, of Berlin, examined the tumour, and found it to be composed of two layers; the inner apparently composed of arachnoid, the outer corresponding to the dura mater. The very thick cellular tissue which covered these externally, he believed to be the product of inflammation. The structures which Dr. Schindler took for nerves passing into the tumour, he considered to be bands, arising also from inflammation; otherwise, if they were really nerves, it would be difficult to understand how puncture, injection, and ligature, should not have been followed by more important nervous symptoms: Dr. Schindler, however, adheres to this opinion, that the structures in question were nerves. M. Meckel believed that the tumour formerly communicated with the spinal canal, but that it had been shut off by closure of the opening in the bones.

Dr. Schindler recommends further trial of ligature of sacral cysts complicated with spina bifida. Until we are enabled to determine the internal structure of the tumour from its external characters, the following circumstances will give some aid in diagnosis and prognosis.

1. When there is paralysis of the lower limbs, bladder, and rectum, malformation, especially in the lower limbs, club-foot, etc., an operation will only be unsuccessful, and will accelerate death; for in these cases there is a very abnormal course of the nerves.

2. When the child has a large head, with widely open fontanelles, when pressure on the tumour produces retrogression of the fluid into the spinal canal, accompanied by convulsions and sopor, and when the distension of the tumour is affected by inspiration and expiration, nothing can be expected from ligature, and scarcely anything from puncture and compression, as the local disease is complicated with general hydrocephalus and hydrocephalus.

3. When pressure produces neither reduction of the tumour nor any symptoms, it may be concluded that the process of separation is already perfect, or that there is only a very small aperture of communication, or that at least there is only local hydrocephalus. The ligature is peculiarly indicated in these cases.

4. It is always most important to ascertain whether there are nervous fibres passing into the tumour; for it is only when none of the lumbar or sacral nerves, or only the posterior ones, enter into the tumour, that the ligature can be used without injury. If the anterior sacral nerves take their course through it, the result will be fatal. We are not yet able to ascertain this from the external form of the tumour; but the following circumstances may in some measure guide us.

If the fissure occurs in the lower lumbar vertebrae and the os sacrum, in most cases the whole circumference of the cord enters the sac, and from it spring the lumbar and the sacral nerves; or the cauda equina passes into the sac, and its nerves spread out in it. If the fissure is seated higher up, the cord is generally not displaced. Of eighteen cases collected by Von Barrensprung, in which he operated successfully, in six the disease was in the cervical and lumbar vertebrae; in four cases in the dorsal vertebrae, and in only two in the sacrum, although this is the most frequent seat of the disease.

If the external covering of the tumour is very thin and semi-transparent, consisting of a prolongation of the covering of the spinal cord, with an accidental epidermis, there is generally a greater amount of disorganisation, than when the external covering is formed of a thick areolar tissue, and the tumour appears to the touch as if it were made up of several cysts.

EDITOR'S LETTER BOX.

CHLOROFORM IN THE PRACTICE OF MIDWIFERY.

LETTER FROM EDWARD W. MURPHY, M.D., TO THE EDITOR.

SIR,—Chloroform in the practice of midwifery has again become a question for discussion; and, fortunately, its tone in your pages is more that of inquiry than controversy. There is evidently a very different spirit prevailing in the profession now, with regard to its use, than existed on its first introduction. It is no longer argued that to assuage the sorrows of childbirth is flying in the face of Providence; but rather that it is humane to relieve this anguish, provided it can be done with safety. "Every one," observes Dr. Ramsbotham, "who possessed the least spark of humanity, would receive with joy and gratitude so easy a method of abrogating or assuaging the pains of parturition, if it only can be proved that the practice is void of danger." (ASSOCIATION MED. JOURNAL, August 12, p. 714.)

I am encouraged, therefore, to trespass on your attention, and, if possible, to convince Dr. Ramsbotham, and those who think with him, that chloroform may be given, not only with safety, but with positive advantage, in the progress of severe labours, and may be used, with very few exceptions, in all cases where the intensity of the patient's sufferings, is evidently more than she can endure.

It would be impossible, however, to produce conviction, if in our discussion the *post hoc, ergo propter hoc* sophism be admitted. If every accident that may occur after delivery, and every bad consequence that may follow labour, is to be charged against chloroform, and chloroform alone, because this agent had been employed, it would be a waste of time to argue the question.

Mr. Bloxham observes, in your last number, "that some advance may be made towards settling the question as to the use of anæsthetics in labour, by exposing the errors in reasoning of the authorities who have discussed this subject." In this I quite agree with him; and if in these discussions the opponents of chloroform in the practice of midwifery have cause to complain of a *non sequitur*, with how much more reason has Dr. Simpson and its advocates the right to object to the bold manner in which this sophism is used?

There is no accident that could occur after delivery, that has not been attributed to chloroform. Hemorrhage, puerperal convulsions, puerperal mania, puerperal fever, have all had chloroform assigned as their cause; as if such effects of labour had never been observed until its introduction. It is hardly necessary to dwell upon the inconclusiveness of such a mode of reasoning, although it is surprising the constancy with which it is adopted; but, in the present instance, I am induced to allude to it more particularly, because in two cases, where chloroform had been given, sudden death occurred some time after delivery, and in one of them at least, if not in both, death has been assigned to the agent employed.

One case had been communicated to Dr. Ramsbotham by his friend Mr. S., and is reported in his *Obstetric Medicine*. Having given a brief history of the case, Dr. R. proceeds: "Parturition came on about noon; the chloroform was given at half-past seven P.M., when the os uteri had acquired the diameter of an orange, and the pains had become frequent and strong. The effects were at first delightful and tranquillising. After refreshing sleep, she rose and bore some moderately strong pains for an hour, without a return to chloroform. It was then resumed, and repeated in frequent half-drachm or drachm doses, but (except once) only when she entreated to have the delightful chloroform, from about ten P.M. till a quarter before twelve o'clock, soon after which the child was born. She instantly expressed much gratitude, and expatiated on the relief afforded her, though even then she felt wrong with the severity of her labour. The uterus contracted well, and the patient appeared comfortable."

"At the end of an hour and a half, distressing dyspnoea came on, attended with excessive lividity of the face, and all the signs of extensive engorgement of the lungs and head. Her respiration became more natural under the means employed, and in three hours and a half she lay down to rest; but in half an hour she suddenly arose, with a return of most distressing dyspnoea, that was soon followed by convulsions, and almost immediate death. No post mortem examination was made." (Ramsbotham's *Obstetric Med. and Surg.* p. 169, third edition.)

In this case, it is evident that the quantity of chloroform given was very small, not sufficient to remove, completely,

She was once only put to sleep, awoke refreshed and was afterwards given chloroform only as she asked for it. When the child was born, she was sufficiently conscious to "express much gratitude, and to expatiate on the relief afforded her."

A very similar case to this occurred in my own practice, which, as I have already alluded to it in my published lectures, I shall quote from that work. "I was summoned to attend a lady in her first confinement, who had been taken in labour the previous night. I saw her about eight A.M.; the dilatation of the os uteri was advancing favourably, and was completed at ten A.M. As soon as the head entered the pelvis, and the pains became very severe, I administered chloroform by the mouth: the severity of the pains were greatly mitigated; she remained quite conscious throughout, and was delivered in two hours. When the placenta was expelled, she fell asleep. On awaking, two hours afterwards, she was seized with slight cough, and some difficulty of breathing; the means used gave no relief, and in the evening dyspnoea had so much increased, that she was cupped to ten ounces. This gave sufficient relief to cause sleep for about two hours; but when she awoke, the dyspnoea returned with still greater distress, and continued to increase during the night. On the following morning she became asphyxiated, and died about two o'clock P.M."

A post mortem examination was made, the kidneys were found extensively diseased; the blood, which coagulated loosely, was carefully analyzed, but no trace of chloroform could be detected. The lungs were highly congested. (*Lectures on Midwifery*, p. 474.)

These two cases resemble each other in their leading characters; both had inhaled sufficient chloroform to relieve pain, but not to remove consciousness. Each was perfectly tranquil for more than an hour after delivery, when dyspnoea commenced, terminating in fatal asphyxia, in one case in four hours, in the other in twenty-four hours, from the first difficulty of breathing. Both inhaled chloroform, both died asphyxiated; therefore chloroform was the cause of death.

Let us examine this conclusion. The action of chloroform and its manner of causing death is now tolerably well understood.

In surgical practice, several thousand patients have inhaled chloroform. Suspension of animation has been caused by it, and death has followed its use; but I cannot find the report of a single case in which the patient, who inhaled chloroform, without one unfavourable symptom, was attacked two hours afterwards with dyspnoea, still later became asphyxiated and died. When chloroform is given for surgical operations the patient is rendered unconscious, immovable; the full dose—the dangerous dose—is given. If then this agent could produce such effects in minor doses, which do not influence the brain, *a fortiori* it should do so when the larger dose is given, yet I cannot find a case of the kind in the whole range of surgical practice. Chloroform can act on the constitution only through two channels; through the nervous system or the blood. Either or both may be means of manifesting its action, but I know of none other. The action of chloroform on the nervous system is to paralyze its force. It diminishes sensation, lessens the motive power, removes the irritability of the respiratory nerves, and the consciousness of the patient; but I do not perceive how it can cause convulsive dyspnoea where that irritability, the *besoin de respirer*, is in excess. If we admit, however, that it might do so, but nevertheless find that no such result attended its inhalation, "when the effect was delightful and tranquillising"; "when the patient rose after a refreshing sleep, bore some moderately strong pains without a return to chloroform"; and (chloroform being resumed until the birth of the child) when the patient "expressed much gratitude"—"expatiated on the relief afforded her". When "the uterus contracted well, and the patient appeared comfortable", when all this happened, it is clear that chloroform did not cause any unfavourable effect on the nervous system. In each case the dangerous symptoms presented themselves more than an hour after chloroform had been inhaled. At a time when the vapour was dissipated, or, if any remained, its force greatly weakened and less likely to cause such effects. It would, therefore, be rather a bold assumption to say that in either of these cases chloroform caused death by its influence on the nervous system.

There remains, however, another mode in which chloroform may influence, or at least is supposed to influence, the constitution. It may alter the blood. It is said that chloroform incorporates with the blood, renders it impure, and therefore might produce such symptoms as have been described some time even after its inhalation. Is this true? Two gentlemen who have given the most attention to the effects of chloroform on life—

Dr. Snow and Mr. Nunneley—both agree in this—that chloroform does not incorporate with the blood or in the least alter its properties. This proposition, supported by a careful experimental inquiry, has also the support of experience; because, if chloroform influenced the blood in this way, its effects must be observed in surgical operations. The greater risk of secondary hæmorrhage, the unhealthy healing of a wound, and other obvious effects of impure blood, would become manifest. If dyspnoea and asphyxia be one of these, then such symptoms should follow surgical operations just as readily as labour. The evidence, however, of surgical practice is quite the reverse; the danger—the only danger which the surgeon dreads is sudden death during the operation; but if he escapes this he has no fears that his patient will afterwards die asphyxiated or from secondary hæmorrhage, and from gangrene of the wound. Thus this assumed effect of chloroform on the blood is only confined to midwifery practice, and may be viewed as another of many assumptions respecting it which is well calculated to deceive those who have not examined, or, perhaps, who cannot, from their numerous avocations, find time to examine carefully its effects.

I shall not attempt any explanation of the cause of death in either of those cases. Unaccountable sudden deaths after delivery is nothing new. Dr. Cormack has ably pointed out some of the causes of death in these cases (*London Journal of Medicine* for 1850, p. 928); and there may be others; but, inasmuch as they are not as yet perfectly understood, it would be beside the question to enter upon such an inquiry. I shall only content myself with asserting that chloroform had nothing whatever to say to the death of either of these patients, nor can I admit, that because "I never saw such symptoms supervene after labour as those which appeared in that case, and as I do not recollect of any such on record, we may fairly refer them to chloroform". If we were to adopt such an argument, chloroform would become the most convenient *locus ignorantie* in the world.

A medical friend of mine attended a lady successfully through her confinement which was most favourable, she was apparently quite healthy, bore her pains cheerfully, was delivered in a few hours, and continued well for several hours when she was seized with convulsions and died. There was no cause to explain so unexpected an attack. My friend was fortunate in not having given her chloroform; because, had it been administered, it would have supplied the deficiency. The case would have been quoted as one in which chloroform clearly caused convulsions.

I feel it my duty to point out this erroneous mode of discussing a very important question, because it is as plausible as it is deceitful, and is well calculated to intimidate the anxious inquirer. It prevents him availing himself of a means of relieving the agonies of his patient, which he finds, or will soon find, his better informed rival is adopting with perfect safety and success, and completely confuses any just or rational inquiry into the effects of chloroform on the constitution.

Every day's experience convinces me of the great value of chloroform in the management of labours, so much so, that I have not the slightest doubt of its general adoption by the profession. Any inquiry into its administration must be based on such an assumption, if it is to answer any useful purpose. It seems to me much more likely that chloroform may be abused than disused, and more danger that it may be given recklessly without any knowledge of its properties than that it would cease to be administered in the practice of midwifery. The questions, therefore, of most importance in connexion with it concern the mode of its administration, the varieties observed in its effects on different constitutions, when it may be safely given, when it must be withdrawn. With such an object, I shall be most willing, at some future opportunity, to give a further account of my experience of it, so as to aid in the object so well pointed out by Dr. Ramsbotham, and assist in collecting "a mass of most valuable evidence which might thus be accumulated, from which it would be easy to lay down some fixed principles for our guidance". I trust also that it may have the effect of dispelling the uncertainty and doubt that as yet cloud our judgment, and proportionably embarrass our proceedings. I am, etc.,

EDWARD W. MURPHY, M.D.

12, Henrietta Street, Cavendish Square, London.

THE CLUB SYSTEM.

LETTER TO THE EDITOR.

SIR,—In the JOURNAL for July 22nd, I was much gratified to read, that, at the meeting of the South Eastern Branch, the subject of sick and benefit clubs and their abuses had been discussed. That their abuses are great and increasing, no member of our profession who has had anything to do with them

can deny; but that the remedy for these abuses is in our own hands, I am perfectly sure, provided only there be unanimity of action. The men of Canterbury have set a good example, which ought at once to be followed throughout the kingdom.

I happen to have been largely connected professionally with benefit clubs for the last dozen years, and at present am surgeon to ten such societies. I am sure none can have greater pleasure than myself in attending, on club terms, the labourer and meehanic, whose scanty earnings cannot possibly meet even a very moderate medical account; but when I find tradesmen, farmers, publicans, etc., insinuating themselves into these clubs, seeking for medical attendance on the same terms—which are in reality partly charitable—as the labourer, and drawing their “sick pay” from the same fund, I am truly disgusted, and give my time and labour with very different feelings to what I do in the former case. Not that I have many such club members; but a few there are in almost every club, who, having entered at the commencement, and being old members, cannot well be got rid of, unless, indeed, their cases can now be met by the plan initiated by the Canterbury surgeons in the Lodge of the Manchester Order of Odd Fellows; that is, the payment of the medical man's ordinary account for attendance on such members from an “Incidental Expenses Fund”.

Perhaps the following will show how far a medical man has it in his power, even single handed, to remedy the evil. Some years ago, an Odd Fellows Society, to which I am surgeon, became apparently flourishing, and, one following another's example, a rush was made by a number of substantial farmers to become members, under the candid confession, that they “did not want sick pay, but only the doctor”. I at once resigned. The old members, who were almost to a man labourers, saw at once the reasonableness of the objections I made. The farmers were refused as ordinary members, and I was re-instated. Of course, the step I had taken gave offence at first, but in the long run I did not lose a patient; and I have since received many a substantial fee from those who, but for the stand I made, would have been club patients on the same footing as their labourers.

Some of the worst cases of imposition upon medical men, however, are with the publicans, who become members of the clubs held at their houses, in their characters of “host” and “hostess”. It is needless to remark, that such persons are generally well able to pay a medical man. By all means, if persons above the class of labouring poor wish to insure themselves against the chances of illness, let them do so, but let it be by some such means as that adopted in the Odd Fellows Lodge at Canterbury; that is, by a general fund applicable to the discharge of a medical man's just and regular charges. I may remark in passing, that this is a mode of assurance against the misfortunes entailed by illness, which it surprises me has not hitherto been adopted. It is one, also, which without in the least trenching upon the privileges of the medical profession, might be found of the greatest service to persons of limited income.

To return to our subject. I fear that all who know our profession, know also that the great difficulty in resisting the encroachments and impositions made and practised upon us, is the want of unanimity of action and distrust one of another, the latter too often well founded; for, how frequently is a post resigned by one man from honourable motives, accepted, nay, canvassed for, by another.

This part of the subject might well be taken up by the Association, as far at least as its own members are concerned, and some plan of action decided upon calculated to stem this undercurrent of an abuse which is inflicting incalculable mischief upon us. The importance apparently attached to these benefit club appointments by medical men, and the canvassing and intriguing among the members which is too often practised, must, to some extent, create the idea that the appointments are of real profit; and perhaps this fact may have in some slight degree contributed to give those who ought to be above such relief, the idea that they were rather conferring a benefit than taking an advantage. Much depends upon the influence which the surgeon himself obtains among the members of his clubs. If he makes himself valued, particularly by the poorer members, and if they feel that his skill, kindness, and attention, are given to them in the same manner as to the rich, they will not easily part with him; he has thus, justly, much power, and may use it; but if, as too often happens, club members are systematically neglected, it need not be matter of surprise if the surgeon is but lightly valued, and if the members, feeling that his services may be easily replaced, successfully resist his attempts at self defence, and at club reformation.

In considering the subject of sick clubs, that of the more pretentious friendly societies, and of some forms of dispensary, founded and fostered by the higher classes, and frequently by the clergy, ought not to be lost sight of. Many of these societies include both adult members and children, far above the class of either labourer or mechanic, while the medical remuneration is often lower than even that of the common club. This is so much the worse, as the founders and conductors of such societies are not ignorant of what ought to be proper professional remuneration, only they are tempted for the sake of showing a flourishing balance sheet, to commit the injustice, and medical men are foolish enough to submit.

The power, present and increasing, which our Association possesses ought to enable it to take up this important subject with success, and while its members might resist the evil as far as they could personally, there can be little doubt that their moral influence among their brethren of the profession who are not members of the Association would greatly assist the work. I would suggest whether it might not be expedient to issue, to the members of the Association, circulars containing a series of queries relative to the working of the sick clubs, of all denominations, friendly societies, dispensaries, etc., within their respective districts, as a first step towards the correction of an abuse which is becoming a real oppression to a large section of our profession.

I am, etc., S. T.

August 5th, 1853.

ANEURISM OF THE AORTA OPENING INTO THE PULMONARY ARTERY.

LETTER FROM J. THURNAM, M.D., TO THE EDITOR.

SIR,—I beg to refer Dr. Herapath and such of your readers as may be more particularly interested in the unusual circumstance of aneurism of the aorta proving fatal by rupture into the pulmonary artery, to a paper in the 23rd volume of the *Medico-Chirurgical Transactions*, in which all the known cases of spontaneous varicose aneurism are collected and reviewed. Two or three additional cases and several preparations, in which the aneurism had become ruptured into the pulmonary artery, are there described.

I am, etc.,
JOHN THURNAM.

Devizes, August 25th, 1853.

NEWS AND TOPICS OF THE DAY.

PROSTITUTION IN ALGIERS SINCE ITS CONQUEST BY THE FRENCH. From the *Union Médicale* of May 21st, we learn that Dr. E. A. Duchesne has published a work on the above subject. Various works have appeared on prostitution in several of the French towns and cities:—in Paris, by M. Parent-Duchatelet; in Lyons, by Dr. Potton; in Nantes, by the Medical Society of that place; etc. M. Duchesne has effected this for the town of Algiers.

From credible documents, it appears that prostitution existed in Algiers in the sixteenth century, though it was then neither tolerated nor subjected to regulations. At a later period, the toleration and regulations were established, which the French found in 1830; at which period, there were three thousand prostitutes. How they were regulated is not precisely known; but they were divided into classes, and confined to private houses, which they could not leave without permission of the *mezouar*, a kind of lieutenant of police.

M. Duchesne states prostitution and sodomy to be both common in Algiers: the latter vice being prevalent not only among the natives, but even among Europeans. Boys of ten or twelve years old are met with in the most public places, making the most disgusting proposals. Sodomy is not regulated; and even if it were, this would be tolerating the vice. What is required, is its total annihilation, by means of a rigorous surveillance and severe penalties.

The number of prostitutes in Algiers does not seem to exceed 600, in a population of about 50,000. Most of them are Arab or Moorish females. The native prostitutes are mostly the children of poor families, who thus gain a living. In Algiers, as in Europe, the population of the towns furnishes more food for debauchery than that of the country; the Moorish prostitutes inhabiting the towns are always the most numerous. No information as to age can as yet be obtained.

In 1830, a dispensary and infirmary was established in

Algiers, containing eighty beds. It is under the care of one medical man. The public females attend the dispensary every morning at seven o'clock. In 1842, the number of females thus attended was 5186, of whom 446, or 8 per cent., were diseased. From a table of the proceedings of the dispensary from 1831 to 1851, it appears that the duration of treatment was from fourteen to thirty-nine days; from which it may be inferred that only primary and local symptoms are treated. In the tables given, the columns of patients affected with primary symptoms amount to 55, 135, 80, and 78; while those of constitutional symptoms amount only to 6 and 8.

There are few or no public females in the Arab tribes; hence there is little syphilis. The Arabs believe that syphilis may be transmitted to a negro female; the individual thus transmitting it becoming free from the disease. Before 1830, the black female slaves had to submit to this; the result of which was to double the number of persons infected.

M. Duchesne concludes with a proposal for establishing in Algiers a workhouse, a home of refuge, and a council of health; as well as a system of regulation of public prostitution.

STATISTICS OF PUBLIC CHARITIES IN PARIS. The report of the administration of public charitable assistance in Paris during 1852, has lately been published. In that year, 90,486 patients were admitted into the hospitals; and 12,117 aged and insane persons were received into the almshouses and asylums; making altogether 102,603. The number in 1851 was 98,754; hence the increase has been 3,849. On January 1st, 1853, the number of children abandoned by their parents was 14,111, of whom 282 were in the public institutions, and 13,829 in the country. The ordinary receipts amounted to 12,767,290 francs (£531,870:8:4); the expenses to 12,238,703 francs (£509,945:19:2).

Certain alterations and improvements have been introduced into these institutions. By a government regulation of March 5, 1852, all pregnant women presenting themselves at the hospitals are interrogated as to their name and place of abode, and a copy of their statement is immediately forwarded to the central bureau, which, in the course of twenty-four hours, ascertains whether it be true or false. If the statement is found to be false, or if the woman has not resided in the department of the Seine during a year, she is dismissed, unless labour is close approaching, or the woman is ill. When delivery has taken place, the mother is obliged to suckle her infant, and to take it with her when she leaves the establishment, unless unavoidably prevented. A supply of child's linen is supplied to those who are destitute of it; and a wet nurse is provided when the mother is unable to suckle her infant. To those who suckle their children, aid in money is granted, besides the assistance which they may obtain from the maternity charities, or other charitable institutions.

The effect of these measures has been, not only to reduce the number of admissions into the obstetric wards, but, what is more important, to diminish from 33 to 4 per cent. the number of deserted children at the Maternité, and to diminish it to 19 per cent. in other hospitals.

THE CLUB SYSTEM IN FRANCE. The editorial committee of the *Union Médicale* is sometimes consulted in medico-ethical matters; and in that journal for April 12, we find a letter addressed to it by Dr. DUFAY, on the subject of medical attendance on clubs (*sociétés de secours mutuels*). The objects of these are the same as those of similar institutions in England. The members are of two classes: *honorary*, who contribute to the funds, and are supposed not to receive gratuitous relief; and *participating* members. This distinction, however, as in England, is often not attended to; and Dr. Dufay writes:

"But if we have some right to pride ourselves on our acts of charity, is it not our duty to take care that they are properly recompensed by those who can do so? And would it not be at once a dereliction of our duty to our brethren, and a lowering of professional dignity, to accept a position which would oblige a practitioner to visit the *rich* as well as the *poor* members of a club, thus depriving his brethren of a practice from which they could obtain some reward for their trouble, and throwing away his own services, as if he doubted whether they were worth anything? If it is no idle scruple which dictates these lines, we must conclude that we ought not to perform the duties of medical officers to clubs on the ordinary conditions—almost gratuitously, until the subscribers who are known to be able to pay for attendance are ranged in a *honorary* or *non-participating* class."

In reply to this letter, the committee of the *Union Médicale* first call attention to the importance of union among the members of the medical profession. They have seen numerous

examples shewing that selfishness and antagonism do good to no one, and injure every one. In some districts, where a club has offered a thousand francs a-year to a medical man, another practitioner has proposed to attend the patients for five hundred francs, another for two hundred and fifty, a fourth for nothing. The committee advise that, when a club is formed, the medical men of the district should agree on the terms on which they would hold office. The practice of some clubs, which only pay fifty centimes for a visit, and some which pay for only eight visits, whatever may be the duration of the disease, is declared to be insulting and humiliating to the medical profession. Annual salaries are believed by the committee to be preferable to payment for each visit. It is well known that, both in Paris and in the country, a large number of persons, beyond the reach of want, enter themselves on the list of participating members of the clubs. In these cases the committee states it to be the right, the imperative duty of practitioners, to point out the abuses. And it will be, they assert, much more effectual, dignified, and convenient, that an appeal on this subject should come from an assembled body of practitioners, than from only one.

The committee suggest the following as the *beau idéal* of the constitution of a club, with regard to medical aid. The medical aid should be organised by the practitioners themselves, combined in associations, according to the locality in which they reside; the patient should be at liberty to choose his own medical attendant; the medical man to be paid should be chosen by the practitioners from among themselves for a limited time, so that all might participate in the advantages. This, however, is only given as a suggestion.

SURGEONS' CHARGES AND SICK CLUBS. In the Dorington County Court, Mr. Hall, surgeon, sued a party named Revell for £14:16:6, a charge for medicine supplied and attendance upon his son, who belonged to a juvenile sick club, the members of which pay 1s. 6d. until they are twenty-two, when they join the senior club, paying 2s. Of these clubs, Mr. Hall is the surgeon. As defendant's son attained twenty-two, and as he had not entered the senior club, his subscription of 1s. 6d. was returned last Lady-day, he not being a member. Hence the present action. Mr. Rouse, surgeon, proved that the bill was very moderate. The judge remarked, that he found that the bill charged 12s. for boluses and other medicines supplied in one day, which he would not allow, when medicine was so cheap. Professional men ought to be well paid for their services, but not for drenching their patients with physic. His Honour ultimately decreed the defendant to pay £2:15:0.

IMPORTANT ADJUDICATION. Dr. Rayner, an English physician residing at Paris, recently brought an action before the Civil Tribunal of Senlis, against M. Alexandre Aumont, of Chantilly, the owner of *Hervine* (who ran second for the Goodwood Cup) and other horses, well known on the French turf, to recover from him 10,000 francs, for having cured him of a serious malady. It appeared from the statement of the plaintiff's advocate (M. Chaix d'Est Ange), that in 1851, M. Aumont suffered dreadfully from nervous attacks and another malady. After employing different physicians without obtaining much relief, he, when almost in a dying state, applied to the plaintiff, who consented to treat him on condition that he would scrupulously follow his advice, and not employ any other physician. On the plaintiff's second visit, M. Aumont asked how much he would have to pay, and Dr. Rayner proposed that he should give him 10,000 francs when he should be entirely cured, but not a single sou in the event of a cure not being effected. M. Aumont consented, and it was agreed that, should his horses not win certain races at Paris and Chantilly, the amount, instead of being paid at once, should be paid by instalments. Dr. Rayner having acceded to these terms, the treatment commenced, and in a short time M. Aumont was a good deal better, and before long was so perfectly cured of his nervous malady that he was enabled to go out shooting and ride about as usual on horseback. Dr. Rayner was then about to commence a treatment for the other malady, but he found that M. Aumont had, contrary to their express stipulations, consulted Dr. Nelaton. He thereupon ceased his visits, and M. Aumont refused to pay him the 10,000 francs. M. Fontaine, advocate for M. Aumont, mentioned that the agreement on which Dr. Rayner relied was contrary to the rules of the medical profession; he had not cured him, and therefore maintained that the 10,000 francs were not due, though he was ready to pay him anything reasonable for his attendance. The tribunal, taking all the circumstances into consideration, condemned M. Aumont to pay Dr. Rayner 4000 francs with interest, and the costs. Dr. Rayner's

only motive (says *Galigiani*) in bringing this action, was to try the question of right, after attacks had been made upon his character. His object was not money, for he could have had more to keep the case out of court; and in proof of this, the plaintiff has declined to receive the 4000 francs damages awarded by the court, having disposed of that sum as follows:—1000 francs to the poor of Senlis; 1500 francs to the Association of Physicians of the department of the Seine, for the foundation of a *Casse de Prévoyance*; and 1500 francs to the Medical Benevolent College at Epsom.

NORFOLK COUNTY HOSPITAL FOR THE INSANE. We are glad to find, from the subjoined circular, that this institution is to be made available to members of the medical profession, for the study of mental diseases:—

"SIR,—I have the pleasure to inform you that the visiting justices have agreed to a proposition which I brought before them at their last meeting, viz., 'to throw open the wards of this hospital, on fixed days *specially*, to the members of the medical profession, under certain regulations'. I have therefore fixed Wednesday and Saturday, from eleven until two o'clock, for this purpose, when I shall be happy to give you every opportunity in my power of becoming acquainted with the internal arrangements and treatment of patients in this institution.

"I am, Sir, your obedient servant,

"R. F. FOOTE, M.D., *Resident Physician*.

"August 20th, 1853."

ROTHERHAM DISPENSARY. On Wednesday week, a special meeting of the Governors of the Dispensary was held to elect a Surgeon in place of Mr. Drew, resigned. There were three candidates. The votes were declared as follow:—Mr. Wm. Saville, Wakefield, 31; Mr. Joseph H. Stone, Wentworth, 27; and Mr. Garrard, Plymouth, 18. Mr. Saville was declared duly elected. A vote of thanks was unanimously awarded to Mr. Drew, the retiring Surgeon, for the attention he has paid to his duties since his appointment, for having effected great economy in the management of the Institution, and for having introduced several improvements in its management. It was also determined to present Mr. Drew with some tangible proof of their approval of his services, and the Committee were empowered to select the most suitable memento.

COMPULSORY VACCINATION. The new act to extend and make compulsory the practice of vaccination, was published on Monday last, and from this new law it appears that parishes or unions, if need be, are, within six weeks of the passing of this act on the 20th inst., to be divided into districts, for the purpose of vaccination, and places are to be appointed for performance of the operation. The parents and guardians of children born after August 1st, 1853, are to have such children vaccinated within three or four months after birth, and the children are to be taken for the inspection of the medical officer on the eighth day after the operation, to ascertain the result of the same. Should the parents neglect to have the child vaccinated, they are liable to a penalty not exceeding twenty shillings.

MR. BRANSBY COOPER. The funeral of this gentleman took place at an unusually early hour on Thursday morning (Aug. 25), in a most unostentatious manner, in strict accordance with the wishes of the lamented deceased, at St. Martin in the Fields, the Right Hon. the Secretary of State having permitted the family vault to be opened for that purpose; this church being one of those in which interments are prohibited. The procession left the late residence of Mr. Cooper at half past eight o'clock, headed by the medical and surgical staff of Guy's Hospital, and followed by the immediate relatives and friends of the deceased, including the few students of the hospital remaining in town. It may not be generally known, that John Hunter is buried in the same vaults. Mr. Cooper delivered the annual oration in memory of the founder of the Hunterian College of Surgeons, in February last.

TESTIMONIAL TO A GENERAL PRACTITIONER. On July 9th, a deputation of friends and patients waited on B. Parkerson, Esq., surgeon, of East Dereham, and presented him with a service of plate, value about £120. The service consisted of a very large and handsome salver, kettle with stand, tea and coffee-pot, etc.; and the occasion of its being presented was that the recipient might carry out with him to the far-distant colony for which he is bound, some sort of proof of the high esteem in which his professional services have been held for the last twenty-six years, and at the same time to express the general feeling of deep regret at his approaching departure. Mr. Parkerson has since set sail for Canterbury, New Zealand, in the ship, *John Taylor*, to which he was appointed the surgeon-superintendent.

REQUESTS. Mr. John Simmitt, late of Lower Norwood, has bequeathed £2000 to be equally divided among the following medical charities:—St. Mary's Hospital; the Royal Sea Bathing Infirmary, Margate; East London Consumption Hospital; and the Royal Free Hospital. The executors appointed to carry out the benevolent intentions of the donor, are John Gay, Esq., surgeon to the last mentioned institution; John Combe, Esq., of Staple's Inn; and Mr. Bagner, of Bishopsgate Street.

UNIVERSITY OF EDINBURGH: PASS LIST. Names of gentlemen who obtained the degree of Doctor of Medicine in July 1853:—Andrew Mercer Adam, Scotland; John Henry Aldridge, England; Thomas Anderson, Scotland; Charles Ashenheim, Scotland; John Beddoe, B.A., England; Peter James Berryman, New Brunswick; William Weddel Bizset, Jamaica; Jean Valleton de Boissière, Trinidad; Henry Breton, East Indies; James Lundin Brown, Scotland; Robert Bruce, Scotland; Wm. Bryce, Ireland; Merrick Lloyd Burrows, England; Robert Graves Burton, Canada; Guillaume Chasseaud, Smyrna; Robert Christie, Canada; William Alexander Clugston, Ireland; Frederick Cock, England; James Collinge, England; James M'Haffie Cowan, Scotland; James Allan Currie, M.A., Scotland; Allen Dalzell, Scotland; John Dickson, England; Arthur Dupuy, East Indies; Charles Dwyer, Ireland; George Fair, Scotland; David Finlayson, Jamaica; Francis S. B. François de Chaumont, Scotland; Dunoon A. C. Fraser, Scotland; John Gray, Scotland; David Greig, Scotland; Alexander Guthrie, Scotland; Thomas Wright Hall, Brazil; William Hamilton, Ireland; Tom Smith Hewitt, England; David Hood, Scotland; Robert Fawre Hutchinson, East Indies; Cornelius Inglis, England; James Jardine, Scotland; John Johnstone, Scotland; Arthur Trefusis Jones, Malta; William F. O. Kay, Scotland; Edwyn John King, England; Edward Wickstead Lane, M.A., Canada; Joseph Law, England; James Henry Losh, Scotland; Edward John Longton, England; Alexander John Macarthur, Scotland; Francis Robert Macdonald, Scotland; James W. N. McKay, Scotland; John Matthews, England; William Somerville Millar, Scotland; Thomas Miller, Scotland; David Milroy, Scotland; Robert Moir, Scotland; Emilius Rowley Nicholson, England; Francis Hugh O'Donel, East Indies; Joseph Fructuoso A. de G. Otorio, M.D., Coimbra, Portugal; Neville Gray du Vernet Parker, New Brunswick; George Clark Pirie, Scotland; Salvator Aloysius Pisani, M.D., Univ. Malta, Malta; William Overend Priestley, England; David Ramsay, Scotland; David Watkin Roberts, Wales; William Tindal Robertson, England; Francis M'Manus Russell, Canada; Richard Sarell, Constantinople; William Henry Scott, Scotland; Eleazar Sherwood, England; James Sinclair, Berwick-upon-Tweed; Tom Speak, England; James Frederick Stewart, Scotland; David Halket Sterling, Scotland; James Petrie Street, New Brunswick; William Taylor, Ireland; Henry Titterton, England; John Turle, England; Edward Penrose Twyford, England; Henry Richard Veale, England; Henry Hannotte Vernon, England; Robert Wailes, England; Patrick Heron Watson, England; Thomas Robert Williams, England; Christopher Young, England; James Young, Scotland. The four prizes annually given were awarded to Dr. William Bryce, for his dissertation on the Medical Topography of the Lake District of the North of England; to Dr. Allen Dalzell, for his dissertation on the Integumentary Appendages; to Dr. W. O. Priestley, for his dissertation on Pelvic Cellulitis, and the Fascia of the Pelvis in the Female; and to Dr. John Turle, for his dissertation on Quinine.

KING'S COLLEGE UNIVERSITY, ABERDEEN:—PASS LIST. Gentlemen admitted Doctors of Medicine on August 12th, 1853:—John Campbell, E.I.C.S., Bengal; Alfred Richardson, London; Charles G. Hewson, Devonshire; Henry Callaway, London; Joseph Kidd, London; Charles C. Hayman, West Malling; Perry Dicken, Ashby-de-la-Zouch; Edward H. Greenhow, Tyne-mouth; William R. E. Smart, R.N.; John S. Taylor, Liverpool; John V. Hawkins, London; Joseph Nash, Box, Wilts; Charles H. Payne, London; William Smith, Weyhill, Hants; James R. Hancock, London. At the same time, the degree of M.B. was conferred on Henry Polson, Old Aberdeen, and John Ross, Aberdeen.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention, and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

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LONDON: FRIDAY EVENING, SEPTEMBER 9, 1853.

NEW SERIES.

ADVERTISEMENTS.

Three lines and under	-	-	-	£0	2	6
Every additional line	-	-	-	-	0	6
Half-a-column	-	-	-	-	1	10
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A line contains ten words, so that any one can calculate the cost of an Advertisement.

Advertisements ought to be delivered at the office on the Wednesday preceding publication, and paid for at the same time.

Post-Office orders are to be made payable to THOMAS JOHN HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields, London.

THE MEDICAL SCHOOLS. In compliance with the wishes of several correspondents, we propose, on the 23rd September, to give, in the body of the Journal, a condensed view of the prospectuses of the various medical schools which have appeared in our advertising columns, or which may appear on or before that date.

DISCIPULUS is requested to communicate his name and address.

FINANCE:—THE JOURNAL AND THE TRANSACTIONS.

If associations have ever possessed great power, it has been in virtue of the union of many minds all tending in one common direction, and aiming at one common end. The stupendous achievements of past ages, which are only rivalled by the mechanical triumphs of our own day, show what even untutored physical strength could accomplish; and to-day the physical impossibilities of what we facetiously call the dark ages have succumbed to the associations which have developed by contact that faculty of mind which has in its vocabulary no such expression as *impossible*, and which has made even time and space but accessories to its strength.

Banded together in the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION for no selfish purposes, seeking in no commercial spirit for profit or for gain, we too can look trustfully on, believing that, from the jarring elements which surround us, there shall arise a fair future to redeem medical science from many of the extraneous evils which prevent its progress, and hinder its advance. Our Association, though it may appear accidentally in a trading guise in returning to its members a tangible equivalent for their subscriptions, can, collectively, and we trust also individually, be actuated but by one motive, and be animated only by one generous impulse. It seeks, in raising and elevating the status of the medical profession, to relieve the destitute, to alleviate the pangs of the suffering, to bring joy where sorrow but now was imminent, and to chase away from the domestic hearth of our friends those dread shadows of death which disease had impended over their dear ones. So indissolubly are united together the best interests of our common humanity with the rightful practice and progressive improvement of our profession, that, even more than ourselves, the public are interested in all that tends to advance our knowledge or increase our facilities for good.

But much that we could accomplish, as an Association, would be lost, had we no power, by the free interchange of opinion, to correct our own impressions, and to fix these impressions on the minds of others. The Promethean spark which is to light up for the world's good many a slumbering and latent gift or discovery would never be struck, did we not afford to our fellows the fullest opportunity of knowing and making known all the varied incidents of life and death which bear upon the progress of medical science.

It must be evident that, with members scattered over all parts of the United Kingdom, and even in foreign lands, this can be accomplished only by an organ of communication to which all may have free access, and from which they may learn the opinions and be acquainted with the facts which, in the progress of discovery (to-day so active), are either developing or developed. It is thus that a weekly journal becomes an indispensable necessity, if we would fully and freely accomplish all that we have, as an Association, clearly placed within our reach. We thus become, to a certain extent, in our character of publishers, a trading firm carrying on an accidental commercial enterprise; not rivalling or precluding the necessity of other publications, but supplying a hiatus they could not fill; and, we trust, each week binding more closely together the ties which unite us, both as members of a liberal profession and as an association promoting the good, increasing the power and knowledge, and elevating the status of medical men throughout the world.

We cannot therefore pass over the important discussion on the Journal, at the anniversary meeting at Swansea, without appending a few remarks to illustrate the position so incontestably proven by the gentleman who moved the adoption of the Report of the Journal Committee; moreover, we are well assured that, in an Association like our own, good, and good only, can accrue from the possession by the members of the most complete knowledge on all points connected with its constitution, management, and finance. In a new undertaking, it is but right that the most scrupulous inquiry should be instituted into its condition and prospects; and as very limited means are placed at our disposal, it is necessary to be convinced that expenses are kept within the boundaries of income. Peculiarly placed as we are, in having a large guaranteed circulation, and having beyond that comparatively few sales, (from the fact that persons desirous of purchasing the Journal become members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION,) we can still fall back upon those general principles which in ordinary business decide the success or failure of any commercial enterprise.*

For this purpose, we may illustrate our present position by viewing the members of the Association as subscribers to a Medical Journal conducted in the ordinary manner, and thus estimate the revenue of the Journal issued to its

* The extra-Association sale of the Journal is chiefly to colleges, societies, and public reading rooms.

two thousand subscribers at 7d. per week each. We find that the total receipts from this source would be £3,033:6:8. Now, assuming that the whole amount of the subscriptions of members went to pay for the Journal expenses, *which is far from the case*, there would then, viewing it as a commercial undertaking, be a profit to the subscribers on the year of £1,000, or upwards of 30 per cent.: no inconsiderable proof of the sound principles upon which the business has been hitherto conducted, and clearly demonstrating the fact that, if the medical practitioner desire a journal, he can, by joining the Association, obtain one, with all the other advantages of membership, at a large saving to himself. But we turn to the other and relative side of the question; and here we find the total cost of production, chargeable to the subscriptions of members, to have been, for the last six months, £856:16:6, or less than 4d. per number for each member. Then, deducting, as we fairly may, from the expenditure of the next six months, the amount of expenses connected with preliminary arrangements, and hence no longer necessary, we calculate the cost of the Journal at £758:9:7, or 3½d. per number for each member. It will thus be found that the clear gain to the Association on the whole twelve months, provided a journal be supplied (and what practitioner would be content without weekly intelligence to keep him *au courant* with the progress of medical science?), is not less than fifteen shillings per member. It will moreover be found that, while the estimated cost for the first twelve months amounts to £856:16:6 ÷ £758:9:7 = £1,617:6:1, the receipts, if the members were subscribers at 7d. per week, instead of paying or promising to pay £1:1 per year, would amount, as before stated, to £3,033:6:8, which, with a handsome amount allowed for contingencies, would make the Journal property to be worth, at a fair calculation, £1,000 per annum.

But it must be borne in mind that, the expenses of some Branches being paid out of the subscriptions of members, leaves from these Branches only 18s. 6d. as the available yearly amount to be devoted to general Association expenses: and from this, £200 has been during the past year voted for Medical Reform, besides many other incidental expenses of which the members derive their full advantage. It is thus evident that for their annual subscription the members obtain a Journal worth 30s. per ann., and all other advantages derivable from membership; and thus, by that *esprit de corps* which supports the Journal and enables it to be conducted at its present low rate of yearly charge, a profit of at least £1000 is divided among the members.

Viewing it merely as a matter of finance, it must, therefore, be evident to all, as it appears distinctly proven to us, that it would be idle to expect (much as we join in the wish) a volume of yearly *Transactions* to be issued to the members at no increased rate of subscription. We are far from saying that there should be no further issue of those elaborate papers on topography, statistics, etc., which have from time to time appeared in our *Transactions*. This indeed we should regret, from the loss which would accrue both to the standing of the Association, and to the reputation of some of its individual members. But we think that the publication of these papers must either be paid for from a separate and voluntary subscription, or be printed in the pages of the Journal. To either of these plans we can conceive objections; but, in our present financial position,

we can see no other path pointed out by a prudent forethought and a wise expenditure. There is, be it remembered, a limit to the capabilities of an annual guinea. We have recourse to these modes of argument and illustration, because they must speak for themselves to persons acquainted with the business transactions of life.

There is one point, in connexion with this subject, which, however painful, is of so much importance, as testified by the tone of the meeting at Swansea, as to demand from us more than a passing notice. Of the subscriptions which should have been paid in advance, there are at this time £1,093 in arrear! or so much of this large sum as may not have been paid to the General or District Secretaries since the annual meeting. To prevent in future such an accumulation of arrears demands not only the best thoughts, but the most earnest endeavours, of the true friends of the Association. It is the want of this money which often cripples our energies, and interposes a main obstacle to our progress. We are in receipt of many proposals for the recovery and prevention of these arrears; but among all our correspondents there is a general feeling that the name of no gentleman should be enrolled, neither should he receive the Journal, until his first subscription has been paid; and that the names of all members who have suffered their subscriptions to be in default for more than twelve months should (after neglecting for one month to answer a circular addressed to them by the Secretary, stating the fact) be liable to certain fines, which if not paid should in time lead to a suspension of the Journal. We would suggest to our friends, the district secretaries, a methodical and constant application for arrears, believing as we do that arrears arise rather from the pressure of professional engagements than from any intention of avoiding payment.

Here the extension required in our Branch organization demands notice; but this subject we must reserve for another article.

THE FEES RECEIVED FROM CLUB PATIENTS.

THE rates of payment which medical men receive from clubs vary considerably. A few clubs belonging to the Order of Odd Fellows pay, we believe, 7s. 6d. per patient per annum. These, however, are exceptional instances; and, if the truth could be arrived at, we think it would be found that 3s. per patient represents at most the average sum received by the whole profession from club practice. We know of one gentleman who holds not less than twenty-five clubs in a manufacturing district, the payment being scarcely 2s. 6d. per annum for each person; and of another practitioner, who, having a club which pays from £14 to £15 yearly, makes not less than 1,000 visits for that sum, in addition to the medicines supplied.

This state of matters is very painful to contemplate. How far it is to be met and remedied, is a great and difficult question; for we fear that, in some cases, the clubs really do offer all that they can afford to give. The poor stocking manufacturer, or Northampton shoemaker, who, with aching eyes, aching hands, aching heart, works for twelve long hours daily for that 1s. 6d. or 2s. which has to purchase the necessaries of life for six or seven helpless innocents, finds even the sum of 2s. 6d. per annum a serious item in his expenditure. In this matter important services rendered for the unimportant sum

not the question to be considered most, but the capabilities of the poor man to pay for *any* service. Food, raiment, and house shelter, take the first place in every man's affairs; and the purveyor, the clothier, and landlord, are considered by all, and very naturally too, before the doctor, whose good offices are only occasionally in requisition. We must not shut our eyes to these simple facts, even though they tell against our own interests; neither must we forget that club practice, with all its evils, is vastly superior to union practice—superior in payment by four or five times; for every club patient pays, as a general rule, three times more than the average sum paid for each union patient, and need not necessarily require attendance in return; and superior also, in that the interference of boards of guardians, and the oppressive insolence of relieving officers, are not present, to annoy and sicken the practitioner. Still more, we know that, in numerous instances, clubs insure to the professional man a remuneration for his services, which, however small it may be, would be nothing at all but for them, inasmuch as the club patient would either become a pauper patient, or be attended out of mere charity.

Are there then no possibilities of effecting a reform in the club system? We think there are. If the government could but be made to move in the matter of union medical appointments, and to make them more remunerative, the club fees would rise at once; for the club patient, being always anxious to avoid the "parish doctor", would give a little more than the average amount of union payment to secure his own selected private medical man. We cannot too earnestly urge this point on the government.

Again, we might carry on an internal reform, in reference to the practices of those who, being well able to pay for medical services, join a club, to insure cheap medical attendance. The profession, one and all, should stand out against this dishonest encroachment; and we believe that, were the subject well considered at the Branch meetings of the Association, a firm stand might soon be made, and then the proper remedy would soon follow.

Lastly, the medical man cannot too often or too earnestly point out to the members of clubs the impropriety and folly of having so many separate and rival club institutions. At the festivities of clubs, no sentence is painted on the banners in larger letters than the old motto, "Let friendship reign while here we stay; let brotherly love continue". In the management of these societies, no motto is more thoroughly forgotten and disregarded. In the club system, "unity" ought to be a first law; it would strengthen and prolong the life of the system, and, in so doing, would enable the benefited patient to pay his doctor a fee that should not only secure better attendance, but excite that just pride which every true Englishman feels when he knows he has paid for that which he has obtained.

MEDICAL STUDENTS AND THE GOLD DIGGINGS OF AUSTRALIA.

THE *Times* makes the journal at the diggings of a Guy's student the text for a leading article; and both the journal and the comments contain matter for very serious consideration in these days. The medical student, before he has passed his examinations, starts for the diggings in Australia with three others, one designed for the bar, one for the church, and one for surveying. They have some money, as they buy a horse and cart, and take tents and implements for work; but they are taken in with the horse, they cannot get any

distance, they return disappointed, and break up their party. The surveyor gets to survey the roads; the young surgeon tries in vain at all the chemists' shops to find employment, but they will not take him, as he is a surgeon's pupil, and they want a chemist's apprentice. He thinks himself fortunate to get a job of whitewashing for four days, and on the profits buys some peaches and apples which he hawks in the street. Whilst so engaged, he sees two Guy's students working on the wharf as labourers; and he says, notwithstanding his own humble work, "Poor fellows, I did pity them!" Hawking fruit did not answer long, and, with a friend's little capital, the two set up a stall in the market to sell boots and shoes, books, and clothes. At the end of seven weeks, they were poorer than when they began, and then resolved to start for the diggings. Here the same want of success followed, and, when the medical student ended his journal, he was a carter, and driving a horse and dray about Forest Creek Diggings. His father sends his journal to the *Times* as a warning.

This, from what we hear from those who have been there, is the common fate of young men who, bred to intellectual professions here, go out to attempt to gain gold in an occupation only fit for "navvies" and strong labourers. They fail there just as they would fail here, if they were to hire themselves for the making of railway embankments, or the construction of docks. But the rush of youths of this description to Australia is a matter of serious reflection for those who have to decide on the occupation of their sons. It must be recollected that, during the last fifty years, the inhabitants of Great Britain have doubled in number, and, as this increase goes on, the increased competition from numbers must be still more severe; and, as education and mental activity increase also, there will be more of the competition of talent. It will, therefore, be much more necessary than it ever has been that youths should be brought up to those occupations for which they are most fitted, and that those who, from organisation, deficient abilities, and want of natural energy, are not likely to make their own way in a profession which requires vigour and talent, should not be introduced into it. It was one of those visions of the future which the German poet Goëthe foresaw and practised in his Utopia, that every youth should, as the world improved, be brought up to do that for which nature fitted him; and that such anomalies as we now see, when a man whose chief delight was in making locks, became an inefficient king, will cease. We are far from such a Utopia; but we are nearer than we ever were to such a state of things, when each man will be valued for what he can actually effect, and when the world will more accurately know what is in each man's power to do. As a general rule, a youth cannot choose wisely his own calling in life, as he has neither the requisite knowledge of himself nor of the world; and a permission to make such a choice against the convictions of his parents is the most cruel liberty he can have. Those, therefore, who ought to decide these matters have a heavy responsibility; and the numbers who are brought up to medicine, and who sooner or later give it up, and the still larger number who sorely regret that they ever entered the profession, prove that a warning to greater circumspection in the first decision of a calling is necessary.

With regard to the question which is often asked, as to the propriety of medical students going to Australia, for the sake of actually digging gold, there can be, with our

actual experience, but one answer. It is a manual labour which requires the hardest bodily toil, and only those should go who are fitted by their bony and muscular organisation to get their bread as labourers. As to the other question, whether it is advisable for young surgeons to try Australia as a field for medical practice, we cannot do better than quote from the able leader of the *Times*:

"If a young man has made such good use of his time—has shown such undoubted ability—has made such friends—has such an opening, and so much money as to set him up respectably, and procure him a good partnership or independent practice—in a word, if he is likely to get on well in this country, and has not the same grounds for believing that he will get on well in Australia, certainly he had better remain where he is. He has no adequate reason for moving, and would be only throwing away a very enviable position. As a general rule, a man who can get on in England had better not go to a colony. But we should like to know how many of the young men who pass at the College of Surgeons or Apothecaries' Hall have such prospects before them as we have described. Many have no extraordinary talents, no money, no friends, no position, no opening whatever; and have just as much to look about for a place where they may be permitted to squat in this country, as if they found themselves shipwrecked off some headland on the coast of Victoria. They have to take a house or a ground floor, put a brass plate on the door, perhaps offer "advice gratis" at certain early hours, perhaps form an unholy alliance with some aspiring chemist, get credit from some tradesmen, descend from one dodge to another, and, perhaps, after some years of this miserable work, compound with their creditors, and decamp and try the same game elsewhere. Others, with rather more pretensions, try a higher game, publish, canvass for places, and so push on through many a year of poverty. Now, if a young surgeon has no better prospects than these, he may just as well go to Melbourne, where he will find rather more elbow-room, and where he may become an Australian Astley Cooper."

To sum up what has been said. Much greater caution should be used in permitting youths to enter the medical profession; and those who have got through their education, but have neither an opening nor prospects in this country, may try Australia as surgeons, though not as gold diggers. The attraction which during the last two years has deluded so many men, without sufficient muscles and bones, to attempt labourers' work at the diggings, has drawn a large number of its victims from the ranks of our profession, and, we fear, will continue to draw many more, notwithstanding the bitter experience which has been proved on so large a scale.

EDINBURGH BOTANIC GARDENS. We understand that the government have consented to make provision in the next year's estimate for the extension of the palm-house in the Botanic Gardens, the insufficient size of which was brought before them some time ago.

M. RICORD. An authorisation appears in the *Moniteur* permitting M. Ricord to wear foreign orders of knighthood from Russia, Belgium, Spain, Sweden, and Sardinia.

NEWS AND TOPICS OF THE DAY.

POST MORTEM EXAMINATION OF THE BODY OF THE LATE MR. BRANSBY COOPER. Examination of the remains of B. B. Cooper, Esq., in the presence of Messrs. J. Birkett and Alfred Poland, August 20th, 1853, at 8 A.M., about forty-one hours after death.

At the root of the tongue, and most on its right side, was a deep excavation, covered over by the cortex of the organ, which seemed to form flaps to the hollow. Around this excavation, the tissues of the tongue itself, as well as the muscles about the os hyoides, were infiltrated with the elements of carcinoma.

Several enlarged lymphatic glands existed upon the right side of the neck, all infiltrated with carcinoma. From one large gland, and from another smaller, when cut, a yellow, tenacious, mucopurulent fluid came away. The parietes enclosing this fluid was carcinoma.

The trachea and bronchi contained fluid blood, as well as the air cells of the lungs, and patches of cells infiltrated with blood appeared upon the surfaces of both the lungs. The tissue of the lungs was healthy, and not a single pleural adhesion existed on either side.

The heart was small, and its muscular tissue thin and pale. The valves were healthy.

The stomach contained imperfectly masticated food, and much blood coloured fluid.

The tissues of the alimentary canal were healthy.

The liver was rather small, soft, and congested with blood.

The pancreas was not diseased.

The spleen was extremely contracted and corrugated, and of a dark, almost black, hue.

Both kidneys were congested with blood, soft, and easily separable from their proper tunics.

In the cavity which existed in the tongue there were a few clots of blood, and as this was the only ulcerated surface, it may be presumed that the hæmorrhage proceeded from a perforation in the right lingual artery, or of one of its branches.—*Medical Times*.

THE NEW ACT ON CHARITABLE TRUSTS. The Act for the Better Administration of Charitable Trusts has been issued. There are, we find, sixty-eight sections in the Act, and it took effect on the 20th instant, when it received the royal assent. The Board is to be called, "The Charity Commissioners for England and Wales". The work of the Board is defined by the ninth section, which enacts, that "it shall be lawful for the said Board from time to time, as they in their discretion may see fit, to examine and inquire into all or any charities in England and Wales, and the nature and objects, administration, management, and results thereof; and the value, condition, management, and application of the estates, funds, property, and income, belonging thereto; and the said Board may cause examinations and inquiries in relation to the matters aforesaid to be made and prosecuted by their inspectors, acting together or separately, in such cases and at such times as the said Board may think fit, and all such inspectors shall, from time to time, report their proceedings to the said Board." Powers are given to the Board to require accounts and statements of charities. The inspectors may examine witnesses on oath, and persons refusing to render accounts, or to give evidence, are to be deemed to be guilty of a contempt of the Court of Chancery, and may be committed by such Court on summary application by the commissioners to the same, and be ordered to pay the costs, if the Court shall so direct.

[News and Topics continued at page 888.]

ORIGINAL COMMUNICATIONS.

NOTES ON THE VINEGAR-PLANT.

By SPENCER THOMSON, M.D.

WITHIN the last two or three years, there have appeared from time to time, in various journals, medical and general, notices of what is called the "vinegar-plant", a peculiar fungoid development, now extensively used in many parts of the country for the domestic manufacture of vinegar. Seeing this mode of making vinegar in frequent operation in a cottage I had occasion to visit professionally, I was induced to make a few experiments and observations, with a view to ascertain the nature of the vegetable growth, and, if possible, its mode of action; the interest being the greater, as apparently from the queries respecting it, the vinegar-plant is an unknown object of curiosity to some of our scientific men.

The plant itself, when well developed, resembles nothing so much as a thick unbrowned pancake; its consistence is very tough and leathery, and its form and diameter are dependent on those of the vessel in which it grows. When young, the growth is thin and gelatinous looking.

The ordinary mode of making vinegar by means of the vinegar-plant is very simple. It is thus described:—"Put the plant—a young one—in an earthen jar, add to it half a pound of the coarsest moist sugar, and half a pound of treacle, with five pints of milk-warm water; cover it lightly over, so as to keep out the dust, but not the air; and then put it in a moderately warm situation; there let it remain seven weeks, not disturbing it more than you can help. At the end of that time, pour off what is now the clear vinegar, and keep it in well corked bottles for use. Again, add to the plant the same quantity of water, sugar, and treacle, as before. At the end of the second seven weeks, the plant will have become like two thick pancakes, and the two parts may be easily divided, care being taken not to tear either the old or the new plant. If the plant is exposed to the cold, or kept too long out of the liquid, it will die."

By the domestic makers of vinegar by means of the plant, it is insisted upon as a necessity that a plant should be present in the saccharine solution: this, of course, is an error; but, on the other hand, it is equally erroneous to assert that the plant is simply an adventitious growth, which is developed during the formation of the vinegar, but which has nothing to do with the process. In my first experiment, I placed in a dark situation, of 75° average temperature, three glass vessels of saccharine solution, made with treacle and sugar, in the proportions above named. To one vessel I added a young vinegar-plant, which immediately sank to the bottom; to another, a small quantity of yeast; the third was left without any addition. In the course of two or three days, as might be expected, in the solution containing yeast, active alcoholic fermentation was going on; in a few days more, this had subsided, giving place to acetification, which, by the sixteenth day, was complete, the solution being converted into strong vinegar. At the end of a week, the solution containing the vinegar-plant smelled like sour milk; the plant added to it still remained at the bottom of the vessel, but a new plant had formed on the surface of the liquid. In the simple solution, no apparent change was to be detected. At the end of three weeks, the report is: "Solution with yeast converted into strong vinegar, and bearing on its surface a gelatinous looking growth, resembling the vinegar-plant, but more brittle, and less leathery. Solution containing vinegar-plant acid, but not strongly so, bearing a fresh well formed plant on its surface. Simple solution scarcely acid, also bearing a gelatinous plant."

This report was on April 22nd; the same day, five glass vessels of the sugar and treacle solution were taken. Into

No. 1 was put the fresh vinegar-plant, formed from the plant used in the first experiment; into No. 2 was put the plant formed on the surface of the acetified yeast solution; into No. 3 was put the plant formed on the surface of the simple solution, all these being obtained from the first experiment; into No. 4 was put a small portion of yeast; No. 5 was left a simple solution. To the above were added two vessels containing each a solution of pure white sugar, in the proportion of two ounces to the pint; one was left simple; to the other a vinegar-plant was added. The seven vessels were placed in a dark situation, of average temperature, from 55° to 65° F. At the end of three months, all the solutions of coarse sugar and treacle were very acid, but that to which the yeast had been added was most strongly so: all five bore on their surfaces well formed plants, and in the first three, to which plants—from yeast, vinegar-plant, and simple solution of first experiment—had been added, the old plants lay unchanged at the bottom of the vessel. The simple solution of white sugar was apparently unchanged; that to which the vinegar-plant had been added was very distinctly acid, but weak compared with the brown solutions; and on its surface it bore a very fine transparent plant, loose in structure, and very different from the compact leathery mass growing in the coarse solutions. When lifted out of the solution, this plant resembled nothing so much as the vitreous humour of the eye, both in appearance and texture. In this solution, as in the others, the old plant, which had been added in the first instance, lay at the bottom of the fluid unaltered.

The question arises, What is the vinegar-plant? If a portion of it be placed under a high magnifying power, 600 diameters, it will be found to consist of spores and minute cells, in various stages of development, lying among interlacing and branched filaments; in short, the spores, cells, and filaments are precisely similar to those seen in the vegetative and mycelium stages of a common mucar, or of the penicillium glaucum, only they are more minute. The vinegar-plant, therefore, is simply an expanded thallus, formed by an aggregation of spores and cells entangled in the filaments developed by the budding forth of the latter; the whole apparently being connected by mucilaginous matter. The form and structure—if it can be so called—of the thallus is apparently determined by the nature of the medium in which it is developed.

Of course there could be no doubt beforehand of the conversion of the coarse saccharine solutions into vinegar, without the addition of yeast, of vinegar-plant, or of any other ferment; their own azotized components in their unpurified condition being sufficient for the purpose, especially under the higher temperature of the first experiment; but the question arises, how far the presence and growth of the vinegar thallus influence or assist the elementary changes by which the saccharine is converted into the acid. As mentioned at the commencement of this paper, it has been asserted that the presence and growth of the vinegar-plant is simply adventitious, and that it exerts no influence in the acetifying process. The error of this supposition is proved by the experiment with the solutions of refined sugar; for, whereas the simple solution remained unchanged at the end of three months, that to which the vinegar thallus had been added was distinctly acetified, this being in my opinion sufficient to prove that the fungoid development or thallus known as the vinegar-plant, is the distinct acetic ferment, capable of determining the acetic fermentation in saccharine solutions, by a power in strict analogy with that by which the torula cerevisiæ or yeast ferment excites the alcoholic fermentation. Like the torula cerevisiæ, the vinegar-plant appears to be capable of development, *de novo*, in saccharine fluids containing azotized matter, provided external circumstances are favourable. It would also appear, that although, like the yeast-plant, its presence may not be absolutely necessary for the excitement and perfecting of its peculiar fermentation it does exert a certain amount of catalytic action upon the components of the saccharine solution, thereby determining and aiding their conversion into acetic acid. I am inclined to think,

* *Lancet*, 1853, vol. ii, p. 303.

moreover, that the presence of the vinegar-plant will give rise to the formation of acetic acid in a saccharine solution, at a lower temperature than that at which the change could take place, were the acetic ferment absent.

There is, however, one remarkable difference between the mode of action of the alcoholic and acetic ferments. As the process of alcoholic fermentation consists of interchange of elements within, and of escape of carbonic acid from the fluid undergoing the change, the yeast torula seems to be in active vegetation as truly throughout the whole fluid, even at the bottom; its greater collection at the surface being simply due to its being carried upwards by the escaping gas. The vinegar-plant, thallus, or ferment, on the other hand, is active only on the surface of the fluid. Old plants once submerged—at least in the saccharine solutions used in the making of vinegar which had a sp. gr. 1.040—do not rise again, but continue without change or increase at the bottom of the fluid, whilst a new plant forms on the surface. How far that surface growth of the plant may be connected with the absorption of the oxygen necessary for the acetifying process, it is, at present at least, impossible to say.

It may be asked, how comes the vinegar thallus in a solution to which no spore or spawn from another plant had been added? It is, I believe, a fungoid development, the form of which is determined by the nature of the medium in which it vegetates; but when it is developed, I believe it is capable of assisting in, and predisposing to those elementary changes and interchanges which take place in the acetous fermentation, and perhaps of aiding the absorption of oxygen necessary for the process. With such a view, the originating spores may have been those of the sugar fungus, or of some of the common moulds. Indeed, if vinegar with a growing vinegar-plant on its surface be exposed to the atmosphere for a considerable length of time, the vinegar thallus passes into a crop of mould. Dr. Carpenter* observes, "of all the protophytes it may be remarked, that the conditions under which they are developed, produce a considerable modification in their mode of growth, and may even effect such a change as to obscure their characteristic 'nisi'". The history of the vinegar-plant appears to corroborate this idea. Throughout this paper, the vinegar thallus has been spoken of as a fungus; and if it be characteristic of the fungi that they are most readily and perfectly developed in situations where azotized matter in a state of decay or change furnishes them with a free supply of carbonic acid and ammonia, then must the vinegar plant belong to them, for we have seen that in the solution of refined sugar from which azotized ammonia-yielding elements had been removed by purification, little, if any, development took place, and the acetification was weak. This latter fact, moreover, proves that the catalytic action is dependent upon the growth of the thallus; for were it not so, were it simply occasioned by the presence of a thallus, there is no reason why the acetification of the pure sugar solution should not have advanced equally with that in the unpurified solutions, each having a similar old plant introduced into them. Again, the vinegar thallus developed on the surface of the saccharine fluid must, necessarily, have continued fresh supplies of whatever element is most essential to its development from the free communication between the particles of the fluid, and as long as the fluid can furnish the element or elements, it continues to flourish; if, however, as stated above, the growth of the thallus be permitted to continue upon a portion of vinegar exposed to the atmosphere for a considerable time, probably from exhaustion of the element required, the vinegar plant degenerates into simple mucar. Similarly, mucar or mould forms on the surface of a solid mass of cheese or of sugar preserve. There can be no interchange of particles as in the fluid, consequently the outer layers of the supporting medium can only furnish the food for growth. Is it that the vinegar thallus requires a more ample supply of some particular element of saccharine and at the same time azote-yielding fluids or sub-

stances, for its development than is requisite to support the growth of the moulds?

The observations in the foregoing paper I offer rather as suggestive than otherwise. The subject is one which does not appear to have undergone any special investigation, and my chief object is to direct to it the attention of those who have more leisure than myself to devote to such inquiries.

Haunton, Burton-on-Trent, August 25th, 1863.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE ŒSOPHAGUS.

By C. E. REEVES, B.A., M.D.

[Continued from page 704.]

SPASMODIC STRICTURE.

STRICTURE FROM AFFECTION OF THE STOMACH. CASE I. Mr. Abernethy relates the following case.* A lady had for many years suffered from what her medical attendant supposed to be organic stricture of the œsophagus. She was now reduced to such a state, that food could be taken only in very small quantities at a time, large quantities of liquid being necessary to enable it to descend into the stomach. He was requested to pass a bougie, but he declined to do so, as the disordered stomach, furred tongue, and tender epigastrium, led him to suppose that it was only sympathetic. Attention to the stomach and bowels soon gave relief to the difficulty in swallowing, and she ultimately got quite well.

CASE II. A young man,† of florid complexion and full habit of body, after walking a considerable distance on a very hot day, was suddenly taken with severe pain at the orifice of the stomach, with great difficulty in breathing, and inability to swallow. He was cured by copious extraction of blood. In the following winter, a slight return, which yielded to purgatives. In the following spring, he was suddenly awakened early one morning with the pain and other symptoms. Bleeding gave him great relief, but only for a short time. He was again bled, by which he was permanently relieved.

CASE III. A female, aged 69,‡ had suffered frequently from pains in the throat, descending at times down to the stomach, with great difficulty in swallowing. A bougie met with some slight obstruction at the lower part of the pharynx, but gave great relief to the obstruction. Five days afterwards, a pain seized her at the epigastrium, and obstruction for the first time manifested itself at the entrance into the stomach. She sank soon after. The stomach was thickened throughout, except for one or two inches near the pylorus, and would not contain more than six ounces of fluid.

CASE IV. A man, aged 45, was, says Monro,§ under the care of my father, Dr. Keith, Mr. Wardrop, and Mr. G. Bell; he had been suffering from dyspepsia and pain in the stomach for two years, and for the last three months from occasional attacks of spasmodic stricture. In October 1810, the stricture became more troublesome, particularly at breakfast. On October 17, a bougie was passed, an obstruction being felt quite distinctly; but it was not relieved until the 9th of November. A cold reproduced the dysphagia, which yielded in the course of a few days to the introduction of the probang. He sank the following May, with all the symptoms of malignant disease of the stomach. The œsophagus was found quite healthy, the stomach distended with dark coloured fluid, and adhering to the liver, a fungous ulcer existing at this point.

STRICTURE FROM AFFECTIONS OF THE LIVER. Portal (*Maladies du Foie*) mentions a case of hepatitis, attended by another physician and himself, where stricture of the œsophagus existed.

Frank met with it in a case of inflammation of the superior surface of the liver. He also mentions a case which

* Principles of Physiology, p. 197.

* Abernethy's Surgical Works, vol. I.

† Dr. Innes, Medical Communications.

‡ Howship, Practical Observation on Indigestion.

§ Monro, Morbid Anatomy of the Stomach and Gallies.

occurred to an Italian physician, where it depended on a worm in the cystic duct.

Mayo (*Outlines of Pathology*) mentions an instance of its occurring in a female, who was suffering from inflammation of the surface of the liver.

Stokes, in his *Clinical Lectures*,* mentions having met with it in several instances during an epidemic gastro-enteritis accompanied by hepatitis.

CASE. The Marquis of T.,† after suffering some time from disease of the liver, had an abscess in the right side, which burst, allowing the escape of pus and a great number of gall-stones. It then healed, but four other abscesses occurred in the next ten years. Six months before death, great difficulty in deglutition came on, for which leeches and blisters were applied, with but temporary relief. He at last sank from diarrhoea. The œsophagus was quite healthy, but the liver was reduced to half its usual size, and adhered to the diaphragm by cellular bands. The gall-bladder was wanting, its place being supplied by a little fibrous substance, in which ended the cystic duct.

STRICTURE FROM AFFECTIONS OF THE DIAPHRAGM AND THE PERICARDIUM. CASE. A female, aged 32,‡ began to suffer from difficulty in swallowing, with a constant sensation of constriction in the throat, and pain at the lower part of the sternum, accompanied by intense agony in laughing. The slightest sudden motion brought on an attack of the agony at the epigastrium. Warm baths, with opiate frictions and hemlock poultices, gave relief. She was ultimately cured by blisters to the epigastrium, and leeches to the anus.

Heister (*Obs. Med. Mis. Obs.* 15) reports an instance of a man suffering from inflammation of the diaphragm, who had spasmodic contraction.

In the following case, reported by Portal (*Mém. sur plus. Maladies*) the pericardium was affected. The mother of Dr. S. was taken with severe pain in the larynx and pharynx, affecting speech, respiration, and swallowing, particularly of fluids, which returned by the nostrils. Fever, with hard quick pulse, also existed. She sank on the seventh day. The larynx and œsophagus, to their great surprise, were quite healthy, but the pericardium was thickened of a dark violet hue, and adherent to the heart, which was also softened.

STRICTURE FROM AFFECTIONS OF THE UTERUS. Riedlin reports the case of a female who, at the fourth month of pregnancy, became subject to spasmodic contraction of the œsophagus, so that she was able to swallow only a little broth. Immediately after her confinement, it began to diminish, and at the end of a month she could swallow with the greatest ease.

In the *Ancien Journal*, the case of a woman is published, who suffered from this affection in eleven successive pregnancies. (*Leblond, Thèse de Paris*, 1822. No. 196.)

Villeneuve relates an instance of a female suffering from uterine disease, who had constant constriction of the throat. Pattissier at the same time mentions a like instance. A seton was introduced into the neck, but to no purpose. In neither of the cases was there hysteria.§

Mondiere|| met with it in a case of menorrhagia. In this case, it is doubtful whether it might not have depended on the loss of blood, and not on any uterine irritation. Sir B. Brodie, in his work on nervous affections, publishes the case of a lady who had suffered three years from spasmodic stricture, the result of repeated discharges of blood from piles. Her face was blanched, she could not swallow solids, and even fluids with much difficulty. A probang was passed with the greatest ease. By tonics and cold injections, she was, at the end of four months, able to swallow with ease.

Rechelmi¶ reports the following case. A F., aged 39, nervous, confined forty days. She had been much weakened by several causes, particularly by excessive menorrhagia. Soon after her labour, a sudden mental shock took away her

consciousness for some time. On recovery, she complained of painful constriction of the pharynx, food and liquid being immediately rejected. It was much worse during the day when up, particularly on walking, and was then attended with difficult respiration and palpitation of the heart. There was extreme emaciation. Great mental depression always preceded the dysphagia. Giving milk to the child always induced an attack. By cold bathing, and amusing her mind, she became, after suffering ten months from it, much better.

A young female,* brought up in the country, and accustomed to an active life, came to live in town to attend on an invalid. She first began to suffer from headache, loss of appetite, and constipation, followed by vomiting of all taken, and considerable emaciation. In a short time, she complained of pain in the throat, behind the cricoid cartilage; the attempt to swallow food produced constriction, followed by its immediate rejection. A common catheter was passed, with immediate relief to the dysphagia and vomiting. Medicines were given, but with little benefit to the hysteria and indigestion. The vomiting and dysphagia soon returned, although less severe. The catheter was again passed, with the same benefit as before. She was sent back into the country, and was soon quite well.

A chlorotic and hysterical female, aged 25,† in whom the menstrual discharge had been scanty for ten years, each epoch being attended with difficult breathing, during the last five years she had suffered from dysphagia. Food, when swallowed, was immediately rejected, and severe pain was excited throughout the whole length of the œsophagus. In the winter, the attacks would come on suddenly in the night, continue longer, and be more severe than at any other time; the tongue and uvula becoming affected, and at the same time frequent hiccough. Throughout the attack, a constant pain, of a spasmodic character, existed at the præcordia, which rendered the breathing difficult.

In the case published by Dr. Tilt, in his valuable work on *Diseases of Women*,‡ the person, aged 27, menstruated at thirteen, scantily and irregularly; at fourteen, it was attended with severe pain. She married at twenty-four, and had a child, which she could not suckle: the menstrual discharge reappeared at the end of three months. In the winter of 1851, she was taken with cough and pain in the pit of the stomach; and food seemed to meet with an obstruction just above the præcordia. She was awake on the fourth night of the attack, suffering from severe suffocative pain in the epigastrium. There was no fever. She had leucorrhœa, and the menstrual discharge was soon expected. The application of hot water gave relief. Sedatives were also given, and plasters of the same character applied to the epigastrium and the region of the ovaries. The pain, however, returned at intervals, rendering the frequent exhibition of morphia necessary. The menstrual discharge did not come on for three weeks. At the next period, she had colic, with pseudo-narcotism, followed by violent epigastric pain, which shifted to the spine, and passed down to the sacrum, then the menstrual discharge appeared. Since this time, she has been subject to spasmodic contraction of the œsophagus during meals. The food is suddenly arrested,—sometimes for a time only; at others, the whole dinner is brought up; but generally only the food, or a little ropy mucus,—after which she is enabled to eat a hearty meal.§

In the case published by Percival.|| A young lady, aged 13, had suffered, when seen, six weeks without any intermission from dysphagia. She had had dysphagia before, but it had left her for a month. Solids passed down to the orifice of the stomach, and were then rejected with a convulsive effort. Warm fluids, swallowed by sipping, met with no resistance; otherwise they were rejected. In the evening the spasm relaxed, leaving a sense of uneasiness at the pit of the

* London Medical Journal, 1834.

† Nacquart, Jour. Gén. de Méd., tome lxxx.

‡ Dumas, Consult. Médicales, 628.

§ Bibliothèque Médicale, tome xlviii.

¶ Archives Gén. de Méd., 1833.

¶ Bibliothèque Médicale, tome xlvii.

* Cummin, Edin. Med. Chir. Transact., vol. iii.

† Zimmerman, Acta Helveticæ, lib. ii.

‡ Second edition, page 64.

§ Dr. Tilt has had the kindness to inform me that she still continues in the same state.

|| Transactions of the College of Physic, vol. ii.

stomach. She had menstruated scantily at nine, but only twice since. Feet very cold, and bowels constipated. By the application of a galbanum plaster to the throat, milk diet, and exercise, cured.

Bright* mentions the case of a female brought into Guy's Hospital, suffering from stricture of several weeks' duration. The introduction of a probang brought on a fit of hysteria.

STRICTURE FROM GOUT. A case fell under my notice a short time back, where a person, while suffering from an attack of gouty spasm of the stomach, everything was rejected the moment it reached the lower part of the pharynx.

Mr. Watson (quoted by Howship) speaks of a case occurring in a gouty gentleman.

Courant describes a case where it preceded the paroxysm of gout.

STRICTURE FROM SUPPRESSION OF CUTANEOUS ERUPTIONS. Manclerc,† a case in a nervous female, where the suppression of an eruption on the back of the hand, by an astringent application, was followed by vomiting and spasmodic constriction of the throat.

Aird§ mentions the case of his son, aged 18, in whom the sudden disappearance of a chronic eruption was followed by swelling and pain in the umbilical and hypochondriac regions, and spasm of the œsophagus.

STRICTURE FROM AFFECTIONS OF THE MIND. An instance is recorded in one of the old writers, of a man who could not swallow a consecrated wafer. Another case is also mentioned, of a monk who never could swallow a particular kind of fluid, some of which had once found its way into the trachea.

Boyer mentions an instance of a female, who, having once had a piece of chicken arrested in the throat, never after could swallow any without its inducing spasm.

I am acquainted with an individual who cannot take a very small new potato, from a surfeit in early life. The moment one is introduced into the mouth, a sense of constriction is produced; and if he attempts to swallow it, it is rejected.

Percival relates an instance where swallowing a pea excited spasms of five or six days' duration in an elderly lady.

Duchateau (Tome 79 of *Jour. Gén. de Méd.*) has published the case of a nervous female, who fancied that she had swallowed a pin. She was at last cured by an enema, and then showing her a pin, telling her it had been discharged from the bowel.

Mondiere (*Arch. Gén. de Méd.* 1833) cites the following cases:

A man, the subject of hypochondriasis, after being bitten by a dog, took to his bed, and had difficulty in swallowing for fifteen days. But on Ferrier telling him that persons suffering from hydrophobia died on the eighth day, he got up and went about his usual occupations.

Barthelemi, the professor at Alfort, was bitten by a little dog. He believed that he was suffering from hydrophobia. For three days he was unable to swallow; the sight of water affecting him like electrical shocks.

Barbatini mentions an instance where a man, while out hunting, was bitten by his dog. The dog did not return home with him. Three days passed: the idea then took possession of him that he was hydrophobic. He had soon all the symptoms, even to occasional attacks of furor. On the ninth day the dog returned, well and playful. From that moment he became quite well.

A man had been absent from home for twenty years. On his return, he learnt that his brother had died of hydrophobia, from the bite of a dog which had also bitten himself. He was immediately seized with all the symptoms of the disease, and sank under it.

INFLAMMATION OF THE UPPER PART OF THE SPINAL CORD. Hoffman mentions an instance where spasm of the œsophagus existed in a case of inflammation of the upper part of the cord.

Harrington Square, London, July 1853.

* Reports of Medical Cases, vol. ii.
† *Jour. Gén. de Méd.*, tome xxii.

TURPENTINE IN THE TREATMENT OF PURPURA.

By WM. SMITH, Surgeon, Fellow of the Royal Medical and Chirurgical Society of London, etc.

IN the ASSOCIATION JOURNAL for June 27th, is a review of Dr. Neligan's work "On Diseases of the Skin"; and some remarks on the treatment of purpura by oil of turpentine.

Having recently had under my care two severe cases of this disease, and having treated each of them differently, I trust a comparative view of the remedial effects of the medicines employed will not be uninteresting. I must premise that my attention was drawn to the use of oil of turpentine by Dr. Copland's recommendation of it in the article on his disease in his Dictionary. The mode, however, in which I administered it, was advised by a gentleman of great practical experience in the treatment of disease, now retired from the profession, and who informed me that he had always found it successful in cases uncomplicated with organic disease.

The cases (which I purposely report very briefly), are as follows:—

E. W., aged 6, residing at Bolsover, Derbyshire, was attacked with large spots of purpura, principally on the lower extremities in the autumn of 1852. Her mother employed domestic and other remedies till the spring of 1853, when, the child becoming much worse, she called me in.

The patient was a very fine though somewhat plethoric child, with ruddy sanguine complexion, and with all the external appearances of rude health. The locality in which she resides is one of the highest and driest in England, and distinguished generally by the longevity of its inhabitants. About six-sevenths of the cases which fall under my care are, however, of the zymotic class. The drainage is bad, and many of the wells have been poisoned by the leakage of the cesspools. During the spring and summer of 1852, malignant scarlatina prevailed to an immense extent, and during this and last year furunculoid eruptions and erysipelas have been common and severe.

In the case now narrated, the child had for some time lived chiefly on animal food, in fact, on the usual farm house diet—bacon. On my first examination of her, March 15th, 1853, several very large ecchymoses were present on the legs, and one of the size of an egg on the forehead, the result of a slight blow. The smallest pressure produced them. There had been considerable bleeding from the nose on several occasions, and once from the bowels. There was oozing of blood from the gums. The urine was high coloured, and the alvine evacuations pale and generally constipated. I treated this case first with purgatives, and then with diluted sulphuric acid. She was also ordered to suck oranges, drink lemonade or very weak beer, and to eat rhubarb tarts.

The case did not progress with this treatment; the epistaxis was, indeed, somewhat diminished, but the other symptoms continued much the same.

Under these circumstances I gave the child citrate of iron combined with citric acid. This succeeded better, and after three months perseverance, the cutaneous discolorations ceased. The progress of cure was, however, extremely slow, and a relapse has since occurred, but the patient has again recovered under the use of the citrate of iron.

The second case occurred in a little girl, aged 4, generally strong and active, and residing in a spacious house situated near a tannery. This case was very acute. There was first remarked in her a disinclination to food, especially vegetable; and extreme irritability of temper. The bowels were extremely constipated. These symptoms ushered in the attack. The lower extremities became weary and stiff towards evening, and three large elevated spots, varying from the size of a fourpenny piece to that of half-a-crown, appeared upon them. These spots became rapidly purple and soft, and gave the impression to the touch of fluid blood under the skin. In the morning they became yellow, and gradually were absorbed, but others, larger and higher up

the legs succeeded. Two formed of a very large size in the hams, and the skin became so thin that I thought it would give way. The child, in three days, became pallid and exsanguine, and her pulse very sharp and hæmorrhagic. After using a mercurial purge, I at once resorted to the following mixture.

Rx Olei terebinth. ʒss.
Olei ricini ʒj.
Mucilaginis,
Sacchari, aa, q. s.
Olei caryophyl. gtts. iv.
Aque dist. ad ʒviij.

Misce ut fiat mistura, cujus sumat cochlearia ij. vel iij. bis vel ter in die.

The effect of this mixture was most satisfactory. The purpuric spots rapidly disappeared, the bowels acted copiously and naturally, the appetite of the child became good, and the temper cheerful.

I certainly believe that in all passive hæmorrhages, turpentine will be found most valuable in its effects; and in this class of diseases we must generally place purpura.

Chesterfield, August 20th, 1853.

GALLIC ACID IN THE TREATMENT OF PURPURA HÆMORRHAGICA.

By T. P. J. GRANTHAM, Esq.

SOME years ago I lost one very dear to me from purpura hæmorrhagica; and my attention was thereby strongly directed to that disease, with the hope of discovering some more satisfactory mode of treatment.

The value of gallic acid in passive hæmorrhages induced me to give it a trial in purpura hæmorrhagica, and the results obtained were very gratifying. Moreover, its safety, promptness, and pleasantness, are no inconsiderable recommendations of this remedy.

If the reader should not find any novelty in the application of gallic acid to this disease, the subjoined cases will at least confirm, as far as they go, the value of the treatment.

CASE I. Mr. E., a farmer and miller, aged 60 years, came under treatment on the 18th November 1852. Two days previously, he had noticed a soreness of the tongue, and perceived that the saliva was bloody. The symptoms of purpura were well marked. The gums were spongy, and they bled freely. The tongue and the buccal mucous membrane were dotted with purple fungoid excrescences, some of which were as large as split peas, and from them blood oozed. The breath was offensive, and the appetite was impaired. The urine contained a considerable quantity of blood. Petechiæ were scattered over the thoracic and dorsal regions; and there was a large ecchymosis on one arm, and another on one of the thighs. The gallic acid was administered in five grain doses every three hours, and two compound rhubarb pills were given at bedtime. On the 20th, the purple excrescences had shrunk and ceased to bleed; the petechiæ and ecchymoses had faded; and the urine was free from blood. On the 30th, the improvement had been sustained. He was quite well again. He said that the first dose of medicine seemed to do him good. Only four scruples were taken.

CASE II. This was a more serious case, several days having elapsed from the first setting in of hæmorrhage from the nose before the patient came under my care. Master C., aged 16 years, a draper's apprentice, was seen by me on the 21st June 1853. He was greatly exhausted and blanched from epistaxis, hæmoptysis, mælena, hæmaturia, petechiæ, and ecchymoses. He was immediately ordered to take gallic acid in doses of three grains every three hours, and subsequently in five grain doses every two hours. The pil. rhei comp. was given as an aperient. The treatment was followed by most marked benefit, and before a week had elapsed, all hæmorrhage had ceased. On the 5th July, a slight recurrence of epistaxis happened,

owing to his having too soon resumed active exercise. But the bleeding was quickly checked by a few doses of the acid, and complete convalescence speedily followed.

CASE III. H. B., aged 12 years, son of an agricultural labourer, after three weeks illness from typhus, then prevalent in the village where he resided, was seized on the 16th August 1853, with hæmorrhage from the nose, gums, and bowels. The tongue was dotted with purple spots, and the back sprinkled with numerous small petechiæ. The treatment adopted was the same as in the former cases. On the 17th, hæmaturia was superadded to the other symptoms, which were very severe. On the 18th, the hæmorrhages began to abate. On the 20th, the spots on the tongue and the petechiæ had faded; the hæmorrhages had nearly stayed. On the 21st, a severe return of epistaxis occurred, from picking his nose. This was followed by alarming prostration of strength. He was ordered to take the acid every hour, and to have his nose plugged. On the 22nd, all bleeding had ceased. On the 30th, I found that there had been steady and daily improvement since last report. On the 31st, he was convalescent.

This was a severe case, as the patient's strength had been so much reduced by a previous exhausting disease; and, accordingly, it was necessary to push the acid to a considerable extent.

In all the cases the dietetic and general management were carefully attended to.

Burgh-le-Marsh, Lincolnshire, Sept. 1st, 1853.

ON FEVER IN RURAL DISTRICTS.

By W. VINER BEADLE, M.D.

IN recent numbers of the ASSOCIATION JOURNAL, I find reports of discussions at the Epidemiological Society, on different kinds of fevers. On a subject of such importance I venture to break the seal of silence, the "*sigilla grata pudico*", and to offer the following remarks on the Fevers of Rural Districts, as I have myself observed them.

My own impression is, that all the *true fevers* are closely connected with one another in origin and nature; that certain endemic even more than epidemic causes may produce these; but that, once brought into existence, they may under certain circumstances, only moderately favourable, be propagated; but that, these favouring circumstances being removed, they sink for want of their proper pabulum.

I, therefore, fully agree with the remarks of Dr. Southwood Smith, that "fever is no doubt capable of extinction. The old fevers are now unknown; and were the earth cultivated like a garden, and the people all rational beings, it would soon cease." New modified forms, it is true, may arise of the same type, and yet bear no further comparison than does our present newt to the ichthyosaurus of geologists.

On looking at the number of deaths by typhus in the Registrar-General's report for 1842, I find it to be 16,201, of which a large proportion occurred in country districts. It is to this latter class that I now more especially refer.

Amongst the circumstances which I recognise as the most favourable to the development of typhus fever, are—

1st. The *nouveau séjour* of Broussais, in places where the resident inhabitants are little affected.

2nd. (a) The want of drainage and ventilation; (b) human effluvia concentrated; (c) damp and consequently a cold and depressing neighbourhood and soil.

3rd. Though in a less degree, infection from those already affected, if *also* exposed to the same polluting influences.

Such is my impression of the origin of our fevers; and such causes must be efficiently removed ere fevers will vanish. I do not mean to speak dogmatically, since I am happy to say that my experience is comparatively limited; though even the cause of that limitation is not without a bearing on the subject. "Many years ago," remarked a gentleman to me, "fever always raged here towards the autumn; and many who were able felt great anxiety to escape at that time from the town." Now, however, since

drainage and cleanliness have been more attended to, matters have been very different.

I have often heard it remarked, that were fever capable of arising from purely local, i.e., endemic causes, it could not occur on a hilly locality, since drainage and dryness must necessarily be there. The latter, at least, was not the case in two recent instances:

1st. In a set of houses of dubious ownership and neglected state.

2nd. In another hill, a fine, open, country spot, where fever was rapidly spreading through a row of houses, when, on adopting my usual practice to inspect the drainage, I discovered the cesspool of the privy quite full and extending beneath the sitting room of the house where it commenced. Of course, its instant removal was resolved on. No fatal case occurred; and since then there have been no fresh cases.

I have found fever of adynamic character occurring in the house where I first met the collapsed stage of Asiatic cholera: in a low, damp spot, where the Chell, reeking with the filth of the town standing on it, added its baneful exhalations to the other causes.

I have seen fever in the small and low farm house, pent in by abominations. I have seen it in the butcher's house, his lower rooms reeking ankle-deep with the filth of the slaughter house. I have seen it in the cottage of the poor, with its atmosphere saturated with human pollution. I have seen it breaking out under exciting causes amongst the newly arrived, whilst those accustomed to the place withstood its baneful influences. I have seen it on the swampy banks of the Thames, Severn, and Somersetshire Avon, when neglect or want has added to the unfavourable circumstances of the case. *But I have never seen adynamic fever arise in any place where neglect had not produced malarious influence, and where more or less of exhaustion, and privation, or want and misery had not induced it.*

But, though so much has been said of the fevers of large towns, so little has been said of it in country districts, in hamlets, or villages, that the subject has been almost overlooked. "Rusticus expectat" is the old adage; and hence it is the more important for those who can observe to call to action. Celsus, indeed, quotes a saying of Asclepiades; "Asclepiades officium esse medici dixit, ut tutò, ut celeriter, ut jucundè curet". But the modern physician recognises a further duty; viz., to observe and bring his knowledge of the laws of nature to bear where it is required—not merely to cure but to prevent.

The question is not now to discuss simply whether anything or what could have saved some or other case when actually attacked. It is this: Can the cause of the whole be removed? We cannot, indeed, root out a law of nature; but we can so modify these laws that she shall yield the golden grain instead of the worthless weed.

A series of cases of fever having occurred in the hamlet of E., small in actual number, yet large as compared with the very scanty population of the place, may serve to show that the causes I have mentioned and the fever were at least coexistent.

CASE I. November 1852. John G., aged 7, was seized with mild typhus fever; but in about seven days it had so far subsided as to leave him in a state of approaching convalescence. After this, several slight cases occurred in the neighbourhood.

CASE II. February 8th. Ann G., aged 34, required attendance. She was then suffering from bronchial irritation, and it had much the appearance of a cold or influenza, save that she complained of more lassitude, feebleness and want of sleep. She had a rather quickened pulse (90).

For a few days, under the rest and the treatment adopted, she seemed to improve, though much was unfavourable to this. Seven persons slept in one small room; and the husband's earnings, though a strong young man, only amounted to 7s. per week.

February 24th. She still coughed a good deal, with a white frothy expectoration. The pulse was 90; the respirations 30; the skin hot and dry; the tongue dry; and she complained of heats and chills, with severe aching about the

limbs. The hearing was impeded; and there was general dejection of mind. The respiration was short and anxious; the skin dry and hot; the breath was offensive; and accumulation of sordes was commencing on the teeth; stupor was present, requiring her to be roused. All showed, in the absence of sound sleep, the approach of adynamic fever. The treatment adopted was gentle diaphoretic anodynes for the cough; a simple saline mixture every four hours; and a little wine in water arrowroot.

February 26th. The pulse was 120; the bowels had been moved five or six times a day. Submucous crepitation (loud mucous rhonchus) was heard all over the chest; and she expectorated white frothy mucus. In other respects she was as at the last report. The following medicines were prescribed.

Rx Pulveris ipecacuanhæ comp. gr. iv.
Camphoræ gr. i. M.

Fiat pilula urgente diarrhœa sumenda.

Rx Decocti cinchonæ flavæ Oss.
Liquor. ammon. acetat. concent. 3iv. M.

Sumat cochlearia ij 4tâ quaque horâ.

March 1st. The pulse was 120; the respirations 50. She seemed now to doze a good deal by night and day. The cough was less troublesome. She had dulness of hearing; and there had been continual wandering and muttering day and night for the last two days. She complained of no pain. The bowels were now open only twice a day; but the motions were passed almost unconsciously. She had the indescribable stupid look of adynamic fever—"Defixis oculis, animoque et corpore torpet."

She remained much in the same state, save that the general exhaustion of mind and body increased, with picking at the bedclothes, sweats about the breast and head, hiccup, more quickened and feeble pulse: and the peculiar listless expression of countenance increased, until life can hardly be said to have remained. March 15th, she died.

CASE III. Occurring at the same time, I had the case of her daughter, Mary G., aged 15.

February 24th. This day I found her suffering from symptoms of fever, though still nursing her mother's infant. The disease commenced precisely as her mother's, with weariness and bronchial cough. On being questioned, she said she felt ill; and looked most exhausted and wretched.

February 26th. The pulse was 120; the respiration 30. She was very thirsty. The tongue was becoming dry with red edges. The bowels were purged five or six times in the day and night; but she said she had no pain. The cough was troublesome; the expectoration scanty, white and frothy. The skin was dry and rather hot. Simple mild salines, with hyoscyamus and mild opiates for the diarrhœa and cough, were ordered.

March 6th. The pulse was 120, tremulous; the respiration 40. The bowels were moved five or six times a day. The head was hot; the tongue dry; the urine moderate. The abdomen, on firm pressure, was tender and rather tense.

March 8th. The respirations were 44; the pulse 112; the tongue moister; the skin dry. She did not cough so much. The tympanitis of the bowels had now become excessive. Fomentations and terebinthinate embrocations were employed; and a tube was passed *per anum*. The urine was moderate in quantity. Her motions were passed under her, partly from unconsciousness, partly from debility. Wine, arrowroot, and bark, were ordered.

I had here to contend with great inefficiency of the nurse, as she remained only during the day, leaving the sick at night almost unattended.

This case proceeded much as the last until the 12th, when with stupor, delirium, and relaxed sphincters, she died.

CASES IV and V. I have the history of two other cases, which were proceeding during a part of the above period, and occurred in a parish near the above. The individuals had come to reside "very recently" there; and each of themselves, none were affected.

They both commenced with hepatic derangement, recovering in a few days. In the other, the

gressed over the abdomen. The debility and the peculiar look of stupor increased.

On February 11th, the third day from my first seeing her, she complained of soreness and aching all over. The bowels were still rather painful, but less so. She had pain of head, languor, and lassitude, which she described as having come on gradually, accompanied by alternate chilliness and flushing. The respiration was rather short and anxious; the pulse 100, frequent, weak, and intermitting. The tongue, at first moist and slimy, was now dry and rather brown, but moistened on taking water.

February 14th. The tongue was dry and rough. Her countenance had an anxious, trembling appearance; and there was a good deal of muttering stupor. She wandered and dozed at night.

This case was much marked by imperfect crises, and an improvement would take place, to be followed by increase of the symptoms on the following day.

She continued, with gradually moderating symptoms, until March 8th, when convalescence was so far set in as to admit of her removal to her mother's. She soon finally recovered.

CASE VI. The next case that came under my notice was that of Anna T., aged 65, a relative of the G.'s, who had nursed them by day; but by night were left almost entirely to themselves, save such assistance as the wearied husband could give.

I was called to her a few days after her daughter's death on March 23rd. She was then suffering from lassitude, pain of the head, rigors and flushes, aching of the limbs, and want of sleep. Before the attack was developed, she had removed to another and distant house. In about ten days, the symptoms had so far abated, that convalescence had well commenced, which was aided by wine and bark.

CASE VII. April 16th. On further proceeding, I find the case of Anna B., aged 60. This case was comparatively mild in its character. There was no abdominal, and only slight bronchial complications; and, in about ten days, convalescence had set in.

CASE VIII. April 27th. I was sent for to Harriet P. She had at different times been attending on those suffering from fever, and for the last fortnight had been very unwell, though still getting about a little. For the last two days, she had felt languor and lassitude, with alternate flushings and chills. She could not rise up, from giddiness and feebleness. The pain of the head was severe; she "maundered" a good deal, but could not sleep at night. There was tenderness at the epigastrium and the right hypochondrium. The pulse was 110. She had a trying bronchial cough.

May 2nd. She was in some respects improved; still, however, she did not sleep at night, and had not for many nights past. If she dozed, she says, "for a bit", she woke up, and her head began to wander; but it wandered last night less. The pulse was 110. As her tongue was less dry, and also the skin, I now ordered her wine and bark, etc.

May 11th. The pulse was 90; the tongue clean. She slept moderately well. She was considered convalescent, except that she was very feeble both in body and mind.

CASE IX. April 30th. Susan B., aged 70, had been ill a few days. The pulse was 100 while lying down. She had had great sense of feebleness and exhaustion, pains of the limbs with aching, inability to sleep at night, and "wandering of the head". On dropping off to sleep at night, her head wandered, and she began talking. Her skin was hot, and rather dry; the tongue moderate, but coated; and she had troublesome bronchial irritation.

This case followed a medium course, and by the 10th she was convalescent.

CASE X. May 13th. Anne S. This case was of a mild character, and convalescence commenced in about a week. It offered no severe complications.

CASE XI. June 5th. George Y., aged 50, came under my care. He was of a feeble habit. He had been recently

reduced in circumstances to the rank of a labourer, and was much depressed in mind.

I had accidentally seen him a few days before, when he was suffering from diarrhoea, with a coated tongue, and some slight soreness over the umbilicus and abdomen. I prescribed a few doses of hydrargyrum cum creta, and compound soap pills, with camphor, for the diarrhoea. Under this, he improved in that respect.

June 10th. The disease now assumed the form of fever. He had been wandering all night, though perfectly sensible on being roused; but would relapse almost immediately. He lay on his back, and did not complain of pain. The signs of exhaustion were very evident in his face and movements. The tongue was red (scarlet) and dry; the skin hot, but clammy; the pulse 80. He had been delirious at intervals for the last two or three days. The head, however, was not hot. The urine was moderate. He had had offensive motions on the previous day. His memory quite failed. Wine and arrow-root were given, and decoction of bark, with acetate of ammonia; also four grains of hydrargyrum cum creta at bed time. Chalk mixture with opium and catechu was prescribed for the diarrhoea. Turpentine and opium embrocations were applied over the abdomen.

June 14th. The pulse was 88; the tongue red and dry. He dozed off at intervals, and, on waking up, wandered. The skin was hot, the head cool, the face flushed. There was some tenderness in the abdomen, but no tympanitis. He had five motions on the previous day. He talked sensibly at intervals. He sighed often, and lay on his back. He was not very thirsty, but occasionally called for toast and water. Hiccup was now come on.

June 19th. Pulse 80. He was purged three or four times yesterday, and twice in the night. The tongue was red, and dry, if not moistened. The eyes were half closed, showing the lower part of the albuginea. He dozed and wandered, but, when roused, he answered rationally. The bark and ammonia were repeated.

R Pulveris ipecac. comp.,
Extracti hyoscyami, aa gr. ij.
Camphore gr. ss. M.

Fiat pilula urgente diarrhoea sumenda.

The turpentine embrocations to the abdomen were continued; wine and arrow root were ordered.

June 24th. He remained much in the same state, with dorsal decubitus. Subsultus tendinum and hiccup were nearly constant. His urine and motions were often passed unconsciously. There was evidently tenderness at the lower part of the abdomen; but his want of sensibility to external impressions rendered it difficult to determine.

June 29th. Pulse 100. He was more exhausted. His mind dwelt, as it had all along, on his change of circumstances. He had never felt the slightest care as to recovery or death. Hiccup and subsultus continued, and he fancied he saw something behind the curtain—the result evidently of the delirium of exhaustion.

July 7th. He died this day.

I now come to the last case of the series.

CASE XII. Anne P., aged 23, was a young person of moderate health, and had a child six months old at the breast. She had for a few days assisted in nursing the previous case.

June 22nd. She was in bed. The pulse was 110; the tongue white, and much coated. She had not felt well for a week, but had been low and depressed in mind, with aching of the head, back, and limbs, and weariness, chills, and flushes. On the preceding evening, she had been sick, and had vomited green fluid. The skin was moist, the head cool, the state of urine and bowels moderate. The head was very painful. The following medicine was prescribed:

R Hydrargyri cum creta gr. iv.
Pulveri antim. com. gr. i. M.

Fiat pulvis 6tis horis sumendus. Mitte iv.

A saline mixture was given every four hours.

June 25th. The pulse was 100; the tongue more coated, but moist; the head hotter, but less painful. During the

night, she had been wandering and dozing. She was more thirsty. The skin was hot, but not burning; the pupils were rather dilated. The bowels and urine were moderate. Her countenance had now assumed the stupified look of fever.

June 30th. The pulse was 90. She slept moderately, and the tongue was cleaner. She dozed at intervals for a short time, but, on waking up, her head seemed to wander. The improvement in the pulse, tongue, and sleep, with the moist skin, and the wandering of exhaustion on waking up, showed the time for the exhibition of wine and tonics; but her age and constitution warranted in delaying them until now.

July 6th. She was improved, and able to sit up a little, though still very exhausted and feeble. The child had been weaned at first.

The above extracts refer to the history of the cases. Their peculiar complications appear to have been modified by season and atmospheric causes. Thus the two G.s had severe bronchial complication from the very first; bronchitis and colds being very prevalent at that time. The enteric mucous membranes, however, soon became affected; and, in the case of the younger one, death followed the accession of tympanitis. Cases vii, viii, and ix, began also in the same manner. Cerebral affections supervened. In the two cases I refer to as instances of "*nouveau séjour*", fever was ushered in by hepatic disturbances, and the abdominal mucous membranes did not become prominently affected. In the case of George Y. (No. xi), the constitution of the season had by this time changed, and irritation of the abdominal mucous membranes, ushered in by diarrhoea, continued more or less throughout. In the case of Anne P. (No. xii), the cerebral implications were most manifest.

The treatment was adapted as far as possible to the circumstances. The bronchial complications were treated with diaphoretics and mild anodynes, combined, if commencing early, with a slight nauseant; the diarrhoea, by a smooth farinaceous diet, Dover's powder, and camphor, with small occasional doses of hydrargyrum cum creta, and especially external rubefacients. Wine, bark, etc., were given according to the strength and stage.

Thus far had the cases proceeded, when I called attention to the state of the place; for the occurrence of ten cases of fever in a population of fifty or sixty persons demanded inquiry.

On June 25th, in company with the Rev. —, a neighbouring clergyman, and Mr. —, I visited several parts of E., with a view to examine the state of the drainage, general cleanliness, and sanitary appliances of the place.

1st. We examined the cottages opposite the house of Mr. J. Y. Opposite to them, in front of Mr. J. Y.'s house, was a large dung heap, in course of turning or removal. On one side was a pool of stagnant water; near it a heap of filth, flung out from the different houses in front of the dwelling; and, at a short distance, a privy, draining its contents into a ditch, and carried off as the rain might avail.

2nd. We examined the houses called H—'s houses. These are six or eight in number, solidly built, having formerly been barns, but utterly destitute of proper drainage. One row of them seemed to be worse than the other. Stables and pigsties surrounded them; and close by, the *cabinet d'aisance*, a miserable place, visible to all, without a door, and unclosed, protruded its contents into the open air. The women, being unable to go there for want of privacy, made use of utensils up stairs, and emptied these into the open gutters, which slowly dribbled it into a shallow ditch.

One of the inhabitants, a woman, described the stench in the morning as being "dreadful". She would not stay there, but could not help herself. The water in the well was brackish.

The other row was much in the same state. The ordure from all these houses, in which about forty persons reside, was discharged in the midst of them all; to say nothing of pigs and horses. No under drainage whatever seemed provided. Three cases of fever occurred here in one house; the nurse also had an attack.

3rd. We examined the farm house belonging to Mr. —, and recently his residence. A ditch close behind the house, reeking with filth, first attracted notice. Into this the general refuse of the house was discharged, and left to escape or putrify as it best might. The *cabinet d'aisance* was in a bad condition, open and foetid. In front of the house was the cattle yard, in a state of sad neglect, with an overwhelming stench; and there was a deep bricked pit, intended to hold the pigwash, filled with a foetid fluid, loaded with animalculæ and insects, and giving out bubbles of gas. These altogether shewed a state of things in the highest degree detrimental, and induced the Rev. — to exclaim that it "breathed out typhus". The entire place appeared the seat of ignorance, neglect, ruin, and filth, though belonging to the chief proprietor. The back of this place nearly adjoined the last named row of houses. This house was much surrounded with trees, which, preventing a free current of air, greatly increased the malarious effect.

4th. We next examined the houses occupied by —. They presented a ruinous condition. A large stagnant pool was in front. The necessary conveniences were in a bad state; and heaps of filth and household refuse lay near the doors. One case of fever occurred here.

5th. The next place examined was a row of cottages near Mr. —'s, belonging to Mr. —, as I was informed. They were low thatched cottages. In one of them fever was then present. One privy served them all; and this was quite open and offensive. The ditch into which it drained was choked up, and the contents regurgitated into some of the houses, producing a disgusting stench. The whole was closed up by trees, which of course prevented a free supply of air, and increased the mischief.

The hamlet, though large, consisting of some thousand acres, has yet but very few inhabitants; and the above description refers only to those places where fever actually occurred. I have referred to them only to take cause and effect together. In some parts they were much worse. These lay in the main or central parts of the place; and, though a few new cottages had been erected, yet many of the remainder consisted of merely one-roomed mud cabins, like those of squatters, seated in a wild uncultivated part, called the "Furzens", and having no available road, were almost unknown.

But the cause of this waste of life and land, lies perhaps still deeper. The tenure of the property is for the most part lifehold, held under ecclesiastical corporations. The consequence is, that no one having a direct interest in its improvement, it remains much as it was centuries ago: whilst some of the farms have so often injured their occupants, that even now they lie unlet. Some of the adjoining parishes, where the tenure is different, present a contrast. There all looks improvement; here decay. There the proprietors reside and the tenants live; here the real proprietors care neither for flock nor fleece; the semi-proprietors fly off daunted from the spot; the tenants, with large, though low-rented farms, are often unsuccessful; and the *adscriptæ glebæ* pine on the humblest wages, or die of fever.

The soil is very stiff and retentive of moisture, being for the most part unenclosed; the ditches even are few; therefore the many hundreds of thousands of gallons of water which annually fall on each acre, are mainly carried off by the surface. The atmosphere being thus loaded with moisture, has a temperature perceptibly lower than that of the surrounding districts.

Excessive dampness of the soil is therefore evidently one great cause of disease. It is pitiable to see the water standing in the furrows during the rainy season, without a hope of escape; to see the mountainous looking ridges with their tops peering up between, or the little starvelings of corn growing on their lower sides, as though bounteous nature was here rearing stepsons. But worst of all is it to see the roads in such a district. The main one is bad to the extreme; the off ones are not in existence, but the waggon horse follows his perilous track, floundering to his knees in mud or ruts, perhaps for miles, like a ship in a storm.

It is of no use to talk with those who contrive to exist under such circumstances. "Us lives as long as our neighbours, and we pays our way; and I don't see any use in what you talk of," was the reply of one magnate to my remarks, though severe disease was so prevalent in his community. But I submit it to the judgment of the profession, whether there is not a close connexion between the two states? Is there no connexion between such tenures and such a state of things, that whilst much around is flourishing, here is neglect or decay; and that within sight of, and only a few bowshots distant from, one of our towns of luxury and ease, and whose practitioners boast of their ignorance of fever?

I should much like to know the experience of others, as to the state of parishes under such tenure; since, if such are its effects elsewhere, it is high time that its days were numbered. And it is no more political to discuss such questions, than it is polemical to investigate the educational neglect of such and similar localities.

There doubtless is a connexion, since pathology points out that derangement of function always results from some change, either in the structure or composition of the tissue itself, or from some corresponding vitiation in its proper stimuli. Under such conditions, the vital tonic of all is diminished, and the typhoid ferment soon vitiates the fluids.

The place lies on the *lias*, consisting of *lias* proper, blue marl, and clay. Under this lies the saliniferous marl of the new red sandstone formations, and which crop up at not distant places. The saliniferous current seemingly takes a southern direction, passing through Droitwich, Tewkesbury, Cheltenham, Stroud, etc.; at all which places saliniferous springs are to be found, occasionally impregnated with sulphur.

It is a good dark and deep soil of vegetable mould, mingled with the decomposed *lias*, and capable of high cultivation; but it is evident, from the nature of its underlying formations, that deep and thorough drainage is the only way to render it available for agriculture, or properly habitable for man.

But I fear that, generally, the condition of the rural population will not bear inspection; and that our rank as a nation in the social scale must suffer, if means are not taken for its improvement. Unfortunately, however, enlightenment has only to a very limited extent pervaded the agricultural mind; and its *Epicuri de grege porci* still slumber on.

Tewkesbury, Gloucestershire, August 25th, 1853.

ON THE TREATMENT OF CHRONIC AND OTHER DISEASES BY BATHS OF COMPRESSED AIR.

By THOMAS POYSER, Esq., F.R.C.S.Eng.

As I am not aware that the treatment of diseases by baths of compressed air, now practised so extensively and successfully at Lyons, has been described in this or the other medical journals, a short account of it may not be unacceptable. Under this impression, I subjoin a translation I have made of a small tract, recently published by Dr. Milliet (descriptive of the method of constructing and using these baths), which was placed in my hands a week or two ago, by Dr. Strange, of Naples. This gentleman, who is now in this country, visited Lyons on his way, and made particular inquiries of the medical practitioners there, as to the extent to which this treatment is carried, and the success attending it.

The result of Dr. Strange's investigation led him to form a very high opinion of the great advantages of this practice, in the management of many obstinate and intractable diseases. From his testimony, and from a communication with which I have been favoured by Dr. Petrequin, I am induced to think that it merits the attention of medical men

in this country. Dr. Pétrequin was for many years principal surgeon to the Hôtel Dieu of Lyons, and is now in extensive practice in that city. He is also favourably known by his researches on the salts of manganese in combination with steel; and by his introduction of these valuable remedies into medical practice.

Dr. Pétrequin has no interest whatever in these baths: that is, he is neither the inventor, nor does he derive any emolument from them; but he has frequently witnessed their effects, and the following short statement is chiefly the result of his own experience. He believes that the bath acts on the system in two ways: 1. By its mechanical pressure. 2. Chemically, by infusing into the system, *i. e.* the blood, a larger quantity of oxygen than it would otherwise receive.

1. The effect of pressure on the surface of the body is, to drive the blood into the interior parts, and thereby give the vessels time to recover their tone: in this way inflammatory eruptions of the skin, and ophthalmia, are relieved or removed. Dr. P. has seen patients go into the bath with the conjunctiva quite red, and in a short time come out perfectly pale. He does not state that this effect is always permanent; but, by repeating the process, time is given for the vessels to recover themselves, and the disease is effectually removed. Again, pressure acts on the absorbent system in a remarkable manner, as is frequently witnessed in the absorption of external tumours; but it is only by means of the air-bath that this pressure can be applied to the lungs and air-tubes. Dr. Pétrequin believes that by means of this bath, we can cause absorption of the lymph or mucus which is effused in cases of bronchitis, either on the surface of the mucous membrane, or between this and the lungs; and which thereby prevents the entrance of oxygen into the blood. Dr. Pétrequin goes so far as to assert, that this pressure will cause the absorption of tuberculous deposits in the air-cells; but he does not state that he has witnessed any positive proof of this having been accomplished.

2. Dr. Pétrequin believes that the bath acts favourably in many diseases on chemical principles, by infusing a larger quantity of oxygen into the blood than it would otherwise receive. The fall of the pulse, and the diminution in the number of respirations, soon after entering the bath, are remarkable proofs of the correctness of this theory: for if at each inspiration a third more of atmospheric air can be introduced into the lungs, it is clear that the inspirations may be diminished by one third, and the same quantity of air be still received. As the number of pulsations bears in general a certain proportion to the number of respirations (say about four to one), it is evident that, as these diminish in frequency, the pulsations will do the same.

M. Pétrequin has seen the pulse fall in a short time from 120 to 80, or less. On these two principles of mechanical pressure and increased supply of oxygen, the compressed air-bath has been used with advantage in asthma, humid or spasmodic, but more particularly in the former; in emphysema, and various other chronic affections of the lungs and air-passages; in deafness dependent on thickening of the membrane of the ear: in various affections of the uterine system, amenorrhœa, chlorosis, chronic inflammations, etc., etc.; in enlargement of the liver and spleen, and other visceral diseases; also in dyspepsia, hypochondriasis, and in almost every kind of chronic disease.

Having made this short statement of the high estimation in which these baths are held by eminent and disinterested physicians who have witnessed their effects, I now proceed to give the proprietor's account of the method of constructing and using them.

THE MEDICO-PNEUMATIC ESTABLISHMENT OF AIR-BATHS AT LYONS. BY DR. MILLIET.

This establishment, which I opened at Lyons last year, was erected under the direction and advice of the inventor himself, M. Tabarié. I thought I could not do better than to act up to his principles, his process, and method.

The physical phenomenon which characterises this process is the augmentation of atmospheric pressure, and de-

depends on that property of the air, its *compressibility*; hence it results that in pumping the air in, we can retain in the same space a quantity infinitely greater than in the ordinary state. It is this which happens in the air-bath. To a volume of the confined atmosphere, which cannot vary, we increase successively the quantity of air which it contains; the retained air tries to escape, and then this pressure acts on a double glass tube, in the form of V, half filled with mercury; and influences, from its force, the ascent in the mercury in the opposite branch. This mercurial tube is the guide and test of the pressure, *i. e.*, of the quantity of air contained in a given volume; it is, in fact, the manometer.

The air that is collected in this apparatus is the ordinary atmospheric air; it undergoes no change; its temperature is that of the external air in temperate seasons of the year; but in extreme seasons it is cooled or warmed, in such manner that the patient neither experiences the sensation of heat nor cold.

The apparatuses are hollow spheroids of wrought iron, of various sizes. I have had three constructed of different dimensions. Two are intended to contain one person, or two at the most. They are about five feet in diameter, and ten high. The third is a collective apparatus, which will contain ten or twelve persons at a time. It is about ten feet in diameter, and has a vestibule or porch, by which any one may enter or leave it, without disturbing the progress of the operation. In the small apparatus, light is admitted by an opening about thirty-three inches long and eighteen wide. The collective apparatus is lighted by four windows, of about five feet high and one and a half wide. The doors of the small apparatus are about five feet high and two wide, and are made of wrought iron; and so thick as to resist a pressure two or three times greater than the maximum one. The doors of the large apparatus are of cast iron, about an inch thick. Their dimensions are, in height about six feet, and in width two and a half. The interior of these apparatuses is lined with silk, to prevent the disagreeable contact of the iron. The inferior segment of the spheroid is carpeted, and the whole has the appearance and comfort of a parlour. The air is pumped in through a tube placed under the carpet, and in the centre of the upper dome, is placed a tube for the escape of the excess of air, and of that vitiated by respiration. The pumps have a diameter sufficient to furnish hourly in the small apparatus 45,000 litres (upwards of 10,000 gallons) of air. In the large apparatus there is the same disposal of the conduits; but the pump which supplies it furnishes a greatly increased quantity of air, and consequently gives an enormous renewal of it. The pumps are worked by steam engines, one of three horse power, the other of ten. The mercurial manometer regulates and directs the pressure. The least pressure that I employ is about fourteen inches of a column of mercury, or nearly half an atmosphere. The greatest pressure is about twenty inches, or two-thirds of an atmosphere. The duration of each sitting or bath is two hours.

The first half hour is occupied in raising the pressure to the desired height; the next hour, the pressure is continued the same; and the last half hour is employed in reducing it to its ordinary state. This slowness in the transitions is the fundamental law in the air-bath: unless the change or transition be well regulated, the air-bath will do harm instead of good. It is certain that, if this law had been known in the submarine excursions with the diving-bell, many of the injuries from it would have been avoided.

During the whole sitting, an assistant directs the elevation, duration, and decline of the pressure. He does not quit his post for an instant; so that the patient may obtain from him, at any moment, any assistance or change he may require.

The air-pumps and engines are superintended and directed by any engineer during the whole time they are employed. The patient, while in the bath, can read or talk at his ease; and, with the exception of a slight pressure on the ears (a sensation which usually goes off on swallowing a little of the saliva), experiences no feeling which can

make him think he is not in, and breathing the ordinary atmospheric air.

These structures or baths, to which we have given the name of "bells", from their resemblance to the diving-bell, are placed in two elegant cases, separated from each other by a small entrance hall. From the interior of the apparatus, the view extends over the plains of Dauphiny, between the Rhone and the Alps. A library and the journals are at the disposal of patients who use these baths.

It is in affections of the organs of respiration, and of the circulation, that the compressed air-baths exert their special influence, and effect a new and peculiar mode of treatment. I do not intend here to show or trace the extent of their influence, leaving that to experience, which can alone settle it. I can, however, say with truth, that, in all the chronic diseases of respiration which I have treated, my success has exceeded my expectation. In fact, we may conceive that, in diseases of the lungs, its action is direct, whether the compressed air act by assisting sanguification, or by regulating and harmonizing the circulation. One of the most remarkable phenomena occasioned by the increase of atmospheric pressure, is the retardation of the circulation; in the majority of cases, the pulse is reduced from 100 to 45, or even less, in the minute. In four or five cases of inflammatory fever which I have treated in this way, the fever ceased after the first sitting; and in the case of my aunt, aged 74, the pulse, which was 120, fell to 60, and so continued. The explanation of this reduction of the circulation appears to me very simple. Submitted to a pressure greater than that of the atmosphere, the lungs find in an equal volume a much increased quantity of air. Respiration is rendered easy; the movements of expiration and inspiration less frequent to obtain the same result—the alimantation of the lungs. On the other hand, we know that, if we voluntarily quicken the breathing, the frequency of the pulse is increased: hence, if we place ourselves in such a situation that the number of inspirations be less, the frequency of the circulation will in the same proportion be diminished. This is precisely the physiological effect on the lungs, under the influence of the compressed air-bath.

The slowness of the circulation is not constant. It sometimes happens that it is increased. This effect is produced when the respiration is straightened or impeded; the compressed air restores it to its healthy state; and the acceleration of the circulation is the result of this return to the normal condition. It continues, when it is produced, only during the time of the sitting.

One of the effects of the employment of compressed air is the increase of secretion and of absorption. These two functions appear to depend on the increased activity of the venous circulation, which is always more active and complete while our organisation is submitted to a more elevated pressure.

In the majority of chronic affections of the respiration, the compressed air acts at first as a sedative; it relieves the symptoms, and the patient feels better; but generally, towards the twelfth or fifteenth bath, he is not so well, and experiences some return of the symptoms. This irritation may continue two or three days, but gives way to the employment of the same means. It is difficult to assign a limit to the duration of this mode of treatment; the mean time is about thirty or forty baths.

To give an account of the phenomena which present themselves in the treatment of chronic affections of the air passages, it would be necessary to enumerate them all successively; and they vary with the different cases. I have in no instance seen the employment of this therapeutic measure occasion any ill effect, or induce the patient to renounce it. All that I have treated have borne it without the least inconvenience. With regard to the principle of this healing influence, exercised in conditions so varied and so extensive, it connects itself with the powerful modification which the system of air-baths may introduce into the atmospheric fluid, in its various physical, dynamical, and chemical relations. The air-baths may also generally be united with any other medical or hygienic treatment.

They assist in the most remarkable manner the development of the constitution in infancy and youth, and render more firm the general health.

It is not our object to describe the various maladies which may be treated by the air-bath. We can, however, affirm that it may be used with success in all the chronic diseases of the air-passages, from the most simple catarrh to the most complicated pulmonary emphysema; and its curative influence is well marked. In the early stages even of pulmonary consumption, it may be advantageously employed. In some cases of this disease which I have treated, and which have been witnessed by Professor Bouisson of Montpellier, and by Dr. Devay, the success has fully justified our expectations.

Considered in a philosophical point of view, the compressed air-bath may be regarded as the subjugation of our atmosphere, by which we can increase or diminish the pressure which establishes the equilibrium of our organisation. In fact, we know that, in decreasing the surrounding atmospheric pressure, this equilibrium is broken, and sanguineous extravasations take place. The phenomena which present themselves in aërostatic ascensions are opposed to those which take place under the influence of compressed air, by which equilibration is kept up in all the functions.

Besides the physical condition of pressure, we can, through the aid of the same apparatus, convey chemical modifications to the atmosphere, and diminish or augment the proportion of its different gases. In one word, we can so far modify the atmosphere with which the Creator has surrounded us, as to render it more amenable to our wants and necessities. Regarded in this double point of view, this discovery marks a new era, and is a blessing to mankind. I feel myself honoured in devoting my efforts wholly to this undertaking—so full of hopes and promises for the future. To develop the beneficial effects of the air-baths, and to render the employment of them more general, and thus to multiply their advantages, will be my hope, and the end and ambition of my whole medical career.

Wirksworth, August 29th, 1853.

ON THE PATHOLOGY OF PHTHISIS.

By CORNELIUS BLACK, M.D.

As many members of the medical profession have requested from me an abstract of my researches into the pathology of pulmonary consumption—as several of my reviewers have expressed a desire for an early completion of my work “On the Pathology of the Bronchio-Pulmonary Mucous Membrane”—and as the immense chemical and microscopical labour necessary for the full and perfect investigation of the numerous data on which I proceed preclude the possibility of an immediate publication of part II, I may be permitted, in the meantime, to indicate some of the results at which I have arrived.

Assuming that the first substantive deflection from the standard of perfect health's in a deficient vitality of the formative elements of the blood, the origin, manifestation, and progress of pulmonary consumption are briefly enunciated in the following propositions:—

- I. That pulmonary consumption observes three stages.
 - a. The stage of Local Predisposition.
 - b. The stage of Deposition.
 - c. The stage of Germination.

II. That the stage of local predisposition is characterised by more or less excess of blood in the pulmonary capillaries of the affected part; that it corresponds to the first pathological condition of bronchitis and of pulmonary cellulitis; that the degree and extent of this local predisposition vary considerably; and that the resulting phenomena bear a proportionate ratio in point of severity and appreciability.

III. That the stage of deposition is attended by increased exudation from the pulmonary capillaries; that this exudation is incapable of entering into structural relation with the pulmonary tissues; that it leads to a more or less rapid thickening of the basement structure of the bronchio-pul-

monary membrane; that it likewise accumulates in the intervacular and intercellular spaces; and that the pulmonary tissue is thereby more or less consolidated.

IV. That the first appreciable sign of the stage of germination is a shedding of the epithelium of the affected portion of lung; that this epithelium does not attain perfect mucus-cell development; that in cases in which the deposition has been slow, it (the epithelium) is more granular than are properly developed mucus-cells; but that the epithelium is still more granular in cases of rapid tubercular deposition.

V. That the epithelium thus shed is not, in progressive tubercular disease, replaced; that, so long as a particle of healthy basement structure exists, the nuclear points of that structure attempt to replace such lost epithelium; but that this properly vitalised basement structure failing before such attempt at the restoration of the epithelium has succeeded, the latter is now cast off in the form of basement patches, which show, here and there, a germinating point.

VI. That the tubercular deposit undergoes, during germination, more or less development into cells; that this growth constitutes the “softening” of authors; that it takes place contemporaneously throughout each isolated and individual mass of tubercle; that it, therefore, does not first commence at either the centre or circumference of the exudation; but that it proceeds more rapidly at the circumference, because at this point the conditions of cell growth are more abundant than at the centre. At the circumference, therefore, plastic and pus-cells abound; at the centre, exudation-cells.

VII. That in the cheesy looking portions of tuberculous sputum there are very frequently, indeed, portions of nerve tubes, and occasionally of lymphatic vessels and of the minute bronchi; that, in other portions of such sputum, plates of cholesterine, the colouring matter of the bile, cystine, and urate of ammonia are occasionally seen by the microscope.

VIII. That the microscopic appearance of the nerve-tubes thus expelled shows that the nerves do not terminate in loops upon the pulmonary mucous membrane, but in bulbous expansions, to be hereafter depicted.

IX. That the foregoing observations show pulmonary consumption to consist in abnormal nutrition, and to be essentially analogous, in its steps, to inflammation; but that the term “inflammation” would be inapplicable to it, inasmuch as it fails to explain the cause of the deficient vitality of the blood-plasma, which constitutes the essential nature of tubercle.

Chesterfield, August 29th, 1853.

CASE OF DOUBTFUL SEX.

By JAMES M. CHURCHILL, Esq.

MR. MANN's case of doubtful sex, published at p. 720 of the ASSOCIATION JOURNAL for August 19th, induces me to give another.

I was requested to see a young person, aged twelve years, who had been brought up as a female. From the outward appearance, I should not have known that the individual was not a female. I found a penis in miniature, with distinct glans, corona glandis, and præputium, as in Mr. Mann's case; but the urethra was situated just as it commonly is in the female, and the vulva was also exactly in appearance that of a female of similar age. I delayed further investigation for a year, at the expiration of which period I found a scrotum on the right side, containing a testicle; and, six months afterwards, another testicle descended on the opposite side. Soon after this, he lost his parents, and went to London, where the male dress was adopted. He had been sorely perplexed to determine which trade would be the least likely to expose his infirmity; but at last he adopted that of a confectioner. This may be a useful hint to others of doubtful sex.

Colchester, Sep. 2nd, 1853.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

CHLOROFORM IN HOOPING-COUGH.

Dr. FLEETWOOD CHURCHILL, of Dublin, in the *Monthly Journal of Medical Science* for August, addresses a letter to Professor Simpson upon the use of chloroform in whooping-cough. The following is an extract:—

You are aware that, in my work on *Diseases of Children*, published three years ago, I mentioned that I had tried the inhalation of sulphuric ether in whooping-cough with great benefit in about a dozen cases. After your application of chloroform for producing similar results, I tried it in whooping-cough with equal benefit in at least as many more cases. But I always found two obstacles to its full and fair administration to young children. In the first place, you cannot get them to give notice of the approach of a cough, so as to enable you to have the chloroform in readiness before the paroxysm commences, and when the paroxysm has commenced, as it consists of eight or ten expirations to one inspiration, the chloroform will have evaporated before it has been fairly inhaled. And secondly, young children have such a horror of anything near their mouths during the cough, that they will resist your trying the chloroform as much as possible, until they themselves have felt its power in relieving the cough. Owing to these two causes, and perhaps also to a want of clever management on the part of the mother, we shall find it fail altogether, occasionally, and in other cases only partially succeed; but when it is fairly tried, as I have already remarked, its use is most beneficial.

I have all along felt very anxious to try it in young persons of twelve or fourteen years old and upwards, because with them we can avoid the two difficulties I have mentioned; but it was not until this year that I had an opportunity. Four cases have come under my care, and the results are as follows:—

CASE I. Miss D., aged 16, had had whooping-cough a month, when I prescribed chloroform. There was no complication, but the whooping was frequent, especially during the night. She was directed to have the chloroform in readiness, and to use it with each paroxysm, and she assures me that in two days the whoop ceased. The cough lasted a few days longer, but it was slight and not in kinks.

CASE II. Miss A., aged 20, had been ill with whooping-cough for about three weeks, when I prescribed chloroform. The cough was not very frequent, and there was no complication. Two days sufficed with her also to relieve her of the whoop; and the slight cough which remained subsided after a week or ten days.

In these two cases the effect seemed quite magical; both had the disease well marked, and the families of both were prepared for a disease of two or three months' duration, as was the case with their other children.

CASE III. Miss B., aged 18, took the complaint from her brother whom I was attending, and I therefore had an opportunity of giving chloroform from the commencement. She did not whoop any time she coughed; but she was directed to use chloroform whenever she felt the tickling in the larynx, without waiting for a cough. By doing so, she found that she could postpone the cough indefinitely, and if it came on suddenly, the use of the chloroform instantly suspended it. About three weeks elapsed before the tendency to cough and the use of chloroform ceased; but during that time she lost neither appetite nor flesh. She slept well, was in good spirits, and able to follow her usual occupation. She went to the country quite well.

CASE IV. Master B., aged 16, the brother of the last case, when I first saw him, had the disease most severely. The kinks were violent and prolonged, the efforts to inspire, and the whoop excessive; it really seemed as if he would be choked or that something would give way. He had lost appetite, sleep, and spirits, although the disease had not lasted three weeks when I saw him. I tried chloroform with him, and it at once reduced the number of paroxysms one half, but without mitigating them when they did occur. He took the chloroform very freely, and as he was not readily influenced by it, the quantity seemed to give him a headache, and he begged to be allowed to suspend its use. I the more willingly agreed to this, as he had a severe attack of diarrhoea. I therefore substituted two drops of prussic acid (Dub. Pharm.) with two or three of black drops three times a day. The improvement,

begun under chloroform, continued under this treatment, and at the end of five weeks from the beginning of the disease the cough had ceased, and he had regained rest, spirits, and flesh.

Although this last case cannot be regarded as cured by chloroform, the paroxysms were first diminished by it, and I have no doubt that it contributed to the beneficial effect of the prussic acid. The three first cases are, I think, very conclusive as to its value; and, if further experience confirms them, we shall possess a means of cutting short this disease in adults, who, when attacked, suffer so severely.

CONSTIPATION AND FÆCAL OBSTRUCTION.

Dr. CHRISTISON, of Edinburgh, publishes the following very interesting extract from a Clinical Lecture, in the *Monthly Journal of Medical Science* for September, p. 252.

The occurrence of a singular case of obstruction of the intestines from accumulation of feces, induces me to make a few remarks on a subject which, though it may appear trite to you, is really one of great importance, and deserving your early consideration as professional men.

When you enter presently on medical practice, you will probably be surprised, as I was in the same conjuncture, at the exceeding frequency of the habit of constipation among persons in easy circumstances in this country. At what period this liability was first observed, and in what cause or causes it originates, are questions which at present I cannot pretend to discuss. But there can be no doubt of the fact, that the infirmity of constipation is extremely common; and likewise, that it often exists without any other constitutional infirmity or special disease, except what is clearly referable to an undue neglect of the proper correctives. Accordingly, by due attention to the use of fit laxatives, thousands of persons of both sexes in the middle and upper walks of life contrive to live as long, as healthily, and, except for the plague of constantly taking physic, as happily, as their more fortunate neighbours.

Prior to the publication of the treatise on purgative medicines by the late Dr. Hamilton, senior, of this city, there is much reason to believe that the use of laxatives was greatly neglected in such circumstances. But after the appearance of that work in 1818, an important reformation took place in this respect. Indeed, as in all important reforms in medicine, physicians and their patients soon ran to the opposite extreme; and ere long as much harm was done by the abuse of aperient and purgative medicines as previously by the neglect of them. At present it may be confidently said that both errors have been materially corrected. No one denies the great importance and frequent necessity of cathartics of all kinds, from the mildest laxatives up to the most drastic purgatives. And on the other hand, most physicians are now satisfied that gentle aperients are sufficient in numberless circumstances, in which formerly powerful cathartics were the fashion. Among other observations, too, it has been found that the regular daily use, even of mild laxatives, is not so indispensable a precaution for preserving the health of those of a permanently costive habit, as has been supposed by many physicians, and especially by many people themselves who were afflicted with that habit. For example, there can be no doubt, that for most people, who, though otherwise healthy, require constantly to use aperients, it is better to open the bowels in this way once every other day only, than daily by a daily dose. Some, especially those who live freely, require a more frequent dose. But in general you will find an effectual aperient every other day amply sufficient for those who do not augment the bulk of the alvine discharges by superfluous nourishment; and by that system they are much more likely to escape the risk of an irritable or congested state of the intestines arising, which we know to be the frequent consequence of the habitual excessive use of cathartics, even of a mild kind.

Some persons, however, have such a horror of aperient medicines, that they cannot persuade themselves to take one oftener than twice a week, or once a week only. And, nevertheless, you will sometimes see them keep their health, and maintain their bodily comfort. But, for the most part, you will find it a sound general rule, to insist with such people on a more liberal use of aperients; and the great variety we now possess of convenient compound aperients, will enable you to find some one suitable to the constitution of any body, and reconcilable with almost any prejudices.

There are others, whose prejudices are unconquerable, and who will not take laxatives at all, though their bowels do not move of themselves above once a week, if even so often. And it is right you should be aware that this apparently most natural and preposterous habit is not of necessity, and

cases, a habit injurious to health. You will occasionally meet with men so singularly constituted, that they enjoy sound health upon a weekly stool. And, indeed, all perhaps that can be said of them is, that they are rather to be envied by their fellow-creatures, for an endowment which must be frequently found very convenient. But such people sometimes get into difficulties. About two years ago, a gentleman from Wigtonshire, a landed proprietor, attached to agricultural pursuits, and therefore never without free air and exercise, consulted me about a serious difference he had with his medical advisers in the country. Having recently recovered under their care from a severe pneumonia, they made the not unreasonable stipulation, when they ceased to attend him, that he should take a laxative every three days, to correct a constipated habit. To this he demurred, on the very natural ground, that, until his late illness, he had enjoyed excellent health for sixty years, although his bowels had been habitually moved all his life only once a fortnight. This gentleman had made a journey of a hundred and twenty miles, for no other reason than to get the question between him and his physicians settled by some competent authority in therapeutics; and, in referring to me for the purpose, he mentioned, for my further guidance, that a neighbouring gentleman of his acquaintance, of the age of seventy, had told him that he too had immemorably evacuated his bowels only every alternate Sunday, without being able to recollect having ever had an illness. It was scarcely to be wondered at that their common experience half inclined them to think that their constitution was the natural and patriarchal one.

Our hospital patient seems to have been of the same opinion with these elderly agriculturists. Like them he has had some experience of life, being now 74. Like them, too, he has enjoyed singularly good health, being a surprisingly fresh looking man for his years, notwithstanding that he had passed through severe trials in early life. As a soldier in India, he sustained, when very young, a spear wound of the leg, where he has had, almost ever since, a small open ulcer, which he ascribes to the spear having been poisoned. In the Spanish war he was wounded at the battle of Barossa, in 1811. There are now evident marks of the bullet having passed through him from the left groin, piercing the blade of the *os ilium* in its course. For two years he lay in hospital; and recovering with a shortened limb and stiff joint, he was invalided on a pension of one and sixpence halfpenny, as a wounded serjeant and soldier of twenty-one years' service. This he has now enjoyed for forty-one years. Nor has his wound much incapacitated him; because for many years, and down to his present illness, he had actually worked as a railway labourer. During this long period he lived on his pension and wages in great comfort and sound health, until, on lately leaving off work, he became liable to constipation. At first his bowels were moved every other day in general, and afterwards seldom oftener than once a week, unless he took physic, which he did seldom. At last the action of the bowels seemed to cease altogether, and he went for four weeks without any evacuation, even though he made occasional trial of a laxative. At the end of the fourth week, a strong dose brought away a great accumulation. After that he had no farther evacuation, and it is now three weeks ago. He had again made a few gentle attempts to assist nature; but he did not much insist upon this, because his lodging-house had no convenience, as he said, for a man under physic. During the entire period of seven weeks, he assures us he had no pain or suffering whatever. But at last his belly got very large, so that his trousers would not button over it; and on this account he applied here for relief, and not from any actual illness.

On admission, he had no appearance of any suffering. He seemed a fresh, vigorous, active, cheerful man. He took his food tolerably well; the pulse was natural; and the tongue was only a little furred. "The abdomen", to quote the Hospital journal, "is much distended, especially in the iliac regions, where there are two large prominent swellings projecting laterally, so that the crest of the ilium on each side is quite sunk, the tumours projecting much beyond the bones. There are different irregular swellings at different parts of the abdomen, especially in the track of the colon. Over some of these points percussion is quite dull; over others it is tympanitic. The circumference of the abdomen, where largest, is 39½ in."

As it was judged unsafe to give him active purgatives by the mouth at once, in case of the great gut being firmly obstructed with hardened feces, a turpentine injection was properly administered by the clinical clerk in charge of him. The result was "a prodigious discharge of fecal matter of all degrees of consistence", much of it composed of very hard scybala. A dose

of jalap and calomel given immediately after this forerunner, brought away also a great mass of feculent matter. Next day, being quite well, but with the abdomen as large as ever, another similar dose occasioned only an ordinary discharge. On the third day, the swelling being equally great, though now quite uniform, and everywhere clear on percussion, I gave him what has always appeared to me the most effectual of all safe energetic purgatives in cases of simple fecal accumulation—two drachms of oil of turpentine with six drachms of castor oil in the form of emulsion. But he had only two scanty loose discharges, and the belly continued in the same state, presenting especially the singular enlargement and overlapping of the iliac regions.

It was now apparent that, owing to long continuous distension of the bowels with feces and gases, their muscular coat had lost its tone, in some regions at least, and especially in the cæcum and descending colon. It was then proposed by the clinical clerk to resort to galvanism for relief from this paralytic condition; which suggestion was at once adopted. It is more than twenty-five years since galvanism was recommended as a useful remedy in cases of obstinate constipation; and we can easily see that it may be useful, and upon what principle it acts. The first way of using it was by directing the galvanic current from the mouth to the arms; and in that way it seems to have been most effectual and prompt in some cases. But its action is thus rather painful; and ulterior observation has shown that passing the current in various directions through the abdomen itself may be sufficient. This remedy seemed even more applicable to the state of our patient after the bowels had been cleared out. And accordingly it acted with wonderful energy and success. After the current had been passed for some time from before backwards, as well as from side to side, he had in an hour a copious evacuation, in three hours another, and next morning a third. Flatus was also discharged in abundance; and the abdomen fell greatly, but still not completely, above all in the iliac regions. The pain of the galvanic action, however, had been so great that the patient begged to have a day's respite. In fact, he declared his willingness, and confirmed it with an oath, that he would rather be shot again than submit to be galvanised a second time. On the second morning, however, the remedy was applied more gently, and on two mornings subsequently. He had a daily discharge from his bowels, and sometimes two. The abdomen had now become natural in size and form. Since then he has had a natural evacuation every morning without aid from either laxative or galvanism. He was dismissed after being fourteen days in hospital.

This is a case a little out of the common run, but not without instruction; and I have therefore thought it well to bring the chief circumstances under your notice. It is an excellent illustration of the influence exerted by galvanism over the animal functions. It appears to me to hold out a probability that the same remedy may prove serviceable in restoring the tone of the intestinal muscles, in other forms of inconvenient chronic flatulent distension of the abdomen.

TURPENTINE VAPOUR BATHS.

The *Union Médicale* for July 16 and 19, copies from the *Revue Thérapeutique du Midi*, an article on turpentine vapour baths, by Dr. A. AILLAUD, of Beaucaille.

According to Dr. Aillaud, the peasants of Vercars have long been in the habit of employing turpentine vapour baths in catarrhal affections; and this practice has been confined to them.

The apparatus used is first described. It consists of an oven, resembling an egg cut in two, and having at the top an opening closed by a valve, and having at the bottom a grating. The oven is built of stone, with thick walls. When it is required to be used, the grating is scattered with chips which have been hewn from the living trunk of a peculiar kind of pine, which is only met with in the forests of Glandaz, and which is very rich in resinous and terebinthinous principles: fire is applied to the chips, and the valve is opened that the smoke may escape. Combustion continues several hours; its end is announced by the cessation of the formation of pitch. The valve is then closed, so as to extinguish all traces of fire; the ashes are then quickly removed, and the opening by which this is done is carefully closed. At the end of more than eighteen hours, there is still a temperature of from 60 to 80 degrees of Reaumur (107 to 212 degrees Fahr.) Some fresh chips are then placed on the grating, and the patients are introduced into the oven, through a thin iron door in the wall. Benches are placed around, on which the patients sit, with their feet resting on the grating. They are thus exposed to the action of medicated vapours.

They reach the door of the oven by a corridor, having a temperature of from 40 to 65 degrees of Reaumur (122 to 178 degrees Fahr.); they remain here a few minutes, and then enter the oven. Their dress is a white woollen shirt, and woollen slippers. They remain in the oven ten, fifteen, twenty, or thirty minutes: the effect is observed by a medical man stationed at the door of the corridor.

The patients first experience a sensation of excessive heat, which they think they cannot endure, but which in the end becomes even agreeable. Under the stimulating influence of the heat, diaphoresis takes place; it is at first very slight, but soon becomes copious: it commences on the chest, and gradually passes over the whole body. Respiration is accelerated for a few moments; but in two or three minutes becomes easy. The circulation becomes a little more active: sometimes the pulsations rise to 70 or 80; sometimes they remain normal. When the desired effect is produced, the patient is removed from the bath; a woollen covering is thrown over his shoulders, and he is carried to bed, where he takes an infusion of the same resinous wood. The diaphoresis then becomes sometimes so copious, that it escapes through the bed-clothes. At the end of an hour or two, the patient rises as alert and lively as before he entered the bath: he feels none of the disagreeable sensations which accompany or follow febrile sweats. His functions are performed with ease and regularity.

Dr. Aillaud observes, that this treatment includes two distinct principles: the application of heat, and of resinous vapours. He then proceeds to describe the effects of placing a person in a high temperature: increase in the heart's action, hyperemia of the surface, and also of the lungs, inducing increased activity of respiration, which is at the same time accelerated by the rarefaction of the air; and hence symptoms of syncope. Dr. Aillaud sums up the symptoms produced as those of a factitious fever; and he believes that great advantage may be derived from the excitement of fever in almost all chronic diseases, where there is no organic lesion present. As examples of this, he refers to acute diseases which have been badly treated, and have become chronic; and also to chronic, nervous, and spasmodic diseases, connected with a morbid principle.

The utility of balsamic medicines in chronic catarrhal and rheumatic affections, has been known from the days of Hippocrates and Dioscorides; and is the mode of administration to which Dr. Aillaud wishes to call attention. If a medicine acts more energetically the better it is absorbed, and the more it is in a divided form when taken, we may judge of its power according to the manner in which absorption has taken place, and especially from the characteristic odour which is assumed by the excretions of the persons who have been in the bath.

The pulmonary mucous membrane participates in the effects produced by turpentine on the other mucous membranes. Hence the membrane, under its influence, becomes dry, as in the early stage of bronchitis; and some individuals in these circumstances expectorate sputa streaked with blood. It is in the chronic mucous bronchitis of lymphatic old men that the turpentine vapour bath is most useful. The bronchial mucous membrane is generally pale, but of normal thickness and consistence; the principal change consists in tumefaction of the follicles, and more or less considerable dilatation of the bronchial tubes. The symptoms have a great resemblance to those of the third stage of pulmonary phthisis.

Dr. Aillaud answers the objections that exposure in the turpentine vapour baths may produce impeded respiration, and that it is dangerous for apoplectic patients, by stating that no bad results have been found to follow in any case.

tion of the knowledge that might be derived from such a study in inquiries directed to the causes of various diseases, has long been known and proclaimed. Arbuthnot, in his essay on the "Effects of Air on Human Bodies", affirms in one of his concluding paragraphs, "that from proper journals of the weather, it might be possible to predict epidemics." And several observers of a past age, amongst whom the names of Mussenburgh, Vitet, Hans Sloane, and Ramazzini deserve especial mention, actually made laborious attempts to discover how far meteorological observations could be made of use in accounting for the origin and spread of some diseases. From an ignorance, however, of many important physical laws, the discovery of which has been reserved for modern days, the labours of these observers proved of but little value; so that, whilst few facts have been established, a vast number of vague impressions and wild theories have taken root and flourished.

Even in this day, as you observe, we have "no strict scientific knowledge of the nature and operation of atmospheric changes upon the body in health and disease". The step, therefore, which you are about to take, the endeavour to enrich our stores of medical learning by a systematic inquiry into the effects of meteorological changes on the body, is almost a new feature in medical literature, and promises to do great honour to our Association, and to the Journal in which the opinions and observations of the members of the Association are recorded.

That the table you are to publish weekly, is an improvement on the one already published by the Registrar General, is very evident. One important improvement in your table, lies in the fact that the observations given are to be made in different parts of the country. At the same time, it occurs to me that two or three additional columns are required. A column describing the electrical states of the atmosphere, like that in the table of the Registrar General, would be added with advantage; for although it is possible that far too great an importance is attached by many persons to electrical conditions, I think that, to ensure correctness, all known electrical phenomena should be carefully noted down. Secondly, the place where the observation is made should be supplied; and thirdly, the *nature of the earth's surface at the point of observation should be clearly specified*. I dwell on this last suggestion, because I believe it to be an important one. Meteorological observations can, as a general rule, be made by professional men but once or twice in the twenty-four hours, and only in the day time. Now, one of the most important changes in relation to the body, is that of its transmission from a cold to a warm temperature, the change consequent on the withdrawal and the return of the sun; and this change will vary very much at different points of observation. At some points, the sun's heat during the day will be absorbed slowly, to be evolved slowly during the night; at other places, there will be little absorption in the day, and rapid radiation and rapid cooling of the earth and of the atmosphere in the night time. Other observations, also, touching the geological nature of the district, deserve especial regard. In short, in commencing your labours, no inquiry that promises an useful result should be omitted; for disease arises in many cases, not so much from the exposure of an animal body to influences that are injurious to it, as from the *rapidity* with which it has been subjected to those influences.

Another observation should be made, having reference to the effects of light and actinism on the animal body. It is fair to infer that no meteorological table can be perfect without such observations; for that the properties of the sunbeam, to which reference is now made, exert an influence on the living world, animal as well as vegetable, no one can deny. Our ideas on the subject are vague at present; but this is the very reason why knowledge respecting it should be increased. That influenza is more prevalent on the shady than on the sunny sides of streets; that cretinism is most common in valleys, where light is in some degree absent; and that animals may have diseases induced in them by being placed in absolute darkness;—these are all ideas which many professional men hold, but they are ideas altogether unproven. It may be objected, that it would be a difficult matter to make observations on light—an objection, indeed, in which there is some degree of truth. It would not, however, be a more difficult process to test for the *actinic principle* of the solar ray, than to test for the presence of ozone.

In looking over the interesting calculations of Dr. Moffat which you have transcribed, it is a source of infinite surprise and pleasure to me, to see that that gentleman thinks he has pointed out a connexion between meteorological conditions and the presence of certain diseases. During last winter, whilst

EDITOR'S LETTER BOX.

MEDICAL METEOROLOGY.

LETTER FROM B. W. RICHARDSON, ESQ., TO THE EDITOR.

SIR,—A perusal of the leader on medical meteorology, contained in the Journal of August 26th, has given me so much pleasure, and filled me with such hope for the future, with reference to the investigation of numerous difficult questions connected with the study of disease, that I cannot avoid turning for a few moments from an interesting inquiry, to make one or two observations on your extensive, well digested, and admirable scheme.

The importance of the study of meteorology, and the applica-

engaged in preparing a paper to be read at the Epidemiological Society (which paper has since been published in this Journal), I tried to investigate the subject now referred to. Taking the returns of the Registrar General, and assuming that the rate of mortality of the epidemic diseases was an indication of the prevalence of those diseases, I endeavoured to ascertain whether any particular meteorological condition, or any series of meteorological conditions, attended an increased or decreased rate of mortality. In this way I took up with great care several diseases—scarlatina, small-pox, measles, and whooping cough, especially. Then selecting certain weeks, out of a series of years, in which the mortality figure was the same, I referred to the meteorological tables of the same weeks, to see if a relationship of any kind could be traced. The results were all negative. The same meteorological conditions that were present at one time, when the mortality of a disease (I allude to scarlet fever more particularly) was highest, say 188 per week, would be present also when the mortality of the same disease was lowest, say 8. In fact, I could make out nothing whatever. To be sure, the observations of the Registrar General were not very applicable to my purpose, inasmuch as they did not give every meteorological condition, were made at one point only, and were not strict enough in the matter of time; but still it is curious that the results of my inquiries were so decidedly unsatisfactory, and I am bound to confess that even the more careful researches of Drs. Moffat and Tripe do not lead me to alter an opinion elsewhere expressed, that as yet we are quite unable to refer the presence of any disease either to a single meteorological condition, or to a combination of meteorological conditions. Of course, I repeat this opinion with great deference; and sincerely trust that it may in the end prove to be incorrect. It is no intention of mine to say that the external influences to which we are exposed produce no effects on our bodies; on the contrary, I recognise the full importance of those influences, and am only desirous of seeing their effects more thoroughly investigated.

And while I am speaking of the external agents that surround and exert an influence over the living being, I cannot but observe, sir, that the course you are about to pursue will, by opening the eyes of the profession to the nature and importance of those agents, lead to an improvement in the treatment of disease. For three or four years past, my mind has been directed to this matter. I have made it a point to observe, if I may be allowed the expression, *the effects of the meteorological changes of the sick room*; and I do assure every one of my professional brethren who may not have paid attention to the subject, that it is not only an interesting, but a highly important subject. It is in the treatment of pulmonic complaints that the condition of the atmosphere of the room should be most studied. I fully believe that it is well nigh in vain for a medical man to treat a case of pneumonia or bronchitis, if, in his absence, the management of the fire in the room of the patient is left to the unchecked hands of a nurse. Let the temperature of the room of a patient suffering from these diseases rise only a few degrees above 60° Fahrenheit, and let the atmosphere of the room become too dry, and so much is the respiration of the sufferer increased, and so rapidly does the oxidation of the body proceed, that antiphlogistic and all other remedial measures will at least be much modified, and perhaps be nullified altogether. In short, in the treatment of many pulmonic complaints (there is not time to allude now to other diseases) I do not hesitate to say that the hygrometer and the thermometer are, in the hands of a scientific physician, as useful and as necessary instruments as are the stethoscope, the lancet, and the drug to be prescribed.

But I must not now encroach further on your columns. That your meteorological table will accomplish great things in the end there is no doubt, and I think I see many of our colleagues who, having read your leader, feel as much unexpected gratification, as I do myself. The instant your project is set on foot, an attempt is being made to correct errors, that may almost claim the year one as their birth year; and if any other word of commendation need be added, it is, that the benefits likely to arise from your labours, and from the labours of the distinguished individuals who work with you, are addressed to the whole human family, to the present time, and to all time.

I am, etc.,

BENJAMIN W. RICHARDSON.

Mortlake, September 5th, 1853.

MEDICAL METEOROLOGY.

LETTER FROM HENRY W. BAILEY, Esq., TO THE EDITOR.

SIR,—Your elaborate paper upon Medical Meteorology, is one of so important a nature, that it requires the consideration of every medical practitioner. It is so intimately connected with disease, with the history of epidemics, and with the progress of various diseases, that its study would prove highly beneficial to the public health, as well as promote the knowledge of meteorological science. By a regular series of observations, made in different parts of this kingdom, or even the world, we may be enabled to form accurate deductions. With this view was instituted the London Meteorological Society, of which I was one of the earliest members; and, at the first meeting, good earnest was evinced by establishing eight stations for observations. Thetford was one of them. A report was sent monthly and laid before the Council. I regretted to find very few medical members were enrolled; and I fear, in the present instance, from their continual occupation, you will not receive many of those contributions so much to be desired. No persons are more qualified than our profession to promote such scientific study. I regularly sent my reports, and they did me the honour to insert them in their first volume of Transactions. The two monthly reports I have enclosed for your inspection, are specimens of the plan I have pursued for thirty-six years. By comparing them with the register at the Royal Observatory, you will find but little difference, allowing for locality. However, such a schedule would be unfit for the object in view. Diseases might be recorded as occurring under a certain atmospheric pressure and temperature. The humidity of the air bears a considerable part: from my observations, I have invariably found fever, catarrhal affections, cynanche tonsillaris, and any epidemic present, much aggravated; while in a higher pressure, low temperature, and moisture, inflammatory diseases, as pleurisy, rheumatitis, influenza, etc., more prevalent. Some considerable information may be derived from this branch of study, as to the laws which govern or produce epidemics, or even contagious diseases arising from cesspools, etc. Much has been attributed to the latter; but probably arising from certain states of atmospheric pressure, etc., which has escaped the attention of the contagionists. It is very certain that the various changes in the atmosphere have great influence upon the human system; and those in the lower grade of society, where much deprivation is experienced, are more subject to diseases from such causes, and there now wants only a neglected cesspool or privy to account for the disease under which they suffer. The nuisance act and sanitary laws come to our assistance; but these avail but little, unless the means are provided to better the poor man's condition as to food and proper quantum of nourishment. In this locality, since the cheapness of provisions, there has been considerably less of disease among the poor than I ever observed before, although there remained the same nuisances at the door.

I hope, sir, your laudable intentions of promoting the study of medical meteorology will be fulfilled, as you will thus confer a great benefit upon the public.

I am, etc.,

H. W. BAILEY.

Thetford, Sept. 3, 1853.

THE NEW ECONOMIC LIFE INSURANCE OFFICE.

LETTER FROM HENRY TERRY, Esq., TO THE EDITOR.

SIR,—I shall be much obliged if you, or any of your numerous readers, can give me any information respecting the "*New Economic Life Insurance Office*", 12, Took's Court, Chancery Lane, London, of which Mr. William Deacon is secretary. A few weeks ago, a respectable tradesman of this town was induced to insure his life in an office of that name, and applied to me as his ordinary attendant to fill up the requisite certificate. As I had not heard of the office previously, and could not find its name in any list, I cautioned my friend. However, he would not listen unto my advice, and sent up a P. O. order for £2, which he had been assured was necessary for preliminary expenses, and would be returned if his life was accepted. As might be expected, he has had no answer. At the end of a week I wrote a civil note to the secretary requesting my fee, which has met with the same fate. You will agree with me that, in the absence of further explanation, the "*New Economic*" does not bear a very good character.

I am, etc.,

HENRY TERRY, JUN.

Northampton, August 29th, 1853.

NEWS AND TOPICS OF THE DAY.

[Continued from page 788.]

MONTHLY JOURNAL OF MEDICAL SCIENCE. The September number has appeared without the names of the "conductors", viz., Dr. Christison, Mr. Syme, Dr. Simpson, Dr. Hughes Bennett, Dr. Douglas MacLagan, and Dr. Wm. Robertson. It is not known how many, or whether any, of these gentlemen have withdrawn from the management; but it is generally understood that the polemical energy of the Journal is to be moderated.

NORTH BRITISH MUSEUM. For some time past, an agitation has been going on in Scotland, in favour of what is called "Justice to Scotland"; and it appears that, as the first fruits of this movement, government are to sanction the erection in Edinburgh of a National Museum—a North British Museum. A fortnight ago, the Right Hon. Edward Cardwell, President of the Board of Trade, accompanied by the Lord Provost, Bailie Morrison, Bailie Fyfe, and Mr. Hall Maxwell, Secretary to the Highland Society, visited various sites which have been suggested as suitable. Mr. Cardwell met the gentlemen we have named at the University, and, after inspecting the splendid collection of specimens there which are rendered entirely useless for want of proper accommodation, he examined the area behind the College, occupied by the Rev. Dr. Alexander's Church, and by the Trades' Maiden Hospital. The party then proceeded to the Museum of the Highland and Agricultural Society, on George the Fourth's Bridge, where the right hon. gentleman had pointed out to him another of the proposed sites, lying between that building and the Cowgate. Lastly, he visited the County Buildings, where the party was joined by Mr. Sheriff Gordon. Mr. Cardwell heard all that was advanced in favour of the different sites; but he did not commit himself to any particular one. The general feeling in Edinburgh is in favour of the site behind the College. This is the site which the Lord Provost and those representing the Town Council consider to be the best; and we believe the Highland and Agricultural Society are of the same opinion, although they would much prefer that the ground near their own Museum should be fixed upon, rather than the County Buildings. It is not yet known, we believe, whether government will give a grant for a Museum of Practical Geology merely—similar to those recently established in London and in Dublin—or whether they will be prepared to allow a sum sufficient for a Museum of a much more extended character, including the former as a mere branch. The latter is the plan most likely to be adopted.

ARTIFICIAL PROPAGATION OF SALMON. A meeting of the salmon fishing proprietors in the Tay was lately held at Perth, for the purpose of considering the question of the artificial propagation of salmon. Mr. Thomas Ashworth, from Ireland, stated that his brother and he have, at the present time, about 20,000 young salmon in ponds, produced by artificial means. His brother and himself, having purchased "the Galway Salmon Fishery" in Ireland, they determined to try an experiment there for the artificial propagation of salmon. A suitable place having been fixed upon at Outerard, operations were commenced between the 20th December and the 1st of January last, which was about a month too late. Boxes were prepared in which the spawn of the salmon were deposited: these boxes were about eighteen inches square and six feet in length, with a zinc grating in the sluice at either end. There were twenty boxes in all, which were filled with gravel to the depth of six inches. To procure the ova and milt of the female and male salmon, the fish were taken by small nets on the spawn fords at night, and instantly and without injury put into a tub one-fourth full of water. The female fish was first turned on her back, one man holding the tail, another running his hands down each side from the head, and, pressing lightly with his thumbs, the ova was readily discharged into the tub: a similar course readily discharged the milt. About 370 salmon were treated in the above manner, and again returned to the river. Mr. Ashworth explained how the ova and milt were mixed in the tub, and then taken out of it with a cup and deposited in the boxes, when it was covered with additional gravel. The fine zinc gratings were used to prevent both trout and insects from getting into the ponds, as they were very destructive to the salmon-fry. The ponds were about twenty yards in length, and twelve to thirteen yards in breadth; and it was intended to

keep the young salmon in them for ten months, when they will have grown to about four inches in length. They would then be able to take care of themselves on their way to sea. He stated also that it was indispensable the young salmon should be fed daily with chopped flesh meat. The current of water running through the boxes must be pure and free from mud, and great care was required during the periods of incubation, when the rivers were flooded by heavy rains, to divert the muddy water from the boxes. It took about 100 days until the spawn gave indication of life. The expense of this plan of artificial propagation he did not estimate to exceed a pound a thousand, which was at the rate of one farthing for each salmon. After some discussion, it was resolved that the experiment should be tried in the Tay; and a committee was appointed to adopt the requisite measures.

ST. THOMAS'S HOSPITAL. The Estate Committee of this hospital have recently let on lease for eighty years a small portion of land belonging to their corporation, at the north-west corner of Finch Lane, of about four hundred square yards, to the Australasian Company, at the enormous rent of £1,300 a year, with the condition to build on it a substantial stone building. This letting, if calculated at its freehold value, at the present price of Consols, would represent the extraordinary sum of rather more than £520,000 per acre.

MEDICAL BENEVOLENT COLLEGE. At a meeting of the Council, held on Tuesday last, thanks were voted to the Rev. Thomas Bazeley, the rector of Poplar, for preaching in aid of the funds of the College. The Treasurer reported that Dr. Kenny, of Canton, had, unsolicited, advocated the cause of the College in that distant country, and had remitted 222 dollars (£55:10), as the result of his disinterested exertions. Many of the Chinese are liberal contributors.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ADVERTISEMENTS.

Just Published, 8vo, price 2s. 6d.

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Mental Derangement.—Dr. Samuel

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References are permitted to Dr. HENRY JOHNSON, Shrewsbury; FREDERICK CARTWRIGHT, Esq., Oswestry; and other medical gentlemen.—Church Stretton is a first class Station on the Shrewsbury and Hereford Railway, 12 miles from Shrewsbury.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXVII. LONDON: FRIDAY EVENING, SEPTEMBER 16, 1853. NEW SERIES.

THE IMPORTANCE OF LECTURES ON MEDICAL ETHICS.

If there is one just subject of complaint in the medical education of the present day, it is of the number of lectures the student is compelled to attend; and yet there still is a department in which he should be instructed, which is more likely to be impressed on his character by the words of his teacher than by books: we allude to MEDICAL ETHICS. There is no other profession than ours, in which its members are more frequently brought into collision with each other, in circumstances where their own interests and those of their patients are at stake, and which not only require the knowledge of what is right, as a matter of professional etiquette, but also correct principles of conduct, and tact in their application. The consequences of failure in these respects are often very severe. Many a young man throws himself back for years, or totally hinders his advancement to any high status among his brethren, by his ignorance or neglect of what is due from man to man in his early collisions with his fraternity. Those men who are born and bred in the higher classes of society get a facility of observation, a conventional sense of honour, and a knowledge of what is gentlemanlike or the reverse, from constant intercourse with gentlemen; and this training inclines them almost intuitively to do what is correct towards others, and just to themselves, in the intricate affairs of life. In short, they act as gentlemen, even although they may not be guided by the highest principles. Again, those who have been early brought up to do to others as they would have others do to them, and who have honest, simple hearts, arrive at the same results by a nobler path and a less complex method.

But the large intermediate class, who have neither had early nor high social education, nor possess the simple honesty of nature raised by religious training, learn what is right in these duties only from much blundering, from cruel mistakes, and from all the trials of an uneducated experience. To this large class, how many medical students belong, who are, when they leave the schools, to be cast upon the rough sea of life, without compasses or chart to guide them in their intercourse with society! Were they Christians in the high sense of the term, or were they thoroughly well bred, either of these disciplines would have sufficed; but, on the contrary, they have had none of that strict social training which compels them to think and to study the feelings of others, and perhaps they have never seriously considered that their success in life would greatly depend on their just, kindly, considerate, and honest treatment of their fellow men. In these respects, how many who have had a pretty good scientific education are still savages, and unable even to appreciate the value of the best manners, from an ignorance of the difficult discipline from earliest years of which they are the fruit! And thus how many medical students may be laboriously trained in the science of medicine, and yet left in ignorance of the duties which they owe as men to their patients, their fellow practitioners, their profession, and

to themselves!—a kind of knowledge which is essential to the proper practice of their art. The metropolitan teacher may watch with pleasure the scientific progress, the zeal and industry of his pupil; and may not suspect that the strong emulation he has been exciting by his prizes and praise, and the active diligence he has fostered by these encouragements, may both ere long be employed in endeavouring to get practice at all hazards, to gain success for himself, whoever is overthrown, *rem quocunque modo rem*; until he may discover that the world will not stand such conduct, when he may find himself suddenly thrown upon his back by its strong arm. Like a boy spinning a cockchafer, he never thought of the pain he was inflicting on another, he was so absorbed in himself.

Now, it is this ignorance we would wish to see reformed; and this selfishness, enlightened and corrected—this want of knowledge of what is due from one man of education to another, practising the same liberal profession, removed. Teachers who have gained the confidence and the affections of the students by superior knowledge, high character, and kindness, are their proper instructors in conduct. The influence founded on high acquirements and zeal, would give their advice in manners (*mores*) the weight of authority; and they might awaken in many a young heart a sense of duty to which it had been a stranger. The seniors of the profession have often made medical conduct the theme of introductory lectures; but though an introductory lecture affords a good opportunity for inculcating general principles, it does not afford an opportunity for going into the requisite details; and, impressed as we are with the importance of the subject, from the observation of the early course of young men in practice, we would, at this season of the year, urge on the professors and lecturers at the metropolitan schools the reasonableness of making medical ethics a part of medical education. This may be done, either by the delivery of a short course of systematic lectures, or by each professor of a practical branch devoting a few lectures to this subject, which is so closely connected with the pupil's success. Schools, which would make medical ethics a branch of medical education, would have a greater claim on parents, and on those masters who take a lively interest in their pupils' London career and subsequent well doing. Instruction in Medical Ethics might soon lay the foundation for the most solid reform in our profession—that which is based on the improvement in conduct of each of its members.

MR. SYME AND MR. HESTER.

It is doubtless fresh in the recollection of many members of the Association, that a complaint was made by Dr. Simpson, at our recent anniversary meeting, against the Association, for having published under its authority an attack upon Mr. Syme and the profession in Edinburgh.

The passage to which we refer is contained in the "Address in Surgery", delivered last year at Oxford, by Mr. Hester, of that city; and is as follows:—

"If we cast our eyes beyond the Tweed, we see the melancholy exhibition of a city, celebrated through long ages as the birth-place of genius, torn by two rival factions and a petty squabble about the perineal section. It is not in these days a question whether the operation originated with Dessault or Syme, nor whether it be adapted for the cases in which it has been recommended. The ultimate condition of the patient is lost sight of in fierce animosity and personal invective, and the two leading surgeons have appealed to a Court of Law upon a question of truth. *Proh pudor!* It were vain to expect them to issue from the contest humbler, better, and wiser men. But should their repentance be ever so great, it will never efface the scandal such proceedings bring upon the profession.

"That such scenes may shortly cease to be enacted in the modern Athens, is my most earnest prayer; and as to ourselves, may we ever be delivered from envy, hatred, malice, anger, and all such pestiferous perturbations, which militate in no small degree against that tranquillity of mind so essential to the practice of the healing art. Were we to take a retrospect of the whole of this unhappy quarrel, in which direction must we turn for liberality or courteous bearing? Where is the trace of industry or of research? It is not even clothed in sparkling wit or glowing language. No! The terms which have been selected would have better suited the tavern or the hustings. If there be value in the practice recommended, we, as independent but anxious trustees of the public health, have a right to ask for a new series of experiments, under circumstances which would admit of no misunderstanding. Until then, no violence of language, no unblushing assertion, even in the form of advertisements in the public journals, will have weight to influence our judgment."

Trusting that the decision adopted at Swansea would be deemed satisfactory, but being at the same time uncertain as to this, from the tenor of our private letters from Edinburgh, we abstained from noticing the subject when speaking, at p. 717, of the proceedings of the Swansea meeting; and now, it is not willingly, but from necessity, that we refer to so disagreeable a topic. Circumstances, however, have occurred which force us to break silence; but, in doing so, we shall keep in view the rules which we laid down for our guidance in our inaugural address published on the 7th of January.

Upon the motion of Dr. Sibson of London, seconded by Dr. Radford of Manchester, the following resolution was carried at the last anniversary meeting:—

"That the Association regrets that there should be any misunderstanding between Mr. Syme and Mr. Hester; but that the Association does not hold itself responsible for the sentiments expressed in the papers which may be published in the *Transactions*, and recommended for publication on account of their general merits."

In the opinion of Dr. Simpson, this resolution does not offer due reparation and redress for the publication of Mr. Hester's statements, which he characterises as calumnious and truthless. He thinks that the Association did not do enough when it withdrew its sanction from the passage complained of; and, under this conviction, he forwarded to us for publication a voluminous correspondence, which, for reasons explained in the following letter, we have resolved not to insert in the Journal:—

FROM DR. CORMACK TO PROFESSOR SIMPSON.

"Putney, Sep. 14, 1853.

"MY DEAR SIR,—Notwithstanding the arguments used in your recent letters, I am still of opinion that I ought not to insert in the ASSOCIATION JOURNAL the correspondence which you have transmitted to me for publication. It is my hope and my belief that the obnoxious paragraph is no longer the property of the Association, and that it was technically repudiated by the resolution adopted at Swansea. Mr. Hester must now, I think, be regarded as the sole proprietor of the paragraph.

As the Association certainly intended finally to settle this most unpleasant business, so far as they and Mr. Syme are concerned, by the decision to which I have referred, I feel that it is my duty not to open the Journal to its re-discussion. I therefore return to you the correspondence, as you intimate your intention of bringing it before the profession, even though I should decline to publish it in our Journal. The following are the letters which I return:—

- "1. Dr. Simpson to the Editor of the ASSOCIATION JOURNAL, Aug. 26, 1853.
 - "2. Dr. Simpson to Sir Charles Hastings, May 1853.
 - "3. Sir Charles Hastings to Dr. Simpson, May 20, 1853.
 - "4. Dr. Simpson to Sir Charles Hastings, May 25, 1853.
 - "5. Sir Charles Hastings to Dr. Simpson, May 31, 1853.
 - "6. Dr. Simpson to Sir Charles Hastings, June 4, 1853.
 - "7. Sir Charles Hastings to Dr. Simpson, June 7, 1853.
 - "8. Dr. Simpson to Sir Charles Hastings, June 14, 1853.
 - "9. Sir Charles Hastings to Dr. Simpson, June 23, 1853.
 - "10. Dr. Simpson to Sir Charles Hastings, July 25, 1853.
 - "11. Sir Charles Hastings to Dr. Simpson, July 27, 1853.
 - "12. Sir Charles Hastings to Dr. Simpson, August 17, 1853.
- [This letter enclosed the resolution adopted at Swansea.]

"13. Dr. Simpson to Sir Charles Hastings, August 26, 1853.

"Allow me to add that, as not a single member of our Association has adopted or defended Mr. Hester's sentiments since they appeared, and as the undoubted object of the Swansea resolution was to sever all connexion between those sentiments and the Association, you and Mr. Syme might, I think, with great propriety, allow the matter, as regards the Association, to rest where it is. In any case, I beg you will offer to Mr. Syme the expression of my high esteem, and that you will accept the same from

Yours very truly,

"JOHN ROSE CORMACK.

"To J. Y. SIMPSON, M.D., Professor of Midwifery in the University of Edinburgh."

While we close our pages against the re-discussion of Mr. Hester's paragraph, we cannot avoid expressing our extreme regret that the Association, in the twenty-second year of its existence, should still be without ethical laws for its guidance, and without a tribunal for the authoritative investigation and settlement of all cases in which members are accused of acting *contra bonos mores*.

REFORM OF THE CLUB SYSTEM.

TO-DAY we publish two admirable letters upon the Club System, a subject regarding which we propose next week to make some further remarks.

We trust that powerful committees may soon be constituted in all parts of the kingdom for the radical reform of the club system—committees similar to those which arose from our articles on gratuitous advice, and one of which is now investigating so diligently, and yet so unobtrusively, the gratis system, as it prevails within the bounds of the Metropolitan Counties Branch.

With reference to the suggestion of S. T., in favour of a five shilling semi-membership, we are not prepared to offer any decided opinion; but our present belief is, that such a project is utterly impracticable, and for this reason, that it would probably still farther increase a body of gentlemen already too numerous—those who read and applaud the Journal, and contribute nothing to its maintenance. At least, one member's copy visits weekly by post three practitioners who are not members, and who assign this accommodation as the cause of their not finding it necessary to join the Association. Again, at least four wealthy reading societies are supplied with the Journal by their secretaries (who belong to our body), giving their copies *gratuitously*, or for a consideration.

ORIGINAL COMMUNICATIONS.

ON YELLOW FEVER:

COMPRISING THE HISTORY OF THAT DISEASE, AS IT APPEARED
IN THE ISLAND OF ANTIGUA IN THE YEARS
1835, 1839, AND 1842.

By THOMAS NICHOLSON, M.D.

(Read before the Epidemiological Society of London,
July 4th, 1853.)

THE subject of the following essay is that peculiar form of fever, which, under the different names of Yellow Fever, Vomito Negro, Vomito Prieto, and Bulam Fever, has been known to the English and Spanish colonists on both sides of the Atlantic for nearly a century, occurring at distant and uncertain intervals, and producing great mortality, especially amongst Europeans who have resided but a short time in these parts. It has been described by nosologists under the terms of Typhus Icterodes, *Cullen*; Synochus Icterodes, *Young*; Epanetus Malignus Flavus, *Good*; and more recently by Dr. Copland, from its pathological characters, Hæmagastic Pestilence. The term Hæmolytic Epidemic of the Atlantic shores would, in my opinion, express more accurately the peculiar features of the disease; but I am unwilling to make any additions to its nomenclature, which, after all, is of little importance.

I had been thirteen years in Antigua, before I had an opportunity of witnessing a single case of this disease, although severe and fatal cases of bilious remittent were met with in malarious localities every year, and in some seasons prevailed as an epidemic over the whole island; as, for instance, in the year 1823, a short account of which, by my friend Dr. Musgrave, will be found in the twenty-eighth volume of the *Edinburgh Medical and Surgical Journal* for 1827. Yet, although the mortality from this epidemic was very great, in no instance did black vomit occur; and, from the best information I could collect on the subject, I have every reason to believe that vomito prieto was not known amongst civilians in that colony, from 1816 till 1835. I exclude, of course, the cases of the *Pyramus*, and two other men-of-war, which arrived at English Harbour with yellow fever in 1821 and 1822.

Being taught in my early years, by the writings of Bancroft, Fergusson, and others, and by the oral instructions of the medical gentlemen under whom I served in the West Indies, to regard yellow fever as a more severe grade only of the endemic fever, I was often puzzled to account for the absence of this peculiar symptom in all the cases I had seen; and I was sometimes inclined to hazard an opinion that, after all, Chisholm might be right. Subsequent experience has convinced me that yellow fever differs as much from bilious remittent, as the epidemic or Asiatic cholera differs from sporadic or English cholera; but I never met with any circumstance that could prove its propagation by contagion. The following history will show that it broke out in St. John's in 1835, at a time when our harbour was almost destitute of shipping, and when, consequently, we had no intercourse with the neighbouring islands; and, although convalescents were frequently carried into the country for change of air, the disease was not propagated in the rural districts.

On the 12th August, 1835, the island of Antigua was visited by a severe hurricane, which did great damage to the buildings in town and country, but more so to the vessels in the harbour of St. John's, most of which were driven on shore and destroyed, or so much disabled as to be unfit for sea. A person inexperienced in these tropical tornadoes, can scarcely form an adequate idea of the fury with which the wind raged for a few hours. The barometer fell in the course of one hour and twenty minutes 1.5 inch, a rapidity of descent which, as far as I can learn, has not been equalled in any former hurricane on record. The centre of this whirlwind moved at a steady rate in a westerly direction, being felt some hours later at each island in that course;

and, strange to say, it was scarcely felt at all forty miles to the south of Antigua. Before the occurrence of the hurricane, the inhabitants were tolerably healthy, at least they were free from any acute or febrile diseases; but the weather was dry and sultry, and dyspeptic complaints were more than usually prevalent. The excitement, however, occasioned by the hurricane, and the vigorous exertions required to repair its effects, dispelled these anomalous complaints, and, for some weeks subsequent to the gale, the number on the sick list was small. The state of the weather was not similarly ameliorated by the atmospheric commotion. The heat was greater; the wind variable, and more westerly than usual; and there were frequent showers of rain. The sea, which rose in the gale above its usual level, aided by the wind, had deposited a great quantity of marine organic matters and vegetable rubbish about the wharves and precincts of the town bounded by the harbour; and it was remarked by the inhabitants in that quarter, that the smell arising from the sea, particularly at night, was peculiarly offensive.

On the 20th September, I was called to a case of fever in a young Irishman, who resided in a house on one of the wharves, which had suffered greatly in the gale, and was then undergoing repair. It proved rather an obstinate case; the headache, gastric irritability, and rachialgia, being very severe: but it terminated favourably. When, each successive day, one or two other cases were added to my list, I began to suspect that we were about to have a visitation of some epidemic; and it is recorded in my notebook at that time as epidemic gastric fever. It is worthy of remark, that it broke out in the same locality, and much in the same way, as the "Dandy Fever", that peculiar arthritic exanthem, which I have described in vol. xxxi of the *Edin. Medical and Surgical Journal* for 1829, p. 115.

I was attacked myself on the 7th October; and during my confinement, which was only three days, the more malignant characters of the disease were developed. But it was not till the 10th October that we had a case of black vomit, when the true nature of the epidemic was discovered. It may be necessary to mention, however, that none of the medical gentlemen engaged in practice in St. John's at that time, had ever seen a case of yellow fever, otherwise the discovery might have been made earlier.

The epidemic continued to increase till the first week of November; after which it gradually declined, and by the end of December had nearly disappeared. The last death occurred on the 24th of that month, in the wife of a Moravian missionary, who arrived in the island from England on the 9th, and was attacked on the 15th. During that period, I had attended two hundred and twenty cases; of whom seventy-five were Europeans, sixty-five white Creoles, and eighty coloured persons. Of the Europeans, twelve died; of whom ten had not been in the island twelve months. None of the Creoles or native whites died; but two of the mixed race sunk under peculiar circumstances.

In June 1839, yellow fever again made its appearance, attacking only those young men who had come to the island during the interval. This epidemic was of a more open or inflammatory type than the former, and copious venesection was practised with much success.

In September 1842, another invasion of the disease took place, and continued till the middle of November, during which time I attended forty-three cases, viz.: twenty-two Europeans, twenty white Creoles, and one of the mixed race. The Europeans had only been a few years in the colony, and of these eight died; the Creoles were chiefly children, of whom three died.

On all these occasions, it is remarkable that the epidemic was confined to the town of St. John's; and, although our practice extends over twenty-eight estates, on each of which several white persons resided, who were unprotected by a former attack, none of these took the disease.

SYMPTOMS.

In private practice, the physician has few opportunities of witnessing the premonitory symptoms of fever, except

in his own person; and therefore I will only describe what I myself experienced. I got up in the morning with an unusual feeling of lassitude, and with some uneasiness in the head, and pain in the back and limbs. I had no sense of chilliness, nor was the temperature of the surface increased; but I had much thirst, and the swallowing of liquids was immediately followed by nausea and copious perspiration. The pulse was weak and variable, and much accelerated by the slightest exertion. Notwithstanding these symptoms, I continued to discharge my professional duties till 10 P.M., when the pains in the head and back became almost intolerable, the vomiting incessant, and the febrile excitement fully developed. The paroxysm continued for thirty-six hours, when it left me in a state of extreme exhaustion, with a furred tongue, which lasted for several days, and a yellow hue in the skin and conjunctivæ.

Such was the mild form in which the epidemic manifested itself in natives and persons who had been long resident in the West Indies; but in others it assumed a highly malignant character, producing a rapid dissolution of the blood, which exuded into the mucous canals, and sometimes even through the pores of the skin; and it frequently terminated in death by asthenia or coma, on the third, fifth, or seventh day.

Three varieties of this malignant type were observable. The first I shall term the *ardent*; the second, the *adynamic*; the third, the *congestive* or *appyritic*.

I. THE ARDENT form was ushered in with the usual symptoms of a febrile attack—slight rigors, or only a coldness of the extremities, headache with suffusion of the eyes, general lassitude, and pain in the back. In a few hours, these symptoms were followed by a hot burning skin, great throbbing of the carotid and temporal arteries, intense headache and rachialgia, pulse from 90 to 120, full and strong, incessant thirst, and vomiting of fluid which often exceeded in quantity what was swallowed. The bowels were obstinately constipated, the urine high coloured, and sometimes entirely suppressed. The discharges from the bowels produced by medicine, generally resembled ditch water, being free from all appearance of bile. The blood drawn at the first visit presented no unusual character. About the second day, the patient complained much of flatulency in the stomach, occasioning frequent efforts to expel it, which Dr. Dewees of Philadelphia has very graphically described as a *vomiting of wind*. There was also a sense of stricture about the cardiac orifice. On the third day, the skin had assumed a lemon colour, which was first perceptible in the conjunctivæ and upper parts of the neck; the heat had subsided, but the pulse had increased in frequency; hiccough was urgent. The matters vomited were mixed with dark flakes, sometimes resembling snuff, sometimes the dregs of port wine. Soon after this, two or three pints of a black fluid, like soot and water, were ejected with great force, and death closed the scene. In some cases, the vomiting would cease suddenly, either spontaneously or on the exhibition of an opiate, and violent delirium or coma would supervene.

CASE I. D. G., aged 21, engineer, lately arrived from England, Oct. 23, 1835, awoke with a sense of fatigue and pain in his back, which he ascribed to a long walk he had taken the evening before. At noon, he was found in a high state of fever, with intense pain over the orbits; red watery eyes; pulse 100, full and strong. He was bled to thirty ounces; and pills of calomel, compound extract of colocynth, and jalap, were ordered. The bleeding relieved the headache, reduced the pulse to 80, and occasioned a copious diaphoresis. At 4 P.M., headache and febrile heat had returned; and vomiting was urgent. The abstraction of eight ounces of blood was again followed by relief of all the symptoms. The pills were repeated every second hour, with effervescing draughts of the tartrate of soda. 8 P.M. The fever was less violent; the bowels had not been moved. The hair was cut; and cold affusion applied to the head as often as the heat returned. The medicines were continued.

24th. Headache and vomiting were still urgent; the medicine had acted but slightly. Five grains of calomel were

given every two hours, with solution of sulphate of magnesia in the intervals. A sinapism was applied to the epigastrium. The cold douche was continued.

25th. The medicines had acted slightly; and heat had abated. There was frequent emission of gas; a yellow tinge of the skin; scanty urine. A blister was applied to the epigastrium; the calomel was continued, with two grains of camphor, every two hours.

26th. He was much easier; had had dark tar-like stools.

27th. He was reported to have passed a quiet night; but I found him at 6 A.M. sinking; the skin cold, and pulse scarcely perceptible. Wine and other stimulants were prescribed; but he died at 10 A.M., immediately after ejecting a washhand-basinful of the black vomit.

POST MORTEM EXAMINATION, at 3 P.M. The external surface was of a yellow colour, spotted with purple patches.

Abdomen. The viscera appeared healthy externally. Liver of a natural size; yellow colour. The gall-bladder contained a small quantity of dark green viscid bile. The stomach contained a pint of black fluid: internal surface highly congested, from cardiac orifice to $1\frac{1}{2}$ inches from pylorus. Small intestines full of black inky fluid, which was warm, and in a state of fermentation. Peyer's glands were very conspicuous. Colon stained of a dark livid colour, interspersed with red patches. Kidneys healthy. There was half a pint of urine in the bladder.

Thorax. The pleura of left side was highly injected; on the right, old adhesions existed. No other morbid appearance was found.

CASE II. Mr. S. A., aged 25. I was called at 11 P.M. on the 8th October, 1842, to visit this young man, a native of Scotland, who had been but a short time in the island. I was informed that he had been complaining of great lassitude all day, with pain in the back and limbs. I found him labouring under intense rachialgia and incessant jactitation, with much headache and coldness of the lower extremities. His feet were immersed in hot water, and in that position he was bled to the extent of thirty ounces, with great relief to all the symptoms. His pulse, which before the bleeding was 120 and very small, became fuller, and less frequent. His skin became moist, and the temperature more equable. He was ordered to take large doses of calomel, colocynth, and jalap, every two hours till his bowels were emptied. On the morning of the 9th, Dr. Musgrave found him complaining of a return of headache, with an increase of heat, and he thought it advisable to abstract about eight ounces more blood from him. The purgative pills were continued, with the addition of a mixture of the compound powder of jalap, but his bowels were slow in responding. In the course of Monday, the 10th, his stomach became very irritable, and he brought up much larger quantities of fluid than appeared to be ingested. The prescription was a blister to the stomach, five grains of calomel every two hours, with effervescing draughts. On the morning of the 11th, he was found much cooler, and quinine was tried: but the irritability of the stomach prevented a continuance of it. Black vomit and hiccough succeeded; and he died at six o'clock in the evening.

CASE III. Mr. F. P., aged 21, an Englishman, about two years in the island, was attacked 1st November, 1842, with giddiness, and pain in the head and back. When visited, the febrile excitement was fully developed. He was bled in the erect position till approaching syncope, when profuse perspiration broke out; the heat was subdued and all the symptoms relieved. The bowels were freely opened with calomel, colocynth, and jalap. He took ten grains of nitre, with a few drops of spirit. æth. nitros., in a glass of water every two hours. On the 3rd, he was in a state of complete apyrexia. Two grains of sulphate of quinine were given, every second hour, during the day, and on the 6th he was struck off my list as perfectly cured.

CASE IV. Mrs. P., wife of the preceding, aged 20, a native of the island, but who had been some years in England for education, was attacked November 7th with all the symptoms of the prevailing epidemic, being five months advanced in pregnancy. She was bled to the extent of twenty-

four ounces, and treated in every respect like her husband; and on the 12th she was convalescent.

CASE V. Mr. W. B., Englishman, aged 25, about three months in the island, was attacked 7th November, 1842, with the usual symptoms of the ardent form of yellow fever then prevailing. He was bled to the extent of forty ounces; was purged with calomel, colocynth, and jalap, and afterwards with effervescing draughts of tartrate of soda with nitre. On the 10th he was convalescent. He took quinine for three days, after which I took my leave.

II. The ADYNAMIC form was usually met with in females and persons of a lax fibre and deficient animal vigour. It was ushered in by slight rigors, giddiness, and pain in the back, frequent sighing, and sense of oppression at the præcordia. The reaction which followed was slight; unattended with pungent heat of the skin, or strong arterial action; the pulse was small and compressible. This stage did not last more than forty-eight hours, and was followed by the stage of collapse; great prostration of strength; cold clammy sweats; feeble pulse; hiccup; vomiting of a dark grumous fluid; yellow colour of the conjunctiva; and a livid hue of the face. Hæmorrhage from the nose, mouth, anus, and vagina, followed; under which the patient sunk in a fit of syncope or æsthenia. In others the sensorium was early affected; there was a total suppression of all the secretions; the patient lay tossing about in a state of wild delirium, totally disregarding exposure of her person. Hæmorrhage took place from all the passages; the sheets were stained with blood; her hands were bloody; the eyes yellow; the arms, legs, and back spotted with vibices. The fairest of creation became an object of pity and abhorrence: and death was hailed with joy by all her attendants.

CASE VI. Mrs. W., aged 31, native of Scotland, about three years in the island, was attacked at 5 A.M., on the 10th October, 1842, with shivering, and great pain in the back, which were soon followed by symptoms of fever of a mild character, the pulse was quick and feeble, and the skin warm, but rather moist. The fever continued during that and the following day without any urgent symptom, except a distressing pain in the back. On the 12th, she was found free from fever, and a solution of sulphate of quinine was prescribed. But at 3 P.M., she was suddenly seized with vomiting, and brought up a pint of *black fluid*; after which her pulse began to fail, and symptoms of collapse occurred. At 5 P.M., she had an epileptic fit; diffusible stimulants were administered liberally; but she remained for several days in a state of extreme exhaustion. On the 13th, hiccup was added to the other bad symptoms. On the 14th, the abdomen was tympanitic, when twenty drops of oleum terebinth. were given every two hours with good effect. Next day the bowels became relaxed. The discharges consisted of bloody serum: these were restrained by tincture of opium and carbonate of ammonia. She gradually recovered.

CASE VII. Mrs. W., aged 28, a native of England, from which she had arrived only a few months. This lady's husband was a physician, holding an official situation in the colony, but was not engaged in practice. His mother-in-law died of fever on the 15th October, 1842, never having been considered by him in danger till fatal coma occurred. This unexpected event occasioned much grief to Mrs. W., and she was preparing to accept the invitation of a friend to spend some time in the country, when I was sent for. On the 25th October, I found her seated on a chair dressed in mourning, and the carriage at the door ready for the journey. She complained of giddiness, pains in the back, and a total prostration of strength. Her husband was urging her to proceed, protesting that she was suffering only from grief and want of sleep. Her pulse was quick; and there was increased heat about the head and trunk; although her skin was generally moist. I sent her to bed, and called a consultation of her medical friends in two hours; when I hoped reaction would have taken place, and as she was of a plethoric habit, though phlegmatic temperament, the propriety of bloodletting might be a question of intricacy. At our visit, fever was more fully developed; but the state of the pulse did not admit of venesection. Purgatives, into

which calomel entered largely, were prescribed, to be repeated at short intervals. Next day there was no distinct change. The following day, the febrile symptoms were increased, with much cerebral excitement and constant jactitation. The head was shaven; and calomel with camphor, were given twice every two hours. But the symptoms became gradually worse. The delirium was violent, and she was with difficulty retained in the bed. The secretion of urine was suppressed; hæmorrhage took place from the nose, mouth, and vagina; the skin was yellow, and the arms, legs, and depending parts were marked with livid spots. She died on the fifth day. Her husband was attacked with the disease under the congestive form on the 27th, and died on the seventh day.

III. The CONGESTIVE form is characterised by the total absence of febrile heat. The patient has a stupid, drunken appearance, will scarcely admit that he is ill, or complains only of slight pain in the back and limbs. He staggers in his gait, or lies in a soporose state. Deafness ensues, and afterwards low muttering delirium. The pulse is at first slow and intermitting; it becomes quicker in the progress of the disease, but seldom exceeds 100. The stools are unnatural, without any admixture of bile; the urine is scanty, and is ultimately suppressed. The skin is of a yellow mottled hue. Hiccup occurs early, with black vomiting, and hæmorrhage from the mouth and nose. The case usually terminates by convulsions or coma.

CASE VIII. Mr. F., a native of the United States, aged 38, about a week after his arrival in Antigua, in November 1835, was attacked with slight headache, and pain in the limbs, which he said he would scarcely have noticed but for the prevalence of yellow fever in St. John's. His pulse was slow and intermitting. His medical attendant treated him with active doses of calomel; but the bowels were scarcely moved, and the discharges were destitute of bile. On the third day he became tinged with a yellow suffusion. On the fourth I saw him; his pulse was then 96; he had hiccup; hæmorrhage from the gums; and vomiting of a brownish fluid with dark coloured flocculi. The urinary secretion was suppressed. Being a stranger, and a man of family, the merchant to whom he was consigned, requested that we would make known to him our opinion if we thought him in danger. This was done in as considerate terms as possible by his medical attendant; when he replied very angrily, that he begged leave to differ from us, he was not ill, and we had quite mistaken his complaint. Next morning he was found incoherent, sitting up in bed and with a fixed melancholy gaze and corrugated brow: blood was issuing from the pores of the right cheek. He took no notice of us as we entered his room, but continued repeating the letters of the alphabet slowly. He died in the evening, after several convulsions.

DISSECTION. On opening the abdomen, the stomach was observed much distended, and presenting on its external aspect several dark spots like incipient gangrene; but on laying it open, this was found to be occasioned by the abrasion of the mucous coat in several places, and the presence of a black inky fluid, like soot and water. The mucous membrane of the upper half of the duodenum was also abraded. The rest of the intestines were sound. The liver was pale; the gall bladder was distended with dark green bile. The lining membrane of the heart was highly injected and studded with patches of extravasated blood on several places. The sigmoid valves exhibited the same appearance.

ANATOMICAL CHARACTERS.

The yellow colour of the surface of the body was always more distinctly visible after death; and on the depending parts it was mixed with purple patches. All the appearances indicated a defective crisis of the blood: it remained fluid after death. The capillaries of the serous membrane were in a state of hyperæmia, but there was seldom any exudation of *liquor sanguinis* perceptible. The mucous membrane of the upper half of the alimentary canal was generally softened, and the epithelium detached from the stomach and duodenum. The muciparous glands were found enlarged only in one

case. The stomach contained always more or less blood, which was changed into a black colour, and frequently mixed with gas. The liver was usually of a pale bloodless colour, and the spleen presented no unusual appearance. The gall bladder was sometimes tinged with black bile, in other cases it was nearly empty. The thoracic viscera exhibited only such appearances of congestion as were referrible to the fluid state of the blood, and the mode of death. In one case, the blood in the right ventricle had a frothy appearance, having been evidently mixed with gas during life.

DIAGNOSIS.

The only diseases with which yellow fever can be confounded are bilious remittent, and the malignant forms of intermittent fever, and as many medical men, for whose opinion I entertain the highest respect, consider all these fevers as the offspring of the same terrestrial miasmata, modified only by the constitution of the individual, and other unknown agents, it is necessary that I should relate more fully the circumstances which have induced me to form a different opinion. My experience is derived entirely from a residence of twenty-five years in Antigua, where intermittent and remittent fevers are endemic, and met with every year, chiefly from September to March, and where yellow fever has only occurred three times during that period. The endemic fevers prevail chiefly in the country districts, and the inhabitants of St. John's are seldom attacked with them. Whereas, the epidemic yellow fever was confined to the city and the garrison at the Ridge, and English harbour. It is difficult to account for the comparative exemption from remittent fever which is enjoyed by the European youths who are employed in the mercantile profession in town, whilst those who superintend agricultural operations in the country, never escape.

Antigua is of a rough circular figure, being 20 miles long and 54 in circumference, containing 108 square miles, equivalent to 69,277 acres; two-thirds of which are under cultivation. There are few springs in the island, and no streams that deserve the name of rivers; but it is much indented with creeks and bays, whose oozy waters maintain the growth of impenetrable thickets of the different species of mangrove, and are the fertile sources of malaria.

In a geological point of view, the island comprises three distinct formations of the tertiary class, of which the most superficial beds occupy the northern and eastern divisions. These consist of a calcareous marl, and coarse sandstone, interspersed with masses of a tolerably compact shell limestone. On the surface are found a great variety of marine exuvise, analogous to those which at present inhabit the surrounding seas, as *astrea*, *meandrina*, *tubipora*, etc. The surface of this district is exceedingly broken and undulated, consisting of a series of round backed hills of no great elevation, covered with a light arid soil. The sides of the hills and intervening valleys are highly cultivated, and produce a rapid growth when duly favoured with rain.

The mountainous district, forming the southern and western divisions, is composed of rocks of the newest flötz trap formations, as *wacke*, *porphyry*, *trap breccia*, *amygdaloid*, and some spherical masses of basaltic green-stone. Some of these mountains rise with conical summits to the height of 800 or 1,000 feet; others, of the same elevation, are more rounded and less precipitous, affording a good soil for the sugar-cane even on the tops. They are intersected by beautifully romantic valleys; and the abrupt sides of the mountains are clothed with the verdant foliage of a great variety of herbs, and trees, and twining shrubs.

The immediate district is occupied by a series of argillaceous strata of varied characters, which dip at a considerable angle to the north and north-east, and extend across the island from Willoughby Bay to St. John's. The northern limit of this district is formed by a zone of low land, which, at no very distant period, appears to have been submerged, and even now, after heavy rains, is readily converted into a marsh. It rises with a gentle declivity towards the south and south-west, when it presents a precipitous escarpment, and is divided from the truss formation

by a ravine, in which are pools of stagnant water, and a sluggish stream, which runs towards the west, through a beautifully luxuriant plain.

Although this district, and the many lone creeks with which the island is indented, present the only unequivocal sources of paludal emanations; yet all parts of the island are at certain seasons affected by malaria—the dry, calcareous soil of the north, equally with the humid valleys of the south. How is this to be explained? Two things are always present when fever prevails in these districts—a hot sun during the day, and circumstances favourable to the radiation of heat from the earth, and the deposition of dew at night.

The febrile poison, whatever it may be, appears to be deposited with the dew, even at a distance from its source; and all who are subjected to its influence, as it rises again at the approach of the sun, are as much affected as if they had inhaled it at the fountain-head. This is the only way in which I can explain the greater prevalence of fever in country districts than in St. John's; it being well known that more dew is deposited in the open country than in cities, where houses conceal a portion of the sky. A soil covered with vegetation is also more favourable to the production of dew, than the trodden streets of a town. At these seasons, the mean dew point is upwards of 70°; and, in the cloudless moonlight nights, the thermometer falls sometimes to 66°, producing an unpleasant sensation of cold, of which the inhabitants of northern latitudes, who enjoy a temperature some degrees lower than this, can scarcely form an idea. The injurious effects of dew have been long known to the vulgar; and I think it has been unjustly overlooked by the late Dr. William Fergusson, in his interesting paper on "Marsh Poison".

So much for the extrinsic cause of endemic fevers. Let us next inquire whether these fevers may be so far modified by constitutional peculiarities in the European, as to assume the *continued* or *malignant* form of yellow fever. Since the year 1837, a considerable number of English labourers have been imported into Antigua, which has afforded me an opportunity of seeing this question put to the test of experiment; and, although they have all suffered more or less from the *fièvre du pays*, not one case of black vomit has come to my knowledge. In May 1843, twenty-six English tradesmen were imported, by a wealthy mercantile firm, for the purpose of rebuilding those works which were destroyed by the earthquake on the 8th of February of that year. They were lodged in the country, in a house sufficiently roomy, and in every respect commodious, but in a locality much exposed to malaria. Their employer, considering the heat of the sun the only thing likely to be prejudicial to the health of these unacclimated strangers, allowed them to retire to their house for three hours at noon; but they entered on their work before sunrise in the morning. They were all attacked in a short time with remittent fever, of the most aggravated type, attended with a deep yellow colour of the surface, delirium, etc.; yet they all recovered without hæmorrhage from the mucous passages, black vomit, or any symptom indicative of that dyscrasia of the blood peculiar to yellow fever.*

Again, in 1845, about thirty mechanics were imported, to rebuild our cathedral, which was destroyed by the same visitation. They were located in St. John's, where they remained upwards of two years; and not one of them was attacked with fever—another proof of the greater prevalence of the endemic in the country than in town, and also that an unseasoned constitution is not sufficient to convert remittent into the continued yellow fever.

I am desirous of confining my remarks to what came under my own observation, otherwise I might add, that yellow fever occurs where marsh fevers are not known, as on board of ships at sea, in the garrison at Barbadoes, Vera Cruz, etc.

* One old man died afterwards in the Colonial Infirmary, of the fever; and I have heard that some of the others died of dysentery on the passage to England, no doubt from organic changes in the viscera produced by the fever.

Are there no symptoms by which yellow fever may be distinguished from other forms of tropical fever? At the commencement of this disease, there are no symptoms by which it can be distinguished from an attack of the endemic, or even any other ephemeral fever arising from atmospheric changes. The suffusion of the eyes, pain in the head and back, closely resemble the precursory symptoms of influenza. It is only in the progress of the disease, when the torpid state of the secretory glands, the chlorotic hue of the skin, and hæmorrhage from the mucous surfaces, reveal the nature of the epidemic. Whether the morbid state of the blood, which forms the *pathognostic* symptom of this fever, is the immediate effect of its contamination with a poisonous principle from *without*, or merely the consequence of defective elimination of effete matter generated *within* the body, is a question that has not yet been determined. Probably this change in the vital fluid is attributable to both causes.

It is very evident that the first link in the concatenation of morbid phenomena is congestion of the capillaries of the brain, spinal cord, and abdominal viscera; and the great benefit derived from blood-letting at the commencement of the attack, so as to remove this state of congestion, would seem to prove that it is the chief proximate cause of the disease. On the other hand, the great susceptibility of Europeans, who have never had the disease, and the immunity of those who have once had it, and of those whose blood has been modified by a long residence in a warm climate, look like the operations of a morbid poison on certain substances, which may exist in the blood of one individual, and not in another.

The yellow colour which attends bilious remittent is generally, if not always, produced by excessive secretion of bile, and the reabsorption of some of it into the blood: notwithstanding, a large quantity is duly excreted, as shown by the colour of the stools, which varies from a deep yellow to a dark green. Some doubts have been entertained recently whether excretions from the bowels of a green colour are due to bile; but of this no practitioner in the West Indies can possibly have any doubt.

Louis, in his observations on the yellow fever of Gibraltar, has laid much stress on a peculiar colour of the liver, as a diagnostic character. Nothing very remarkable to the naked eye was observed in the Antigua fever, except in some cases its anæmic colour; and we had no means of making a microscopic examination.

Not the least remarkable feature in the history of yellow fever is the fact generally admitted, that it attacks an individual only once in his lifetime. This was in great measure corroborated by the epidemics that fell under my notice; not one of those persons who suffered in the first epidemic was attacked in the subsequent visitations.

TREATMENT.

When the epidemic began in 1835, it was treated on the general principles pursued in the treatment of fevers within the tropics. At the first visit, if the symptoms were sufficiently urgent, and particularly if the patient was a European, in whom the tone of the vascular system was increased, blood was drawn in sufficient quantity to produce a decided impression on the system, as indicated by relief of the headache and pain in the back, reduction of the pulse, and a general diaphoresis; an active purgative of calomel, compound extract of colocynth, and jalap, was administered, and repeated every two or three hours, till a satisfactory discharge from the bowels was produced; the action of the kidneys was stimulated by small doses of nitre, frequently repeated; and the head and chest were assiduously sponged with cold water. When these measures failed to relieve the febrile symptoms, and to rouse the liver to increased secretion, five grains of calomel were given every two hours. Vomiting was arrested by the application of rubefacients of capsicum or mustard, or sometimes of a blister to the epigastrium, aided with saline effluents, or a draught of magnesia, tincture of opium, and mint water.

The following case, however, created a strong prejudice against blood-letting. Calomel was given in some cases to the extent of 250 grs., without any sensible effect on the system; and it could generally be detected at the bottom of the vessel containing the watery stools, in the form of black oxide.

CASE IX. Mrs. B., a native of England, aged 35, was attacked, on October 4th, 1835, with symptoms of the prevailing fever. Her husband, in his youth, had been some time in an apothecary's shop, and still retained a love for the profession, which he displayed occasionally by the practice of minor surgical operations, such as bleeding and extraction of teeth, for the benefit of his friends. On the evening of the 4th, he made various ineffectual attempts to draw blood from Mrs. B.; and on the 5th I was sent for. I found her labouring under symptoms of a mild attack of the fever, and venesection might have been considered unnecessary; but, to please her husband, and at the same time, perhaps, not a little influenced by a desire of convincing him that he was not an expert surgeon, I abstracted about sixteen ounces of blood at a full stream. This depletion appeared to be well borne, and the headache and other febrile symptoms were much relieved. She had already taken purgative medicine, and a mild febrifuge was all that was considered necessary. Her husband was attacked the following day, and I myself on the 7th, having left Mrs. B. apparently convalescent. On the morning of the 9th, she was so well, that she got up, and went into the adjoining bedroom, where Mr. B. was lying. She sat for some time on his bed, endeavouring to comfort him with religious conversation, and expressing her gratitude that she had so far recovered as to be able to attend to him. On returning to her chamber, she discovered that she had a discharge which she took for the catamenia. Soon afterwards, she was attacked with syncope. Messengers were sent in every direction for medical men, and three were very soon at her bedside; but the vital spark had fled. Two of these medical men were strongly opposed to the use of the lancet in fever, and it was very currently reported that Mrs. B. had fallen a victim to this rash practice; and the effect on the public mind was such, that to propose such a measure afterwards was met with horror both by the patient and his friends.

The lancet was not used in any of the cases that died subsequently, except that of D. G., already described.

In the epidemic of 1839, when the ardent form prevailed, and also in 1842, blood-letting was had recourse to at the commencement of the attack, with great benefit, and, in some cases, to a very large extent.

Our assistant, Dr. C., lost about sixty ounces of blood, and my son not much less; and, in a few days, they were both convalescent. However, it is only within the first twelve hours from the commencement of the hot stage, that this bold treatment is admissible. If the congestion in the capillary system is not removed by the early and decided use of the lancet, the blood soon becomes so disorganised, and the tone of the extreme vessels so destroyed, that the loss of even a few ounces cannot be borne with safety.

CASE X. Mr. C., aged 23, a native of England, had been about six weeks in the island, when he was attacked with symptoms of yellow fever, on the 8th October, 1842. He had been confined to his bed, and under treatment for a sprained ankle, for some days previously; so that the first twelve hours of the fever were overlooked. On the morning of the 9th, he was bled; but a tendency to syncope occurred before eight ounces of blood had flowed. His pulse was never above 90. On the 10th, he had black vomit, and the stage of collapse commenced. His skin was yellow, and mottled with livid spots. Wine and porter were given liberally, and for a time he appeared to be recovering his strength; but, on the evening of the 11th, the wound in his arm burst out bleeding, which was not observed till his pulse was nearly extinguished. He died at midnight.

In the *asthenic* form, blood-letting was of course never thought of; and in the *congestive*, I never had the courage to make the trial. In the latter moments, diffusible stimulants, rubefacients, and blisters, were the remedies used;

but they were generally as ineffectual as if they had been applied to a dead body.

During convalescence, quinine was always administered, to the extent of six or eight grains of the disulphate daily; and the dietetic regimen required the utmost attention.

The foregoing essay was written in the early part of 1849, and presented to the Faculty of Medicine in the University of Glasgow, as a graduation thesis. On my return to Antigua in November of that year, I found that yellow fever was prevailing amongst the European troops to a most fatal extent; the surgeon and many of the men of the 54th Regiment having fallen victims. On this occasion, it was remarkable that the civilians, unconnected with the garrison, were entirely exempt from the epidemic. Indeed, the poisonous atmosphere appeared to be confined within very small limits, being confined to the Ridge, the chief military station, situated on the south-east part of the island, on a hill of 800 or 900 feet elevation, bounded by the sea on the east and south, and overlooking English Harbour and the Dockyard on the west. The northern boundary is occupied by an extensive tract of uncultivated land, covered with thickets of brushwood. After a time, the troops were removed, and placed under tents at Monk's Hill, an old military post about four miles to the westward of the Ridge, and about the same elevation. It presents an abrupt precipice to the south, which shows it to be composed chiefly of trap breccia and conglomerate, capped by a stratified rock of a beautiful sea-green colour, containing crystals of angite and other minerals.* Here the disease gradually abated; but it was some weeks before the poison imbibed at the Ridge was entirely eliminated from the system, as cases occurred among the men daily for some time after their removal. One officer, who was on a visit to a gentleman in the neighbourhood of St. John's, fell under our care. He was bled by my son at the very onset of the attack, and treated with active mercurial purgatives and saline refrigerants and diuretics. On the third day he was convalescent, and taking quinine; the only symptom of disease remaining being a remarkably slow pulse. Another officer, a young Irishman of gigantic stature and robust frame, was seized whilst on duty at Monk's Hill. Having witnessed the speedy recovery of his comrade, he was most anxious to come to town to be placed under our care. At length the colonel yielded to his wishes, and he was conveyed in a four-wheeled carriage, accompanied by an assistant surgeon.

When I saw him, it was too late for general bleeding; but his intense headache, ferret-like eyes, and bounding pulse, induced me to have him cupped on the nape of the neck. This produced apparent relief; but the case was attended from the first with an obstinate diarrhoea, which resisted the use of calomel and opium, acetate of lead, and similar remedies. Nevertheless, he survived the critical days on which death usually occurs, and we began to entertain hopes that he might struggle through it, when suddenly he was attacked with delirium, the stools assumed the colour and appearance of black vomit, and he died on the ninth day.

A melancholy case occurred in the family of an engineer officer, who was about to return to England in the next steamer. He fled to St. John's with his wife and daughter, a young lady in the full bloom of health and beauty. A day or two after her arrival in the city, this young lady was attacked with the disease, and died on the fifth day.

Five artillerymen were removed to the barrack in St. John's on the 30th November. Next day two of them sickened; and the following day the three others. They were under the care of my friend Dr. Furlonge, who has published an account of them in the *Lancet* for 1850. One died on the fifth, and another on the seventh day; the rest recovered.

I have heard much during the last three years of the

successful treatment of yellow fever in Demarara by large doses of quinine and calomel; twenty-four grains of the former and twenty grains of the latter being the usual dose. This practice is so contrary to what I consider the rational treatment of ardent fevers, that I could not in my conscience adopt it in such cases. I might venture to try it in the congestive form of the disease; and perhaps that is the type most prevalent in the swampy colonies of Guiana.

Dr. Blair has had ample opportunities recently of testing the efficacy of this empirical treatment; and the profession may justly claim from him a report of his extended experience. It is to be hoped, also, that he will publish the result of another experiment he has been making, with the view of protecting individuals from the disease by administering belladonna as a prophylactic.

[From the length of Dr. Nicholson's paper, we have been obliged to omit some of the concluding paragraphs, which, however, did not specially refer to yellow fever. EDITOR.]

ON THE ARSENICAL TREATMENT OF CASES OF SNAKE-BITE.

By BENJAMIN TRAVERS, Jun., Esq., F.R.S.

IN the ASSOCIATION JOURNAL of the 2nd instant (p. 773), I read a communication on the subject of "Snake-Bite" which is not without interest, although it contains nothing materially in advance of several suggestions which had been previously offered in reference to the treatment of these cases.

I am familiar with the effects of the "adder's bite", having witnessed the successful treatment of two cases at St. Thomas's Hospital. They were both marked by rapid and diffused swelling from the wrist to the shoulder, such as I would call *acute oedema-tension* with a dull mottled or slightly livid hue, as contradistinguished from erysipelatous redness. In both cases to which I allude brandy and ammonia were very liberally administered; and the parts were kept constantly and thickly smeared with warm oil. In one of the patients, a young man, who was brought from the vicinity of Dulwich or Norwood, the depression of the nervous system was well marked for many hours: he was very sick, and drowsy almost to torpor, with a small, jerking pulse. There was little or no complaint of pain, but pressure or handling the part produced great distress. Very simple measures were adopted for the prompt relief of the bowels by injection. I am sorry that I am unable now to speak more in detail of these cases; but I retain a lively impression of the particulars to which I have alluded. Some years ago, a case of this description terminated fatally at St. Bartholomew's Hospital; and such of your readers as are conversant with the literature of our profession, will remember the interesting narrative of Sir Everard Home, of the fatal consequence of the bite of a rattlesnake, detailed in the *Philosophical Transactions* for 1830, and the later and equally fatal example of this accident, which occurred at the Gardens in the Regent's Park.

This subject has always been one of especial interest to me, in consequence of the great probability that we possess in arsenic a remedy which, if administered boldly and in time, will rescue the sufferer from an imminent and painful death. I believe no one has ever questioned the accuracy of the facts recorded of the comparatively certain operation of the Tanjore pill, and Mr. Ireland's cases, of which he enumerates five treated with unvarying success, are powerfully corroborative of Dr. Russell's statements. Mr. Ireland, on his arrival in the island of St. Lucie, having previously heard the facts concerning the efficacy of arsenic stated in Mr. Chevalier's lectures, proceeded at once to test the truth of the proposition, by administering one grain doses of the mineral (in the form of arsenite of potash, as it exists in Fowler's solution), every half hour until the patient began to revive. He treated five cases with perfect success.

* This rock was mistaken by Dr. Chisholm many years ago for an ore of copper, and formed the basis of his theory of fish poison.—*Edin. Med. and Surg. Journal*, vol. iv, p. 393.

in this manner. The men severally took six, seven, and eight doses of the following form, before the irritating operation of the arsenic began to show itself by vomiting and purging. What is very remarkable, is the immediate and complete recovery of these patients, without the arsenic having produced any trace of its poisonous agency, or any subsequent ill consequences. Mr. Ireland prescribed as follows—

R. Liquor. arsenicalis 3ij.
Tincturæ opii gtt. x.
Aqueæ menthæ pip. ʒiiss.

to which was added half an ounce of lime-juice: the medicine being taken in a state of slight effervescence. The embrocations and clysters mentioned by him, cannot be regarded as having had much to do with the cure, but were no doubt useful in some degree.* On one occasion only did Mr. Ireland amputate the finger on account of the extent of the laceration. In the remaining instances he contented himself with paring the edges of the wound and dressing it superficially.

It is well admitted by most physicians that arsenic will cure chorea, if given in proper doses and for a sufficient time. Mr. Martin, of Reigate, and Mr. Salter, of Poole, have adduced abundant evidence of the great powers of arsenic in the cure of this disorder. Now, having a due regard to the condition of the nervous system in these two instances of its disturbance from such different causes, I think we must conclude that arsenic operates specifically and powerfully in that direction. Dr. Taylor tells us that it is not a corrosive poison, and although four or five grains have been found sufficient to destroy life, patients have recovered after taking sixty. Such a case is upon record; it was published by Dr. Roget. A grain of arsenic every half hour sounds somewhat heroically, but I should like to see this remedy tried in hydrophobia as Mr. Ireland used it to quell the effects of the snake poison. I think it may be shown that arsenic powerfully and specifically stimulates the semilunar ganglion and its tributaries presiding over the organic life of our bodies. Its "evacuant" operation is an incident of prime importance in cases of poison. It should always be given on these occasions until the patient vomits and purges abundantly.

I thank Dr. Powell for his valuable contribution to the Journal; but I fear he must assume or prove something in addition to the altered quality of the blood, before he will successfully explain the *modus operandi*, variable as it is known to be, of these subtle poisons. The nerves have their own extrinsic and peculiar properties and functions as well as the blood, and where their independent action is slighted or forgotten in the treatment of constitutional disorders growing out of local irritation, whether chronic or acute, grave errors of treatment will occur, and the practitioner's reputation will in such circumstances not always pass unscathed.

London, 8, Dover Street, September 6th, 1853.

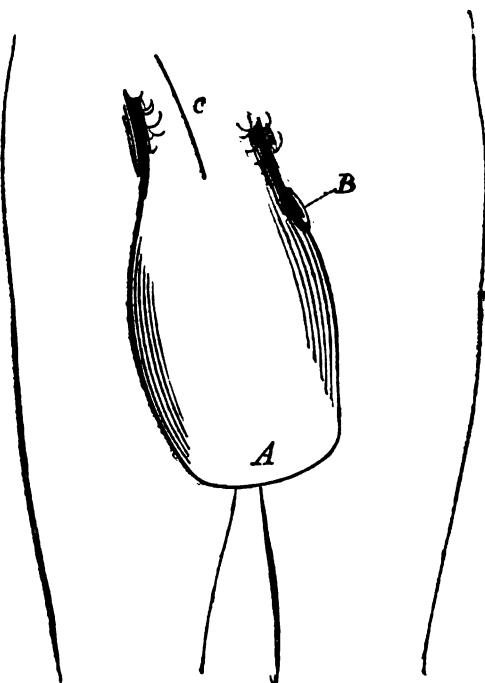
CASE OF LARGE STRANGULATED INGUINAL HERNIA FATAL AFTER OPERATION.

By JOSEPH HINTON, Esq., M.R.C.S.

UNSUCCESSFUL cases, however unsatisfactory they may appear, often furnish us with a deeper insight into the disease, and hence I am induced to lay before the readers of this Journal the brief details of the following case.

CASE. W. H., aged about 45, a blacksmith, requested my assistance in May last. He had been for many years the subject of right inguinal hernia, which was irreducible; at various times he had while at work felt a fresh protrusion, with increase of volume in the tumour, and these attacks had generally been attended with severe pain, vomiting, etc. On these occasions, he had generally been able to restore the parts to their original size, that of a large foetal

head, by his own efforts. His habits of life had been very irregular, which his appearance bore out. On the morning in question, while at work, he felt a sudden increase of volume in the tumour, was soon suffering, and almost immediately vomited; he found that the hernia was nearly double its usual size, and it resisted all his efforts to replace it. I found that it occupied the whole of the scrotum, the penis (B) being nearly obliterated; in length, it could not have measured less than ten inches, whilst in circumference it must have been considerably greater, the neck being from three to four inches across; the whole tumour was tense, and somewhat reddish, especially at the lower portion, where there appeared, as it were, a second somewhat flattened swelling (A), the skin of which was glossy, and where there was also an indistinct feeling of fluctuation. I have endeavoured in the accompanying sketch to convey some idea of its size and appearance.



The abdomen itself was comparatively small, though rather tense; it was certainly flattened, but there was no tenderness on pressure; the parietes were loaded with fat.

During the day and the morning of that following, various efforts were made at reduction; but the careful employment of the taxis, cold applications, inclining the body on a board the lower part of the pelvis being elevated above the rest of the body, were alike unavailing. Opium in full doses checked the vomiting; several injections were given, but they produced no effect. Although in these old cases, there may be, as a general rule, less danger in delay, yet considering that he remained *in statu quo*, and that his general appearance became more anxious, I did not consider myself justified in postponing the operation. Accordingly, on the evening of the second day, he was placed under the influence of chloroform, and a last trial of the taxis in that condition proving unsuccessful, the operation was at once undertaken. My original intention was to have relieved the stricture without opening the sac; in this, I failed, not because this was within the sac, but because trusting to books, I was misled. The incision made (C) was about three inches in length, an equal portion being on either side of the neck of the hernia; the dissection was carried through a layer of fat, about three quarters of an inch in depth, until I arrived at a layer of membrane, which appeared like the sac, but which showed the bluish character which books assign to this membrane only in a very small portion; taking, therefore, a portion of this surface, which was dis-

* The very interesting narrative from which the foregoing facts are quoted will abundantly repay perusal. It occurs at p. 136 of the second volume of the *Med.-Chir. Transactions*, published in 1811.

tinctly white, I made a very small opening in it, which was immediately filled up by a substance like fat; the opening further enlarged, proved this to be omentum; and from the sac thus opened, a large quantity of bloody serum speedily flowed. The contents of the hernial sac were in front of the large intestine, immediately behind which were from six to eight inches of small intestine, evidently the recent addition to the contents of the sac, and that also which had suffered most, for it was very dark; after the division of the stricture, this was replaced, and the large intestine, which had contracted adhesions to the sac, was not meddled with. Owing to the dilated state of the large intestine, the external parts were with difficulty brought into apposition; warm water dressing with pad and bandages were applied. The patient expressed himself as being relieved, but he never appeared to rally, and gradually sinking, died in about ten hours; a slight action of the bowels previously taking place.

Twenty-four hours after death, the whole of the scrotum was of a dark purple colour, and was also emphysematous: there was no attempt at adhesion; recent peritoneal inflammation existed more or less over the whole of the intestines; the strangulated portion was less dark than at the time of the operation. The sac contained the greater portion of the colon, and apparently all the omentum, which was very firmly attached to the lower portion of the scrotum.

I merely place this case on record, as a proof that old herniæ of large size will not always admit of delay, for this had scarcely been strangulated thirty hours; and also as a caution to others, who, like myself, have not had many opportunities of *closely inspecting* the operation—I say *closely*, for it is one of those where students are very rarely able to notice the actual steps, although they may very frequently witness the cases—that we cannot always rely on the blue colour as a mark of our arrival at the sac; indeed, I should apprehend that whenever omentum is immediately beneath the sac, the blue colour cannot possibly be present, unless the latter contains so large an amount of fluid as to separate the one from the other.

Blaina Iron Works, Monmouthshire, Sept. 1853.

BIBLIOGRAPHICAL NOTICES.

COMMENTARIES ON THE SURGERY OF THE WAR IN PORTUGAL, SPAIN, FRANCE, AND THE NETHERLANDS, from the Battle of Roliça in 1808 to that of Waterloo in 1815, etc. Revised to 1853, by G. J. GUTHRIE, F.R.S. Fifth edition. London: 1853.

MR. GUTHRIE occupies, deservedly, a prominent place in surgery; and among military surgeons he stands second to none. During the Peninsular campaigns, he did good service to his country in the field; and many results of this experience will be of value to his profession in all time coming. His sphere of observation was large and varied. To the task of observing, he brought the natural gift, flanked by intelligence and activity: he has since had ample time and opportunity for reflection and thought—for leisurely digesting at home, as it were, the ingesta which had been hastily taken in the camp; and the result is now before us, in the form of condensed "Commentaries on the Surgery of the War".

A systematic review of such a work would require a regular and sustained campaign, incompatible with the time and space at our disposal. We can attempt nothing more than a mere skirmish, or affair of outposts. Campaign, we say; for we cannot in all points agree with our author; and some of the positions, which evidently he deems among his strongest, we think we could "turn", and occupy against him. On the whole, however, we have much pleasure in stating our conviction that the work is an excellent one, creditable to Mr. Guthrie, and valuable to the profession of which he is a distinguished and important member.

A favourite subject with our author, evidently, is the *treatment of wounded arteries*; and his main effort, practically, is to enforce the maxim of always doubly ligaturing the vessel at the injured part, in preference to treatment applied on the cardiac aspect, and at a distance. No doubt this is sound; and the service done in enforcing this is great and good: yet, like most sanguine men, paternally related to any good thing, Mr. Guthrie, in our humble opinion, is apt to push his favourite law a little too far, and to judge rather harshly of his brethren who sometimes venture to differ from him in practice. To the rule in question, he will admit of only one exception, namely, when ligature of the wounded part is impracticable. That few will dispute; all the more, as it seems to amount pretty nearly to a truism. But we think there is room for one other exception, namely, that it is not expedient to attempt to tie the vessel at the wounded part when that part cannot reasonably be expected to hold the ligature—being, along with the other tissues around, in a state of ulcerative and unhealthy inflammation—at the end of three, four, six, eight, ten, or twenty days, after the injury, as the case may be. Instead of placing a ligature on such a part, whence it must prematurely come away, and infallibly be followed by hæmorrhage, it is surely better to tie a healthy portion on the cardiac side, with or without moderate pressure on the ulcerating wound.

Again, Mr. Guthrie, in treating of the means whereby bleeding is spontaneously arrested in arteries, is anxious to impress upon his readers the fact that the object is accomplished mainly, if not solely, by the artery's "own intrinsic powers", namely, contraction, and the internal clot, irrespective of all supposed aid from the vacant space in the sheath, and the formation of external coagulum; at least, in "arteries of moderate dimensions, such as the middle part of the femoral or the axillary, etc." And yet, at page 206, we read of a French femoral artery divided, high up in the thigh, by a cannon shot, at Salamanca, in which the following appearances were found "on the morrow"; the man having "died exhausted, but not from any immediate bleeding, which, when once stopped, had not recurred". "The external coagulum filled up the ragged end of the artery, and was slightly compressed within by the contraction, which kept it in its place. The rest of the coagulum filled the hollow in the surrounding parts, which the retraction of the artery had occasioned. . . . Contraction had begun, but had done nothing essential." And in another case (same page), we are told, "a slight contraction had taken place, but not sufficient to have been of the slightest utility in suppressing the bleeding, which was in fact prevented by an external coagulum". Surely there is no such great difference between the femoral "at its middle" and the same vessel "high up the thigh", as to size, structure, function, or ought else, as necessitates any very marked difference in the spontaneous means whereby bleeding is arrested after transverse section. Therefore, we incline to think that here our author's faithful accuracy of observation in individual cases militates against, and is superior to, his general sweeping conclusions; and we pronounce in favour of the vacant sheath with its external clot, as generally available, with other means, for the arrest of arterial bleeding.

Once more,—Another "great principle" is, "that no operation ought to be performed on a wounded artery unless it bleeds"—at the time, is meant. This, too, seems rather sweeping. Take the following case in illustration—the very one (page 213) which Mr. Guthrie calls "the model on which the treatment of all such injuries should be founded". The man was wounded by a musket ball in the thigh. Several days afterwards, a bleeding took place, and "half filled a large pewter basin". A tourniquet was put on; and next day, the man being laid on the operating table, Mr. Guthrie tried to bring on the bleeding, but it would not come. "The man was replaced in bed, and a loose precautionary tourniquet applied. At night, the wound bled smartly again, and the blood was evidently arterial. It was soon arrested by pressure. The next day,

placed him on the operating table again, but the artery would not bleed. This occurred a third time, and with the same result." Other bleedings took place, but were restrained by pressure; and at last the hæmorrhage ceased without further interference, and the man recovered. In the hands of other surgeons, this artery would not have escaped ligature on the ground of "not bleeding". Although it obstinately refused to bleed exactly at the time wanted, as if instinctively aware of Mr. Guthrie's peculiarity, and wishful to escape his knife and needle; yet it bled quietly, by itself, shortly before and shortly after; and should have been held a "bleeding" vessel—to be tied accordingly.

But a truce to our "skirmishing". On looking at the whole performance with a reviewing eye, we are quite satisfied; and we find special cause to commend the praiseworthy pains which Mr. Guthrie takes to keep himself on a level with the progress of his profession, taking as kindly to the microscope and stethoscope, as if they had been born with him; and, though very "pure" in his surgery, scorning no aid which science can afford. In this particular he contrasts very favourably with smaller surgeons we wot of; and he thus reads them a lesson, from which, ere long, we hope to see them profit.

Many of Mr. Guthrie's cases are of historical interest; concerning, as they do, men well known to fame, and dear to their country's remembrance. Often, too, characteristic traits of the British soldier are freshly and pleasingly exhibited. For instance, at Campo Mayor (p. 540) a lieutenant of dragoons is shot in the body. He felt "a terrible shock", but did not fall; and, looking down, found his bowels protruding in front, while copious bleeding was taking place behind. A French officer called out "Rendez vous, mon officier!" But the dragoon replied "Pas encore, monsieur", and rode away with his bowel in his hand. The *esprit* here is really delightful; and we rejoice to learn that the gallant fellow ultimately recovered. But, in the next edition, we would fain see some other "characteristics" of reckless soldiering prudently omitted. At page 457, for example, one does not read the profane doggerel of Colonel D—, without a double regret—that a brave soldier should have been capable of such sorry things, and that a skilful surgeon should have blotted his good book by their transcription.

We care not to throw aside our pen, without saying one word on a subject at present of great importance—the establishment of a metropolitan Chair of Military Surgery. The necessities of the time call loudly for such an institution—but let its duties be wisely arranged. To make the course one of general surgery with but a military rubric can be productive, in our opinion, of nothing but injury—to general surgery and to military surgery alike. We would have the course specially limited and defined, as something in harmony with, and dependent on, but additional to general surgery; to be studied when the latter has been mastered, and not before: consisting of prelections on gunshot and other wounds, diseases of foreign climates, peculiarities of camps and campaigning, hospital management, transportation of the wounded, billeting, and recruiting. We would have these matters, peculiar to actual service, illustrated by access to museums, hospitals, parades, drills; and, when practicable, by the improvement of such scenes as Chobham lately presented.

Once more heartily commending this attractive and valuable book to the careful attention of our readers, more especially of such as mean to "serve", we take leave of Mr. Guthrie.

THE INVALID'S OWN BOOK: a Collection of Recipes from various Books and various Countries. By the Hon. LADY CUST. 8vo. pp. 144. London: 1853.

How often does a stupid cook defeat the doctor! Times without number we have seen a badly cooked "plain mutton chop", or bad bread, retard convalescence: but we think that the most delicate stomach requiring animal food or bread, might with impunity receive these articles of diet,

prepared according to the precepts of LADY CUST. If it is not beneath the dignity of the physician to attend to the regimen of his patient, it is not beneath him to bear in mind such simple and excellent directions as are conveyed in the following and similar passages, in the little volume now before us.

"PLAIN MUTTON CHOP.

"Cut a chop from the lean side of a loin of mutton [or from the neck]; pare off the fat, and trim it neatly; beat it well to make it tender; and then, with a clear fire, put it on the grid-iron. Season it with pepper and salt; and, after turning it several times whilst it is broiling, press it, and if it feels tender, it is sufficiently cooked. Let the plate on which you serve it be very hot." (p. 113.)

"ENGLISH BREAD.

"After sifting a peck of flour into a trough, make a hole in the centre. Strain a pint of yeast through a hair sieve, mixed with a pint of water just warm. Stir into the yeast and water a small quantity of the flour, leaving it in the hole in the centre of the rest, to prove if it will rise. Set it in a warm place for an hour, when you will see the effect. Afterwards, mix the whole with two quarts of lukewarm water, and a pinch of salt; and, after you have kneaded it to a proper thickness, try it again in an hour after. Then knead it again, and bake it in a brisk oven. A brick oven is the best." (p. 110.)

"FRENCH BREAD.

"Commence as for English bread; but use milk instead of water with the yeast. When you have proved that it will rise, add two quarts of milk just warm, half a pound of butter, a little salt, and an ounce of sifted loaf sugar. Knead all together well; in an hour prove it again, to be sure of its rising. Make the dough into rolls about the size of a brick; lay them in a warm place for about half an hour, and then bake them in a brisk oven." (p. 120.)

Lady Cust describes the varieties of gruel, porridge, panada, and caudle, suitable for the sick; and jellies, puddings, broths, syrups, and cordials, are also fully explained. The methods of cooking fish and meats for invalids are very well set forth.

It is only in the chapter on "Teas" that the authoress ventures any hint as to the special cases in which her culinary preparations are to be used: but, as the following extracts will show, she does slightly invade the physician's province, when she speaks of elder flowers, cherry-stalks, horseradish, dandelion, and parsley, as remedies for dropsy.

"ELDER FLOWER TEA.

"Infuse dried elder flowers, the same way as common tea is made. Add a little acid, to hide the sickly taste of the elder. Sweeten to the taste!

"This is an excellent remedy to promote profuse perspiration."

"CHERRY STALK TEA.

"Infuse cherry stalks as above. Strain off the liquor.

"This is a French remedy for dropsy."

"HORSE RADISH TEA.

"Scrape horse radish root into a jug; pour boiling water upon it; strain it, and flavour it to the taste.

"This is another remedy for dropsy."

"DANDELION AND PARSLEY TEA.

"Wash and scrape six roots of dandelion, and six of parsley; add a pint of boiling water; set it by the fire to infuse for three hours. Add a pinch of salt to render it more palatable, or what is more efficacious, a little nitre.

"This is an excellent remedy in dropsy, acting powerfully on the kidneys." (pp. 3, 4.)

In the preface, we read:

"Many of the recipes were collected for the use of a beloved suffering member of my own family, since deceased, the companion of our residences in the Spanish Main, many of the Dutch, French, Spanish, and English West Indian Islands, and North America, by whose bedside the midnight hours were beguiled in compiling them."

From the circumstances which originated this publication, we expected to find in it many useful hints, and we have not been disappointed. It was compiled when attending upon a relative during a protracted illness in many lands.

CHEAP, NICE, AND NOURISHING COOKERY: or how Working People may live well upon a small Income. By the Author of "Cookery made Easy". 12mo., pp. 60. London: 1853.

THIS sixpenny book supplies a vacuum in the literature of culinary science.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

PROGNOSIS AND TREATMENT OF EPILEPSY.

The *Union Médicale* for May 17th and 19th contains an article by Dr. HERPIN, of Geneva, on the above subject, of which we now give an abstract.

In the *Union Médicale* for December 1st, 2nd, and 7th, 1852, M. Moreau, of Tours, relates nine cases of epilepsy, in which oxide of zinc had failed to arrest the disease, a remedy stated by Dr. Herpin to be of considerable efficacy. Seven of the cases were of the class stated by Dr. Herpin to be most amenable to treatment, and the medicine was administered according to the rules laid down by him in his essay, *Du Prognostic et du Traitement curatif de l'Epilepsie*, published last year at Paris. Dr. Herpin points out the causes of M. Moreau's want of success, in the following manner.

1. The first remarkable point which may account in a great measure for the different results obtained by M. Moreau and Dr. Herpin was, that eight of M. Moreau's cases were hospital patients, while Dr. Herpin's were private patients. Dr. Herpin observes, that physicians who have the charge of epileptic wards in hospitals, regard the disease as almost always incurable; while those who see the patients at home, as far as can be judged from their writings, form a very different prognosis. Tissot, Odier, De la Rive, and C. Vieusseux, all believe in the curability of a fair proportion of epileptic cases. A principal cause of the difference between the opinions of the two classes of practitioners is, that those in private practice generally see the disease from its commencement, while hospital physicians almost always have to treat severe or obstinate cases.

2. M. Moreau had only male patients; Dr. Herpin had more females than males. From an analysis of his cases, Dr. Herpin arrives at the following results:

Of twenty-six female epileptic patients, sixteen were cured, six were improved, and four were incurable.

Of twenty-four male epileptic patients, twelve were cured, four were improved, and eight were incurable.

There were thus twice as many incurable cases among males as among females.

3. With regard to age, Dr. Herpin has obtained the following results:

Of thirty-five patients under 20 years, eighteen were cured, nine improved, and eight were incurable.

Of nine patients aged from 20 to 50, five were cured, one was improved, and three were incurable.

Of six patients aged from 50 to 80, five were cured, and one was incurable.

The period of life from 30 to 50, furnishes a third of incurable cases; while the other two do not together supply a fourth. All M. Moreau's cases were from 19 to 50 years of age—the most unfavourable period.

4. With regard to the previous duration of the disease, Dr. Herpin finds that—

Of twenty-three cases, which had existed less than a year, fifteen were cured, five were improved, and three were incurable.

Of twenty-seven cases of from one to twenty years' duration, thirteen were cured, five were improved, and nine were incurable.

While nearly one half of Dr. Herpin's cases were of less than a year's duration, three of M. Moreau's patients had been ill from fourteen to twenty months, one for two years at least, three for six years, and one for about twenty years; the ninth had recent attacks of vertigo, but had probably had an epileptic attack six months before.

5. With regard to the number of attacks previous to treatment—

Thirty epileptic patients, who had had less than twelve attacks, furnished only three incurable cases.

Twenty-two patients who had had at least from thirty to a hundred attacks, furnished twelve completely obstinate cases, being at least five times as many as in the preceding category.

Of M. Moreau's nine cases, one, who was seized with vertigo, had perhaps had a fit; one patient had had only four attacks; one had had about fifty; four from seventy to eighty; one more than a hundred; and one more than five hundred. Besides this, one of the patients had, before the commencement of treatment, paralysis, denoting organic lesion of the brain, which was proved by the autopsy; and another had been twice insane. This latter circumstance was met with in one of Dr. Herpin's cases, in whom, though the conditions for treatment were otherwise favourable, the disease remained incurable.

Besides these causes of failure in M. Moreau's cases, Dr. Herpin points out that the want of sufficient judgment in the choice of treatment is perhaps a more powerful obstacle. He observes that, as long as we are unacquainted with the indications of each remedy for epilepsy, we must begin by giving that which experience has shewn to have succeeded in the greatest number of cases; then, in case of failure, we must have recourse in succession to other remedies of efficacy. By employing only one, especially in a number of patients placed in the same conditions as to age, sex, etc., we render ourselves liable to fall on the medicine which is not indicated. This is precisely what, it seems, has accidentally happened to M. Moreau.

Oxide of zinc is believed by Dr. Herpin to fail generally in epileptic patients in the vigour of their age, especially in men. Taking the whole of the cases placed in favourable conditions as regarded the number of previous attacks, and which were treated by oxide of zinc, he finds that there were twenty-six cures and five failures—all the latter being in patients between the ages of seventeen and fifty-nine years. On examining into the results of the treatment by oxide of zinc in men of between 20 and 50 years, in order that the conditions of sex and age might be the same as in M. Moreau's patients, Dr. Herpin finds six patients who were almost all in the most favourable conditions for treatment. In one, venesection appeared to have more influence than the zinc in producing improvement. Of the remaining five cases, there were—one cure without relapse, in a patient who had had only three attacks; two cures followed by relapse—in one of these the oxide of zinc failed on the subsequent trial; one in whom improvement was produced at the age of 15, but in whom the same remedy failed ten years later; and lastly, one in whom the disease altogether resisted treatment, although it had been commenced five days after the first attack. Thus, while the total number of favourable cases treated by zinc are in the proportion of five to six, adults furnish only three cases out of five, and in only one of these was the cure permanent.

In adult age, it is necessary to give zinc in large doses and for a considerable time; in childhood and old age, the same result is obtained from smaller doses, and, in some cases, from almost insignificant quantities.

The preceding observations appear to Dr. Herpin to afford sufficient reason for arriving at the following conclusions:

1. Oxide of zinc seems to be indicated as an anti-epileptic in children and old persons.

2. It often fails in persons of middle age, especially in men.

3. If it be employed in females, it must be given in large doses, and for a long time.

Whatever, Dr. Herpin observes, may be the remedies employed, it is of the highest importance that the disease be treated at as early a period as possible. He is convinced that, by perseveringly treating epilepsy from its earliest manifestation, there is a certainty of cure in a large majority of cases. At present, some mistake the first symptoms of the disease; others treat it for a time by means almost always inefficacious, such as bleeding, anthelmintics, etc.; others again try useless remedies, but timidly and without effect. A small number, chiefly hospital physicians, form a tolerably accurate method of the choice of a medicine and of the results obtained; but they are placed in the worst conditions for acting at the most favourable moment.

Dr. Herpin promises at a future period to publish in the *Union Médicale* the details of some cases in the practice of himself and others, giving both the successful and unsuccessful cases in the proportion of one to five.

BROMO-IODIDES IN THE TREATMENT OF INSANITY.

Dr. LUNIER, chief physician of the lunatic hospital at Niorte, is convinced that the bromo-iodides are useful in the treatment of mental alienation, and that they may often be substituted advantageously for cod liver oil. From many formulæ recommended by Dr. Lunier, we select the following:

R Potassii iodidi gr. xxxvj.
Potassii bromidi gr. xxv.
Pulveris radices gentianæ ðij.

Artemisiæ syrupi q. s. ut fiat massa, in pilulas lx. dividenda.
S. A pill thrice daily.

R Ferri iodidi gr. xxxvj.
Ferri bromidi gr. xxv.
Pulveris radices gentianæ ðij.

Syrupi corticis aurantii q. s. ut fiat massa, in pilulas lx. dividenda.

R Potassii iodidi gr. xij.
Potassii bromidi gr. viij.
Extracti gentianæ ðj.
Aquæ destillatæ ʒviij. Fiat solutio.

S. A tablespoonful thrice daily.

This solution can be given in the food, if care is taken to avoid aliments containing starch. *Annales Médico-Psychologiques.*

TOXICOLOGY.

CASE OF POISONING BY ACONITE AND BELLADONNA.

In the *Glasgow Medical Journal* for July 1853, Dr. J. A. EASTON relates a case in which death took place from the administration of aconite combined with belladonna. It formed the subject of a judicial investigation in Glasgow.

CASE. On Saturday, the 8th January, about half-past six o'clock in the evening, a young man, previously in good health, but suffering from slight headache, called at a drug establishment in Glasgow, to get advice from a medical student with whom he had been on friendly terms. The student administered a draught, containing twenty-five minims of tincture of aconite, twenty minims of tincture of belladonna, and a drachm of the tincture of musk. The tincture of aconite was prepared with sixteen ounces of the root of aconitum Napellus to thirty fluid ounces of spirit. Shortly after swallowing this mixture, the patient walked to a friend's house, about three-quarters of a mile distant. When the patient arrived at twenty minutes past seven, immediately on his entrance, he complained of "feeling queer", of being sick, and of experiencing a tingling sensation in his hands and arms. After remaining for a short period in the house, during which the hands and arms became so benumbed and powerless that, when raised, he could not keep them up, he walked again for about a quarter of a mile, and then was conveyed by an omnibus back to the place where he had swallowed the draught. He reached this about a quarter to eight; while there, he vomited freely, his speech was thick, and he staggered like a person intoxicated, though there was neither stupor, nor the slightest loss of consciousness. From the drug warehouse, the patient, accompanied by the medical student referred to, and by another friend, was despatched in a cab to the residence of Dr. Lawrie, which they reached at half-past eight.

Dr. Lawrie, in the discussion which followed the reading of Dr. Easton's paper at the Glasgow Medico-Chirurgical Society, gave the following account of the state in which he saw the patient.

"Mr. B., the subject of this case, walked into my room, supported on either side. His gait and appearance were those of an intoxicated man; but when he spoke, which he did with some effort, his articulation was so distinct, and his conversation so intelligent, that any idea of alcoholic intoxication was dispelled. He complained of a general feeling of discomfort and illness, of tingling and numbness in the muscles of the face, and of dragging downwards, especially towards the left side. His face was not flushed, neither was his skin cold, although the night was cold and stormy; and his pulse was about ninety, of fair strength. While I was examining him, he was seized with an inclination to vomit, whereupon I walked across the room to bring him a basin. On turning round with the basin in my hand, I found him by my side. The basin was replaced, and he vomited, standing with his hands resting on the basin stand. By restraining the effort to vomit, and by putting his right hand

over his lips, not a drop escaped from his mouth upon the floor. Observing that the matter which he discharged into the basin had the appearance of tea and bread recently swallowed, I gave him a tumbler of warm water, containing eight or ten grains of ipecacuan powder. He vomited again, still standing at the basin stand, supported by Mr. W., and did not complain of weakness or faintness. Believing that he was able to be moved, and being anxious that he should be in bed as soon as possible, I advised that he should be immediately taken home; that if his stomach were not emptied by the medicine which I had given him, a little ipecacuan wine should be exhibited, and that he should be freely stimulated. The party then left my house, Mr. B. walking with support, as he had entered it."

They proceeded in a cab to the home of the patient, which they reached at nine o'clock. On his arrival, he presented the appearance of a person dead drunk, and vomited twice. Shortly afterwards, convulsive movements took place in various parts of the body; the face became more deadly pale, and was covered with clammy perspiration; the pulse could not be felt; and at length, retaining his consciousness to the last, he expired at twenty minutes past nine, within three hours from the period at which he had swallowed the fatal draught.

Drs. Macgregor and Easton made an examination of the body two days after the death, and subjected the contents of the stomach to chemical analysis and microscopical examination.

The veins of the brain were unusually congested, and serous effusion existed in great quantity in the arachnoid. The lungs were gorged with very dark blood, and the right cavities of the heart were distended with similar fluid. The lining membrane of the stomach was of a dark red colour. With the exception of a slight thickening of one of the valves of the heart, the remaining viscera were in a natural condition.

The stomach, having been secured at both ends by two ligatures, was removed to the laboratory of Dr. Macgregor, where the contents of the organ were subjected to chemical and microscopical examination. They availed themselves of the microscope as a means of detecting the poison, though they also applied nitric acid and other chemical tests. A quantity of pure aconitina was examined under the microscope; but nothing more was observed than small masses of matter, dark in colour, and irregularly rounded in form. By way of comparison, a drop of the contents of the stomach, filtered, concentrated, and chemically prepared, was placed under the instrument; and an appearance was presented exactly similar to that yielded by the genuine aconitina. Drs. Easton and Macgregor, however, felt that it would be unjust to draw any conclusions from such an imperfect mode of judging; and, therefore, declared that, while the chemical analysis failed to detect aconite in the contents of the stomach, the microscopical examination afforded *no proof* of its existence. On the other hand, the unnatural condition of the heart, lungs, and brain, was precisely such as would be produced by this poison. They declared, however, that what the agency in this case was which overpowered the nervous system, and impeded the processes of respiration and circulation, the medical examination, and the chemical and microscopical researches by themselves, were insufficient to determine.

The medical student was indicted for culpable homicide. To this offence he pleaded guilty, at the spring circuit held at Glasgow in the beginning of last May; in consideration, however, that he had been on friendly footing with the deceased, and that he had acted from no other motive than to confer a supposed favour, he was sentenced only to imprisonment for fourteen days.

REMARKS. Dr. Easton thinks that death was owing entirely to the aconite. With the exception of unsteadiness in walking, the symptoms manifested were exclusively those of poisoning by aconite; while, with the exception stated, not one of the effects characteristic of belladonna was displayed. Belladonna produces flushing of the face, dilatation of the pupil, double vision, the seeing of imaginary objects, difficulty of swallowing, loss of voice, a scarlet eruption on the skin, and extravagant delirium. In the present case, the power of swallowing was perfect, the face was unusually pale, there was no mental aberration, and consciousness was retained till the last moment. Vomiting was present from an early period, as in cases where a poisonous dose of aconite has been taken; while in the majority of cases of poisoning by belladonna, though nausea is not infrequent, vomiting very rarely ensues. Hence he thinks that aconite is a much more energetic poison than belladonna; that it keeps the latter in abeyance, masking or repressing its effects, and thus giving support to the popular belief that two poisons cannot act at the same time.

It has been established by this case, that twenty-five minims of a tincture of aconite, of an ascertained strength, may take away life within three hours. This, Dr. Easton believes, is the smallest quantity yet known, or at least recorded, as having produced a fatal result. A much smaller dose, however, has been found to exercise a poisonous influence, from which the patient narrowly escaped. In the second volume of the *Lancet* for 1851, Dr. Topham of Wolverhampton narrates a case in which fifteen minims, taken in mistake by a female, produced inability to walk, convulsions in the face, etc.; but recovery ultimately took place, under the use of stimulants, in about twenty-four hours. The quantity taken in this case was probably equal to a little less than ten minims of the tincture given on the occasion referred to in the foregoing narrative. This preparation, to avoid circumlocution, Dr. Easton terms Pereira's tincture, from its similarity to that prepared according to the formula of the late Dr. Pereira.

On the other hand, ten minims of a stronger tincture—that prepared according to the formula of Dr. Fleming—have been given as often as three times daily.* In some instances, when even one such dose had been exhibited, very alarming effects were occasionally witnessed, such as the pulse falling in two hours from 70 to 44, becoming "weak and irregular", the patient at the same time being seized with vomiting, and, at the third hour from administration, experiencing "numbness and tingling", accompanied with "great powerlessness of the extremities, and a sense of weight pressing on the belly".† Further, according to M. Teissier (*Revue Medicale* for 1849), from one to two drachms have been given in the course of a day, with great benefit, in the treatment of rheumatism and other ailments! Dr. Easton calculates that the two drachms given by M. Teissier in the course of a day are equivalent to forty-eight minims of Pereira's tincture! He remarks that there must have been great carelessness in preparing tincture, or that some other botanical species of aconitum had been employed than the *A. Napellus*.

Still more enormous doses are reported to have occasionally been taken without a fatal result. In the *Lancet* for 1837, Mr. Sherwen tells us of a woman who swallowed by mistake "a mouthful" of tincture of aconite, but who recovered. Professor Taylor, in his work on Poisons, relates a case where recovery took place, though a quantity equal in strength to one drachm and four minims of Pereira's tincture had been swallowed at one dose; and in the same work we find a quotation from *Canstatt's Jahresbericht* for 1844, to the effect, that a patient ultimately recovered in three days, after having taken no less than ten drachms of the tincture of aconite! The escape from death in these and similar instances has been attributed to variation in the strength of the tincture employed. There are in this country no fewer than five different tinctures of aconite in daily and common use,—one adopted by the London College, another by the Dublin; the third prepared according to the formula of Pereira; the fourth from the recipe of Dr. Turnbull; and the last from that of Dr. Fleming. Dr. Easton does not believe that mere weakness of tincture accounts for the absence of a fatal result in those cases where large doses have been swallowed. He suspects that vomiting succeeded almost immediately after the introduction of the poison into the stomach, and that owing in great part to this, and not to mere weakness of the preparation, a fatal issue was prevented. Moreover, all the species of the genus aconitum are not equally poisonous. On this point Dr. Christison remarks:—"It has been rendered highly probable by the researches of Dr. Fleming, that the very peculiar acrimony of the monkhoods is a measure of their narcotic properties, and consequently of their medicinal virtues. I have found that *A. Napellus*, *Sinense*, *Tauricum*, *uncinatum*, and *ferox*, possess intense acrimony; that *A. Schleicheri* and *nasutum* possess it feebly; *A. neomontanum* very feebly; and that *A. paniculatum*, *lasiosomum Vulparia*, *variegatum*, *nitidum*, *Pyrenaicum*, and *ochroleucum*, do not possess it at all. These facts will direct the medical botanist in the choice of a species for medicinal use."

Two years ago, when Dr. Easton was engaged with Dr. Macgregor in the chemical examination of a case of poisoning by opium, it was suggested by the latter gentleman, that the microscope might be made available for confirming the presence of the crystals of morphia, which, by the usual process, had been separated from the meconic acid. The result was, that the perfect similarity as to shape of the crystals obtained from the stomach, with those of genuine morphia, left no doubt of the

identification of the one set of crystals with the other. In the case of amorphous bodies, however, such as aconitina, such a satisfactory corroboration of other proofs cannot be obtained.

POISONING BY ATROPIA APPLIED TO THE CONJUNCTIVA.

The *Gazette des Hôpitaux* gives an account of a case of poisoning by atropia, which is remarkable from the small quantity employed, and the place of application, viz.: the healthy conjunctiva. A patient in the hospital Saint-Antoine was labouring under double cataract, complicated with adhesions of the iris to the lens. In order to ascertain exactly the condition of the eyes, three or four drops of a solution, containing about one grain of atropine to two ounces of water acidulated with acetic acid, were instilled into each eye. Half an hour afterwards the patient suffered from vertigo and complained of disagreeable, unusual sensations; three quarters of an hour later he manifested all the symptoms of poisoning by belladonna, redness and animation of the face—pupils, though irregular, enormously dilated, incessant hallucinations, seizing the bed-clothes, and grasping at objects in the air. He could not raise himself from his bed, nor advance a step without being supported, as his limbs trembled and gave way at every effort. Pulse full, and beating one hundred and twenty. These symptoms gradually passed off, but the patient did not recover his normal condition for three or four days afterwards. Being interrogated upon the delirium and hallucinations of the preceding days, he had only a vague recollection of what had passed.

TOXICOLOGY IN THE SLAVE STATE OF VIRGINIA.

A dangerous horse is not shot—he is sold: and so it is with the slaves of Virginia: when convicted of poisoning they are "sold and sent to the south". The following we copy from the reports of the Medico-Chirurgical Society of Richmond, reported in the *Virginia Med. and Surg. Journal* for April 1853.

"Dr. BOLTON communicated a case of suspected poison by arsenic, in which the chemical analysis was conducted by Dr. Lewis and himself. Col. —, of Louisa, while eating ice-cream, perceived a peculiar taste, which aroused his suspicion and alarm. He took an emetic, and was attacked shortly afterwards by violent vomiting and purging. Under the care of Dr. Atkinson, of Henrico, he gradually recovered from the more alarming symptoms of poisoning, but was long debilitated, and his health was not completely restored until after a season at the mineral springs. Not having seen the physician in attendance, these general statements, derived from the patient's friends, were all that were in Dr. Bolton's possession.

"The glass of ice-cream, of which the patient had partaken, was examined, and after it had melted, a white powder was observed at the bottom. This powder was dried, and sent to Dr. Bolton for analysis. 1. A small portion of the powder was put in a reduction tube, carefully cleaned, and was covered with fragments of charcoal; upon being heated by a spirit lamp, a whitish ring was formed, then a broad ring with a distinct metallic lustre. 2. The same experiment was repeated with a different flux. 3. Some white particles were picked from the powder and placed upon a glass plate, and evaporated with an odour resembling phosphorus. 4. Similar particles were dissolved in boiling distilled water; solution of nitrate of silver had no effect; on adding ammonia, an abundant canary yellow precipitate took place. 5. The same solution was treated with the ammonio-sulphate of copper, and an abundant green precipitate was the result. This showed that the preceding reaction was not caused by phosphoric acid. 6. Marsh's process was now employed. Hydrogen was evolved from an apparatus containing rain-water, sulphuric acid, and granulated zinc. A piece of white porcelain was exposed to the gas without acquiring the slightest stain. A solution in boiling distilled water of the ring procured by the reduction process, was then added to the apparatus, and numerous distinct deposits were procured upon a slip of glass and upon a piece of white porcelain. 7. Reinsch's test was next tried. A solution of the powder was placed in a clean test-tube, and one-sixth part of muriatic acid was added; clean slips of bright copper foil were introduced. Upon boiling, a copious grey coating of the metallic surface took place. 8. A slip of copper, thus coated, was gently heated, and a sublimate was obtained. This was treated with ammonio-nitrate of silver, and ammonio-sulphate of copper, and the characteristic reactions of arsenic with these tests ensued. 10. A solution of the powder when treated with hydrosulphuric acid, threw down the rich golden sesquisulphuret of arsenic. 11. (*Quantitative analysis.*) One grain of the powder, which was apparently

* An Inquiry into the Physiological and Medicinal Properties of the Aconitum Napellus, by Alexander Fleming, M.D., p. 146.
† Op. cit., p. 148.

composed of a white mineral pulverulent substance, mixed with a coarse powder like bran or corn meal, was dissolved in boiling distilled water. This was precipitated by sulphuretted-hydrogen, and re-dissolved, to purify it, by ammonia, and again precipitated by hydrochloric acid. The precipitate was carefully weighed, and amounted to one grain—equivalent to four-fifths of a grain of arsenious acid. 13. (*Microscopical analysis.*) The ring procured by the reduction process exhibited, under the microscope, octohedra of arsenious acid.

"Notwithstanding the conclusive nature of this evidence, the examining court before whom the negro suspected of perpetrating the crime was arraigned, found no cause for trial, and he was accordingly sold and sent to the south."

OXYGEN AS AN ANTIDOTE TO THE DELETERIOUS EFFECTS OF ANÆSTHETIC AGENTS.

Dr. S. ABRAHAMS, of New York, writes thus to a friend in Canada:—

"An accident which happened last season in this city (New York), as similar occurrences have often previously done, has brought before the medical profession, a remedy or antidote to the deleterious effects of chloroform, as an anæsthetic, which promises, in point of usefulness, to be second only to that of the discovery of anæsthetic agents themselves.

"The case is as follows:—A young man, attached to the Laboratory of the New York Medical College, became asphyxiated from the inhalation of the vapour of chloroform, and so far had its effects been carried, that he became pulseless, and all hopes of his resuscitation abandoned; and as all the usually recommended remedies had been tried without any success, nothing but the death of the young man was looked for, when I proposed as a *dernier ressort*, the application of *pure oxygen gas*, as the only chance by which resuscitation could be brought about; but at the time the proposal met with opposition from the medical men present, who were anxiously watching what seemed to be the expiring efforts of the poor boy, expecting each moment to be his last. Having, however, consented, the gas had not been more than a few seconds applied to his nostrils, when he who was apparently beyond the help of human aid, and absolutely *in articulo mortis*, arose and placed himself on a chair, proving most conclusively, how correct I was in proposing the application of oxygen gas as a remedy against the deleterious effects of chloroform as an anæsthetic.

"I am inclined to believe that the same agent might be used with advantage in cases of drowning, where the body has been recovered from the water while it is still warm; and I am sanguine of its success where persons are suffering from the inhalation of the fumes of charcoal, or from the fixed air (carbonic acid) of pits, mines, etc. I might mention that oxygen gas is almost instantaneously generated from the chlorate of potash, or what is always more readily obtained, nitrate of potash. Either of which placed in a metallic spoon or shovel, and held over a gentle heat, will evolve the gas most profusely."—*Canada Med. Journal*, January 1853.

EDITOR'S LETTER BOX.

THE CLUB SYSTEM.

SECOND LETTER FROM S. T. TO THE EDITOR.

SIR,—Thank you for so quickly and energetically seconding, in your last two leaders, my letter upon that threatening down-draught of our profession, the *abuse of the club system*. I am glad you think with me, "that our Association does possess the power" of rectifying the evil. Only let the subject be earnestly taken up by the members, especially in the Branch meetings, and we may look forward with reasonable hope to a reform which will benefit not only the profession at large, but also those who properly ought to constitute the class of recipients of club medical relief. Perchance, in doing this, the Association may discover that its recent growth has given it greater moral influence, both with the profession and the public, than it is yet quite aware of.

It seems, moreover, that it is not in England alone that club abuses prevail; the extract from the French *Union Médicale*, published in the *Journal* for Sep. 2nd, shows that, across the Channel, not only are certain well-to-do persons willing to impose upon medical men by availing themselves of provisions made for, and *calculated pecuniarily* for, the poor; but that

medical men there, as well as here, are found to submit to the imposition, in some cases perhaps from indifference, in others from fear, and probably, as here, in not a few, from the hope that the acceptance of the club pittance from one member of the family will be the stepping-stone to substantial fees from the remainder—a motive especially unworthy, when made the means, as it often is, of insinuation into a family attended by a brother practitioner. In Scotland, too, judging from the letter of the northern correspondent of the *Medical Times and Gazette*, published Sep. 10th, the club abuse is rousing attention: that attention, however, ought to be directed to its reform, and not to its wholesale condemnation, as expressed by the writer.

Agreeing generally with the most important remarks upon the club system made in your leading articles, on one minor point at least I differ. You say, "the secret cause of *all* the mischiefs that accrue to the profession through club appointments" arise from the desire, on the part of leading members or conductors, to show a flourishing balance sheet." Now, I acknowledge that much mischief does accrue from this cause, but not all; part is due to the members of our profession themselves. In many clubs, the scale of the doctor's remuneration is fixed by the whole body of the members; and, if the bulk of these are labouring men or artisans, accustomed to comparatively small expenses, and to deal in small sums, they naturally think that the aggregate amount, made up of half-crowns, or other such sum, is something specially profitable. They have no rule or idea by which to measure professional remuneration; and when they find the doctors making an object of, or canvassing for, the privilege of attending the club upon their own terms, what other idea can they entertain? What other rule have they to go by? Now, I am very far from condemning the attendance upon labouring men's clubs at the very common rate of four shillings per member annually, or even in some instances for less; for I believe that the sum, small as it is, constitutes as much as can be afforded by the average of the class: what I contend for is, that the recipients of medical attendance on such terms ought to be clearly shown that they are not remunerative; that, if their doctor does his duty as he ought to do, he does it from a sense of duty; but it should also be made clear that such a sense of duty cannot be in action with him if he is required to attend, upon similar unremunerative terms, individuals whose means, he is aware, enable them to pay a reasonable medical bill.

I lately had the opportunity of giving to the poorer members of a club a practical exemplification of the above. I was offered the medical attendance of a certain number of females, at an advance on what they had previously paid. The majority of them I would gladly have attended, for I knew the sum they offered was as much as they could well afford. On looking down the list, however, I found the names of two or three persons, who not only in times past had paid me proper accounts, but who could do so again, if requisite; and I accordingly declined the offer made. True, self-interest was here a considerable actuating motive; for it would have been very foolish to undertake the attendance of thirty people, for the sum I should probably, or possibly, draw from one. The lesson, however, was not the less useful; and, at the same time, I ought to say that, had it not been for the two or three interlopers, I would gladly have given my services to the others.

To return: *all* the mischiefs, then, of the club system do not originate with the leaders or directors of such associations, but actually arise from the ignorance of the great bulk of the members as to the nature of professional remuneration; ignorance, moreover, fostered by the conduct, or taken advantage of, by some members of our profession. This ignorance, however, cannot be pleaded by the gentlemen, clergy, or high class tradesmen, directors of Friendly Societies, Dispensaries, etc.: they must know, when they admit members indiscriminately, as they do, at the low rate of medical remuneration adapted to the slender finances of the labourer, that they are wronging the medical officers of their charities. This, however, is but part of the system of gratuitous or semi-gratuitous service in hospital, dispensary, and consulting room, looked for almost as a right by an exacting public, and yielded by medical men. It will assuredly meet its reform ere long. But for reform of every kind, we must have what I fear is more easy to suggest than to bring about—union among ourselves; without it we are all but powerless. The men of Canterbury have shewn what may be done by united action; and there is no reason why well combined force—especially among the members of the Association—should not be brought to bear in every separate locality, sweeping away that distrust of one another, which ever stands in the way of decided steps, and of independent action. How few are there in

our profession, who do not know from experience how difficult, and at times how impossible it is to maintain that independent course which their feelings dictate, when those feelings are put in competition with the claims of a family dependent upon them for support, and for provision, which cannot afford the loss of a fraction even of a bare income.

And why does an independent course, followed by a medical man, as regards the public, involve risk to most sacred claims? Simply because each medical practitioner distrusts his neighbour, and feels that if he resigns his club or his union, because he is under-paid, or because undue advantages are taken, that probably there are two or three neighbours ready to step in.

It is almost trite again to remark, that it is vain to look for a remedy without united action among ourselves. It is strange how men can be so blind to their own interests, as not to see the immense power which union would place in the hands of every individual medical man. Moreover, the united action of a body of men, provided their motives are right, the reforms they propose just, and the claims they advance reasonable, brings with it a moral power, out of all proportion greater than that exerted by the agency of an individual, however self-sacrificing. According to my own experience, at least, it is much easier to resist some great encroachment, to "do some great thing", than to keep up the warfare against the continued petty grievances that spring up under such a system as the present club arrangements.

It is impossible, without serious injury to those interests which a man must preserve, and without loss of true dignity, to be constantly cavilling at little matters, resisting the introduction of doubtful members. These things can only be met by the laws or rules of a collective body, such as the medical men of each district might and ought to form.

I fear, Mr. Editor, I have already encroached far too much upon your valuable space, but having said so much about union in our profession, I cannot close without briefly laying before the members of the Association a plan of union, which might embrace a large proportion—it is vain to hope all—of the medical men in the kingdom.

It perhaps is true, that even the annual guinea fee required by our present terms of membership, is an object to many medical men of small incomes. Would it not be possible to institute an honorary or branch membership, which, involving only the payment of such a small fee as five shillings, would not confer the privilege of the receipt of the Journal, but confer the other privileges of membership, not connected with the disposal of funds derived from the higher fee? For the benefit of all the members, honorary and otherwise, I would propose the publication of a small monthly, or quarterly periodical, devoted solely to our political and ethical concerns, making such publication the medium of connexion between the entire body of medical men composing the Association. Such a publication would free your own columns from much correspondence of a non-scientific character, and afford you more space for practical matters, while at the same time it would offer a ready and recognised medium for communications relating to the ethics and political constitution of the medical body.

As I have found it necessary in the course of my remarks to bring forward personal experiences, perhaps you will permit me to avoid the charge of egotism by retaining my signature of

S. T.

September 12th, 1853.

THE CLUB SYSTEM.

LETTER FROM CONWAY T. EDWARDS, ESQ., TO THE EDITOR.

SIR,—S. T. has struck a blow in the right direction; and I wish to second him. So open have our hearts been to our suffering fellow-creatures; so freely have we given of our gifts of healing; so willingly, and with such tenderness have we ministered at the bed of sickness; so contented to take thanks for our pains, and bear pains mental and bodily for our exertions; so quietly do we pass over neglect and ingratitude, so abhorrent to the feelings of the great majority of our brethren is a determination to obtain by legal means our legal dues; that society generally, and public bodies particularly, believe that the medical profession, as a body, should work for the lowest amount of money possible, if, indeed, for money at all. The truth of the first position being proved by the remuneration given by clubs of all kinds; and of the last, by the unremunerated services of hospital surgeons.

But, whilst the conduct of the public is unjust and ungenerous towards us, we must feel that we *alone* have been to blame;

and that it no more would have dared to lay its icy fingers upon us, than on the legal and clerical professions, if we had not freely held forth our hands to meet them. But on all sides labour is beheld asserting her rights. Everywhere the overworked and underpaid labourer has obtained a recognition of his services; through hunger and thirst, the dauntless and living determination of his British heart has beaten down opposing forces, and won the object for which he fought. Are we more helpless than the labourer? Or are our sufferings but delusions of the mind? In courts of law we suffer; by public bodies, and the poor-law especially, we suffer! In pocket, in honour, in our gentler feelings, and in everything which ennobles and sanctifies humanity, we suffer! We suffer; for we are *dis-united*, and therefore helpless.

We fear a phantom! In its incarnated state, all kinds of quackery it patronises!—all the quack pathies it patronises!—all the pills, mixtures, liniments, and ointments, that ever were invented, it patronises! No matter how *indecent* the statements; no matter how absurd the assertions; no matter how lying the advertisements which treat of relief from suffering, it believes all—it patronises all! And is this the thing to which we should sacrifice our integrity—our freedom? Is there no great principle for which it should undyingly contend? There is!—it demands a sacrifice: are we prepared to make it? Ah! how timidly we go to work! Clear, defined, unmistakable, before us lies our grievance—by its side, our remedy.

One complains, another complains. A. is afraid of B.; B. is fearful of C.: and A. B. C., not being equal to each other, shrink into themselves at the bare thought of attacking the *fons et origo mali*. We want a master mind to marshal A. B. C., and to march them to the fight.

Yet, how bravely A. B. C. contend for that miserable bone thrown amongst them by the most Christian Poor-law Guardians! How fiercely they fight, *i.e.* canvass, for the honour of attending the "Gemini Club", at five shillings for any number of babies! or the "Pot and Pipe Friendly Society", at "2s. 6d. per head, per annum"! How they bow down in the dust, and defile their fathers' graves, but inwardly anathematise their own sad fate, when they arise, victorious from the fray, the Corypheus of that Pot and Pipe Society!

Oh, unhappy, yet noble, profession, how long art thou to be torn in pieces by thy children? Where are our Colleges? Are they sleeping, dreaming, or paralysed? Have they heart, soul, or sense? Or, as they float on the Pactolian stream which flows from us, do they laugh us to scorn, and sing to each other "Io Pagan", as we sink beneath a most unequal fight.

They are, one and all, dipped in Lethe! Shake them—they yawn, and heave, and sleep again. No generous emotions throw any warm sunlight through their souls. They care not for us: our sufferings are nothing to them! What is it on which their heads repose? A pillow, which they have stamped with these words—"Our vested rights!"

We know the foul disease which is wearing us away. The remedy is sure, if we have courage to face it! Can we bear the knife,—not in a tedious, trying dissection,—but in a daring and effectual sweep, once and for ever, through the diseased parts? I think we can.

At once, then, resign all public appointments; and remembering *with what, and for what we fight, refuse to fill the gap our brother leaves*. And when remuneration shall receive the sanction of our now awakened Colleges, and is allowed by the whole body of the profession to be just and good, then with one heart and voice join in the reinstatement of our brother in the place which he vacated for the good of society, and welfare of our profession.

To effect this, a central committee should be formed in London, and local committees in every city and town of the United Kingdom; and when the sense of the profession is taken, and an universal assent is given to the great proposition, action begins, complaints cease, and tyranny shall no more have dominion over us.

I am, etc.,

CONWAY T. EDWARDS.

Bath Easton, September 8, 1853.

[The club system evidently falls within the province of the Medico-Ethical Committee appointed at Swansea; and, as the first meeting of that committee is probably to be held within a month or six weeks in London, good might result from Mr. Edwards and others specially interested in the subject, communicating at once with the secretary of the committee, W. H. Michael of Swansea. EDITOR.]

CHLOROFORM IN LABOUR.

LETTER FROM J. DEANE, ESQ., TO THE EDITOR.

SIR,—How is truth to be discovered in medicine, or in any practical art? Simply by observing facts, and by reasoning on them. Above all things, we must not be weary in the discussion, and end it by saying, "We have had enough of this". Apathy has in all ages as much retarded science as abstruse hypothetical reasonings.

Dr. Simpson's "Letter on Chloroform" has been cleverly handled in a recent number. If, at the same time, one-half the genius and acquirements which dictated that letter had been employed in the personal observation of anæsthesia in labour, pages 761 and 762 would have been otherwise filled. I do not think that any specimen of special pleading, however well managed, can stamp Dr. Simpson's reasonings as fallacious, or throw his discovery to the winds.

Mr. Bloxam begins with some correct remarks about the dangers of analogical reasoning. If Dr. Simpson had recommended chloroform from analogies, however strong, he would assuredly have been at best at the threshold only of his discovery. Such, however, is not the case. All through his letter, you see analogy exactly where it should be. He is reasoning against prejudices, and he defends his point by showing that the arguments advanced against him are not admitted to be valid except in their solitary application to chloroform; and that, under precisely similar circumstances, the same argument is not admitted against anything else. Now, if the analogy holds in the only point in which it is used, it is assuredly valid, and you cannot argue against it by proving it not to hold in some other respects in which no analogy was asserted or claimed; otherwise all analogical reasoning might be refuted by the *reductio ad absurdum*. Dr. Simpson thus meets objections by showing that they prove too much—a mode of reasoning which can be answered only by showing that the analogy does not hold in the point at issue. It is bad reasoning to argue against the analogy by saying that it does not accord in some feature not bearing on the illustration.

Thus the analogy is contested in paragraph 9, between the use of forks in eating, and the use of chloroform in labour. "A fork may aid in eating", but he does not see how chloroform can aid in labour. Dr. Simpson would reply: "I do not claim the analogy on the ground of aid (although I might reasonably claim it), but on the ground that 'all the tendencies of man in a civilised state of society are to intermeddle with, and change, and improve, as he conceives, the action of almost every function of the body; and each improvement has, at the time of its introduction, been duly denounced.' The analogy is on the disposition and 'the necessity of intermeddling, changing, and improving the functions of the human system.' It is an argument against the notion, that whatever is natural in the human system is right and desirable. It is natural to eat with your fingers; it is natural for disease to go on uncontrolled when the *vis medicatrix* cannot cure it; natural for pain of all sorts to go unrelieved, from the twinge in a rheumatic joint to 'the pain for which there is no other name but *agony*'; just as it is natural for thorns and thistles to show themselves under the most careful tillage. But 'it is the tendency of civilised man to intermeddle with and to improve' these matters. Here, surely, the analogy holds, and is as perfect as such a form of reasoning possibly can be.

Another fallacy in Mr. Bloxam's letter is what is called "ambiguous middle term". Thus, to meet the assertion that it is hardly worth while to relieve the pain of labour, Dr. Simpson argues that we constantly use measures to relieve colic, sciatica, pleurodynia, gout, and all the "dolours" that flesh is heir to; and then he inquires why we are to except the pains of labour, and refuse to administer relief when it is within our power? Mr. Bloxam then argues (paragraph 3) that, "on the same principle, if a man be suffering pangs of conscience consequent on the commission of crime, it would be our duty to relieve his suffering by putting him to sleep with opium". Dr. Simpson speaks, as a medical man, purely of physical suffering; Mr. B. speaks of human suffering in its widest sense, including the mental and the spiritual. The ambiguous middle term is the word "suffering" or "pain". We have here a compound error in reasoning: in addition to the ambiguous middle term, we have the application of an analogy in a bearing for which it was not designed, and that very bearing is the substitution of the word "suffering" in a universal sense instead of a particular. Dr. Simpson does not even argue that all pain should be assuaged by chloroform; he would not recommend it for the

pain of incipient meningitis, and for many other forms of suffering. In the paper now before us, he is arguing for it only in the last stage of labour. Will it be believed that, in meeting the quotation just given from Dr. Simpson, the respondent argues that "the desire to relieve existing discomfort is under many circumstances a temptation to sin? If the immediate relief of existing bodily discomfort were in all cases desirable, drunkenness, lasciviousness, perhaps all the sins of life, would stand justified." The bodily "discomfort" of one writer, and "the gout, and other innumerable dolours that flesh is heir to", are two absolutely different ranges of ideas, and are used all through Mr. Bloxam's letter under the ambiguous words "pain", "suffering", "bodily discomfort".

In the sixth, seventh, and eighth paragraphs, we have a specimen of the *ignorantia elenchi* fit for a college exercise. Dr. Simpson had argued that the pain and extreme fatigue caused by the last few miles of a journey of thirty miles on foot have a strong resemblance to the last stage of labour, being pain, weariness, exhaustion, and all in both cases the result of excessive muscular action; and he argued that, as in one, so in the other, something to carry the parties engaged in these modes of travail easily through this last stage is as judicious as it must be acceptable: in the former case, a conveyance, some good man's carriage; in the latter, some quiet anæsthetic, to relieve the pain and fatigue of labour. This may be a good argument, or it may not. How is it met? The words "ordinary fatigue of walking" are substituted for the words "a continuous journey of thirty miles on foot" (Simpson); and then it is argued that "the ordinary amount of fatigue that attends upon ordinary progression is conducive to health"; and half a page of good writing is devoted to prove the statement, and Dr. Simpson's proposition is forgotten. If you wish for a case of *ignorantia elenchi*, you cannot, Mr. Editor, find a better than this; and if you wish a description of this form of fallacy, you cannot find a better, not even in Whately's *Logic*, than the following, which I copy from the second paragraph of Mr. Bloxam's letter: "It consists in substituting some other proposition for the one primarily under consideration. The adopted proposition is perhaps made good, or it is at any rate presumed to be so. No attempt is made to show that the two propositions are similar, analogous, or parallel to one another; but, as there is an obvious or apparent resemblance in some point of view, they are presumed to be parallel cases for the purpose of the argument. This is a very hazardous mode of proceeding, though a very convenient one in some respects."

When Mr. Bloxam's letter was penned, I can almost imagine him to have said, "Having gone thus far, what other sophism have I not used? There is the *petitio principii*; I must not forget to give a specimen." Accordingly, paragraphs 11 and 12 constitute a very fine specimen of this fallacy. The reasoning is good, except that, unfortunately, it is all based on the assumption that anæsthesia adds to the danger of labour. This happens to be the question. Those who have used it, assert it; if properly administered, to be innocent; that the labour is quicker from the relaxation of the sphincters, and from the relief of cramp, and of all irregular actions about the uterus; and that the patient is better and stronger afterwards; and therefore, for the last advantageous considerations (other considerations being about equal), they recommend chloroform to abridge human suffering; and they fortify their position by the statement which Mr. B. admits in his last paragraph, that "patients, when submitted to the pain and shock of surgical operations without the use of anæsthesia, recover in smaller proportions than those who are operated on under its influence."

I do not think I have in any way misrepresented the strictures upon Dr. Simpson's letter. I think the charge of loose reasoning must rebound on Mr. Bloxam. To what strange resorts are men reduced, who reason against improvements, instead of fairly endeavouring to test them! I am, etc.,

J. DEANE.

Chatteris, Cambridgeshire, Sept. 13th, 1853.

THE NEW VACCINATION ACT.

LETTER FROM FRED. JAMES BROWN, M.D., TO THE EDITOR.

SIR,—Since the bill rendering compulsory vaccination the law of the land has passed, I beg leave to suggest the following for the information of those that may have the framing of the machinery by which the bill is to operate.

That printed certificates be issued by the registrars to all qualified medical practitioners, of a form adapted for the entry of particulars respecting the progress of the vaccine-pock, the

date of the appearance of the areola, the continuance of the same; the date of the falling off of the scab, etc.

Certificates expressing particulars would thus become documents of value, enabling physicians, in future years, to judge for themselves of the nature of the pock that their patients had had in infancy. We frequently see persons suffering under variola that have been previously vaccinated; but we have, at present, no means of knowing whether these persons have had the true cow-pock.

Another suggestion is that every registrar should be required to ascertain, by reference to the directory, that the practitioner signing the certificate is really a qualified medical man.

If certificates be loosely received (as they now are for deaths, in many instances), no dependence can be placed upon their accuracy.

I am, etc.,

FRED. JAMES BROWN, M.D.

Chatham, September 8rd, 1853.

[Dr. Brown ought to press his important suggestions in the proper quarter. From the tenor of our correspondence, however, we fear that the Vaccination Act is doomed to prove a failure. ED.]

THE COLLEGIATE SYSTEM.

LETTER FROM W. COLLYNS, ESQ., TO THE EDITOR.

SIR,—Grateful as every one of our profession must be to Sir Charles Hastings, the founder of our Association, and gratified as every medical man must be at the eminent success of Mr. Propert's noble and philanthropic institution, there still remains a desideratum of the first consequence to society—the general establishment of collegiate residences for medical students obliged to leave the parental roof.

It was a great omission in the proposed bill for medical reform, that there was no clause requiring a certain course of preliminary practical study, as a pupil, with some legally qualified general practitioner, before the intending student should be admitted to matriculate at a medical college. But when the state of pupillage is past, and the young student enters one of our great medical schools, in the metropolis or elsewhere, he has no retreat, within which he may retire for study, under the certain surveillance of a superior, who could assist his studies, and protect him from the numerous temptations, so attractive, and so fatal to the welfare of unsophisticated youth.

It appears to me that there should be some sort of collegiate establishment attached to every large medical school, the superior of which should be resident, and an active intelligent person, who should attend to the discipline and order of the house, superintend the meals in the hall, enforce the closing of the house at a proper hour; and whose report of the students' conduct should always be required by the examiners at the boards, when the pupil applies for his license or degree.

Having educated thirteen pupils, during a practice, in the country, of forty-five years, and having seen the sad demoralising effects of the present system of irresponsible conduct (and more particularly in one instance in my own family, which entailed upon me great expense, and much misery), I may be excused having made this suggestion. If through your kind offices, attention can be drawn to this momentous subject, so as to obtain an efficient remedy, it will be a source of great and lasting satisfaction to

Yours, etc.,

W. COLLYNS.

Harlow, August 12th, 1853.

[Mr. Collins has touched upon a subject of surpassing importance. When parents send up their sons to study medicine in a metropolitan school, and place them, inexperienced and raw from the country, in a solitary lodging, they ought chiefly to blame themselves for the vicious courses of their children. A collegiate, or, better still, a domestic, home is far more likely than a famous school to tell favourably upon a youth's future career. EDITOR.]

NEWS AND TOPICS OF THE DAY.

TABLE TURNING.

[The following letter requires no commentary. We pity the parishioners of Patcham and the troops at Brighton. EDITOR.]

TO THE EDITOR OF THE BRIGHTON GAZETTE.

"SIR,—Though men cannot now believe in direct miracles, they must be startled by witnessing experiments and results

which superstition or imagination might easily attribute to the supernatural, and in reality without wonder.

"Within a few years, sensible evidence taught a few that Mesmerism (so called) was not simply ideal. The animate was found to act wondrously on the animate; and it may not have been blind conjecture that the will was an agent of mighty power over the nervous and muscular system.

"Whether, or to what extent, clairvoyance has a reality, and if so, what are the agencies which, acting and re-acting on each other, produce such startling effects, is a problem yet unsolved.

"Far more rapid in its progress, quite as startling in its results, and not less difficult to fathom, is the process of *table-turning*—no longer questionable, but a fact accomplished. For it has become the amusement of millions, young and old, the unlettered stare with astonishment, thousands cannot believe their senses, the scientific think and think, and are puzzled, and differ, and can come to no conclusion; and the great Faraday, the giant of his profession, can publish in the *Times* the most puerile farrago on this subject, to him so clear and intelligible!

"Table-turning, then, the world begins not to dispute; but table-talking, and table-telling, and table-dancing, and the fantastic freaks of tables of all colours, and all woods, and all shapes, people do not believe. They say they can't believe, and multitudes that they won't believe, and that nothing would make them believe.

"Then, sir, let me tell you, for the instruction and benefit of your readers, the following simple unvarnished facts, to the statement of which I attach my name and address, as a guarantee for their genuineness and correctness; and let me state, that any collusion, or combination, or deception, by one or more individuals present, was utterly impossible.

"On the 12th inst., I was visiting at Crohan House, the residence of R. Patton, Esq., county Donegal. From among a party of ladies and gentlemen, nine were solicited to take their seats round a large rosewood drawing-room table. After forming an uninterrupted link with our little fingers, we all agreed to will that the table should turn to the left. About half an hour elapsed without any apparent motion, when I said, 'let us alter our intention, and will it to the right'. We did so, without in any respect changing the position of our hands. Almost immediately the table began to creak and shake a little, and soon to turn slowly, and then more rapidly revolving and progressing. It was arrested by an inequality in the carpet, and for a quarter of an hour seemed quite motionless, when it again started off rapidly, and carried us all with it, *volentes volentes*, but was again stopped by the uneven carpet. The patience of some of the party began by this time to give way. One or two raised their hands, and finding the chain broken, we all did so. Four of the same party then formed a similar chain round a small table, about three feet in diameter, standing upon three legs, without castors, which in less than a minute started off, revolving with great velocity—so great, that the persons whose fingers formed the chain on the table were unable to retain their balance, and one after another were prostrated on the floor, to the no small amusement of the bystanders. However, the moment the table was again touched by more than one of those who had been engaged in operating on the large table, an immediate effect was produced; and, as in the case of the larger one (which we had often tried), when revolving rapidly to the left, on my saying, 'now we will it to the right', *citius dicto*, to the right it went, with equal velocity. 'Quicker, quicker,' we all cried, and quicker it went; and at the command 'stand still,' it equally and as quickly obeyed.

"One of the party then suggested that the table might be asked to tap on the floor. While revolving, it raised one leg, and tapped loudly and distinctly. Three taps were then required of it: three it gave. It was then ordered to stand still and tap: it obeyed. By this time, either the table or the individuals became so charged with the occult power, that by simply touching the table, without any manual conjunction, it immediately performed a rapid revolution. One lady in particular set it wildly off the instant her fingers touched it. My own power over it seemed next to hers; but certainly inferior.

"The table was then told to tap with one leg three times: it tapped at once three times, loudly and clearly. Then with each leg, in succession: it failed not. We then desired it to go round, and then suddenly to stop, on which I asked of it, how many children a certain lady present had? It raised its leg, and gave the accurate number of strokes, distinctly and correctly. How many Irish miles, we next inquired, is it from Ramelton to Rosnakeel? The answer, eleven, was unmistakably plain and correct. How many people were round the

table? Five. Correct. How many in the room? Right. The table could never be made to move after indicating the number till a fresh question was put. 'How many framed pictures were there round the room?' Nine. Right. 'What o'clock is it?' It was a quarter after nine. It gave nine distinct strokes (afterwards, when a quarter to ten, it struck ten). One of the party then proposed that the table should be carried upstairs to the room of an invalid lady who was extremely interested in the 'séance'. I opposed the movement, on the ground that the experiment must fail. I was outvoted, however, and it was carried by four persons, maintaining the chain perfect. The instant it touched the floor, off it went again, at my bidding; and its race was quick or slow, to the right or left, backward or forward, just as we willed it. I might say, as I willed it, or the lady before named, for we often did so separately, and alone. But, stranger still, my order was that it should dance, it danced a merry hornpipe; that it should shake, it rolled rapidly round, and shook as if in a fit of ague, amid one irresistible laughter. It obeyed the command to jump till it lost its balance and tumbled over. Our order that it should raise itself was unavailing. On request, it bowed most politely, and in like manner it played hide and go seek, when told to follow any one through the room; it was commanded to leave the room. No sooner said than done; to save it some broken legs, we dragged it back just as it was reaching the stairs. In telling the ages of persons between forty and fifty, it was mostly correct, always approximately, and the one year's variation from the truth in an instance or two, arose, I believe, from miscalculation on the part of some of us, or from want of sufficient observation. Subjects for experiment at last began to fail us, and finally, it was asked, when our amazed patient would recover: in three days was the immediate reply, and loudly proclaimed answer. Time sufficient has not yet elapsed for me to hear the result.

"These, sir, are a few of the numerous experiments we made so successfully. What a wondrous novel power! Muscularity it cannot be; odyle, or some corresponding power, it may be; electric, or galvanic, or something similar, perhaps, not now to be characterised by name. I leave the question to the public, without note or comment. Gladly should we hear again from Mr. Faraday on the subject. "I am, etc.,

"HENRY ALLEN,
"Vicar of Patcham, and Chaplain
to the Troops, Brighton."

August 23rd, 1853.

CHOLERA AT NEWCASTLE. Up to Monday, 133 cases of the Asiatic Cholera have occurred at Newcastle, of which 53 were fatal. The disease has also broken out at Hexham and at Morpeth. Mr. Grainger has been in Newcastle since Friday, co-operating with the authorities to improve the sanitary state of the town. We cannot expect that we can long enjoy an immunity in this metropolis; and yet our sanitary condition is as imperfect as it was in 1849.

THE CHOLERA. The epidemic is on the decline at Copenhagen, and the people are a little recovering from their alarm. Apprehension had, however, risen so high, that more than 40,000 people had fled from the capital. It is computed that the population was reduced to 90,000, and that about 4,000 persons had fallen victims to the disease. The cholera has again broken out at Moscow, and one of the first victims has been Dr. Siervruk, Professor of Anatomy to the University, who died after two days' illness. The disease is said to have appeared at Dantzic. We regret to learn that cholera, which at first only presented "sporadic" cases in Hamburgh, has now assumed an epidemic form. Of 180 cases, two-thirds proved fatal, thus exhibiting the malignity of the disease.

MUSEUM OF PRACTICAL GEOLOGY IN GLASGOW. On Wednesday, August 31st, a meeting was held in Glasgow, presided over by the Lord Provost, in the Council Chambers, for the purpose of having an interview with the Right Hon. E. Cardwell, President of the Board of Trade, on the subject of having a Museum of Practical Geology established in that city. The Lord Provost introduced the business of the meeting by stating that as it was understood Government intended to establish a School of Practical Geology in Scotland, it was most desirable to have it founded in Glasgow, which was the centre of the mineral districts and manufacturing industry in Scotland, where it would be found practically useful, instead of being scientifically ornamental, which it would be if established in Edinburgh. Mr. Wm. Murray of Monklands, in urging the claims of Glasgow, stated, that situated as it was in the centre of the mineral dis-

trict, comprising the counties of Lanark, Ayr, Renfrew, and Dumbarton—a district inhabited by a third of the entire population of Scotland; producing 600,000 tons of iron annually, whilst all the rest of Scotland yields only 54,000 tons; and employing 20,000 persons in the manufacture of pig-iron, 8,000 more in converting into malleable iron, 15,000 in making it into ships, and other 15,000 in constructing engines and machinery on the Clyde—no other city could put in a claim for the foundation of the museum, which could bear a moment's comparison with it. Sir James Anderson, Mr. Hastie, M.P., and other gentlemen, having also enforced the claims of Glasgow, Mr. Cardwell rose and said, that there were two questions to be considered. The first was, shall the public money be devoted to the establishment of such an institution; and if so, in what part of Scotland should it be placed? It gives me pleasure to hear the statements of so many eminent men in Glasgow, and it belongs to me, in the department of the Government in which I am placed, to consider all such questions; but you are aware that it requires the sanction of that department which regulates the expenditure of the public money, before I can determine the question. All I can say is, that I have listened attentively to the statements which have just been made, both as to the necessity of such an institution, and the place where it should be situated, and that the subject shall be very carefully considered by me.

THE LATE D. M. MOIR ("DELTA"). It is with much pleasure that we are able to state that the name of the widow of Mr. D. M. Moir, surgeon, of Musselburgh—so well and widely known in the world of letters for the tale of Mansie Wauch, and other valuable contributions to literature—has been submitted to the Queen by the Earl of Aberdeen for a pension of a hundred pounds a year, and that Her Majesty has been pleased to approve of the Premier's recommendation.

EPIDEMIOLOGICAL SOCIETY. The Cholera Committee appointed by this Society are understood to be diligently engaged in investigating the origin and progress of the present outbreak of Cholera in the country.

PHYSIC FOR BRUTES. A hair of the dog that bit you is recommended as a cure for the consequences of drunkenness; but when intoxication results in beating women, the dog does not afford so proper a remedy as the cat. *Punch.*

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LOST AND FOUND. We are requested by Mr. Michael to state that a lens belonging to a microscope was *lost*, and a pair of gold spectacles *found* at the place of meeting at Swansea.

DR. CHRISTISON ON GALVANISM IN CONSTIPATION. We regret to find that at p. 801 we copied a misprint from a cotemporary. The word *arms* is printed in place of *anus*. The sentence ought to read thus:—"the first way of using it was by directing the galvanic current from the mouth to the anus."

THE MEDICAL SCHOOLS. In compliance with the wishes of several correspondents, we propose, on the 23rd September, to give, in the body of the Journal, a condensed view of the prospectuses of the various medical schools which have appeared in our advertising columns, or which may appear on or before that date.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXVIII. LONDON: FRIDAY EVENING, SEPTEMBER 23, 1853. NEW SERIES.

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DISCIPULUS is again requested to communicate his name, not for publication, but in confidence, so that his letter may be answered.

MEDICAL ATTENDANCE ON SICK-CLUBS.

UPON several recent occasions, the attention of our readers has been directed, both by ourselves and by our correspondents, to the subject of sick clubs as they affect the interests of medical men. We again recur to the topic, not only because these institutions are in themselves the source of much injury to the medical profession, but especially because they are a part of that system of imposition and oppression, to which we are all more or less exposed, whereby our time, our skill, nay, almost our lives, are assumed to be at the disposal of the public (from government downwards), whenever they are asked for under the names of charity and benevolence. We deny not the claims upon our charity and benevolence; and we rejoice to bear testimony to the general readiness with which those claims are practically acknowledged by our professional brethren; but we do deny the right of any one, whether in a public or private capacity, to make them a ground of imposition in what ought to be purely business arrangements. We object to the abuse of the sacred name of charity, when it is improperly used to give an appearance of goodness to the gratuitous or semi-gratuitous services of medical men. How many, we ask, of the gratis morning levees of the unpaid dispensary and hospital officers, with their indiscriminate admission of patients, are held for the sake of true charity? We need not give the answer; all know it: all know, too, and feel, that reform of these things there must be—a reform which can only be brought about by earnest and united action. No body of men in our profession possesses the same power of acting in union as our own Association. To its members, therefore, we address ourselves, hoping that the reform, when once begun by them, will not cease till all abuses have been swept away.

Owing to the great variety of circumstances under which Sick Clubs are constituted; owing, also, to the great variation in the amount per member paid to the surgeons, it is impossible to form any calculation of the general remunerative value of clubs. Assuming, however, that from three to four shillings per member is the average annual payment,

and knowing that the ascertained average cost of the medicines for each patient treated in a public hospital is a little above four shillings, it is evident, as only a certain percentage of the members of a club are ill in the course of one year, that the payments made to the surgeon must cover the cost of drugs, and leave at least some margin of remuneration for time, trouble, and skill. Now repudiating any system of medical remuneration based, either actually or ostensibly, upon the sale of medicines prescribed, our calculation has simply to do with the amount of remuneration left after the actual cost of the drugs has been deducted. That such amount of remuneration is small enough even in the best paying clubs, there can be no question; but, whatever it may be, if it is what the members of the club can be justly expected to afford, it can never be derogatory to any medical man to accept it, if it suit his convenience to do so. Its acceptance is simply a personal matter, a calculation between value received and value of time given; and often, in the country, of the facility with which the members of a club can be attended coincidentally with the private patients of the district.

But, after private considerations, every medical man, as a member of the profession, has public considerations due to that body, in the acceptance of any public appointment. He is bound to take care that his acceptance of such appointment does not involve injustice to his medical brethren. Every practitioner who, upon the ordinary club terms, accepts clubs composed, either in whole or in part, of members who are able to discharge a reasonable medical account, clearly does so to the injury of his brethren and of himself: he withdraws individuals from the ranks of those who, consistently with the order of society, ought to do their part in the support of the profession as a whole. If persons who unjustly seek for club medical relief do not feel the degradation which they ought to feel in accepting the semi-charity of terms adapted to the scanty earnings of the labourer, medical men have no right to degrade themselves and the entire body of the profession, by pandering to such meanness. In confirmation of our sentiments, we cannot do better than quote from the extract from the *Union Médicale*, given in the Journal for September 2.

"But if we have some right to pride ourselves on our acts of charity, is it not our duty to take care that they are properly recompensed by those who can do so? And would it not be at once a dereliction of our duty to our brethren, and a lowering of professional dignity, to accept a position which would oblige a practitioner to visit the rich as well as the poor members of a club, thus depriving his brethren of a practice from which they could obtain some reward for their trouble, and throwing away his own services, as if he doubted whether they were worth anything?"

It is upon the established practitioner of moderate income and moderate practice that the abuses of the club system press most severely; encouraged as those abuses are, on the one hand, by young men struggling into practice, and on the other by men of large and old established busi-

ness, who employ assistants to do their club and union practice. By the former, the *respectable* club patient is hailed as likely to bring the more profitable accession of his family connexions; by the latter, the question of profit or loss is swamped in the generalities of a large income. To the established practitioner, with but a small or moderate practice, this question of profit and loss is a very different matter; to him, every private patient, who can pay his accounts, is a matter of consequence and calculation, and his withdrawal into the club ranks is a loss to be felt. Yet how difficult is the position of the medical man! If he resists what he knows and feels is an imposition and a wrong, he almost certainly risks the loss, not only of the one patient, but of the family. Need we feel surprised that, making up his mind that the first loss is the least, he succumbs to the force of circumstances, and certifies his *respectable* patient as a fit member for semi-gratuitous attendance?

We cannot blame poor men who act thus—men who feel they cannot afford to lose even an inch of ground in the battle of life; but we do blame the indifferent or aggrandising spirit of the independent men—the men of large practices and visiting assistants—who might rectify the evil, who might, without hurt to themselves, or rather to those dependent upon them, take an independent course, but who prefer permitting, and even aiding, the victimisation of their less fortunately placed brethren. To those who are in easy circumstances we appeal for co-operation in our attempts to remedy an evil which, though it may not affect their pecuniary interests, does affect their position as medical men, and originates calamities which press with severity upon others. Charity begins at home. Every medical practitioner, be his position what it may, is bound to see that, in exercising his vocation for the good of the public, he inflict not injury upon his own profession. Is it not the abuse of gratuitous advice, and of semi-gratuitous advice, which renders our Benevolent Fund and our Benevolent College so necessary?

WHERE OUGHT I TO INSURE MY LIFE?

WHERE ought I to insure my life? is a question which is daily addressed to medical men by some of their patients; and we fear that, too often, an answer is inconsiderately given. It does not follow that, because an insurance company promises to remunerate the medical profession, it is a safe and respectable concern; and as some seem to act as if this were the case, we think it our duty to caution our readers against too easily lending their names and influence to new and plausible speculations.

In our number for the 9th current, we inserted a letter from Mr. Henry Terry, jun., of Northampton, regarding a society which we find has been extensively advertised, especially in the provincial newspapers, under the name of the "New Economic Life Assurance and Loan Association". The advertisements represent the following gentlemen as trustees: Matthew Faber, Esq.; Alexander Peter Fletcher, Esq.; Ambrose Lockett, Esq.; William Pincher, Esq. We have made diligent inquiry among our City friends; and we find that these trustees are wholly unknown in the commercial world. As their addresses are not given in the prospectuses and advertisements of the company, we much fear that their standing as monied men is no better

than that of the directors of a more celebrated undertaking—the Glen Mutchkin Railway. If we are speaking wrongfully of these gentlemen, they have themselves only to blame; inasmuch as "William Deacon", their Secretary, who signs their prospectuses "by order of the board", has evaporated from the offices, 12, Took's Court, Chancery Lane, and has left neither man, woman, boy, nor placard behind, to tell of his own habitat or of that of the trustees. The affair is, or is not, a swindle; and we call upon Mr. Deacon and his friends to come forth from their hiding places, to gratify our curiosity on this subject.

It is not Mr. Terry's patient alone who has suffered; we are in possession of other cases of the same description. Mr. John Salusbury, of Conway, North Wales, informs us of a friend of his, who was treated exactly in the same way. The lady, who lives near Conway, in reply to inquiries which she instituted in London regarding the company, received the following reply:—

"Red Lion Square, Aug. 27th, 1853.

"MADAM,—By Mr. ———'s direction, I have made inquiries in Took's Court respecting the New Economic Life Assurance Company, and regret to inform you that it is a complete swindle. The parties left there last Monday, without paying the rent of the room occupied by them as offices: since which time many applications have been made by parties, who, like yourself, have been duped; but at present nothing has been heard as to where they have gone to.

"I am, Madam, your obedient servant,

"H. E. HINGTON."

There are other insurance companies, regarding which we may yet be obliged to make some remarks. But in the meantime we forbear, in the hope that, during the next session of Parliament, an Insurance Company Registration Act will be passed, which will effectually keep sharpers out of the field. At present we would say, that when a medical man recommends an office, he ought to feel morally certain of its solvency and respectability; and he ought to bear in mind that some of the new companies are most hazardous ventures.

ORIGINAL COMMUNICATIONS.

ON FEMALE STERILITY, WITH SOME PRACTICAL SUGGESTIONS FOR ITS REMOVAL.

By WILLIAM BAYES, M.D., one of the Physicians to the Brighton Dispensary.

It is interesting in the outset of our inquiry to glance at the laws which appear to govern the increase of the human race. Viewed as a whole, the population of the world appears rapidly on the increase. There is no fear of depopulation from any natural causes with which we are at present acquainted. But a marked difference in the ratio of increase appears, if we contrast particular countries and separate races of men.

The increase is most apparent in the temperate regions, from this cause, that the average duration of life is longer than in those regions where extremes of heat or cold predominate.

In newly discovered, yet fruitful countries, human fertility is very great; it is less where population is dense.

where civilisation has reached a high pitch. Again, human fertility is great among a well fed and well clothed labouring population. It is less among the idle and luxurious.

These two examples, however, are in reality identical, since in all newly discovered, sparsely populated countries, the inhabitants necessarily belong to the labouring class, and to the most healthful of that class, viz., the agricultural. And lastly, fecundity is great among new nations composed of various elements and of a mixed population, while it is much less in the older nations, especially where, from natural or artificial restrictions, they are much confined within their own limits, and remain almost unmixed.

But our inquiry does not relate to the fertility or sterility of nations; at present there is more fear, in Europe at least, of over population, than of the reverse; and even if that were not the case, it would more properly belong to the province of the political economist than of the physician. It is with individual cases we have to deal, where it occasionally happens that the greatest grief and distress are consequent upon sterility; and it is with a view of inquiring how far the causes of this sterility are removable by medical interference, that I have penned these few lines.

Descending, then, from communities to individuals, we shall find that where both the man and the woman show fine physical development, and are possessed of a sanguine temperament (which must be looked upon as the true index of perfect health and vigour), their families, *ceteris paribus*, will be both numerous and healthy. And further pursuing our inquiry, we shall find that the woman who has a broad well shaped pelvis, and a good bust, together with fine muscular development, and a rounded contour, will bear the largest number of children.* In other words we would say, that where the body is finely formed, where every part is well expanded, where the mind possesses a happy and quiet disposition, where an equable balance is preserved between the animal and mental powers, there will be force, regularity, and rhythm of every action, and in the performance of every function, and there will exist the most happy state for fertilisation. Whatever detracts from this state of body in either the male or female, must be considered as antagonistic to fertility, and as tending to sterility. This faulty organisation is far more frequently to be found in the female than in the male sex.

The artificial life led by the luxurious and highly civilized among the upper classes tends to a loss of balance between the animal and mental powers; it tends to exaltation of the functions of the sensory and depression of those of the motor tracts of the nervous system (bodily), and to a preponderance of the sensations, feelings, and passions, over the reasoning powers (mentally).

Thus, in place of expansion, we find contraction of the frame, flattened chests, curved spines, and narrow or distorted pelvis. We find a loss of balance in the muscular power. Its contractions are partial, spasmodic, and intermittent, in place of rhythmical and tonic. Or, on the other hand, a general relaxation of the fibre occurs, allowing engorgement of the lymphatics, as in the scrofulous. And these same states of body have their psychical analogues in the alternate excitability and listlessness of the mental efforts.

Faults in the organisation, such as these, are of course most readily combated and corrected during youth; yet even in riper years it is astonishing to find how much the general development may be expanded by perseverance in judicious measures.

Proceeding in our subject to the more immediate causes of sterility in the female, which are likely to be benefited by medical interference, we should divide them into three classes.

- I. Mechanical;
- II. Functional; and
- III. Moral.

I. MECHANICAL CAUSES. With regard to the first, I shall not here speak at length, since it must be obvious that where a mechanical obstacle exists, it must be removed before impregnation can occur.

The most frequent obstacles are uterine displacements, prolapsus, retroversion, anteversion, etc., and a narrowness in the passage through the os and cervix, sometimes almost amounting to stricture. Also, occasionally imperforate hymen and a contracted state of the vagina, allowing of only partial connexion. So far as my own experience goes, uterine displacements are of increasing frequency. In the majority of cases, sterility, arising from these causes, is capable of cure, if advice be sought early, and the cause be discovered.

II. FUNCTIONAL CAUSES may be subdivided into—

- A. An irritable state of the uterus, constantly tending to produce clonic spasm, and causing dysmenorrhœa.
- B. The atonic state, which is usually accompanied by leucorrhœa.

Whether the dysmenorrhœa arises from an unnaturally acrid state of the menstrual fluid causing irritability of the uterus, or whether the womb itself is at fault from hypersensibility, from ulceration of the os, or from its passage being preternaturally contracted, we cannot look for impregnation, until this morbidly irritable state of the organ is subdued. If the quality of the blood be hyperæmic or anæmic, we must correct it. If local irritability be present, we must search for its cause, and subdue it.

In some cases, this is not a matter of much difficulty. It often depends in the newly married on local excitement, and will give way readily on the temporary suspension of intercourse. In other cases, as where ulceration of the os uteri exists, it may be more or less difficult of removal. But there are other cases, where, in spite of all the means at present in general use, dysmenorrhœa still continues; and although during the intervals the health may apparently be perfect, no sooner does the time approach, than the warning pains are felt, and hours or days of pain and illness must be again endured.

Where this is the case in young females, it sometimes happens, if they marry early in life, that they soon become pregnant; and if they escape miscarriage, their subsequent menstrual periods recur, after weaning the infant, with little or no pain. But although this occasionally happens, such a happy termination is by no means frequent, especially when the dysmenorrhœa has been of long standing, and where the female marries later in life. In these it would appear as though the habit of body were too strongly grafted upon the system to be easily checked; so that although a few days, or even a few weeks, beyond the usual period, may occasionally elapse, and hopes be thus excited, yet the uterus is still so irritable, that it will not tolerate even the slightest distension, and the discharge returns with twofold violence, adding another and recurring cause of sterility in the frequent disappointments hence ensuing.

If we assume, as a physiological fact, that each menstrual period is analogous to the "heat" of animals (and this is the most recent view), and that each catamenial discharge is accompanied by the expulsion of an ovum, which having become matured, has failed to be fertilised, and is thus cast out of the body; we must then suppose that the most fortunate period for impregnation is the moment when the ovum is ready to drop from the ovarium; just as the most fortunate moment to prepare the ground round a tree for the reception of its seed is at the very moment when the ripe fruit is ready to fall. But in the functional derangement, now under our consideration, the difficulty lies in this, that the uterus is so irritable that its tendency is, not to retain but to expel.

Our inquiry here will be, Can this expulsive action be reversed? I do not hesitate to say that in very many cases it can. And the consideration of the means I would suggest leads us to some very interesting points for investigation.

* Narrowness and contraction of the pelvis is the sign of a worn out race, both in man and in woman.

In severe cases of dysmenorrhœa, the pain is not only to be found in the lumbar, sacral, pubic, and iliac regions, but extends down the inner part of the thighs, and often in the mammae.

In some cases of amenorrhœa, a vicarious discharge has flowed from the breasts.

The great and marvellous sympathy between the mammae and uterus is well known to every practical physician. As a means of arresting uterine hæmorrhage after labour, the application of the infant to the breast has long been known and acted on. Here appears the most powerful example of the direct sympathy of distant organs, and of the diversion of the circulating fluid from one portion of the body to another. In a less striking form the same occurs during lactation, the menstrual flow being suspended during suckling. In other words, the uterus remains quiescent when the mammae are in a state of activity.

It is needless to enlarge on points so well known to practical observers: enough has been said to illustrate my meaning. I would suggest whether the consideration of these facts does not point out to us an easy and safe channel, through which not only to alleviate the pains of those who suffer from dysmenorrhœa, but also show us a means by which the womb may be made to pause, and its morbid irritability be moderated sufficiently to allow of successful impregnation.

Dr. Marshall Hall has proposed that a strong infant should be applied to the breast with this double view: but it seems to me that, apart from the inconveniences and practical difficulties attending such a course, there are other means which would prove even more serviceable. My own suggestions would be, that fomentations of warm milk should be used to the breasts a day or two before the expected period; that a breast pump should be gently applied at the same time for a quarter of an hour, two or three times during the day; that the space from the last cervical to the eighth or tenth dorsal vertebræ, for some inches on either side of the spine, should be kept warm with hot flannels; and that the apartment should be kept warm and well ventilated. These means should be continued until the period has fully arrived. If the menstrual flow then appears, the warmth thus applied need not interfere with other means, supposing the pain to be severe. If intercourse shall have taken place and conception have followed, I should suggest the continuance of the fomentations until the period over which the catamenia usually extend shall have passed. Presuming, as is most likely to happen, that the first application of these means fails in immediately inducing conception, it will still have made a step towards it by lessening the irritability of the uterus. During the interval between the catamenial periods, I should now suggest a temporary absence from home; and that abundant exercise, a full exposure to the open air, freedom from mental occupation, and every measure tending to produce muscular strength should be adopted, while intercourse should be avoided until a few days previously to the next period, when a recurrence of the same means should ensue. The development of the mammae should also be favoured by carefully protecting them from cold, and by occasional friction with a soft hand and a little warmed oil or milk.*

Sterility may ensue from general hyperæmia or anæmia, and it is often strange to notice how immediately fertile the uterine system becomes, after the removal of these adverse states. The former is not unfrequently met with in the upper classes of society, where food of the most nutritious and rich kind is abundantly partaken of, and where wines are freely taken, whilst the amount of exercise and exposure to vicissitudes of temperature is extremely small. In these cases, the uterine loss offers a safeguard to the general health, and profuse menstruation becomes a habit needful

to the preservation of life. Fertilisation, here, can only take place when a simpler diet is substituted, and muscular exertion to some extent persevered in, so that the uterus is allowed to return to its simpler and more natural duties. An anæmic condition, sometimes accompanied by amenorrhœa, generally with deficient and painful menstruation, and not unfrequently with profuse leucorrhœa, is also one of the causes of sterility. Iron and generous living here suggest themselves, but especially out door exercise, as much as can be borne. The cold douche to the lumbar region is among the most powerful of the tonic means at our disposal. Cases of this kind very frequently present themselves to our notice, in which we see conception occur almost immediately on the removal of this condition.

III. MORAL CAUSES. Before concluding we must glance, though cursorily, at the moral causes. Some pernicious habits in which the young occasionally indulge, often in ignorance of the evil consequences they are certain to entail, lead to sterility, through their debilitating effects upon the constitution. These and their remedies need not here be entered upon. But there are other moral causes which are apt to be overlooked, and which are connected with modern education and civilisation, which tend to induce a passive and enervated condition of body in our females, very adverse to the free development of the frame. These act indirectly by lowering the standard of the general health, and thus tend to produce the evils just mentioned. The whole education of an accomplished girl tends to a repression of the natural feelings, and teaches her to hide every expression of her natural impulses, by word or look. Hence, all instinct becomes blunted and suppressed, and she even gets to look upon that which is legitimate as something immodest and indelicate. This retiring and shrinking bashfulness is not consonant with conception. The lower classes of society, less refined in their feelings, unaccustomed to their suppression, meet the advances from which the other retires, and thus become easily fertilised. But it is otherwise with the highly civilised and, so to say, etherealised child of art; and nature here abandons in her turn her who has despised and thwarted her lessons and her hints.

Marine Square, Brighton, Sept. 1853.

[We conceive that there is either dangerous error or much ambiguity in the concluding paragraph of this interesting paper. As the physician seeks his examples of female fertility and health among rustic home-bred women, and not among the "accomplished girls" of fashionable life, so does the poet and the man associate the beauty of a blush with untutored simplicity, and not with the perfection of an accomplishment. We cannot, therefore, avoid stating our conviction, that it is an error both in morals and in hygienics, to regard "shrinking bashfulness" as, under any circumstances, a cause of sterility; and that it is equally incorrect to regard *genuine* "shrinking bashfulness"—the most charming attribute of woman—as the real or generally alleged characteristic of "the etherealised child of art".—EDITOR.]

CANCER OF THE SIGMOID FLEXURE OF THE COLON AND FIRST PART OF THE RECTUM: DEATH FROM PERFORATION.

By C. E. REEVES, B.A., M.D., &c.

CASE. M., aged 78, tall and still somewhat muscular, with dark eyes and grey hair, had been treated by a practitioner for piles and indigestion for some months. The history of his case, as near as it could be obtained, from his being deaf and the fatigue which talking produced, was, that during the last eight months he had gradually lost flesh and strength; his bowels, always constipated, had become more and more acting without powerful purgatives. Four months before his first experienced tenesmus: this had gone on, and he had

* In the application of the fomentations, Markwick's spongio-piline offers a very useful material; and if a circular piece be perforated at its centre with a hole for the nipple, and a V shaped portion be cut from the centre, it can be made to fit the breast perfectly.

severity, particularly towards evening, and had obliged him to get out of bed ten or twelve times in the course of the night. During this time, the evacuations obtained by purgatives, such as croton oil, had been very scanty, consisting of slimy matter mixed with a little fluid feces and occasionally a little blood. He had suffered throughout much from flatulent eructations, attended with burning heat at the epigastrium.

His skin was pale, with an almost imperceptible tinge of yellow, bearing a close resemblance to badly bleached white wax; his conjunctivæ were clear and bright; pulse good; the appetite during the last fourteen days had been failing, and now any attempt to take food excited nausea.

The abdomen was rather large: on the right side the descending portion of the colon could be distinctly felt, containing large masses of feces down as low as the sigmoid flexure; the ascending and transverse portions were dull on percussion, and undefinable, from the small intestines being equally distended with fluid. The stomach was empty; the liver was normal, situated rather high, but the gall-bladder projected beyond its lower margin nearly three-quarters of an inch, and felt hard and resisting. On introducing the finger into the rectum, a hard scirrroid body was felt two and a half inches up, larger posteriorly than anteriorly and laterally, with a small opening in it just admitting the apex of the index finger. He had slight lancinating or pricking in this region, but the tenesmus was the most troublesome symptom. The motion which had been passed a short time before, consisted of about three tablespoonfuls of fluid feces, with two or three small clots of dark coloured blood, and two masses of the size of large peas of dirty ashy coloured muco-purulent matter. This matter, on being examined under the microscope, gave indication of cancer-cells. The motion had a peculiar putrid fishy smell. The symptoms continued much the same until the third day before death, when considerable tenderness was complained of over the descending colon. His pulse rose from 72 to 80; his tongue became brown, and he was unable to take anything. The tenderness was much mitigated by the next day by the application of cold water; yet the pulse had risen to 100, and this day, in addition to the evacuation of fecal matter, he had passed between five and six ounces of foetid serum tinged with blood. He had also vomited several times very dark greenish foetid fishy watery fluid, with flaky masses in it, like those seen in the motions. On standing, the flaky masses sank with a dark green substance, like inspissated bile, to the bottom, leaving a rather clear fluid, like cabbage water. On the morning of the day of his death, the tenderness over the descending colon had nearly subsided, the masses of feces were more moveable, and they seemed to be now floating in fluid. The vomiting had continued. An evacuation from the bowels had been preserved; it consisted of about a tablespoonful of fluid feces with streaks of dark coloured blood. Pulse 116.

At half-past twelve A.M., he began to complain of pain in the bowels; and he passed nearly a quart of fluid feces, mixed with streaks of dark coloured blood. The pain in the abdomen increased in severity, and, when seen two hours from its commencement, he was suffering the most excruciating agony, pulseless, and nearly speechless, with yellow watery bilious matter rising up into his mouth every few minutes. It was only after 160 drops of tincture of opium had been given, in three doses, at intervals of ten minutes, that any relief was obtained, and his pulse became at all perceptible. He sank at 6 P.M.

POST MORTEM EXAMINATION, sixteen hours after death. The abdomen was not distended, but the peritoneum, on being incised, gave issue to some highly foetid gas. The intestines were covered with fluid fecal matter, which was seen to ooze from between the pelvic viscera on the slightest pressure, or on moving the body. The descending colon was felt largely distended with fluid, in which floated two large masses of fecal matter, each the size of a fist. Several dark violet coloured patches of congestion, varying in size from a shilling to a florin-

piece, existed on the peritoneal membrane; some patches of the same character were present on the small intestines, larger in size, but much less intense in colour. The capillaries of the peritoneum of the abdominal wall were injected; this injected state increased considerably towards the dorsal region. On separating the small intestines from the pelvis, some flakes of dirty muco-purulent matter were seen, and, on pressure, fluid feces issued from the right side of the sigmoid flexure of the colon, from an irregular jagged opening; but the parts were so exceedingly soft, that its magnitude could not be well determined, and it was with the greatest difficulty that they were removed for inspection. The whole of the walls of the sigmoid flexure were scirrroid, varying in thickness from a quarter to half an inch, of a fibrous character, and easily broken down. On the anterior part, near the centre, an irregular excavated ulcer existed, about three inches in diameter, covered with the same kind of dirty muco-purulent fluid as was seen in the pelvis, and had been passed during life. To the right of this ulcer, a kind of sinus existed; and here the intestine seemed to have given way. The mucous membrane throughout was glistening, with a thin deposit of melanoid substance in its submucous tissue; this extended down to within three quarters of an inch of the termination of the rectum, not abruptly, but in a kind of fringe-like manner. Some of the mesenteric glands were melanotic, and also those along Glisson's capsule.

The liver was of the ordinary size, but situated high up. It was of a black colour, with a slight tinge of green; and soft, breaking down with very slight pressure; its coverings were easily removed; the granules were much larger in the superior than in the inferior part. This layer of black extended uniformly all over the organ, to the extent throughout of one-sixth of an inch; and the granules, although easily seen by breaking it, were yet smaller, and seemed more compact, than in any other part of the organ. I regret that the inadvertence of a servant, in throwing away the parts of the diseased colon and liver which I had brought home, prevents me from giving their microscopical characters. While making the examination, I applied a little salt to the dark layer of the liver; and, in the course of a few minutes, it changed the colour to a beautiful dark grass green.

The gall-bladder was very large and tense; oval in shape; three inches in length, and two inches in diameter near its centre; thickest at its inferior part. Half an inch from the extremity a slight indentation existed, the remaining portion curling upwards over the free margin of the liver. In its neck a small oval stone was found impacted, preventing bile from passing into the duct. Cut open, it was found to contain about two ounces of nearly clear coloured fluid, somewhat thick and viscid, like oil. The application of heat immediately coagulated it. The internal surface was quite smooth. The gall-stone was of the size of a small marble, ovoid in shape, rough and glistening, lighter than water, yellow on one side, and dark on the other. It was impacted in a pouch immediately external to the neck of the bladder. It seemed as if the stone had consisted originally of inspissated bile, and had become arrested; and that the deposit of clear cholesterine had taken place, until at last the duct had become quite blocked up. The dark portion of the stone, where it was in contact with the sac, had tinged it of a dark colour. The cystic duct was large, and would with ease admit the thick end of the blow-pipe. The spiral apparatus was obliterated, and it was tinged with bile to within a quarter of an inch of the cyst which contained the stone. The hepatic duct was also much larger than usual; but this and the other biliary canals were quite free. The stone, on section, consisted of two portions—a dark, forming three-fourths, consisting of inspissated bile, with a little cholesterine; the remaining part consisting of cholesterine. All the other viscera were healthy.

Harrington Square, London, Sept. 7, 1853.

CASES ILLUSTRATIVE OF THE TREATMENT OF SOME VARIETIES OF CHRONIC RHEUMATISM.

By C. HANDFIELD JONES, M.D., Senior Assistant Physician to St. Mary's Hospital.

THE following cases of diseased action depending upon rheumatism seem of sufficient interest to be worth recording, if only as memoranda of well marked instances of disease, and of the action of remedies. The brief way in which they are reported was unavoidable, as they all occurred in hospital out-patients, and time was of course wanting to make detailed inquiries.

CASE I. Jane F., aged 6, residing at Kensal Green, was admitted on Feb. 9th. She had a kind of fit, her mother stated, six weeks previously; but she did not lose her consciousness. At present, she was stupefied several times in the course of the day. She had pain in different parts of the head, which was not increased at night. The tongue was clean; the urine clear. She was living on the bank of a canal, in a damp place. The following medicine was ordered:

R Potassii iodidi 3 ss.
Liquoris potassæ 3 iss.
Infusi calumbæ 3ij. M.

Sumat 3ss. ter die.

Feb. 16th. She was decidedly better this week than last; but made a groaning dismal noise in her sleep, much more some nights than others. The medicines were continued.

Feb. 23rd. She was not free from fits, but had them certainly less often. Her mother said that when she was affected, she could compare her "to nothing so much as to a tipsy man in his foolish talk". The bowels were properly open; the pulse weak. The head was tender; she could not bear to have it touched. A blister was ordered to be applied to the neck.

R Ferri carbonatis gr. x. ter die.

March 1st. She had had no fit since the blister; but had one sharp attack on the night on which it was applied.

March 8th. She had no more fits, but rambled and talked during the night. The bowels were confined.

R Syrupi ferri iodidi 3ij.

Aquæ 3iss. M.

Sumat 3ss. ter die.

R Hydrargyri c. cretâ gr. iij.

Pulveris jalapæ gr. v.

Fiat pulvis alternis noctibus sumendus ad tres vices.

March 15th. She was improving; and did not talk so much during the night. The medicine was continued.

March 22nd. She had now quite lost all her former symptoms, and rested better at night.

April 5th. She was quite recovered, and gone to school.

REMARKS. That the pain in the head, and the cerebral disturbance, in this case, were occasioned by the action of the rheumatic poison seems pretty certain, from the nature of the pain, the tenderness of the scalp, the general progress of the disorder, the damp nature of the residence, and from the *juvantia*. The influence of local treatment was shewn in the good effects of a blister. Disturbance of the cerebral functions is by no means common, as the result of chronic rheumatism. Neither Dr. Copland nor Dr. Fuller makes mention of it. Had this affection continued longer, the chronic inflammatory action would, it is very probable, have produced hypertrophic thickening of the cranial bones, and a roughened state of their internal surface; and then the disorder would have become well nigh incurable. A female has been more than once under my care, in whom repeated rheumatic attacks, of the same chronic character, seem to have been the cause of imperfect speech and giddiness, with impairment of voluntary and mental power, from which she can obtain no relief.

CASE II. P., female, aged 1½ year, came under my care on May 10th. Her mother described her as a backward child. She had no teeth, and was frequently ailing. The

tongue was not coated; the bowels were in good order. The anterior fontanelle was depressed. The skin was in the morning cool. The child was very feverish and restless at night, becoming worse about 4 P.M.; constantly crying and moaning, very fractious and restless, rolling her head about. The feet were always swollen at night. The head, at the time of examination, was not hot. She had been ill five days. She lived in a healthy place.

R Potassii iodidi gr. ix.
Liquoris potassæ 3 ss.
Vini ipecacuan. 3 ss.
Aquæ anethi 3ix. M.

Sumat 3j. ter die.

May 15th. She had had two good nights; complained much less of the head, and was evidently much better; but had no appetite. The mixture was continued; and a teaspoonful of cod-liver oil was given three times a day.

June 30th. The mother called on me for another purpose, and told me on inquiry that the child had quite recovered from her former symptoms, and had thriven much better.

REMARKS. There was a good deal of apparent resemblance in this case at first to more serious disease; it might easily have been taken for a case of meningitis. However, the depressed state of the fontanelle, the nocturnal exacerbation, the swelling of the feet at night, and the absence of fever and of gastric disturbance, made it probable that the distress of the head was owing to a different cause. The beneficial influence of antirheumatic treatment was very apparent.

CASE III. W. W., aged 28, a cabman, was admitted on March 8th. He had had severe pain at the back of the head during two months. It was felt mostly at night, and had probably been brought on by damp. There was no disturbance of functions.

R Potassii iodidi gr. iv.
Sodæ carbonatis gr. v.
Decocti cinchon. 3iss. M.

Fiat haustus ter die sumendus.

R Liniment. opii,
Liniment. terebinth., aa 3j. M.

Fiat linimentum nuchæ applicandum.

March 15th. He was better.

R Potassii iodidi gr. vij.
Sodæ carbonatis gr. v.
Tincturæ cinchonæ 3j.
Decocti cinchonæ 3j.

Fiat haustus ter die sumendus.

March 22nd. He was much better.

April 5th. He had quite recovered; but seemed to want a tonic. He was discharged with directions to continue the same mixture, without the iodide of potassium, for a few days.

REMARKS. This was a typical case of rheumatic neuralgia cured by iodide of potassium. The man continued his occupation of cab driving all the time.

CASE IV. E. P., aged 32, wife of an omnibus conductor, was admitted Oct. 9th. She was suffering from frontal headache, which was increased by the recumbent position. The head was tender to the touch. She often had pain in the ancles. Her sleep was broken. The bowels were costive; the tongue was slightly coated; the urine scalded, and was high coloured. She felt very weak.

R Potassii iodidi gr. iij.
Potassæ bicarbon. 8j.
Decocti aloes comp.
Infusi calumbæ, aa 3ss. M.

Fiat haustus ter die sumendus.

Oct. 20th. She was better. The legs were free from pain. The urine was clear, and did not scald. The draught was continued, with the addition of five minims of tincture of cannabis Indica.

Nov. 10th. She went into the country soon after the last report, and returned with the same symptoms. She was ordered to resume the medicine.

Nov. 17th. She complained of itching all over, and some pain at the top of the head. The other pain was less. The draught was continued, the tincture of Indian hemp being omitted.

Dec. 1st. The itching continued in some degree. She was directed to take a mixture of quinine with sulphate of iron three times a day; and four grains of compound aloetic pill at night.

Dec. 15th. She was stronger, but still felt rheumatic pains occasionally.

Dec. 29th. She was going on very well, and felt "quite a different person". She was ordered to continue the medicine for a week.

REMARKS. The rheumatic symptoms in this case were very marked, amounting at first almost to subcutaneous. After being relieved by the employment of iodide of potassium and alkalis, they persisted for some time in a less degree, and were finally removed by the tonic action of quinine and iron. It seems questionable whether the itching was a rheumatic affection or not; it might be regarded as an hyperæsthesia: but no mention is made by Romberg of any such state resulting from the presence of the rheumatic poison in the blood. It is very conceivable that the *materies morbi* of rheumatism circulating in the capillaries might cause some irritation of the nerves in the papillæ, and so give rise to itching, much in the same way as occurs in jaundice.

CASE V. S. M., aged 33, a labourer, was admitted Feb. 16th. He had some short time ago an accident, which caused concussion of the brain; he was brought to the hospital, and, after remaining there several days, he was discharged. Very soon after this, he applied as an out-patient, complaining of severe pain at the left side of the head, extending up all over it. The pain was not constant; it was sometimes more severe at night, and sometimes by day. The patient was a stoutly built man, of rather sanguine aspect.

R Potassii iodidi gr. iv.
Liquoris potassæ ℥ss.
Decocti cinchonæ ʒiiss. M.

Fiat haustus ter die sumendus.

Feb. 23rd. He did not feel nearly so much pain as the preceding week. The medicine was continued.

March 1st. He had much pain at the back of the head on the left side, but slept well.

Sumat ferri carbonatis ʒj. ter die.

Opiate liniments were ordered to be applied.

March 8th. He was much better, but still had some remains of the occipital pains. The draught prescribed on February 16 was resumed.

March 15th. He was not so well. A blister was applied to the back of the neck; and the carbonate of iron was continued.

March 18th. He had less pain since the blister, but was not free from it.

R Potassii iodidi gr. x.
Sodæ sesquicarbonat. gr. v.
Misturæ camphoræ ʒj. M.

Fiat haustus ter die sumendus.

March 22nd. He was much better. The medicine was continued.

March 29th. Colchicum was substituted by a friend, who saw him in my absence.

April 5th. The pain had returned, and had been much worse last week, principally on the left side.

R Potassii iodidi gr. v.
Sodæ sesquicarbonat. gr. v.
Decocti cinchonæ ʒj. M.

Fiat haustus ter die sumendus.

A blister was applied behind the ear.

April 10th. The pain increased during the first three days of the week, but was subsequently less. Five grains of iodide of potassium and a drachm of tincture of cinchona were added to the draught.

April 15th. The pain was remitting, but on the whole less severe. The pulse was very weak.

April 17th. The patient was ordered to take mixture of quinine with sulphate of iron three times a day; and half a grain of extract of belladonna three times a day.

April 22nd. He felt a great deal better, and had very little pain.

April 26th. He was in about the same state. The appetite was good; but his strength did not increase. The pulse was of rather better force. The decayed stump of the last molar tooth was found to be exciting irritation in the upper alveolar arch. The medicines were continued; and equal parts of creasote and laudanum were ordered to be applied to the decayed tooth.

May 5th. The head was almost entirely free from pain; but he had a little on the right side.

May 10th. He had no return of the pain in the head; and was discharged cured.

REMARKS. The previous concussion of the brain might have excited suspicion how far the pain of the head was merely neuralgic. Relief was soon obtained by the employment of iodide of potassium; but afterwards, even in much larger doses, it ceased to produce a good effect. Colchicum was not beneficial; and belladonna did not seem to be of any particular use. The quinine and iron were the most effective remedies. The man continued, I believe, at his work as a labourer; but the debility which he experienced was very manifest. This seems to be a common feature in these neuralgias.

CASE VI. W. B., aged 39, a compositor, was admitted September 16th. He had very recently been in the hospital, suffering from weakness and painful aching of the limbs: he went out nearly, but not quite recovered, and soon relapsed. He stated that he had formerly had gout. His right arm was now much affected. Iodide of potassium with bark was given thrice daily, and camphor with henbane at night. He was ordered to rub an opiate liniment on the part.

Sep. 20th. He said that he was improved, and that he slept better. The pains in the limbs were diminishing, but were brought on by exercise.

Sep. 27th. He was improving "nicely".

October 4th. He had been much better during the last week, the pains gradually decreasing.

October 21st. He had pain in both loins, and some weakness in the elbows and arms. The urine was not clear, and high coloured.

R Potassii iodidi gr. v.
Potassæ bicarbonatis ʒi.
Decocti cinchonæ ʒiiss. M.

Fiat haustus ter die sumendus.

R Extracti aloes aquosi,
Extracti nucis vomicæ, aa gr. i.

Fiat pilula bis die sumenda.

October 25th. The pain was much more severe in the arms and shoulder. The tongue was clear; the urine clear: his bowels were open.

R Syrupi ferri iodidi ʒj.
Potassii iodidi gr. viij.
Decocti cinchonæ ʒj. M.

Fiat haustus ter die sumendus.

October 25th. He was wonderfully better since taking the last medicine.

November 1st. He was improving much, but had no flannel, and was half starved. The medicine was continued.

November 4th. He had no pains in the arms, and felt very well, but had an abscess forming near the anus. On account of this, he was again admitted as an in-patient. It was opened, and discharged purulent matter for some time. He left the hospital November 23rd, and did not present himself as an out-patient.

REMARKS. The rheumatic nature of the affection in this patient was not at first apparent; it was not regarded as such during his first stay in the hospital. The effect of remedies, the occasional shifting of the pains to other parts, and

the condition of the urine on the 21st, when a relapse took place, seem to show pretty certainly that it had its origin in this most common cause. It is also very probable that the abscess in the nates was connected with the same constitutional state; that it became, in fact, a focus of eliminative action. I had at one time a case under my care in which the symptoms presented at the outset the appearance of rheumatic fever, but quietly changed to a typhoid state; while collections of matter continued to form for a long time in various parts of the limbs. The cause of this unusual change can only be sought for in some peculiar condition of the vital powers, in consequence of which a disposition to generate pus took place of that which ordinarily produces lactic acid, the received *materies morbi* of rheumatism.

CASE VII. M. A. S., aged 42, married, had rheumatic pains all over her. They were most severe in the hands. Her urine was generally high coloured, and deposited lithic acid. The tongue was smooth, clear, and moist. Her digestion was pretty good.

R Potassæ bicarbonatis ℥j.
Potassæ nitratis gr. viij.
Vinî colchici ℥viij.
Aque pimentæ ʒiiss. M.

Fiat haustus ter die sumendus.

R Pilulæ hydrargyri cum colocynth. gr. v.
Fiat pilula omni nocte sumenda.

July 4th. She had had severe diarrhoea, which had not yet subsided. The bowels were open eight or nine times on the preceding day. The tongue was clean.

R Acidi sulphurici diluti ʒss.
Tincturæ opii ℥iv.
Aque ʒj. M.

Fiat haustus 4tis horis sumendus.

July 7th. The bowels were quiet. The rheumatic pains were troublesome, "all in the flesh". The urine did not deposit red sand.

R Infusi gentianæ comp. ʒj.
Ammoniaë muriatis gr. xv. M.

Fiat haustus ter die sumendus.

July 25th. She felt quite well, and wished to be discharged, saying that she was a good deal better for the medicine.

REMARKS. The rheumatism in this case was chiefly muscular; and the good effect of muriate of ammonia on it was very marked.

CASE VIII. S. F., aged 41, was admitted on July 14th. She had dreadful pain between the shoulders on moving. The urine presented nothing remarkable. Her digestion was not good. She had catarrh a month previously, to which she attributed her complaint.

R Potassii iodidi gr. iij.
Potassæ bicarbonatis gr. x.
Infusi gentianæ comp. ʒj. M.

Fiat haustus ter die sumendus.

R Camphoræ gr. i.
Extracti hyocyami gr. iiss. M.

Fiat pilula ter die sumenda.

July 18th. She stated that the medicine caused swelling of the eyes (eyelids); but there was none seen.

R Potassii iodidi gr. iss.
Sodæ sesquicarbonat. gr. v.
Acidi hydrocyanici diluti ℥v.
Infusi gentianæ comp. ʒj. M.

Fiat haustus ter die sumendus.

The pills were continued.

July 21st. The shoulders were better. The medicines were continued.

July 28th. The pains "went and returned again".

R Ammoniaë muriatis gr. xv.
Decocti cinchonæ ʒj. M.

Fiat haustus ter die sumendus.

August 4th. She was much better.

August 25th. She was discharged, well.

REMARKS. There seems to have been an unusual susceptibility in this case to the influence of iodine, as a dose of three grains of iodide of potassium caused irritant effects. The diminished dose (gr. iss.) was borne well. In this case, also, muriate of ammonia was of much use.

1, Southwick Place, Hyde Park, London, Sep. 13th, 1853.

BIBLIOGRAPHICAL NOTICES.

PRACTICAL OBSERVATIONS ON AURAL SURGERY, AND THE NATURE AND TREATMENT OF DISEASES OF THE EAR. By WILLIAM R. WILDE. pp. 506. London: 1853.

WE have had much pleasure, and not a little profit, from the perusal of this very excellent work, which we have placed on our shelves beside other standard treatises, the works of good, clear-headed, observing men—not "specialists", but sound scientific practitioners, entitled to the confidence of the profession, and wholly devoid of quackery or puffing.

From the situation of the organ of hearing, and the comparative difficulty of investigating the morbid appearances it may present, it has been till lately one of our medical opprobria, and has fallen under the dominion of quacks, lay and medical, the latter of whom Mr. WILDE justly castigates in the "History of Aural Surgery" which forms the introduction to this book. He divides the history into three epochs, the first marked by the introduction of the speculum (Fabricius); the second, by the application of Eustachian catheterism (Cleland); and the third, by the operation of perforating the membrana tympani, in certain cases of deafness (Sir A. Cooper).

The second chapter of the work contains the means of Diagnosis of Diseases of the Ear, and the Mode of Applying Instruments. We have for several years been ourselves in the habit of employing the simple and convenient speculum recommended by Mr. Wilde; it is a polished conical silver tube, of such a size as to fit the meatus, and infinitely to be preferred to the complicated instruments which have been so much vaunted. It "should be made as light as possible, highly polished both inside and out, with a stout rim or brim round the larger margin, and the smaller aperture well rounded off, so as not to irritate the ear." The patient is to be placed opposite a window into which the sun is shining; and the membrana tympani can now be easily seen and examined. Lamp-light is to be discarded.

The stethoscope, applied over the ear, is useful in enabling the surgeon to appreciate the varieties of sound produced on driving air into the tympanum, either by an expiratory effort on the part of the patient, or through the Eustachian catheter. This last named instrument, Mr. Wilde considers, will be found much less frequently necessary than many fancy; and he raises his voice against introducing probes into the drum of the ear, and among its small bones. The Eustachian catheter which he recommends is much wider than those commonly seen, and is always to be introduced through the nostril; but he repeats that, when the patient is able to inflate the membrana tympani himself, or when the cavity is inflamed, catheterism of the tube should never be employed.

We have in this chapter some observations on tinnitus, and its various characters. These Mr. Wilde cannot connect with any special lesions of the apparatus of hearing; in fact, he thinks that the description which patients give of the noises in their ears depends mostly upon fancy; servants invariably stating that they suffer from "the ringing of bells"; while, in his country, old women usually sum up their complaints by saying that "all the kettles in Ireland are boiling in their ears". Our author states that the tincture of arnica has proved useful in some cases of tinnitus.

In leeching the ear, the animals should be made to bite close to the orifice, or just behind or in front of the lobe of

the ear. Galvanism and electricity Mr. Wilde discards from the catalogue of remedies. On the use of mercury, he gives some good, but rather diffuse observations: the same rules apply to its use in diseases of the ear as in those of the eye, and especial praise is justly bestowed on the alterative powers of corrosive sublimate.

Chapter III contains the Statistics and Nosology of Ear Diseases. From an analysis of 2,385 cases treated at the dispensary, it appears that diseases of the auricle and external meatus amount to nearly one-half of the entire; affections of the membrana tympani, exclusive of collapse, number 819, or nearly one-third of the whole; and diseases of the middle ear amount to 101, or about a twenty-third of the whole. A very minute register is given of 200 cases, taken without selection from the records; and "the state of the membrana tympani is the most valuable result afforded by the examination of these cases. In ten instances only it was found natural; so that such may fairly be stated as the proportion of cases of 'nervous deafness';" in the other cases, it presented a great variety of morbid appearances, being thickened, vascular, opaque, ulcerated, etc., as variously as the cornea is; and from these records, "as well as Mr. Toynbee's researches, it is incontrovertibly manifest that inflammatory affections of some form or other have been the chief cause of aural diseases". It is manifest how this conclusion ought to affect our practice. The chapter concludes by a nosological classification.

The author next enters upon the proper subject of his work, which, however, "does not profess to be a complete system of aural surgery, but is intended to supply the reader with a practical treatise on the most frequent and urgent affections of the organ of hearing". This object Mr. Wilde has very successfully accomplished; his descriptions and directions being, though somewhat diffuse and occasionally episodic, throughout correct, practical, and distinct.

The diseases of the external ear are first considered, preceded by a sketch of the anatomy of the parts; and similar short accounts of the structure introduce the maladies of the more internal parts in the subsequent chapters. In treating of wounds of the auricle, our author informs us, on the authority of Dr. Carter, that, whenever a negro in the West Indies wishes to attach to himself a dog, he nails its ear for a day to the door-post of his cabin. These dogs must be possessed of a curious idiosyncrasy—first, in respect of their moral affections being seated in the ears; and secondly, in that the feeling of attachment can be excited by a process which one would think more likely to stimulate the organ of combativeness to action.

There is a curious form of inflammation peculiar to insane persons, in which the auricle swells until, in some cases, the skin breaks, and the parts discharge thick dark coloured blood and serum.

Mr. Wilde describes six kinds of tumours found behind the ear: an irritable and painful tumour of the sterno-mastoid gland; a scrofulous suppurating gland; chronic abscess in connection with diseased bones; acute periostitis; aneurism; and malignant fungus.

A minute account is given of the best mode of extracting foreign bodies and hardened wax from the external meatus. Inflammation of this should never be neglected, apt as it is to pass on to the inner parts. When the lining membrane of the passage is the subject of chronic inflammation, the solution of nitrate of silver and the brown citrine ointment may be employed with much advantage, precisely as in the analogous ophthalmia tarsi; the general health being carefully attended to. *Hairs* may fall in upon the membrana tympani, and give much annoyance, till they are lifted out with forceps. Defective hearing, arising from contraction of the meatus, is one of the few diseases that may be relieved by the introduction of a small metallic tube, shaped like a wine funnel. Such instruments, however, "being silver gilt, and sold in very neat morocco cases", are often used when they are noways adapted to benefit.

Exostosis of the external meatus is not very rare: it seems usually connected in its origin with inflammatory action. Inflammation of the membrana tympani is one of

the commonest forms of otitis, and is indeed, as in the parallel cases of iritis, usually not an isolated affection, but accompanied by inflammation of the tympanic cavity and neighbouring parts. Then it may become dangerous not only to hearing, but to life itself, ending in caries of the mastoid process, if not of the petrous portion of the temporal bone. It is absolutely necessary that we should be familiar with the healthy aspect of this membrane, as viewed through the silver speculum in clear sunlight. How else can we pretend to trace aright the morbid changes which it undergoes—the vascularity, the opacity, the collapse of the membrane, appearances which Mr. Wilde's pages so well describe?

"In it will, according to my observation, be found characteristics of disease, and pathological changes from the normal structure, sufficient to account for at least two-thirds of the cases of impaired hearing, independent of mechanical impediments from wax, and the inflammations presenting otorrhoea which occur in practice."

Acute pain of the ear is *very rarely neuralgic*—an important caution to those who drop strong stimulants into the meatus; and the inflammation which it for the most part indicates is to be treated, as reason points out, by leeching the orifice of the meatus, poulticing, purging; in the later stages, blistering; and mercury is not to be withheld in cases of any severity, any more than we would withhold it in iritis. These are clear and sensible dogmata, and must, we think, command the assent of all judicious surgeons.

Subacute myringitis is unaccompanied by pain, but is equally destructive to hearing as the acute disease; the aspect of the membrane is much the same, and the treatment is based on the same principles. In this form of the disease, and also in *scrofulous* inflammation of the tympanic membrane, which usually occurs in the young, and is quite analogous to, may often alternate with, *scrofulous* ophthalmia, Mr. Wilde recommends the rational combination of local depletion and counterirritation with constitutional alteratives and tonics—a system which is found very useful in the ocular disease. Small doses of corrosive sublimate in tincture of bark he particularly recommends in the chronic form and stage. Myringitis is occasionally *syphilitic*, being usually a tertiary symptom, and to be treated like chronic syphilitic iritis; but, being painless, requires, of course, the speculum for detection. In one case, "on the morning on which salivation was produced, the hearing was restored almost miraculously".

The truth is, that in this, as in all other maladies, it is only by a judicious combination of local and constitutional treatment that a cure is to be sought for; and the practitioner who is versed in the great general principles of medical science, and who applies them carefully to the exigencies of the case in hand, will find much less mystery and difficulty in the matter than those who are always seeking after specifics, and sighing for definite "rules", according to which this or that malady is to be cured.

In *chronic* myringitis, as in chronic ophthalmia, moderate local depletion, and persevering counterirritation, with the cautious application of solution of the nitrate of silver by means of a hair pencil, will be the best local remedies; but thickening and lesions of the tympanic membrane will be as difficult to remove as albugines and leucomata usually are.

It is when permanent thickening and opacity of the membrane has occurred, that, in a few cases, we may try what can be done to improve the hearing by making an aperture in the diseased part: but as we know not what injury the parts within may have suffered from the previous disease, the result must be always doubtful. Mr. Wilde, like a good surgeon, discards all complicated screws and punches, and makes the opening with a sickle-shaped needle, touching it with nitrate of silver to keep it open.

Inflammation within the tympanum, or otitis proper, presents the same varieties, and in many respects the same symptoms as myringitis, because, in fact, the diseases are often combined. It may end in resolution, with some remaining deafness, or in suppuration; and consequent

bursting of the tympanic membrane; or, worst of all, in the disease passing to the bone, and ultimately to the brain. Palsy of the facial nerve is often produced, apparently by the extension of the inflammation to the canal in which it lies so near the tympanic cavity; and Mr. Wilde remarks that he has "not met with a single instance of Bell's paralysis unaccompanied by otorrhœa, caries, or cerebral affection, in which there were not manifest traces of disease, or its results, in the membrana tympani, or in the middle ear". This is well worthy of notice, as manifesting the propriety of the antiphlogistic treatment of these cases in the early stage.

The tympanic mucous membrane is likewise subject to catarrhal and chronic inflammation, exactly parallel to those of the conjunctiva; and which is to be treated on the principle above described.

Disease of the labyrinth must of necessity be equally obscure and dangerous. Mr. Wilde has in his possession a natural dissection of the osseous labyrinth, set free by caries, and pulled by Sir Philip Crampton out of the external meatus of one of his patients!

True nervous deafness, unconnected with local inflammatory lesions, is, in Mr. Wilde's opinion, much more rare than is supposed; and, when it does occur, is to be treated as one would do amaurosis, according to its cause, traced out as well as we can. No nostrum, no specific, and least of all the ether vapour douche through the Eustachian tube (which our author has fully and vainly tried), is to be trusted to; and though old and far gone cases are usually irremediable, in others a careful attention to the local, the cerebral, and the constitutional symptoms will often lead to great amendment.

Chapter viii is occupied with Otorrhœa, a symptom originating in various diseases of the ear, and occurring in 647 cases out of 2,385 at St. Mark's infirmary. Mr. Wilde gives a graphic though somewhat prolix description of the usual do-nothing mode of treatment in these cases, and enforces the necessity of prompt and appropriate management, since not only is otorrhœa a disgusting disease, but one never knows "how, when, or where it will end, or what it may lead to": caries of the temporal bone, and death from phlebitis and abscess of the brain, may be the sequence.

Thorough cleanliness, by frequent syringing, the removal of polypi (which occurred in no fewer than 64 out of 647 cases of otorrhœa), the careful touching of granulations on the membrane with nitrate of silver, the application of the solution of the same substance and of weak citrine ointment to the meatus, abstinence from plugging the ear with cotton, so that the membrane may be exposed to the free air, and the diligent use of counterirritation and constitutional treatment, are the means of cure.

Our space will not permit us to enter upon deaf-dumbness, the subject of Mr. Wilde's elaborate appendix; so here we conclude by once more strongly recommending this sterling work. Its occasional prolixity is its principal, and on a subject generally so little understood, its not unpardonable fault.

ON THE USE OF AN ARTIFICIAL MEMBRANA TYMPANI IN CASES OF DEAFNESS, DEPENDENT UPON PERFORATION OR DESTRUCTION OF THE NATURAL ORGAN. By JOSEPH TOYNBEE, F.R.S. pp. 47. London: 1853.

OF MR. TOYNBEE'S MERITS, let us hear Mr. Wilde speak:

"The labours and investigations of Mr. Toynbee have effected more for aural pathology than those of all his predecessors, either in England or on the Continent. He commenced at the right end, and has travelled in the proper direction. He has brought to bear upon the subject the true principles of science, and with the assistance of the microscope, the aid of every modern artistic appliance to assist him, accustomed to habits of minute dissection, patient research, and careful observation, he has accumulated a mass of facts upon the morbid anatomy of the organ of hearing that must lay the foundation for a more rational mode of treating the diseases of those parts than has heretofore been resorted to. Mr. Toynbee has laboured extensively, and with effect, to discover and describe the *post mortem*

appearances which disease has produced in the organ of hearing; and I trust he will long continue to prosecute, with the same avidity, the same honesty of purpose, and an equal amount of critical acumen, his valuable researches." (*Aural Surg.*, p. 37.)

We need not add to this praise from so good a judge, and can only express our satisfaction to see advertised by the author of the pamphlet we are now noticing, "a complete treatise on the Diagnosis and Treatment of Diseases of the Ear." Meantime, we have to deal only with the artificial membrana tympani, the subject of the present brochure.

While perforation of a thickened and inelastic membrane restores the patient, in some cases, to a considerable hearing power, replacement of a lost or perforated drum head has a similar good effect in others. This has been done, as our readers are aware, and with much success, by the application upon the perforation of a morsel of cotton wool moistened with oil; and Mr. Toynbee gives several cases in which a gutta percha membrane has been marvellously useful.

The first section of Mr. Toynbee's pamphlet describes the minute structure of the membrane, and the layers of which it consists; it is interesting anatomically at all events.

The second section treats of the functions of the membrane, of the tympanum, and of the Eustachian tube, in which he endeavours to show that the Eustachian tube is always closed, except during the act of swallowing, and that the tympanum is, therefore, practically a closed cavity. This conclusion we are not prepared to deny; yet we do not see how it logically follows from the well known fact that sonorous vibrations communicated to the petrous bone through the head are heard loudest when the external meatus is closed, that therefore those coming through the outer ear ought to be confined to the tympanic cavity for producing their full effect.

The third section consists of a description of the artificial membrane, with cases in which it has been used. It is made "by fixing the layer of gutta percha or vulcanised India rubber between two very delicate silver rings from the eighth to the sixth of an inch in diameter; these rings are riveted together, leaving a portion of the membrane drawn moderately tense in their centre; a margin of the membrane is also left beyond the circumference of the rings, so as to prevent the latter being in contact with and irritating the tube of the ear". To the surface of one of these rings the silver wire is fixed "of sufficient length to admit of the membrane being introduced or withdrawn by the patient."

Nine interesting cases follow, which, however, are too long to quote. They seem very satisfactory as to the improvement effected by the appliance, which is well worthy of more extensive trials.

An appendix on "Tonsil-cutting" follows, in which Mr. Toynbee agrees with Mr. Wilde that it is not useful, and may be very harmful. Many with tonsils enormously enlarged hear very acutely; and when deafness and swollen tonsils occur together, it is not that the glands close the Eustachian tube, but that there is a concomitant disease of the aural mucous membrane.

A FEW PRACTICAL OBSERVATIONS ON DEAFNESS AND DISEASES OF THE EAR, ARISING FROM SMALL POX, SCARLET FEVER, AND MEASLES. By P. ALLEN, M.D., F.L.S. pp. 70. London: 1853.

DR. ALLEN appears to have an extensive aural practice; and he has embodied some of the results of it in a paper written to be read before the Dorset Branch of the Association. For this, however, it turned out to be too voluminous, and he has therefore printed it in a separate form. His great objects are:—

I. "To point out the relation and connexion which exists between the tissue affected in variola, rubeola, and scarlatina, and the same structure in the organ of hearing."

In this, so far as we can judge, he has not succeeded.
II. "To describe the nature of the several diseases of the ear produced by these diseases."

III. "To consider the results of such several affections; their production of deafness, and the treatment to be adopted for its relief."

It is quite obvious that the author's plan includes a complete treatise on diseases of the ear, and perhaps also on the exanthemata. It is altogether so extensive that, to do it justice, a pamphlet of seventy pages is narrow, not voluminous; and we are not, therefore, surprised that the necessary compression of ideas in this work has occasionally produced confusion.

We are astonished that Dr. Allen should speak of "the meatus becoming dilated as widely as is necessary, or its sensibility will admit of" by the speculum: the meatus, being of cartilage and bone, may be straightened, but can hardly, we think, be dilated. Nor are we sure that a lamp "held between the teeth of the surgeon" is the best way of illuminating the passage.

Dr. Allen differs much from Mr. Wilde and Mr. Toynbee in his estimate of Eustachian catheterism: he values it much, and has performed it *four thousand times*, injecting warm air or water into the tympanum, or even making the catheter the medium of the electric current, which he says he has seen do good. We distrust the efficacy of the electric current: but the author's experience entitles his opinion to be received with respect.

REMARKS ON THE OPERATION OF BRONCHOTOMY. By WM. MARTIN, Esq., Bengal Medical Service. pp. 22. Calcutta: 1853.

We do not think that surgery would have lost much, had these "remarks" never been made.

The author draws, describes, and recommends a trocar wherewith to pierce the windpipe, as we understand, right through the skin, without any preparatory incision. He has tried the instrument but once; and that, be it observed, was in performing *laryngotomy* through the crico-thyroid membrane, an operation comparatively very easy, and where the parts are fixed and superficial, and where only a thorough blunderer could contrive to fail. *Tracheotomy* is the difficult thing; and we certainly should be very much disinclined to thrust a trocar in this heroic way through skin, and muscle, and tube: suppose the trachea eluded the point of the instrument, as it very likely might, where would the latter go? Besides, how did Mr. MARTIN succeed in his single trial of the easier operation?

"It did not, however, succeed entirely to our satisfaction; from deficient experience, I had not confidence that I might not carry the cutting part of the trocar, a full sized flat one, so far as to endanger the posterior surface of the larynx; and as time was pressing, I withdrew the instrument before the canula had perforated the crico-thyroid membrane, stopped the external bleeding, which was not profuse, and as quickly as possible, with a scalpel, opened the larynx at this point, carrying the incision downwards through the cricoid cartilage. In this way a sufficient opening was made, the operation having been somewhat simplified by the preliminary introduction of the trocar."

Is this encouraging?

RESEARCHES ON THE PRIMARY STAGES OF HISTOGENESIS AND HISTOLYSIS. By ROBERT D. LYONS, M.B. pp. 16. Dublin: 1853.

The object of this paper, reprinted from the proceedings of the Royal Irish Academy, is to trace the formation and the dissolution of organised structures, and the supposed parallel between the two.

As a general fact, there can be no question but that the body is composed of certain elements, to which it is again ultimately reduced; but we cannot say that we feel much enlightened in anything of a practical way by the elaborate investigation which this paper contains, or that it has rendered our ideas of these recondite processes much more clear.

The subject is a very difficult one, and must be followed out in the light of microscopic and chemical science with long patience towards a very doubtful result.

SANDGATE AS A RESIDENCE FOR INVALIDS. By GEORGE MOSELEY. 12mo. pp. 136. London: 1853.

SANDGATE is a pleasant village on the south coast of England, sixty-eight miles south-east of London and eight miles west of Dover. According to Mr. MOSELEY it forms one of the best marine residences for invalids, being well sheltered and possessed of numerous natural and artificial advantages.

"In its security from cold winds, it vies with any one place on the coast; and to those who have resided at Nice or Pau, and have felt the bitterness of the easterly winds of spring and winter at the former place, and the heavy rains and shifting weather of the latter, as well as the relaxing influence of its warm winds, I need not point out the difference between a *warm* and a *sheltered* situation." p. 7.

The information contained in Mr. Moseley's work is interesting and useful.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

FACIAL ANÆSTHESIA.

In the *Glasgow Medical Journal* for July, Dr. J. B. COWAN, of that city, has published a very complete article on the subject of facial anæsthesia. He draws his conclusions from the data furnished by published cases. We are, however, obliged to confine our abstract to the general results at which he has arrived.

By the term anæsthesia is meant loss of sensibility, or, as it is more fully defined in the work of Romberg, it implies "a diminution or loss of the energy of a sensory nerve, from its excitability or condensing power being reduced or destroyed."* Anæsthesia most commonly occurs, either as an immediate antecedent of motor palsy, or coincident with it; but it has been found to exist in various parts of the body, independent of any paralytic affection. When anæsthesia accompanies paraplegia, its extent seems to depend upon the producing cause. Thus, when paralysis is the result of spinal concussion, or of severe injury of the cord, along with the loss of motion, there is loss of sensation; while, in cases arising from disease or some spontaneous morbid alteration, sensibility is generally unimpaired. In cases either of complete or partial paralysis, the sensibility, without being destroyed, may be defective, and the anæsthesia may confine itself strictly to one seat.

Facial anæsthesia, or deficient or entire loss of sensibility in the parts supplied by the fifth pair of nerves, or in some of them, may result from disease of the cerebrum where the fifth nerve takes its origin, of the nerve within the cranium, or of the nerve after it has emerged from the cranium; and, according to the seat, Dr. Marshall Hall has shown that there is a striking contrast as far as regards one class of symptoms. Thus, where the disease is one of origin, there is insensibility of the eye and nostril; when it exists in the nerve exterior to the cranium, the eye is unaffected; while, should there be disorganisation or division of the nerve within the cranium, the eye is partially disorganised, owing to the destruction of its nutritive function. Romberg describes a peripheral and a centric anæsthesia of the fifth pair; the first distinguished by the isolated loss of conduction on the side of the lesion, while the physiological characteristic of the second lies in the crucial effect of the lesion. He shows how the precise seat of the disease may be diagnosed in the following propositions:—(a) "The more the anæsthesia is confined to single filaments of the trigeminus, the more peripheral the seat of the cause will be found to be. (b) If the loss of sensation affect a portion of the facial surface, together with the corresponding facial cavity, the disease may be assumed to involve the sensory fibres of the fifth pair, before they separate to be distributed to their respective destinations; in other words, a main division must be affected before or after its passage through the cranium. (c) When the entire sensory tract of the fifth nerve has lost its sensation, and there are at the same time derangements of the nutritive functions in the affected parts, the Casserian ganglion,

* Romberg on Diseases of the Nervous System. Syden. ed., vol. i, p. 192.

or the nerve in its immediate vicinity, is the seat of the disease. (d) If the anæsthesia of the fifth nerve is complicated with disturbed functions of adjoining cerebral nerves, it may be assumed that the cause is seated at the base of the brain." The disease may be a consequence of injury, may be spontaneous, or attributable to some exciting cause. It may be general or local, complete or incomplete; the first being when the whole of one side of the face, the second when only a portion is affected, and this latter is most likely to follow an injury, or to be an accompaniment of palsy of the motor branch of the fifth. The symptoms may develop themselves gradually, or may come on suddenly; and not unfrequently they are preceded by neuralgia. The most permanent symptom in many of the cases is absent altogether or less marked in others, owing to the difference in the seat of the lesion. The disease of the fifth nerve is frequently complicated with disease of other nerves, more particularly of the portio dura of the seventh.

The symptoms generally consist in complete or partial suspension of the functions of the trifacial nerve, loss of tactile sensibility in the parts supplied by it, viz. the integuments of the cheek and side of the head, the eyelids, conjunctiva, tongue, Schneiderian membrane, etc., accompanied by loss of taste on the side of the tongue which is affected, frequently by loss of smell and hearing, and by inflammation of the eye, terminating in ulceration of the cornea, and by no means uncommonly in total disorganisation of the globe. An addition to these symptoms is paralysis and wasting of the muscles of mastication. Although the parts may be destitute of sensibility, strictly speaking, the feeling of pain may be conveyed from the presence of some morbid process in the nerve. The nature of the affection often escapes notice for some time, the attention of the practitioner being directed to some one prominent symptom.

It does not appear that the disease is of more frequent occurrence at any particular period of life, but in young persons it is very uncommon in the permanent form. Partial loss of sensibility, however, may accompany a *blight* or temporary paralysis of the facial muscles.

Causes and Premonitory Symptoms. The occurrence of the disease is ascribed by the patients to a variety of causes; and there is a marked difference in the primary symptoms in different cases. Injuries, as pistol shots, have in several instances produced it. It is often sudden, and sometimes is only preceded by a slight perversion of sensibility, or by a tingling sensation. Frequently there are attacks of headache, or pains in the occipital region and in the side of the face, which is afterwards the seat of the anæsthesia. Dimness of vision may be a prominent symptom. In three or four cases it has occurred after a simple fit or an epileptic attack. Further, it happens as a consequent of facial paralysis; a fact which does not seem easily explicable in those instances where the motor power had been entirely recovered, before the sensory function had been destroyed.

(a) *The loss of common or tactile sensibility* is the main characteristic of the disease. In a complete case of facial anæsthesia, the whole of one side of the anterior part of the head, and of the face, with the exception of a small space (bounded by the zygoma, the course of the facial artery, and the lower margin of the jawbone), supplied by twigs from the cervical plexus, is destitute of sensation. The ocular and palpebral conjunctive, the side of the tongue, and the nostril corresponding with the affected part, as well as the gums, are insensible, but the pinna of the ear is unimplicated, although receiving twigs from the anterior auricular division of the inferior maxillary, and also the back part of the head. In the majority of cases, however, the anæsthesia is more limited, and in some is confined to a very small spot. The want of sensibility may exist along with very severe pain arising from inflammation, and the progress of disease in the nervous substance.

(b) *Ageusia.* Loss of taste is not invariably, though in a very large majority of cases, a concomitant of the loss of tactile sensibility on the side of the tongue, corresponding with the affected side of the face and head. The only modifications of this symptom are, that the taste may be perfect at the base of the tongue and lost in its anterior portion, and that the sense may be perverted but not destroyed. The presence of this symptom in cases of division or disease of the trifacial nerve has tended to elucidate the functions of that nerve, and has proved satisfactorily that the sense of taste resides in the lingual branch of the fifth and the glosso-pharyngeal. That the sense of taste in the anterior part is given by the branch of the fifth, is proved by the researches of Alcock and Reid, and still more so by its loss supervening on disease of that nerve. It has been argued, however, that this was dependent on defective nutrition; a supposition proved to be erroneous, in some cases at least, by the

suddenness with which it occurs, and with which it ceases. Where the whole of the tongue is alike destitute of sensation, which is the case in chronic disease of the fifth nerve, this may afford a plausible explanation. Romberg is inclined to the assumption, that the glosso-pharyngeal is the only nerve of taste. He strengthens his position by reference to cases in which, there being tactile insensibility of the facial integuments, the taste continued: or in which the taste was perfect, although the tongue was destitute of sensibility. Another argument he derives from the absence of imaginary taste in hyperæsthesia of the lingual nerve. But, in at least thirty of the published cases, the sense of taste in the fore part of the tongue was destroyed. Injury or division of the glosso-pharyngeal nerve impairs the sense of taste on the back of the tongue, and on the mucous membrane of the fauces; and, while the sense is destroyed in the fore part, in consequence of disease of the fifth, it commonly remains perfect in the back part. Recent researches go far to show that the sense of bitter taste is dependent on the glosso-pharyngeal, and that sweet, sour, and salt tastes, are proper to the lingual branches of the fifth.

(c) *Masticatory Movements.* The portio minor of the fifth pair, or motor division of the inferior maxillary nerve, sends branches to the muscles of mastication, the masseter, temporal, two pterygoid, anterior belly of digastric, and mylo-hyoid, supplying them with motory power. The buccinator, however, in facial anæsthesia, does not participate in the paralysis of motion; and hence the branch it receives from the fifth must be a purely sensory one, its motor powers being derived from the facial. Loss of motory power in the above muscles is a frequent accompaniment of facial anæsthesia; and, if the disease is of long standing, the muscles become loose and flaccid. That this system should not be of uniform occurrence admits of easy explanation. If the pathological condition be one involving all the roots, or if it implicate the inferior maxillary after it joins the portio minor, then there will exist paralysis of the muscles of mastication. If it exist in the ganglion, or in some of the other branches, the muscles will not be affected.

The centric anæsthesia of the fifth pair is described by Romberg as accompanying recent hæmorrhage in the brain. "It affects," he says, "the third branch of the fifth pair on the side opposite to that on which the lesion is seated." In the cases he had observed, there was always paralysis of the portio minor of the fifth, the patient being only able to masticate with the muscles of the opposite side of the face. He seems to be the only author who has met with and detailed cases of this kind.

It is evident that paralysis of the masticatory muscles is a valuable symptom, as diagnostic to a certain extent of the nature and seat of the morbid condition on which the anæsthesia depends.

(d) *Other Senses.* In addition to partial destruction or perversion of the sense of taste, the other senses are frequently either lost or impaired, where there is complete paralysis of the fifth nerve.

Sight. That the optic nerve is indispensable to vision is clear, while, at the same time, the fifth exercises a very remarkable influence over it, and in some animals it is its sole source. The conclusions of Alcock, in the *Cyclopædia of Anatomy and Physiology*, are, "that the optic nerve is the proper medium of perception to visual impressions, and that the co-operation of the fifth nerve is not even necessary, to enable the optic nerve to fulfil its function. As the instrument of the general sensibility of the structures of the eye, however, the fifth nerve may be the channel through which impressions not visual, though perhaps excited by an agent of vision, viz., light, may be conveyed." Dr. Mackenzie considers irritation of the fifth by no means an uncommon cause of *sympathetic amaurosis*.

Hearing. The power which the fifth nerve exercises over this sense is probably dependent on defective nutrition.

Smell. The loss or impairment of the sense of smell might naturally be looked for, in those cases of facial anæsthesia, where taste is destroyed, as there is an evident connexion between the two; although its precise nature may not be easily explained.

(e) *Nutritive Function of the Eyeball.* The next symptom of facial anæsthesia is defective nutrition of the eye, leading to inflammation, ulceration, and ultimately disorganisation of the eyeball; and this has been shown by Dr. Marshall Hall to occur chiefly when the disease attacks the nerve, before it has made its exit from the cranium. In a case of complete paralysis of the fifth, the conjunctiva is deprived of sensibility and is unaffected by chemical irritants. The cornea becomes opaque, inflammation of all the tunics of the eye follows, and ulceration of the cornea and destruction of the globe very rapidly ensue.

Writers differ as to whether these results are traceable to lesion of the fifth nerve as a primary cause, or to a combination of secondary causes; and it has been argued by Alcock and others, that the violence inflicted in the vicinity of the organ, its exposure through the deprivation of sensibility to the action of irritating matters, and the absence of the lachrymal secretion, are the conditions which tend to its inflammation and destruction. The balance of evidence appears to incline in favour of admitting the effects to ensue directly from a lesion of the nutritive filaments. Be this as it may, all the appearances mentioned above are found in facial *anæsthesia*, and form one of its most prominent symptoms.

(f) *General Motor Power of Face.* Reference has already been made to the destruction of motor power in the masticatory muscles; and it is unnecessary to allude to those cases in which, from conjunct disease of the facial nerve, there is paralysis of all the facial muscles. Occasionally, however, more limited destruction or impairment of mobility occurs.

The Treatment of facial anæsthesia can only be palliative, and directed to mitigate the symptoms. In some cases, decided benefit has been observed to follow the employment of local applications, such as blisters and leeches; and these, with cupping and purgatives, are the measures which may generally be had recourse to. Spontaneous cures are fortunately not unfrequent.

Morbid Appearances. The morbid conditions out of which facial *anæsthesia* springs differ from one another as to their precise nature and seat, but are rarely or never obscure. In some instances the nervous cords are the seats of lesion, and they may be found in three states, either hardened, softened, or atrophied. Tumours pressing on the nerve may disturb or destroy its functions. Finally, the disease may be of a more extensive character, situated in and involving a large portion of the cerebral mass. There are many other varieties in the nature and extent of the lesions, on which it is unnecessary to dwell.

EDITOR'S LETTER BOX.

CASE OF FENNEL versus ADAMS.

LETTER FROM C. F. J. LORD, ESQ., TO THE EDITOR.

SIR,—It is desirable that the strong feeling entertained by the profession in regard to the late trial, "*Fennell v. Adams*," should not pass away till we have defrayed the costs which Mr. Fennell has been driven to incur.

Those of your readers who have not a clear recollection of the case, will find in the leading articles of the *ASSOCIATION JOURNAL* (July 8th, 1853), *Medical Times and Gazette* (July 9th), and *Lancet* (July 23rd), comprehensive recitals, and just commentaries, very favourable to Mr. Fennell.

The Medico-Ethical Society of Manchester have given their powerful testimony to the legitimacy of the plaintiff's appealing to the profession, "on account of the great and undeserved injury that such charges of neglect of duty brought against him were calculated to produce"; and I am quite sure that the uprightness and benevolence of the profession will concur in this opinion. To subscribe and carry Mr. Fennell harmless from the pecuniary cost of the trial is, therefore, consistent with our professional character, due to our sense of brotherhood, and to our love of justice. Thus warm with the subject, I venture to call on my professional brethren, and to quote, on the spur of the moment, from the pretty little ballad written by a young lady, and sold in aid of the funds of the Medical Benevolent College:—

"It needs not great wealth a kind heart to display;
If the heart is but willing, it soon finds a way;
And the poorest one yet, in the humblest abode,
May help a poor brother a step on the road."

I am, etc.,

CHARLES F. J. LORD.

Hampstead, Sept. 11th, 1853.

[A subscription (limited to 10s. 6d.) has, we perceive by our advertising columns, been already commenced.—EDITOR.]

MEDICAL EDUCATION.

THE LICENSING BODIES OF ENGLAND.

The following bodies grant degrees, diplomas, and licenses to practise medicine and surgery in England:

UNIVERSITY OF OXFORD.

UNIVERSITY OF CAMBRIDGE.

UNIVERSITY OF LONDON.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE SOCIETY OF APOTHECARIES.

UNIVERSITY OF OXFORD.

Chancellor: The Earl of Derby. *High Steward:* The Earl of Devon. *Vice-Chancellor:* R. L. Cotton, D.D. *Registrar:* P. Bliss, D.C.L. *Professors:* Regius Professor of Medicine, J. Adey Ogle, M.D. Tomlins' Prælector of Anatomy, Ditto. Shearardian Professor of Botany, C. G. B. Daubeny, M.D. Lichfield's Clinical Medicine, J. Adey Ogle, M.D. Aldrichian Professor of Anatomy, Ditto. Aldrichian Professor of Medicine, Ditto. Aldrichian Professor of Chemistry, C. G. B. Daubeny, M.D. Lee's Lecturer in Anatomy, H. Wentworth Acland, M.D.

EXERCISES FOR DEGREES. I. To perform the Responses, consisting of an examination in the Greek and Latin languages, in the rudiments of Logic, or in Euclid's Elements of Geometry.

II. To be publicly examined in, 1st. The rudiments of religion; 2nd. The *literæ humaniores*; 3rd. The elements of the mathematical sciences, and of physics. In Medicine, all students (besides undergoing the two examinations for Bachelors of Arts) are examined in the Theory and Practice of Medicine, Anatomy, Physiology, and Pathology; in *Materia Medica*, and in Chemistry and Botany, so far as they illustrate the science of Medicine; and in two at least of the following writers: Hippocrates, Aretæus, Galen, and Celsus. For a Doctor's degree in Medicine, a dissertation is to be recited in the Schools. Degrees are conferred once a year.

UNIVERSITY OF CAMBRIDGE.

The degrees granted by this University are those of Bachelor of Physic, Doctor of Physic, and Licentiates *ad practicandum*.

A candidate for the degree of M.B. must have entered on his sixth year from the date of admission, have resided nine terms, and have passed the previous examination. The examination in Chemistry and Botany may take place at the end of three years from admission; that in Anatomy and Medicine at the end of four years. The exercises are one act and one opponyency.

The degree of M.D. is granted to a Bachelor of Physic of five years, or to a Master of Arts of seven years' standing. The exercises are two acts and one opponyency. The examinations and certificates are the same as for the license *ad practicandum*.

Candidates for a license *ad practicandum in medicind*, being previously M.B., must produce certificate of having attended hospital practice for three years, exclusive of the nine terms above mentioned, and of having attended lectures on Practice of Physic and Pathology, Anatomy and Physiology, Chemistry, Botany, Medical Jurisprudence, *Materia Medica* and Pharmacy, Principles of Surgery, Principles of Midwifery, and Practical Anatomy. If previously Masters of Arts, they must bring evidence of having been engaged in the study of Medicine five years after taking the degree of B.A., and of having attended hospital practice for three years.

UNIVERSITY OF LONDON (SOMERSET HOUSE).

Visitor: The Queen. *Chancellor:* The Earl of Burlington, LL.D. *Vice-Chancellor:* John G. Shaw Lefevre, Esq., C.B., F.R.S.; F.R.S. *Registrar:* R. W. Rotham, M.A., M.D. *Clerk to the Senate:* H. Moore.

EXAMINERS: FACULTY OF MEDICINE. Intellectual Philosophy, Logic, and Moral Philosophy: Rev. Henry Alford, B.D.; T. B. Burcham, Esq., M.A. Medicine: Archibald Billing, M.A., M.D., F.R.S.; Alexander Tweedie, M.D., F.R.S. Surgery: Sir Stephen L. Hammick, Bart.; Joseph Hodgson, Esq., F.R.S. Anatomy and Physiology: Francis Kiernan, Esq., F.R.S.; Wm. Sharpey, M.D., F.R.S. Physiology and Comparative Anatomy: W. B. Carpenter, M.D., F.R.S. Midwifery: Edward Rigby, M.D. Chemistry: W. Thomas Brande, Esq., F.R.S. Botany: Rev. J. S. Henslow, M.A. *Materia Medica* and Pharmacy: G. Owen Rees, M.D.

DEGREE OF BACHELOR OF MEDICINE. Candidates for the degree of Bachelor of Medicine are required—1. To have studied

during four years at one or more of the institutions recognised by this University. II. To have spent one year at least in one or more of the recognised institutions in the United Kingdom. III. To pass two examinations.

The FIRST EXAMINATION commences on the first Monday in August. The candidate must produce certificates—1. Of having completed his nineteenth year. 2. Of having taken a degree in Arts; or of having passed the matriculation examination. 3. Of having studied during two years at a recognised medical school, subsequently to having taken a degree in Arts, or passed the matriculation examination. 4. Of having attended lectures on each of four of the following subjects: Descriptive and Surgical Anatomy, General Anatomy and Physiology, Comparative Anatomy, Pathological Anatomy, Chemistry, Botany, Materia Medica and Pharmacy, General Pathology, General Therapeutics, Forensic Medicine, Hygiene, Midwifery and Diseases peculiar to Women and Infants, Surgery, Medicine. 5. Of having dissected during nine months. 6. Of having attended a course of Practical Chemistry. 7. Of having attended to Practical Pharmacy. The fee for examination is five pounds. Candidates are examined in Anatomy, Physiology, Chemistry, Botany, and Materia Medica and Pharmacy; they also translate passages from the Latin Pharmacopœia. In the week following, the examiners arrange in two divisions such candidates as have passed; and a certificate, signed by the registrar, is delivered to each candidate.

Any candidate who has been placed in the first division may be examined for honours, in the week following, in any or all of the following subjects:—Anatomy and Physiology, Chemistry, Materia Medica and Pharmaceutical Chemistry, and Structural and Physiological Botany. If sufficient merit be evinced, the highest candidates in Anatomy and Physiology, in Chemistry, and in Materia Medica and Pharmaceutical Chemistry, will each receive an exhibition of thirty pounds a year for two years; and the first and second candidates in each of these subjects and in Botany will each receive a gold medal of the value of five pounds. Certificates of honour are given.

The SECOND EXAMINATION commences on the first Monday in November. No candidate is admitted within two academic years of the first examination. Certificates required—1. Of having passed the first examination. 2. Of having subsequently attended lectures on each of two of the subjects in the foregoing list, for which the candidate did not present certificates at the first examination. 3. Of having, since the first examination, dissected during six months. 4. Of having conducted at least six labours. 5. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months, and lectures on clinical medicine. 7. Of having subsequently attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. 8. Of moral character from a teacher in the last institution at which he studied. The fee for examination is five pounds. Candidates are examined in Physiology (including Comparative Anatomy); General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine: they are also required to translate passages of the Latin Pharmacopœia into English, and of the English Pharmacopœia into Latin, and to report on the cases of actual patients. In the following week, the examiners arrange in two divisions such candidates as have passed, and a certificate is delivered to each candidate.

Candidates placed in the first division may be examined for honours in any or all of the following subjects:—Physiology and Comparative Anatomy, Surgery, Medicine, Midwifery. In Physiology and Comparative Anatomy, in Surgery, and in Medicine, will the highest candidates each receive an exhibition of fifty pounds per annum for the next two years, with the style of University Medical Scholar; and the first and second candidates in these subjects, and the candidate who distinguishes himself most in Midwifery, each receives a gold medal of the value of five pounds. Certificates of honour are given.

DEGREE OF DOCTOR OF MEDICINE. The examination commences on the fourth Monday in November. Certificates required—1. Of having taken the degree of Bachelor of Medicine. 2. Of having attended, subsequently to having taken the above degree, (a) to Clinical or Practical Medicine during two years in a medical institution recognised by this university; (b) or, to Clinical or Practical Medicine during one year, and of having been engaged during three years in the practice of his profession; (c) or, if he have taken the degree of Bachelor of Medicine in this university, of having been engaged during five years in the practice of his profession. (One year of attendance on

Clinical or Practical Medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second examination were placed in the first division.) 3. Of moral character, signed by two persons of respectability. The fee for examination is ten pounds.

Candidates are examined in—Elements of Logic and Moral Philosophy, Medicine, Surgery, and Midwifery. A thesis is written on a subject in Medicine, Surgery, or Midwifery, at the option of the candidate.

SPECIAL REGULATIONS. Certain parts of the above regulations are remitted in the case of candidates who commenced their medical studies in or before January 1839, or who were admitted by one of the licensing bodies prior to 1840.

ROYAL COLLEGE OF PHYSICIANS, LONDON (PALM-MALL EAST, TRAFALGAR SQUARE).

President: Dr. John Ayrton Paris. Censors: Drs. Nairne, Barker, Owen Rees, and Seth Thompson. Elects: Dr. Thomas Turner, Clement Hue, John Bright, Edward Thomas Monro, Thomas Mayo, Henry Herbert Southey, Francis Hawkins. Treasurer: Dr. Edward Thomas Monro. Registrar: Dr. Francis Hawkins.

The Examiners for the License are the President and Censors. The examinations take place at or about Christmas, Easter, Midsummer, and Michaelmas. The Examiners for the Extra-License are the President and three Elects. The examinations for the License and the Extra-License take place at the same time.

FEES. License, £56:17, including £15 stamp. Fellowship, £55:1, including £25 stamp. Extra License, about £25.

Every candidate for a license or extra license must produce evidence; 1. Of unimpeached moral character. 2. Of having completed the twenty-sixth year of his age. 3. Of having devoted himself for five years at least to the study of medicine.

The course of study ordered by the College comprises:—Anatomy and Physiology; the Theory and Practice of Physic; Forensic Medicine; Materia Medica and Botany; and the Principles of Midwifery and Surgery; attendance for three entire years on the physicians' practice of some general hospital or hospitals in Great Britain or Ireland, containing at least 100 beds. Candidates who have been engaged in practice and are forty years of age, may be admitted to examination upon presenting such testimonials of character, general and professional, as shall be satisfactory.

The first examination is in anatomy and physiology; the second in the causes and symptoms of diseases; the third in the treatment of diseases. The examinations are carried on usually during three days by writing, and two days *visd voce*.

The candidate is called on to translate *visd voce* into Latin a passage from Hippocrates, Galen, or Aretæus; or to construe into English a portion of the works of Celsus, or Sydenham, or some other Latin medical author.

The fellows are elected from the body of licentiates—a certain number generally on the 25th of June.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (LINCOLN'S INN FIELDS).

President: James Luke. Vice-Presidents: G. J. Guthrie and W. Lawrence. The Council: The President and Vice-Presidents; R. Keate; T. Copeland; Sir B. C. Brodie, Bart.; B. Travers; C. Hawkins; J. Swan; J. H. Green; E. Stanley; J. M. Arnott; J. F. South; F. C. Skey; J. Hodgson; T. Wormald; G. Pilcher; J. Bishop; G. W. Mackmurdo; F. Kiernan; W. Coulson; G. Gulliver; and R. Partridge. Court of Examiners. The President and Vice-Presidents; B. Travers; E. Stanley; J. H. Green; J. M. Arnott; John F. South. Examiners for the Fellowship in Classics, Mathematics, and French: G. Smith; G. G. Stokes; and I. Brasseur. Professor of Anatomy and Physiology: F. C. Skey. Hunterian Professor and Conservator of Museum: R. Owen. Conservator: J. T. Quekett. Librarian: T. M. Stone. Secretary: E. Belfour. Clerk: H. P. Gregg. Mace-bearer: W. Stone.

CANDIDATES FOR THE DIPLOMA OF MEMBER OF THE COLLEGE are required to produce the following certificates, viz:—1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of professional knowledge. 3. Of having studied practical pharmacy during one year. 4. Of having attended at a recognised hospital or hospitals in the United Kingdom the practice of physic during one year, and one summer session. The winter session commences on the 1st of October, and terminates on the 31st of March. The summer session commences on the 1st of June, and terminates on the 31st of September. The course of study comprises a period of three months, and

mences on the 1st of May, and terminates on the 31st of July. No provincial hospital will be recognised by this College which contains less than 100 patients; and no metropolitan hospital which contains less than 150 patients. 5. Of having attended, during three winter and two summer sessions, the practice of surgery at a recognised hospital or hospitals in the United Kingdom. 6. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during three winter sessions. 7. Of having attended, during two winter sessions, lectures on the principles and practice of surgery. 8. Of having attended, during one summer session, lectures on materia medica, and lectures on midwifery; practical midwifery to be attended at any time after the conclusion of the session. 9. And of having attended one course of lectures on the practice of physic, and one course on chemistry.

The course of study hereby prescribed is required to be observed by candidates who shall have pursued their studies in hospitals and schools in England.

Certificates will not be received from candidates who have studied in London, unless they shall have registered their tickets at the College, as required by the regulations, during the last ten days of January, March, and October in each year; nor from candidates who have studied elsewhere, unless their names duly appear in the registers of their respective schools.

In the certificates of attendance on hospital practice and on lectures, it is required that the dates of commencement and termination be clearly expressed.

Blank forms of the certificates may be obtained on application to the secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination.

The regulations respecting the education of candidates for the Certificate of Qualification in Midwifery, and for the Fellowship, may be obtained on application to the Secretary.

THE SOCIETY OF APOTHECARIES.

Master: J. Parrott, Esq. *Wardens:* C. Griffith, Esq.; and R. N. B. Ward, Esq. *The Court of Examiners:* E. Tegar, Esq., *Chairman:* H. Combe; A. M. Randall; Richard Hopkins Robertson; Richard King; Robert Norton; Thomas Peregrine; R. C. Walsh; R. Druiitt; R. H. Semple; W. G. T. Dyer; and S. H. Ward, Esqs. *Secretary to the Court of Examiners:* Henry Blatch, Esq. *Clerk to the Society:* Robert Brotherson Upton, Esq. *Professor of Botany:* John Lindley, Esq., Ph.D., F.R.S., G.S., etc. *Professor of Chemistry and Materia Medica:* Wm. Thos. Brande, Esq., F.R.S. *Examiner for the Society's Prizes in Materia Medica and Therapeutics:* J. Copland, M.D., F.R.S. *Examiner for the Society's Prizes in Botany:* N. B. Ward, Esq., F.R.S., F.L.S. *Curator of the Botanic Garden:* Mr. T. Moore. *Beadle:* Mr. C. Rivers.

REGULATIONS TO BE OBSERVED BY STUDENTS INTENDING TO QUALIFY THEMSELVES TO PRACTISE AS APOTHECARIES IN ENGLAND AND WALES. (DATED 1848.) Candidates must produce testimonials: 1. Of having served an apprenticeship of not less than five years to a legally qualified apothecary; or of an apprenticeship for not less than five years to surgeons practising as apothecaries in Ireland and Scotland. 2. Of having attained the age of twenty-one years: as evidence of age, a copy of the baptismal register will be required in every case where it can possibly be obtained. 3. Of good moral conduct. 4. Of having pursued a course of medical study in conformity with the regulations.

COURSE OF STUDY. Every candidate whose attendance on lectures shall have commenced on or after the 1st of October, 1849, must attend the following lectures and medical practice during not less than three winter and two summer sessions; each winter session to consist of not less than six months, and to commence not sooner than the 1st, nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

FIRST YEAR. *Winter Session:* Chemistry; Anatomy and Physiology; Anatomical Demonstrations. *Summer Session:* Materia Medica and Therapeutics; Botany and Vegetable Physiology; Midwifery and Diseases of Women and Children.

SECOND YEAR. *Winter Session:* Anatomy and Physiology; Anatomical Demonstrations; Dissections; Principles and Practice of Medicine; Medical Practice. *Summer Session:* Medical Practice; Midwifery and Diseases of Women and Children; Forensic Medicine; Practical Chemistry; Morbid Anatomy; Clinical Medicine.

THIRD YEAR. *Winter Session:* Dissections; Principles and Practice of Medicine; Medical Practice; Morbid Anatomy; and Clinical Medicine.

Practical Midwifery at any time after the conclusion of the first course of midwifery lectures.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the order prescribed.

Medical Practice must be attended during the full term of eighteen months: twelve months at a recognised hospital, and six months either at a recognised hospital or dispensary.

In place of the Second Course of Lectures on the Theory and Practice of Medicine, the Court will admit a certificate of attendance on a course of Clinical Lectures, delivered in a recognised hospital by a distinct professor, consisting of not less than seventy-five lectures, attended by the student after the first systematic course upon the Theory and Practice of Medicine.

Those gentlemen whose attendance on lectures commenced before the 1st of October, 1849, will be allowed to complete their studies in conformity with the previous regulations of the court.

The certificates of teachers recognised by the medical authorities in Dublin, Edinburgh, Glasgow, and Aberdeen, and of medical professors in foreign universities, are received.

No hospital will be recognised unless it contain at least 100 beds, and it be under the care of two or more physicians, who give a regular course of clinical lectures and instruction in morbid anatomy; also, unless the apothecary be legally qualified. No dispensary will be recognised unless situated in some town where there is a recognised medical school, and be under the care of at least two physicians and an apothecary legally qualified. No medical practice will be available unless it be attended in conformity with the course of study prescribed.

REGISTRATION OF TESTIMONIALS. All testimonials must be given on a printed schedule, with which students will be supplied at the end of their first registration: In London, at the Hall. In the provincial towns, from the gentlemen who keep the registers of the medical schools.

All students, in London, are required *personally* to register the several classes for which they have taken tickets. Tickets of admission to lectures and medical practice must be registered in October and May; but no ticket will be registered unless it be dated within *seven* days of the commencement of the course.

The court requires students at the provincial medical schools to register their names in their own handwriting, with the register of each respective school, within the first twenty-one days of October, and first fourteen days of May; and to register their certificates of having duly attended lectures on medical practice within fourteen days of the completion of such attendance.

PRELIMINARY EXAMINATION IN CLASSICS AND MATHEMATICS. Three times in each year, in November, March, and July, an examination takes place in classics and mathematics for articleed students who have not yet entered to their second winter session of their curriculum; and students who pass this examination are not again examined in Latin, except in the Pharmacopœia Londinensis and Prescriptions. The subjects of examination, and the dates, will be announced in the medical journals at least three months before each examination.

PRELIMINARY LATIN EXAMINATION. On the first Saturday in the months of December, January, February, April, May, June, and October, those students who have completed two winter sessions of their medical studies may be admitted to an examination in Celsus and Gregory, provided there be twenty names on the list. Candidates must enter their names in a book kept at the beadle's office, on or before the preceding Monday, and attend at half-past three o'clock p.m., on the day of examination.

Those gentlemen who fail to pass this examination satisfactorily will not be readmitted until they appear for their general examination.

GENERAL EXAMINATION. Every person intending to offer himself for examination must give notice in writing to the clerk of the society, on or before the Monday previously to the day of examination, and must deposit all the required testimonials at the office of the beadle.

The examination of the candidate for a certificate of a qualification to practise as an apothecary will be as follows:

In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of Gregory's Conspectus Medicinæ Theoreticæ; in Physicians' Prescriptions, and the Pharmacopœia Londinensis; in Chemistry; in Practical Chemistry; in Materia Medica and Therapeutics; in Botany; in Anatomy; in Physiology; in the Principles and Practice of Medicine, including Midwifery and the Diseases of Children.

The court meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock.

Sums to be paid for certificates: For London, and within ten miles thereof, ten guineas: for all other parts of England and Wales, six guineas. Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition.

For information, students are referred to the beadle, at Apothecaries' Hall, every day (Sunday excepted), between ten and four o'clock.

HOSPITALS AND MEDICAL SCHOOLS IN ENGLAND.

The following is a list of the hospitals and medical schools in England.

IN LONDON.

ST. BARTHOLOMEW'S HOSPITAL (Smithfield).
CHARING CROSS HOSPITAL (West Strand).
ST. GEORGE'S HOSPITAL (Hyde Park Corner).
GUY'S HOSPITAL (Southwark).
KING'S COLLEGE HOSPITAL (Portugal Street, Lincoln's Inn).
KING'S COLLEGE MEDICAL SCHOOL (Somerset House).
LONDON HOSPITAL (Whitechapel).
ST. MART'S HOSPITAL (Paddington).
MIDDLESEX HOSPITAL (Charles Street, Berners Street).
ROYAL FREE HOSPITAL (Gray's Inn Road).
ST. THOMAS'S HOSPITAL (Southwark).
UNIVERSITY COLLEGE (Upper Gower Street).
WESTMINSTER HOSPITAL (Westminster Abbey).
SCHOOL OF ANATOMY AND MEDICINE ADJOINING ST. GEORGE'S HOSPITAL (1, Grosvenor Place).

IN THE PROVINCES.

BIRMINGHAM.—QUEEN'S COLLEGE.
—SYDENHAM COLLEGE.
BRISTOL.—MEDICAL SCHOOL.
HULL.—SCHOOL OF MEDICINE AND ANATOMY.
LEEDS.—SCHOOL OF MEDICINE.
LIVERPOOL.—ROYAL INFIRMARY SCHOOL OF MEDICINE.
MANCHESTER.—ROYAL SCHOOL OF MEDICINE AND SURGERY.
—CHATHAM STREET SCHOOL OF MEDICINE.
NEWCASTLE-UPON-TYNE.—COLLEGE OF MEDICINE AND PRACTICAL SCIENCE.
—COLLEGE OF MEDICINE IN CONNECTION WITH THE UNIVERSITY OF DURHAM.
SHEFFIELD.—MEDICAL INSTITUTION.
YORK.—MEDICAL AND SURGICAL SCHOOL.

ST. BARTHOLOMEW'S HOSPITAL.

PHYSICIANS: Dr. Hue, Dr. Roupell, and Dr. Burrows. SURGEONS: Mr. Lawrence, Mr. Stanley, and Mr. Lloyd. ASSISTANT PHYSICIANS: Dr. F. J. Farre, Dr. Jeaffreson, and Dr. Black. ASSISTANT SURGEONS: Mr. Skey, Mr. Wormald, and Mr. Paget. PHYSICIAN ACCOUCHEUR: Dr. West.

FEES. *Medical Practice*. Six months, £10:10; nine months, £12:12; eighteen months, £15:15; unlimited, £31:10.

Surgical Practice. Six months, £15:15; twelve months, £21; three years, £26:5; unlimited, £31:10.

The hospital contains 650 beds; of which 420 are devoted to surgical cases, and 230 to medical cases and diseases of women. The clinical clerks are elected from among the most diligent students. The fees for dresserships are: three months, £12:12; six months, £18:18; twelve months, £26:5.

MEDICAL SCHOOL. WINTER SESSION. Medicine. Dr. G. Burrows; M., W., and F., at half-past 3 P.M. One session, £5:5; perpetual, £7:7.

Surgery. Mr. Lawrence; M., W., and Th., at 7 P.M. Fees, £5:5, and £7:7.

Descriptive and Surgical Anatomy. Mr. Skey; daily, except Saturday, at half-past 2 P.M. Half session, £5:5; whole session, £7:7; unlimited, £10:10.

Anatomy and Physiology. Mr. Paget; daily, at 9 A.M. Half session, £5:5; whole session, £7:7; unlimited, £10:10. Dissecting rooms open daily from 7 A.M. to 4 P.M.

Practical Anatomy. Mr. Holden and Mr. Coote demonstrate daily from half-past 10 to half-past 2.

Chemistry. Mr. Stenhouse; M., W., and F., at 10 A.M. Fees, £5:5, and £8:8.

SUMMER SESSION. *Materia Medica and Therapeutics*. Dr.

Roupell; M., W., Th., and F., at half-past 2 P.M. Fees, £5:5, and £7:7.

Botany. Dr. F. J. Farre; Tu., Th., and Sat., at 9 A.M. Fees, £3:3, and £4:4.

Forensic Medicine. Dr. Baly; M., W., and F., at 9 A.M. Fees, £3:3, and £4:4.

Midwifery and Diseases of Women and Children. Dr. West; daily, except Sat., at half-past 3. Fees, £4:4, and £6:6.

Comparative Anatomy. Mr. McWhinnie; M., W., and F., at 10. Fees, £2:2, and £3:3.

Practical Chemistry. Mr. Stenhouse; M., Tu., Th., and F., from 10 till 1. Fees, £2:2, and £3:3.

Natural Philosophy. Dr. Gibbon; W. and Sat., at 12. Fee, £2:2.

Entrance fee to all lectures required by the Colleges of Physicians and Surgeons and the Society of Apothecaries, £52:10; lectures and hospital practice for same, £94:10; unlimited entrance to all lectures, £62. The fees may be paid in two or in three portions at the commencement of the first winter and summer sessions.

SCHOLARSHIPS AND PRIZES. Examinations of the classes are held at the close of each session; and various scholarships and prizes are awarded.

CHARING CROSS HOSPITAL.

CONSULTING PHYSICIAN: Dr. Shearman. PHYSICIANS: Dr. Golding and Dr. Chowne. ASSISTANT-PHYSICIAN: Dr. Rowland. SURGEONS: Mr. Hancock and Mr. Avery.

FEES. *Medical Practice*. Six months, £10:10; full period required, £15:15.

Surgical Practice. Six months, £10:10; full period required, £15:15.

Full period to both medical and surgical practice, £26:5.

MEDICAL SCHOOL. WINTER SESSION. Medicine. Dr. Chowne and Dr. Rowland; M., W., and F. Fees, £4:4, and £7:7.

Surgery. Mr. Hancock; M., Th., and F. Fees, £3:3, and £5:5.

Descriptive and Surgical Anatomy. Mr. Canton; daily, except Sat. Fees, £4:4, and £7:7.

Anatomy and Physiology. Mr. Canton; daily, except Sat. Fees, £4:4, and £7:7.

Anatomical Demonstrations. Mr. Goldsbro; daily. Fees, £2:2, and £4:4.

Chemistry. Mr. Lewis; Tu., Th., and Sat. Fees, £5:5, and £7:7.

SUMMER SESSION. *Materia Medica and Therapeutics*. Dr. Steggall and Dr. Willshire; daily, except M. Fees, £4:4, and £6:6.

Botany. Mr. F. W. Headland; daily. Fees, £3:3, and £4:4.

Forensic Medicine. Dr. Birkett and Mr. Hird; M., W., and F. Fees, £2:2, and £4:4.

Midwifery, and Diseases of Women and Children. Dr. Chowne and Mr. Hird; M., Tu., Th., and F. Fees, £3:3, and £6:6.

Practical Chemistry. Mr. Lewis; Tu., Th., and Sat. Fee, £2:2.

General fee for all the lectures required by the College of Surgeons and Society of Apothecaries, exclusive of Practical Chemistry, £45.

Various prizes and testimonials of honour are awarded.

ST. GEORGE'S HOSPITAL.

PHYSICIANS: Dr. J. A. Wilson, Dr. Nairne, Dr. Page, and Dr. Benée Jones. ASSISTANT PHYSICIANS: Dr. Pitman and Dr. Fuller. OBSTETRIC PHYSICIAN: Dr. R. Lee. SURGEONS: Mr. Cæsar Hawkins, Mr. Cutler, Mr. Tatum, and Mr. H. C. Johnson. ASSISTANT SURGEONS: Mr. P. Hewett and Mr. G. D. Pollock.

FEES. *Medical Practice*. Six months, £8:8; twelve months, or the period required by the Hall, £16:16; unlimited, £25:4; fee to the apothecary, £1:1.

Surgical Practice. Six months, £15:15; twelve months, or the period required by the College, £21; unlimited, £26:10.

The hospital contains 350 beds.

Instruction in practical pharmacy—six months, £12:12; one year, £15:15. The pupils attending medical and surgical practice may become, when qualified, clinical clerks. The dresser of the surgeon of the week boards at the hospital free of expense. Perpetual pupils are eligible to be assistant house-surgeons for six months, and house-surgeons for twelve months (without additional fee), when properly qualified.

MEDICAL AND SURGICAL SCHOOL. *Materia Medica and Therapeutics*. Dr. Nairne and Dr. Page; M., W., and F. Fees, £5:5, and £6:6.

* Where two sums are mentioned, the first denotes the fee for one course; the second that for unlimited attendance.

Surgery. Mr. Tatum; M., W., and F., at 12. Fees, £4:4, and £6:6.

Descriptive and Surgical Anatomy. Mr. P. Hewett and Mr. Pollock; daily, except Sat., at a quarter before 3. Fees, £6:6, and £8:8.

Anatomy and Physiology. Mr. Athol Johnson; M., Tu., Th., and F., at 10 A.M. Fees, £8:6, and £8:8.

Practical Anatomy. Students will be directed in their studies during several hours daily, by Mr. Henry Gray, Dr. Ogle, and Mr. T. Holmes, under the superintendence of the lecturers.

Chemistry. Mr. H. M. Noad; Tu., Th., and Sat., at 11 A.M. Fees, £6:6, and £8:8.

SUMMER SESSION. Materia Medica. Dr. Pitman; daily, except Sat., at 11 A.M. Fees, £5:5, and £6:6.

Botany. Mr. Henfrey; daily, except Sat., at 10 A.M. Fees, £3:3, and £4:4.

Medical Jurisprudence. Dr. Fuller; M., W., Th., and F., at 12. Fees, £3:3, and £4:4.

Midwifery. Dr. R. Lee; daily, at 9 A.M. Fees, £4:4, and £6:6.

Practical Chemistry (including use of materials). Mr. Noad; daily, at half-past 2. Fee for course, £4:4.

The whole of the lectures and hospital practice required by the College of Surgeons of England and Society of Apothecaries of London may be attended on payment of £42 at the commencement of the first year; £42 at the commencement of the second year; and £12:12 at the commencement of the third year. The payment for the year will admit the pupil to all the lectures, and to the hospital practice required, for that year only. Registration fee, one guinea.

SCHOLARSHIPS AND PRIZES. The examinations of those students who are candidates for prizes and certificates of merit will take place at the end of each course. Various scholarships and prizes are also awarded.

OUTY'S HOSPITAL.

Sent too late for insertion this week.

KING'S COLLEGE.

Prospectus not forwarded.

LONDON HOSPITAL.

PHYSICIANS: Dr. Cobb, Dr. Little, and Dr. Fraser. **SURGEONS:** Mr. Luke, Mr. Adams, and Mr. Curling. **ASSISTANT PHYSICIANS:** Dr. Davies, Dr. Parker, and Mr. Gibbon. **ASSISTANT SURGEONS:** Mr. Critchett, Mr. N. Ward, and Mr. Wordsworth.

General fee for attendance on the medical and surgical practice, qualifying for the examinations at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the lectures, £88:4, payable in two instalments of £44:2 each, at the commencement of the two first sessions. Perpetual fee to the lectures alone, £50. Students can make special entries for lectures or practice.

WINTER SESSION. Medicine. Dr. Little: Mon., Wed., Th., and Sat. Fees, £4:4, and £7:7.

Surgery. Mr. Curling and Mr. Critchett: Mon., Wed., and Fr. Fees, £4:4, and £6:6.

Descriptive and Surgical Anatomy. Mr. Adams: daily (except Thursday). Fees, £5:5, and £10:10.

General Anatomy and Physiology. Dr. Carpenter: Tu. and Th. Fees, £3:3, and £5:5.

Practical Anatomy. Mr. N. Ward and Mr. Wordsworth: daily. Demonstrations on Tu., Th., and Sat. Fees, £5:5, and £10:10.

Chemistry. Dr. Letheby: Mon., Wed., Fr., and Sat. Fees, £4:4, and £7:7.

SUMMER SESSION. Materia Medica and Therapeutics. Dr. H. Davies: Mon., Wed., Th., and Sat. Fees, £3:3, and £4:4.

Botany. Mr. Bentley: M., W., and F. Fees, £3:3, and £4:4.

Forensic Medicine. Dr. Ramsbotham and Dr. Letheby: daily (except Saturday). Fees, £3:3, and £4:4.

Midwifery and Diseases of Women and Children. Dr. Ramsbotham. Fees, £4:4, and £6:6.

Practical Chemistry. Dr. Letheby: Tu., Th., and Sat. Fees for students of the hospital, £2:2; other persons, £3:3.

The anatomical museum and reading room are open daily.

ST. MARY'S HOSPITAL.

PHYSICIANS: Dr. Alderson, Dr. Chambers, and Dr. Sibson. **SURGEONS:** Mr. Coulson, Mr. Lane, and Mr. Ure. **PHYSICIAN-ACCOCHEUR:** Dr. Tyler Smith. **SURGEON-ACCOCHEUR:** Mr. I. Baker Brown. **OPHTHALMIC SURGEON:** Mr. White Cooper. **AURAL SURGEON:** Mr. Toynbee. **ASSISTANT PHYSICIANS:** Dr. Handfield Jones, Dr. Sieveking, and Dr. Markham. **ASSISTANT SURGEONS:** Mr. Smith, Mr. Haynes Walton, and Mr. James

Lane. DENTAL SURGEON: Mr. Nasmyth. **RESIDENT MEDICAL OFFICERS:** Mr. Trotter, Mr. Bullock, and Mr. Lawrence.

This hospital contains 150 beds, 85 of which are devoted to surgical, and 65 to medical cases. These include a ward of 10 beds for diseases of women, two small wards for ophthalmic cases, and beds for aural cases.

FEES. Medical Practice. Three months, £5:5; six months, £7:7; twelve months, £12:12; eighteen months, £15:15; perpetual, £21.

Surgical Practice. Six months, £9:9; twelve months, £21; three years, £21; perpetual, £32:10.

There are three resident medical officers, who board in the hospital, and are appointed for eighteen months, two non-resident medical officers, a curator, and a medical and a surgical registrar, who are appointed by the weekly board on the recommendation of the medical committee; these offices are open to competition among the pupils of the hospital. Clinical clerks and dressers will also be selected from the best qualified students without extra fee.

MIDDLESEX HOSPITAL.

PHYSICIANS: Dr. Francis Hawkins, Dr. Crawford, and Dr. Seth Thompson. **PHYSICIAN-ACCOCHEUR:** Dr. Frere. **ASSISTANT PHYSICIANS:** Dr. Stewart and Dr. Goodfellow. **SURGEONS:** Mr. Shaw, Mr. De Morgan, and Mr. Moore. **ASSISTANT SURGEON:** Mr. Henry. **SURGEON-DENTIST:** Mr. Tomes. **APOTHECARY:** Mr. Corfe. **REGISTRAR:** Mr. Sibley.

FEES. Medical Practice. Three months, £6:6; six months, £10:10; eighteen months, £15:15; unlimited, £21.

Surgical Practice. Six months, £10:10; twelve months, £12:12; three years, £18:18; unlimited, £21; fee to apothecary, £1:1; fee to secretary, 6s.

Students desirous of entering to the medical and surgical practice, apart from the lectures, for the periods required by the College of Surgeons and Apothecaries' Company, may do so by making one payment of £30. The hospital receives 300 in-patients, and contains wards appropriated to the admission of cases of syphilis, of cancer, and of uterine disease. Clinical clerks and dressers are selected from the most deserving pupils without additional fee. Pupils become eligible as dressers to the in-door patients, after having practised dressing and bandaging in the out-patient room and surgery. House-surgeons are elected half-yearly from the dressers, fee £21; and are provided with board and residence in the hospital.

CLINICAL PRIZES. The physicians and surgeons have instituted two prizes, of the value of ten guineas each, which will be awarded, at the annual distribution, to the students who shall present the best reports of cases in the hospital during the preceding winter session.

TREASURERS' PRIZE. An annual prize, value ten guineas, is offered by the treasurers.

MEDICAL AND SURGICAL SCHOOL. WINTER SESSION. Medicine. Dr. Crawford and Dr. Seth Thompson; M., W., and F., at 9 A.M. Fees, £4, and £6.

Surgery. Mr. Shaw; Tu., Th., and Sat., at 9 A.M. Fees, £4, and £6; two courses, £5:5.

Descriptive and Surgical Anatomy. Mr. Moore; daily, at 12. Fees, £8, and £11.

Physiology and General Anatomy. Mr. De Morgan; M., W., and F., at 3 P.M. Fees, £4, and £6.

Practical Anatomy. Mr. T. W. Nunn and Dr. Van der Byl; demonstrations, Tu. and Th., at 3 P.M. Fees, £2:2, and £3:3.

The dissecting room is open from eight to five o'clock daily.

Single Course of Anatomy, Physiology, Demonstrations, and Dissections, £8:8; perpetual, £15.

Morbid Anatomy. Mr. Henry; M., at 10 A.M. Fees, £2:2, and £3:3.

Chemistry. Mr. Thomas Taylor and Mr. Heisch; M., W., and F., at 11 A.M. Fees, £8, and £8.

Practical Pharmacy, with Dispensing. Mr. Corfe. Fee for six months, £8:8; for twelve months, £12:12; without dispensing, for three months, £6:6.

SUMMER SESSION. Materia Medica, etc. Dr. Stewart; daily, except Sat., at 3 P.M. Fees, £3:3, and £5:5.

Botany. Mr. Bentley; daily, except F., at 11 A.M. Fees, £3, and £4.

Medical Jurisprudence. Dr. Goodfellow; daily, except M., at 9 A.M. Fees, £3:3, and £5:5.

Midwifery. Dr. Frere; daily, except M., at 10 A.M. Fees, £3, and £5.

Comparative Anatomy. Mr. G. R. Waterhouse; Tu. and F., at 5 A.M. Open to all general pupils of the school. Fee from occasional students, £2:2.

Practical Chemistry. Mr. T. Taylor and Mr. C. Heisch; M. W., and F., at 11 A.M. Fee for general pupils, £2:2; non-general pupils, £3:3.

Clinical Lectures on M., W., Th., and F., at 1 P.M.

Practical Histology and the Use of the Microscope. Dr. Van der Byl; twice a week. Fee, £2:2.

Attendance on all the hospital practice and lectures required by the College and Hall, exclusive of practical chemistry, £75; which may be paid by instalments of £30 at the beginning of the first session; £30 at the beginning of the second session; and £15 at the beginning of the third session. Fee for every additional session, £5. Admission to the Library and Reading Room is included in the fees paid by general students. Occasional students, who desire to make use of the Library, may do so on payment of 10s. 6d. The Museum is open daily to students, and bones and models are supplied to them for study during the intervals of lecture.

ROYAL FREE HOSPITAL.

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Botany. Mr. J. F. Syme; M., Tu., W., and F., at half-past 9. One session, £3:3.

Forensic Medicine. Dr. J. R. Cormack; M., Tu., and Th., at 11 A.M. One session, £3:3.

Midwifery, and Diseases of Women and Children. Dr. Tyler Smith, Dr. Robert Barnes, and Dr. Henry Bennet; M., W., and F., at 4 P.M. One session, £4:4.

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At the termination of the winter and summer sessions, examinations will be instituted. Honorary certificates will be awarded to those students who may distinguish themselves. Clinical honorary certificates will also be granted to those students who, at the end of the year, may produce the best reports of cases treated in the hospital.

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Examinations are held at Christmas, and at the end of the winter and summer terms.

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Clinical Medicine. Dr. Barker; M. and W., at 3 P.M.

Surgery. Mr. South; Tu., Th., and Sat., at 11 A.M.

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Anatomical Demonstrations. Mr. Rainey, Mr. Barwell, and Mr. Jones; daily, from 9 to 3.

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Clinical Lectures in Midwifery. Dr. Waller and Dr. Griffith.

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Botany. Dr. Bristowe; Tu., Th., and Sat., at 10 A.M.

Forensic Medicine. Dr. Brinton; Tu., Th., and Sat., at 8 A.M.

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Various other scholarships and prizes are given. Two house-surgeons, and a resident accoucheur, provided with rooms and commons free of expense. The house-surgeons are selected annually from the dressers who have obtained their diplomas to practise; and the resident-accoucheurs from the students, on examination. Fifteen dressers are selected every six months, and provided with rooms and commons in the hospital, free of expense, during their attendance.

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Chemistry. Mr. Shaw. Fees, £6:6, and £9:9.

SUMMER SESSION. Materia Medica and Therapeutics. Heslop and Mr. Knowles. Fees, £4:4, and £5:5.

Botany. Mr. Knowles. Fees, £3:3, and £5:5.

Forensic Medicine. Dr. J. B. Davies. Fees, £3:3, and £5:5.

Midwifery and Diseases of Women and Children. Mr. Berry. Fees, £3:3, and £6:0.

Practical Chemistry. Mr. Shaw.

The course of study required by the College of Surgeons and the Society of Apothecaries, may be attended on the payment of a composition fee of £42, exclusive of college fees, £5 per annum, and of hospital practice, £21. The payment may be made at once, or in two equal sums,—at matriculation, and twelve months afterwards.

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Descriptive and Surgical Anatomy. Mr. Elkington, Mr. Jones, and Mr. Postgate. Fees, £4:4, and £7:7.

Anatomy and Physiology. Dr. Keyworth. Fees, £4:4, and £9:9.

Anatomical Demonstration. Mr. Jones and Mr. Postgate.

Chemistry. Mr. A. Hill. Fees, £4:4, and £7:7.

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Midwifery. Dr. Elkington. Fees, £3:3, and £4:4.

Forensic Medicine. Mr. Orford. Fees, £3:3, and £4:4.

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General Anatomy and Physiology. Dr. Brittan and Mr. Coe; daily. Fees, £5:5, and £8:8.

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Principles and Practice of Surgery. Mr. Hey and Mr. Nunneley; Tu., Th., and Sat. Fee, £3:3.

Descriptive Anatomy. Mr. W. M. Price and Mr. C. G. Wheelhouse; M., Tu., Th., and F. Fees, £4:4, and £3:3.

Anatomy, Physiology, and Pathology. Mr. Ikin, Mr. S. Hey, Mr. Price, and Mr. Wheelhouse; five days in the week. Fees, £6:0, and £4:4.

Chemistry. Mr. Morley and Mr. Scattergood; daily, except Sat. Fees, £4:4, and £3:3.

SUMMER SESSION. *Materia Medica* and Therapeutics. *Dr. Clarke; daily. Fees, £5:5, and £3:3.

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Forensic Medicine. Dr. Pyemont Smith; M., Tu., Th., and F. Fees, £2:12:6, and £1:11:6.

Midwifery and Diseases of Women and Children. Mr. Smith and Mr. Braithwaite; daily. Fees, £3:3, and £2:2.

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Clinical Surgery. Mr. Cooper: Tuesday.

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Practical Chemistry. Dr. Brett: three days weekly. Fee, £3:3.

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Clinical Medicine. Dr. Dickinson: Friday.

Clinical Surgery. Mr. Cooper: Tuesday.

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Descriptive and Surgical Anatomy. Dr. Renaud; daily. Fee, £4:4.

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Anatomical Demonstrations. Mr. Lund; daily. Fee, £2:2.

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By Order of the Council,

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Hon. Sec.

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EDITED BY JOHN ROSE CORMACK, M.D.

No. XXXIX.

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THE PROFESSION AND THE CHOLERA.

AGAIN, and at our doors, has the tocsin of pestilence been sounded. The cry to the battle-field, where death wars against life with more giant energy than on the plains of Waterloo, is borne on the air; and to us as a profession comes the call for manful energy, and a hand to hand death-encounter. Regrets that the time of immunity from disease has been suffered to roll on without energetic action, and with no preparation for its advent, are now all in vain; and the responsibility of inaction must be indeed heavily felt by those august bodies whose pre-eminent duty it should be, as it appears to us, to conserve the public health; in all times of emergency, to give advice and assistance; and when this time has passed, by the advocacy of sound measures of sanitary reform to prevent its recurrence. It cannot cease to be matter of regret that, with the abundant materials placed at their disposal, the London College of Physicians has allowed another epidemic of cholera to invade this country without placing before the profession the lesson taught by the last.

What public authorities have failed to accomplish, it remains for us as individuals energetically, at this crisis, to perform. In silence, unnoticed, and after seeing the praises we have deserved borne away by others who have talked while ours have been the burden and heat of the day, it is still our duty—and we feel proud in knowing how well the duty will be done, in the midst of discouragement, and surrounded by scenes of appalling misery and destitution—to go onward to alleviate, by the kindness of our art and the consolations of our presence, the visitation of pestilence in the haunts of dirt, of famine, and of disease.

But as yet there is time for a note of warning ere the dread visitation is fairly domiciled amongst us; and it behoves us to do all in our power to arouse the lethargic, to enrol the willing, to organize and direct, and, by all means in our power, to afford another to the accumulated evidences that we are, as a profession, of all bodies the most unselfish and humane.

In all towns where there is no Sanitary Committee or Board of Health, the medical men should meet, and publish, with the sanction of the authorities, some such precautionary notice as the following, to be posted in all courts, alleys, and back streets. We select the following

merely as a specimen of the sort of notice which is required. Of course the words may be variously modified, according to circumstances; but the leading points to be impressed on the public are indicated in the subjoined placard.

“PREVENTATIVES AGAINST CHOLERA. Let every kitchen, cellar, and all underground premises, be thoroughly cleansed and whitewashed: and see that no gutter is choked, or any filth, ashes, or stagnant water, is allowed to accumulate in or near any of your premises. Give notice to the inspector at once of any nuisance that you know of anywhere near your house: and help your neighbours thoroughly to cleanse and purify the streets or courts in which you live.

“Cholera does not come on at once; there is first, perhaps for some days, looseness of the bowels, or purging, *without any pain*. But no one must be put off their guard by this, but get an order to the infirmary, or to the union surgeon, or procure some other medical advice, immediately. This will prevent diarrhoea from becoming cholera. Cholera is often brought on by improper food. Sour or unripe fruits and vegetables, especially uncooked, should be avoided.

“All excess must be carefully guarded against. *Dirt and drink* always bring on cholera, and drunkards always suffer most. Be moderate in eating and drinking; avoid exposure to the cold and wet, especially to foggy night air. If your clothes get wet, change them immediately.

“By attention to these simple rules, you will avoid cholera, both in your houses and in the town.

“By order of the Sanitary Committee,

“W. H. MICHAEL, *Chairman*.”

“Swansea, Sept. 21st, 1853.”

The medical men should confer with the authorities of the town or district in which they reside, and help and direct them as to the best modes of thoroughly cleansing all courts and alleys, and removing filth and nuisances of every description. They should originate a fund for the relief of destitution and distress; and organize a thorough system of house to house visitation, immediately upon the appearance of cholera, or even the ordinary autumnal diarrhoea. The medical men of a town or district should confer together, and determine such arrangements as would make the labour and toil be equally divided; while, at the same time, boards of guardians, or a public meeting of the inhabitant rate-payers, might pass such resolutions as would secure to the medical attendants a proper and fixed remuneration, say 10s. 6d., for each case of cholera or severe diarrhoea. At the same time, the poor should be informed as to where medicines and appliances could be procured at a moment's notice, and where medical advice might be at once obtained. This might be well accomplished by a central dispensary, where one, two, or three assistants, according to the number of cases, might be kept constantly at work, and where one or more might devote his time to a tabular record of cases, their results, treatment, etc.; for we feel assured that it is at the moment while the disease is rife that facts should be collected, to be reasoned on at leisure.

The isolation of the destitute and dirty from their

wretched and filthy habitations cannot be too much insisted on; and the fitting up a large airy warehouse as a temporary cholera hospital would become a necessary step in our precautions; while another might, with equal, if not greater service, be used as a refuge for the families attacked. Indeed, we believe, upon the whole, after the most careful consideration and considerable experience, that, instead of removing the patient, it is often better to clear the house of the family; and by cleansing, fumigating, and ventilating the apartment of the invalid, and other parts of the house, more is accomplished towards recovery than by concentrating large numbers together in a hospital; for the shock which is inseparable from removal often operates prejudicially on those over whom collapse is hovering.

There are duties devolving on the rich; and unless at this crisis these duties are performed, the affluent will enjoy no immunity from the visitation. It is the breeze which comes laden with pestilence-miasm, gathered in its way from the straw pallet of the neglected and famishing wretch who occupies one of the rich man's cots, which, through the jalousied and draperied rich man's window, shall bear to the loved and tenderly nursed inmates the message of the angel of death. We must as a profession unflinchingly proclaim to the rich man his moral obligation, and fail not to awaken his fear, if no other than selfish interest can arouse him to duty. Where water is supplied by public companies, we should urge on the authorities the necessity of some arrangement by which the poorest hovel shall be now at least freely supplied with this greatest necessary of life.

Of the positive antidotes, these are the main—fresh air, free ventilation, pure water, and wholesome food; of the negatives—freedom from anxiety, and from undue toil. The former being present, and the latter away, cholera will in vain seek for its accustomed haunts: the nidus will then be destroyed; we shall have chained the spirit of devastation, and lured it to its own destruction.

But, as we write, mournful prognostications of neglected want, of putrid exhalations, of foul dwellings, crowded with rage, and peopled with penury, with idleness, and with want, arise before us: we tread in imagination the sickening alleys and courts of our great towns, and feel again the physical and moral depression they have before produced.

The hand of the monster is again upon us, and we have again to struggle in its mortal grasp, as beginning where other diseases end—in death. It proclaims in the daily prints that time has diminished nothing, if indeed it has not increased its fatality. If we cannot arrest its coming, let us at least use the present opportunity to make us familiar with the tactics of our grim antagonists. If the profession are true to themselves, this visitation will determine its character, and point out the means for its cure. Let every practitioner tabulate *every* case, whether of cholera, diarrhoea, or cholericine, with the treatment adopted. So as accurately to fix data upon which conclusions may be safely based, we would strongly urge upon every medical man the desirability of adopting for himself *one* plan of treatment, and in every case, unless for good reasons to the contrary, persistently carrying it out. We shall thus, in place of the vacillating and uncertain reports which lead to no practical issue, have at our disposal a mass of facts and data from which a sound judgment can be derived, and the true laws of cholera be deduced.

We have no words to express the importance we attach to the conduct of our medical brethren at this emergency. It is one of those occasions when the profession is looked to for counsel, for guardianship, and help. The public will expect "every man this day to do his duty"; and we feel that from every heart there is but this one response—"Ready, aye ready".

THE CHOLERA, THE ASSOCIATION, AND THE ASSOCIATION JOURNAL.

THE steady march of Cholera from its eastern home, and its actual encampment in many of its old and familiar European haunts, at present awaken the anxieties and the fears of the public with as much freshness as if some new and unexpected calamity had occurred. But the medical profession can mingle no surprise with its sorrow: for nothing has happened which its wise men have not foretold would take place, unless better defences were prepared against the invader, than those which now exist. The advance of the disease over vast continents and tracts of country differing widely in climate and geological formation, and its progress during different seasons and different meteorological conditions, make it sufficiently evident that there is a pestilential something which can find a way for itself, be it by the land, by the water, or by the air. But the history of the past teaches us another and a more cheering lesson; for it assures us that although cholera may spread itself over a village, a city, or a kingdom, yet in some of the embraced localities it will be unable to procure a single victim, while its carnage will be terrific in those situations where men dwell among cesspools, foul privies, untrapped sewers, and graveyards—

"Where putrefaction into life ferments,
And breathes destructive myriads."

As the representatives of the medical profession we cannot give utterance to surprise; but though almost weary with the cry, we must once more lift up our lamentation and our complaint that, in this enlightened age, scientific medicine should still be refused its high and its rightful place in the statesmanship of England. For a time, but not for ever, can this complaint be disregarded.

Descending from what the State ought to do, to what the Association can without State assistance accomplish for humanity, let us in a few words state the kind of information regarding cholera which is wanted; and which we desire to disseminate through the medium of this Journal.

In the first place, we respectfully submit to our colleagues that a retrospect of the past shows that no advantage can be obtained by filling Medical Journals and Newspapers with defective histories of cases, and laudations of specific remedies. With both, the archives of medicine are encumbered, to the notorious discredit of the majority of those authors by whom this rubbish has been accumulated. What we wish to preserve in our pages, is a *series of authentic histories of every case of every disease occurring during a cholera outbreak within a given period and within a given district, accompanied by as complete an account as possible of the daily meteorological condition of the atmosphere*. From such data only can the natural history, the pathology, and the right treatment of cholera, be discovered; and, if such data there are very few practitioners among us who cannot contribute something useful, if they observe and report what they see with faithfulness and accuracy.

To those who wish to contribute to this Journal their experience of the threatened visitation, we would recommend the perusal of the article on Medical Meteorology in our number for the 26th of August, the circulars issued in 1849 by our own Association, by the College of Physicians, and by the Western Medical and Surgical Society of London. As these valuable documents are as appropriate now as when they were first published, we reprint an article in which they are embodied, from the *London Journal of Medicine* for November 1849.

**"FACTS ASKED FOR, ON WHICH TO ESTABLISH THE TRUE PATHOLOGY AND TREATMENT OF CHOLERA.—
MOVEMENT IN THE PROFESSION.**

"The Royal College of Physicians of London, the Provincial Medical and Surgical Association, the Western Medical and Surgical Society of London, and we rather think some other bodies, have issued important circulars, calling for information on the subject of cholera. All, most properly, ask for *facts apart from theory or opinions*. In reprinting the documents which have been issued, we would very earnestly impress upon the profession the duty which is now laid upon every member, to come forward with such a contribution to the general store as he may be able to give. We would also suggest that the different bodies might, perhaps with great advantage, co-operate, and issue one, in place of separate digests of information. Might not the Provincial Association, for example, have a representative in the Cholera Committee of the College of Physicians? with which committee, we think, the arranging and digesting of the reports might safely be left. From the subjoined circulars and queries, we feel confident that a committee better fitted for the duty could not be found. A general co-operation of the whole profession with the College of Physicians is what we would like to see. If we cannot combine as political bodies, let us all join, heart and soul, in this great pathological inquiry. Our broken ranks and paltry jealousies deprive us of our proper social position, and of our facilities of enlarging the boundaries of science. The present occasion offers an opportunity of union, which, if made use of, may lead men to know and appreciate each other more than they have yet done, and thus tend to good in many ways.

"COLLEGE OF PHYSICIANS: THEIR CIRCULARS.

"Royal College of Physicians, Pall Mall East,
6th September, 1849.

"SIR,—The Cholera Committee have instructed us to address you again, for the purpose of explaining the object of the resolution transmitted to you on the 6th ult., and of offering some suggestions as to the mode in which your co-operation could be most efficiently rendered.

"The opinions of the profession are divided on many points relating to the pathology and treatment of cholera; and it is not to be expected, that the doubts and discrepancies existing will be finally settled by the evidence which any individual member of the profession may adduce. But the committee have a confident hope, that valuable and conclusive results, in regard to at least some of the disputed points, might be obtained, by collecting and comparing the observations of hospital physicians, and of the many other members of the College who have practical experience in the present epidemic.

"Such a method of inquiry appears to be especially applicable, and indeed indispensable, in any endeavour to estimate the relative values of the various modes of treating cholera, respecting which the evidence is at present so conflicting. With the co-operation of the members of the College, the committee may, it is hoped, in some cases, be able to fix the kind and amount of benefit derivable from particular remedies or plans of treatment; they may establish the superiority of some remedies; and, with regard to others, they may show that their use ought to be at once abandoned.

"The following list includes the principal modes of treatment hitherto recommended. It seems desirable that every member of the College, who has the necessary opportunity, should submit one or more of these to a systematic trial in a series of cases. But the committee request that you will communicate to them any observations you may have made, on the effects of other remedial means not included in this list:—

"Calomel, in large doses; in smaller and frequent doses.

"Calomel with opium.

"Opium in large doses.

"Ammonia; alcoholic liquids; essential oils and aromatics; camphor and musk.

"Acetate of lead; sulphate of copper; the vegetable astringents.

"Quinine; arsenic; iron.

"The saline plan, as recommended by Dr. Stevens.

"The tartarized antimony plan, as recommended by Dr. Billing.

"Emetics.

"The free administration of cold water and ice; the cold bath and cold douche.

"The application of the 'wet sheet'.

"Injection of saline or other fluids into the veins.

"Bleeding.

"Electricity.

"With regard to the form in which your observations on the results of treatment may be communicated, the committee would merely suggest that, with a view to the subsequent comparison of the facts contributed by different observers, a statement, not merely of the number of cases treated with each remedy, and the main results, but also of some particulars of the cases, is desirable. The following points appear the most important, with reference to the object in view:—

"The age and sex of each patient.

"The period of the attack at which the treatment was commenced.

"The severity of the attack, as indicated by—

"1. The pulse.

"2. The state of the surface, especially of the face and extremities, as to temperature, moisture, and colour.

"3. The appearance and amount of the intestinal evacuations.

"4. The existence and degree of urgency of the vomiting and cramps.

"5. The state of the urinary secretion.

"The apparent immediate effect of the remedy on the symptoms.

"The duration of the state of collapse, whether fatal or not, after the commencement of the treatment.

"And, in cases of recovery from collapse, the supervention or not of the state called the 'consecutive fever'.

"The preceding observations have reference, more especially, to the treatment of the disease in the stages of impending and complete collapse. But the committee would gladly learn the results of your experience relative to the means of arresting the diarrhoea, which, in many instances precedes the stage of collapse, and of restoring the healthy action of the kidneys, when collapse has been recovered from. (See the Queries, Nos. 6 and 10.)

"Lastly, the committee request that you will communicate to them the results of any inquiries you may have instituted into the morbid anatomy of cholera, or into the chemical and microscopic analysis of the blood and secretions in the different stages of the disease, and any general observations on the pathology of cholera. The series of queries, appended to this letter, embraces some of the more important questions, which might be elucidated by the combined experience of the members of this College. But it is not desired by the committee,

that, in any communication with which you may favour them, you should limit your remarks to the subjects of those queries.

"We are, sir, your obedient humble servants,

"WILLIAM BALY, } *Secretaries to the*
"WILLIAM W. GULL, } *Cholera Committee.*

"**QUERIES.**

- "1. Can you communicate to the committee any facts observed or investigated by yourself, which appear to you demonstrative of the contagious or infectious nature of cholera, or of its communicability in any way?
- "2. Can you detail any facts illustrative of the influence of deficient ventilation, damp, foul air, and bad water, respectively, or of other external circumstances, in determining or favouring the production of cholera?
- "3. What are the particular states of body or mind, which, according to your experience, have most frequently predisposed individuals to be attacked by the disease?
- "4. What are the groups of symptoms which have preceded the full development of the attack of cholera?
- "5. Have you observed any distinctive marks by which diarrhoea, about to pass into developed cholera, may be recognised?
- "6. Does it accord with your experience, that cholera, in the stage of 'serous' or watery diarrhoea, can with facility be checked? What means have you found most effectual in attaining this object?
- "7. Have any facts come under your notice, which, independently of theoretical views, should elucidate the question, Whether the affection of the intestinal mucous membrane in cholera is the primary disease, or one of its secondary effects?
- "8. Can you furnish the committee with the particulars of cases, in which the rapidity of the fatal collapse has borne no relation to the amount of fluid discharged from the blood-vessels, either through the intestinal mucous membrane, or through the skin?
- "9. What are the pathological conditions which you have observed in the 'consecutive fever'?
- "10. What means have you found most successful in re-exciting the function of the kidneys, after the stage of collapse has passed?

"Royal College of Physicians, Pall Mall East,
13th October 1849.

"SIR,—We are instructed by the Cholera Committee to transmit to you the accompanying copies of the letter issued on the 6th of September, and to request that you will distribute them amongst those members of the profession in your neighbourhood, not members of the College, who have had the largest experience in the epidemic now subsiding. Any aid which those gentlemen may afford the committee, in furtherance of the objects indicated, would be received as an obligation.

"The committee are also desirous of obtaining your co-operation in a special inquiry respecting the origin and mode of propagation of the cholera. They believe that much might be done towards the elucidation of this important question, by collecting authentic information in regard to the first cases of the disease in the several towns, villages, and public institutions throughout England. They have accordingly directed us to submit to you the subjoined queries, and to beg the favour of your obtaining for them as detailed and precise answers as may be possible:—

- "1. Had the person first attacked with cholera in recently been in an infected place? or had he received into his house clothes or other articles, which may have conveyed infection? or had he been in contact with strangers coming from an infected locality?
- "2. If the disease appears not to have been introduced in any one of these ways, is it possible that the drinking-

water was the means of conveying the infection, by its being contaminated in its previous passage (as a river or canal) through infected places?

- "3. What was the character of the part of in which the first case occurred, as regards elevation, drainage, supply of water, density of population, ventilation, and cleanliness?
- "4. Did the first few cases occur simultaneously? or after what intervals did they succeed each other?
- "5. Is there any evidence or probability of there having been communication, or near approach, between the first patient, or patients, and those next affected?

The following queries have reference to the communicability of the disease, but do not relate especially to the first cases:—

- "6. In the instances where several cases have occurred in the same house, have they been simultaneous or successive?
- "7. Have any persons attending on cholera patients, or employed to wash the clothes or bed-linen of such patients, been soon afterwards attacked with the disease?
- "8. Where several persons in one house, or in contiguous houses, have been attacked, in a district otherwise free from the disease, has it been discovered that the water used for drinking had been contaminated by a sewer, drain, or cesspool? or have any other causes appeared, which would explain the particular limitation of the disease?
- "9. Can you learn that the disease has apparently been conveyed to neighbouring healthy places, by infected persons leaving?

"In conclusion, we have to ask of you the favour of an early reply to the present, as well as the previous, letter of the committee. It is desirable that all communications should be sent in by the 15th of November, or as soon afterwards as possible.

We have the honour to be, sir,

"Your obedient humble servants,

"WILLIAM BALY, } *Secretaries to the*
"WILLIAM W. GULL, } *Cholera Committee.*

"It would be very difficult for the most hypercritical to object to a phrase, or even a word, in the above documents. They have evidently been framed by physicians, who have not only read and reflected much upon the pathology and treatment of cholera, but who have also had extensive clinical experience in the disease. One or two additional points of information may occur to some, we doubt not; and perhaps it would have been well to have included a request for any facts connected with cholera which the respondent might possess, even though not embraced in the queries. Some might have observations to communicate on the sequelæ of cholera, upon the type of other diseases during the epidemic of cholera, upon recovery from the cold stage by those who had no medical treatment: and others might imagine they had statements of value to make regarding other medicines than those specified, among which we might cite as examples, sulphur, and the camphor chloroform mixture, remedies which have been largely used by some, especially for the cramps. In reference to the calomel treatment in the stage of collapse, it would be well for the stools to be examined, for the purpose of determining the extent and rapidity with which the unaltered drug is washed out by the serous discharges.

"It is not merely desirable, as stated by the secretaries of the cholera committee of the College of Physicians, to have particulars of the cases in which each mode of treatment was employed—it is absolutely essential. No statement of treatment is worth anything, unless accompanied by a full detail of each case in which it was tried,—recorded, moreover, not from memory, but at, or immediately on quitting, the bedside of the patient.

"The PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, by means of its wide spread and numerous members, possesses

extraordinary facilities for obtaining a correct digest of the history of cholera in the provinces. The following is a copy of the official paper:

"INQUIRY ON CHOLERA. In compliance with the resolution passed at the annual meeting held at Worcester, the annexed questions have been carefully framed; and it is earnestly requested by the Council that the members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION will assist in this laudable purpose, by forwarding as full and complete a series of answers as possible to Mr. Hunt, 26, Bedford Square, London, who has kindly undertaken the inquiry.

CHARLES HASTINGS,

"President of the Council.

QUESTIONS.

1. "During the prevalence of the epidemic, has your own neighbourhood, town, or district, been *exempted* from the visitation? If so, can you mention any local circumstances which may account for the exemption? Was the district healthy during the visitation of the cholera about the year 1832, and did circumstances then exist which may be supposed to have protected it?
2. "If the cholera* has appeared in your district, how many cases have you seen? how many of these have been fatal?
3. "When did the disease break out, and how long did it prevail? Please to state generally whether many persons were simultaneously attacked, or otherwise; and whether it commenced contemporaneously in more than one site in the same town or district, or whether it appeared to spread from one point only. Were there any peculiar circumstances observable in its local character, or in the course or direction of its advance, which may throw any light upon the important question, whether the disease be of a *contagious*† nature or otherwise?
4. "Have you invariably been able to trace the disease to *local impurity of the atmosphere*, or have you seen it attack persons living in a pure air, apart from graveyards and other sources of putrefaction, in well drained and well ventilated dwellings? In cases of the latter description, if any have been observed, has there been any intercourse with the sick which may tend to establish the doctrine of *contagion*, or the reverse?
5. "Did the cholera appear in your neighbourhood *with* or *without* the general and contemporaneous appearance of the *milder forms* of disease, diarrhoea, bilious cholera, etc.? Has dysentery or typhus been prevalent or otherwise?
6. "Were its ravages indiscriminate as to personal vigour, age, sex, station, occupation, etc.; or might the attacks be traced to some *predisposing personal cause*, as weak bowels, intemperance, debility, fear, errors in diet, uncleanly or sedentary habits, or impaired health from any cause?
7. "Were 'premonitory' symptoms of general occurrence, or did the disease frequently appear suddenly in its malignant form, with violent cramps, vomiting and purging, 'rice water' dejections, and rapid collapse?
8. "Did the symptoms differ from those generally observed and frequently described? Had the disease any peculiar type, either of mildness or malignity?
9. "Are you aware of any exempting circumstances, of any description, which have uniformly protected certain individuals

* "In using the term *cholera*, or in responding to any question concerning it, please to adhere strictly to this definition:—The term *cholera* shall be restricted to that so frequently fatal form of the disease in which there are vomiting, purging, cramps, and 'rice-water' evacuations, and to that still more formidable state of collapse unaccompanied by these symptoms; that the term *Bilious Cholera*, shall apply to the disease formerly called *Cholera Morbus*, in which there is both vomiting and purging of bile, with cramps; and that the term *Diarrhoea* shall be confined to those cases in which there are simply frequent and numerous fluid alvine discharges, without either vomiting or cramps."—*Prov. Med. and Surg. Journ.*, Sept. 6th, p. 490."

† "A house or district may be infected, so as to spread a disease not strictly contagious. Respondents are therefore requested to confine the latter term to evidence of communication by personal approach or contact."

from the disease,—such as trades, habits, diet, etc., not inclusive of local habitation?

10. "Can you throw any light on the *physical origin* or remote cause of the recent or former visitation? Are you able to say, from your own observation, that the general symptoms and history of both are similar? Have you instituted any researches into the density, humidity, temperature, or electro-magnetic phenomena of the atmosphere; especially, have you inquired into the relative quantity of ozone existing in the air during the prevalence of this epidemic or the former visitation; and have you compared it with the proportion observable during the last visitation of the influenza? Have you observed the progress of the cholera to be arrested by storms, wind, or rain?

11. "Have you made any *post mortem* examinations of fatal cases of cholera, and with what result? Do you know of any circumstances which justify the immediate interment of the dead? Did you ever observe cholera patients show signs of organic life for hours or days after apparent death?

12. "Can you describe any method or principle of TREATMENT which has proved successful in so large a number of cases of *cholera*, as to commend it to universal adoption? If so, has not the method frequently failed in other hands, and can you explain the cause of failure?

13. "What mode of treating the epidemic *diarrhoea*, and premonitory symptoms generally, have you found most successful?

14. "Can you suggest any means of preventing or arresting the spread of the disease in the event of any future outbreak?

15. "What is your opinion as to the propriety of removing the inhabitants who have not taken the disease, from the infected dwellings, to houses of refuge, in situations where the presumed causes of the disease are not in operation?

"WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. This Society deserves very high praise for the zeal and excellent direction of its labours in connexion with cholera. It has also the merit—no small one—of having been the first body in the profession to come forward with a regular and scientific plan for observing and reporting cholera cases.

"About the end of September 1848, when the first cases of epidemic cholera occurred in London, the first steps were taken; and on the 15th of October, a very full meeting was held, to consider what plan ought to be pursued. It was universally lamented, that the epidemic of 1832-3 should have left behind it so little authentic and positive information; and it was anxiously inquired, whether the Society might not hope, by timely exertion, to derive more satisfactory results from the epidemic which was then evidently approaching. One way to do so seemed to be the obtaining records of such a number of cases as would justify conclusions from their analysis. But it was obvious, that these records would not be of value, unless they entered into considerable detail: and that, from practitioners actively engaged, such detail could neither be expected nor obtained, without the aid of some plan whereby their attention might at once be called to the points chiefly to be noted. There would be this further advantage, too, from an uniform plan, that the subsequent tabulation and analysis would be rendered much easier. These views were embodied in resolutions, unanimously agreed to, and made public through the *Lancet* and *Medical Gazette*, of October 21st and 27th respectively; and a committee was appointed to draw up the plan. The committee devoted itself incessantly to its labours, and early in November the plan was completed.

"The tabular form consisted of a folio half-sheet, one side of which was ruled to receive all the details of the case, under the heads of 'State of the countenance, and general aspect of the patient; state of the tongue; state of the skin; state of the pulse; state of the voice and respiration; character and fre-

* "See an article on the Causes of Cholera, by Mr. Robert Hunt, in the *Athenaeum*, Sept. 1, 1849."

quency of the vomiting; of the stools; of the cramps; state of the urinary secretion; state of the nervous system,' etc. etc. The paper was so ruled as to admit of eight separate observations on each of these points; it being considered that this number would be sufficient for a protracted case, while, in a rapid case, not more than two or three could be expected. On this side of the sheet, a space was allowed for preliminary inquiries, including the occupation, habits, previous health of the patient, as well as the symptoms, if any, exhibited up to the appearance of those characteristic of the disease, the locality in which he dwells, etc. etc. Another space was allotted for any general observations on the case which might occur. The other side of the half-sheet was divided into two portions; one intended for the record of the treatment pursued; the other for the entering the state of the organs at examination after death, where such was undertaken.

"A form, thus completed, was capable of comprising all the details of a single case. Several hundred of them were printed at the expense of the Society, and delivered (a certain number to each) to all the practitioners, whether members or not, residing in Chelsea, Pimlico, Brompton, Kensington, Hammersmith, Putney, and Fulham. Along with them, was sent a circular letter explanatory of the purpose of the Society, requesting that a record of each case that might come under the practitioner's care might be entered on the form, and returned to the Society for analysis; and desiring information of any kind which might throw light on the disease, especially on the circumstances attending its outbreak in any fresh locality; the existence or non-existence in each case of premonitory diarrhoea; its character and amount, the prevalence or not of ordinary diarrhoea, etc. etc. It was also requested that the specimens of the blood, of the matters vomited, and of the characteristic dejections, might be forwarded for chemical and microscopical examination. Such was the plan proposed for the investigation of the disease. In carrying it out, the Society was obliged, for obvious reasons, to limit its operations to the district mentioned—that in which the members, and those with whom they could more readily communicate, resided; but the hope was entertained that the plan would be adopted, or improved upon, by other metropolitan and provincial societies, acting each within its own district. For this purpose, copies of the tabular plan were forwarded to all the London medical societies, and to such of the provincial societies as desired them; and official letters were written by Dr. Seaton, the Secretary, and published in the *Medical Gazette* of October 27 and November 17, and in the *Lancet* of corresponding dates. If the hopes had been realised, there can be no doubt that there would now have existed materials for a far more complete history of the epidemic, based on more comprehensive data, than any we are now likely to attain. The Medico-Chirurgical Society of Bristol alone, which has since earned for itself so much honour in reference to cholera, recognised the value of the scheme, and adopted, with slight alterations, the printed forms for cases.

"As an addendum to what we have said in reference to the plan and exertions of the Western Medical and Surgical Society, and its able and zealous Secretary, Dr. Seaton, we subjoin the following communication from Mr. F. S. Haden, which appeared in the *London Medical Gazette*, of October 19th, 1849.

"A PLAN TO INSURE RAPIDITY AND UNIFORMITY IN CHOLERA CASE-TAKING. Sir,—In October 1848, the Western Medical and Surgical Society of London issued a tabular form for uniformly reporting cases of cholera. In this form, a space is allowed for preliminary inquiries—for successive observations of the symptoms in detail—and for recording the condition of each organ at an examination after death.

"I have considered, however, that practitioners desirous of noting cases of cholera would have their labours facilitated, if a similar list of symptoms, inquiries, etc., were printed, as is here done, with a letter or number prefixed to each. The letter or

number being taken to represent the question or symptom against which it is placed, the observer would then merely have to write on a piece of prepared skin or paper, e.g. '2. anxious'; '3. contracted'; '4. moist'; '5. cold', etc.; and on the reverse of the skin, the prescription. Much time would thus be saved at the bedside, and the case could be written out in full at leisure, or entered upon the larger form of the Society.

"I am, Sir, your obedient servant,

"FRANCIS SEYMOUR HADEN.

"Number of Case—Date—Name and Occupation—Sex—Age—Habits and Previous Health—Residence—Locality, high, low, moist, or dry—Proximity to Rivers, etc.—State of Drainage.

"A—Supposed exciting cause of the attack. B—Diet within the preceding twenty-four hours. C—State of stomach. D—State of bowels. E—Other ailments. F—Medicine already taken.

"CHARACTERISTIC SYMPTOMS. 1. *Hour of first appearance?* 2. *Countenance*—Expression of? 3. *State of the Pupils?* 4. *Tongue*—appearance and condition of? 5. *Temperature of?* 6. *Skin*—Generally or locally, appearance of? 7. *Condition of (as to secretion)?* 8. *Temperature of?* 9. *Pulse*—Volume and character of? 10. Number of, whether felt at the wrist? 11. In the axilla? 12. In the carotids? 13. *Heart*—Stethoscopic examination of? 14. *Voice*—As to the tone and power? 15. *Respiration*—Frequency of? 16. Free or laborious? 17. Relative duration of inspiration and expiration? 18. *Breath*—Temperature of? 19. *Vomiting*—Its character and frequency? 20. *Stools*—Their quantity and frequency? 21. Their character, colour, and consistence? 22. *Cramps*—Nature, frequency, and parts affected? 23. *Thirst*—Urgent or tolerable? 24. *Urinary Secretion*—State of? 25. *Nervous system*—Affections of? 26. Degree of consciousness? 27. Deafness? 28. Noises in the head? 29. Loss of vision? 30. Convulsions? 31. *Termination of the case*—In gradual or sudden recovery? In consecutive fever, or in death?

"POST MORTEM EXAMINATION—HOURS AFTER DEATH. *External Appearance of the Body*. 1. Colour—temperature—rigidity? 2. Any muscular twitching after death? its duration?

"ENCEPHALON. 3. Degree of congestion? 4. Effusion, its nature and seat? 5. Other lesions?

"THORAX. 6. *Pericardium?* 7. *Heart*—Degree of rigidity and flaccidity of each ventricle? 8. Contents of each ventricle as to quantity? 9. Condition of blood as to fluidity and colour? 10. If fluid, does it coagulate on exposure? 11. *Lungs*—General condition and appearance of?

"ABDOMEN. 12. State of the peritoneum, and of the abdominal cavity? 13. *Liver*—Condition and appearance of? 14. *Gall Bladder*.—Nature and quantity of its contents? 15. *Gall Ducts*—Condition of? 16. *Stomach, duodenum, small intestine, cæcum, colon, and rectum*—Contents of respectively? Are they acid or alkaline? Condition of the mucous membrane of respectively (*with regard to appearance and state of glands*)? 17. *Spleen?* 18. *Kidneys?* 19. *Urinary Bladder*—As to contents, and degree of contraction?

"VASCULAR SYSTEM. 20. Aorta and vena cavae. 21. Pulmonary artery and vein. 22. Femoral artery and vein. 23. Hepatic, gastric, splenic, mesenteric, and renal arteries and veins. 24. General condition of whole vascular system, especially as to congestion, etc.

"We have given place to the above documents and remarks, because we feel that the members of our Medical Colleges and Societies require to be stimulated to the earnest observation of the disease, and to be reminded of the opportunities now afforded of making good use of their facts."

We do not expect that every observer can afford the time for reporting cases in the detailed manner suggested by the Western Medical Society; but that the reports of dispassionate observers may be capable of instructive comparison, we have no doubt.

the favour of our contributors employing at least the general outline of that system, which is the most complete and also the most easily followed with which we are acquainted.

In conclusion, let us warn our friends against allowing their philanthropy and their scientific ardour to be chilled by the indifference with which the public look upon that patient plodding by which only medical truth can be attained. It may be disheartening to see impudent nostrum vendors realising wealth at every corner by the sale of so-called cholera specifics, while the skill of honest and enlightened men is not appreciated; but then we must moderate our disappointment by remembering that the rewards in store for those who successfully pursue medical and hygienic inquiries are of a nobler kind than pelf and personal aggrandisement, while at the same time they by no means preclude pecuniary advantages which often, though not always nor uniformly, flow from a well earned fame. As regards the profession, we cannot doubt that it is by establishing for itself undeniable claims upon public gratitude, and at the same time scorning to rise by the pseudo-philanthropy of indiscriminate gratuitous advice, that it shall ultimately obtain that amount of social and political influence which the well being of the community requires, and which Medicine is entitled to receive.

In our next, we propose to speak of the formation of local Cholera Committees by members of the Association, and other respectable practitioners willing to cooperate with them. In the meantime, we now announce our willingness to arrange and digest all the available information which may be transmitted to us, for the purpose of forming the basis of an authentic history of the epidemic.

FINANCE: THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

How true is the observation of Lessing, that there is no descending to the people; that, to be successful, whether as individuals or as companies, whether singly or collectively, every rung of the ladder must be trodden, and confidence gradually, and step by step, be acquired. Does not the experience of our readers, who have fought their way resolutely, day by day, to the position they occupy in life, confirm the truth of this theory? For however *profanum* we may affect to consider the *vulgus* of the world, we cannot, if we look back, but see how all things are by its mighty dictum ordered and disposed.

Our Association is but another exemplification of this law, added to another law of equal truth and as enlarged import—that the atom, however in itself insignificant, by aggregation becomes a mighty mass, potent for good, and not always without an influence for evil; but restrained and curbed by the mighty truth, that evil is in itself self-destructive. Beginning humbly with comparatively few members and with small funds, it has become a vast and a noble organisation, slumbering oft, and oft disregarded, but with its giant strength waiting but for occasion of development to attest its power. It has gone through its phases of infancy and youth to a mature age, and is destined to exercise an influence, only now advancing to acknowledgment, which shall be felt wherever the progress of civilisation demands the services of the practitioner of the healing art. It has been afflicted, and has learnt wisdom; it has progressed slowly, and by many unheeded, until to-day it is the strongest agency which bears upon medical science,

whether that science be viewed as a system of politics, of philosophy, of arts, or of ethics. It comes not to disturb and to uproot the combinations and usages of the past, but to modify, to conserve, and to aid them. It is not the peasant, wishing the mighty Ganges to flow through his garden, astonished to find that the fulfilment of his wish brought as its consequences destruction and devastation; but the wiser friend, who asked only for the rill from the neighbouring brook, whose healing waters, in their gentler flow, fructified, nourished, and fertilised his land. It proposes no sweeping change or mighty reform, for it has learnt that to alter is not always to amend; and that, in medicine, true reform is always conservative; but it provides a careful protection, a watchful guardianship, and an ever ready help. These are the advantages which our Association now proffers to its members, and which it hopes soon to be able to supply with a more powerful and a more liberal hand.

But we are met at the threshold of our endeavours by *the necessity for funds*; and we have in a former article endeavoured to show that, to provide for unity of purpose and intelligent and combined action, with all the other advantages which combinations bring in their train, a Journal to explain the views of the members of our Association becomes a necessity; and we believe we have proven that as much pecuniary as correlative benefit arises to the members from this adjunct to our Association machinery.

With our present number of members—say 1900—£300 is left, after paying Journal expenses, for other Association purposes. This we would distribute in the following manner, always premising that in so doing we take no account of the £691:3 contributed during the year to the Medical Benevolent Fund, presided over by Mr. Newnham. We should thus have for

Annual Meeting	35
Secretary	105
Committees, Printing, Stationery, etc., independent of the Journal Establishment	100
	£240

leaving £60 for other applications of the Association funds. These applications might with advantage be extended in many directions. An important question, for example, has been suggested to us; namely, How far the Association, as a body, might use its influence to protect the rights of its individual members, when subjected to wrong and injustice? We can conceive of many ways in which the future of our Association might be made to bear upon the defence of the just claims of its members; and, in questions purely professional, not only could the Association render much aid, but the mere fact of its influence being used would materially tend to prevent the recurrence of similar acts of oppression.

We have been much pleased at noticing the formation of an Irish Medical Association, on the model of our own. We cannot but consider this event, and the establishment of Medical Associations and Medical Association Journals in France and Spain, as the best sign of the times, medically considered—the extension of Associations, all tending to draw closer together the bonds of fraternal unity and brotherhood.

We are induced in this place to particularly notice the Irish Medical Association, from a feature in its programme, where it offers annually a prize to the member who shall write the best essay on the progress of medicine and surgery during the year. This idea we might with advan-

tage at no very distant day adopt in our own Association; and still be able to lay by something as a sinking fund, the interest of which (with the principal if necessary) to be devoted to those contingencies to which the best regulated associations must always be more or less subject.

It is true that the star of our Association is in the ascendant everywhere, and that on all sides we are met by aspects of encouragement. The contemplated junction of the Yeovil and Crewkerne Medical Society with our Association will be found reported in our columns of to-day; and the accession to our ranks of individual practitioners goes on unceasingly. Now, therefore, is our opportunity of permanently establishing financial security, and enlarging the sphere of our operations.

But, independent of stated fees, nearly £700 has been contributed during the year by the Association and its friends to our Medical Benevolent Fund, a Fund unostentatiously and in secret relieving the direst distress—distress the greater, because falling on those so ill prepared for its reception. Nursed in the lap of comfort, oblivious of the future, and living but for to-day, how many of our wives and daughters are at this moment in want of the merest necessities of life, kept but alive, or from the Union Workhouse, by the almsdeeds of this Fund—a small token of respect from the more fortunate of an ill requited profession, to the afflicted families of their unfortunate brethren. Viewed but financially, ours is in truth a noble Association. It is indeed matter of gratulation, that from the hard working and ill paid medical men of these realms, so much is subscribed to enlarge the usefulness and increase the applications of medical science. We seek to improve the condition of suffering humanity by increasing our own means of usefulness; and when by long continued toil our brother is disabled from further exertion, and when the hard wind of adversity blows on his unprotected family, we afford some little covering, and though small and temporary, at least a partial shelter from its bitter and biting blast.

Our financial condition is sound and healthful; but it will only continue so while we have on the part of our members the same desire to promote the general good, and the steady continuance of efforts to extend the usefulness of our labours. Our Association must not resemble the mighty endogen of the tropical forest, whose growth from within in time bursts through the encircling but false and treacherous envelope, and causes by its inherent force its own destruction. But like our own mighty wood monarch the oak, receiving from without new accessions of strength, it must continue to grow until it embraces within its genial pale every practitioner of the healing art; liberally receiving aid and encouragement, it must in return liberally impart the solid advantages of increased means and opportunities for usefulness, and of support and protection in the faithful discharge of duty.

THE CASE OF FENNEL v. ADAMS.

We trust that Mr. Lord's appeal (published at p. 837 of last number) may be successful in procuring subscriptions sufficient to defray the expenses to which Mr. Fennell has been subjected, in obtaining a public inquiry into the accusations which were groundlessly made against his professional character. To the medical practitioner, character is capital: and he who cannot preserve it from the spoiler is certainly a ruined man. Mr. Fennell felt this; and he

manfully and successfully vindicated his reputation by the only method which he could employ. The pecuniary expenses incurred are, however, more onerous than Mr. Fennell can easily bear. This, we think, would be in itself a very sufficient reason for a subscription being opened to defray these costs; but a more potent reason for our united support of Mr. Fennell lies in the moral good which will result from the public perceiving that medical men are able and willing to associate together for the protection of an injured brother. We therefore ask our friends to come forward with their donations, not merely as an act of kindness to Mr. Fennell, but much more as an act of benefit to the whole profession.

NEWS AND TOPICS OF THE DAY.

JUDICIAL ESTIMATION OF HOMŒOPATHY IN FRANCE. The *feuilleton* of *l'Union Médicale* for September 3 contains an account of an action brought at Toulouse, on 12th August, by a homœopathic practitioner against one of his patients, to recover the sum of eighty francs. The particulars of the account were as follows: Nineteen visits, 40 francs; opening an abscess in the finger, 5 francs; fifteen cauterisations and dressings, 15 francs; medicines, 20 francs.

The defendant, M. D., asserted that he had agreed to pay the homœopath, M. X., two francs for each visit, and to add two francs for the medicines, making forty francs; and he considered that this was paying very dearly for globules, even supposing the medicine to be worth five francs per grain. He further objected that M. X. was a physician and not a druggist; and was consequently not authorised to charge for medicines. Relating the case of one of his children, for whose illness he had consulted M. X., he thus ingeniously exposed the duplicity of the homœopaths:

"I called in M. X. He entered on the subject by developing to me the beautiful principles by which homœopathic practitioners are led. 'We never bleed', he said. 'Why deprive nature of the blood which she has formed to nourish the organs? We perform no surgical operations.' 'What, then, do you call surgical operations, you who open abscesses and employ cauterisation? Ah! you have doubtless a double: one of you is a physician, making me pay for the visits; the other a surgeon, requiring payment for cauterisation and dressing. You have laid a snare for me; for I did not call you in as an allopathic physician, and you have deceived me. You cannot escape from this dilemma. As a homœopathic physician, your practice should have been homœopathic. But you have practised allopathically; you therefore owe me damages, for you have acted otherwise than was agreed on.'"

M. D. then went on to contrast the difference between homœopathic and regular practitioners, referring to the case of another of his children, who had been under the care of M. X., but continued to become worse. He then called in an allopathic practitioner. The charges of the latter were eighty francs for fifty-seven visits, without any charge for medicine. After some time, M. X. called upon M. D. to represent to him that allopathic treatment would not cure his son.

The judge decreed that M. D. should pay the sum of forty francs, which he had offered to M. X.; he also condemned M. X. to pay the costs, estimated at 15 francs 80 centimes, not inclusive of the costs of declaration of the present judgment; as well as a fine for contempt of court, in not appearing at the trial.

EPIDEMIOLOGICAL SOCIETY: CHOLERA. The Cholera Committee of the Epidemiological Society, feeling the importance of obtaining authentic information from medical practitioners in all places where the cholera may appear, especially with reference to the origin of the early cases, has invited communications to be addressed to either of the Secretaries of the Committee, Dr. Bryson, 8, Duke Street, St. James's; and Dr. McWilliam, 14, Trinity Square, Tower Hill.

MEDICAL BENEVOLENT COLLEGE. At the last meeting of the Council, held at the Hanover Square Rooms, Edward Henry Sieveking, M.D., was unanimously elected Honorary Secretary of the College, vice Henry Tudor Davies, Esq., resigned.

[News and Topics continued at page 864.]

ORIGINAL COMMUNICATIONS.

FACTS AND OPINIONS RELATING TO TUBERCULOSIS, WITH COMMENTARIES.

By HENRY ANCELL, Surgeon.

NO. I.

HAVING recently published a voluminous Treatise on Tuberculous Diseases, there may be some surprise that I should so soon again urge the subject upon the attention of the profession. There have subsequently appeared several important statistical reports, and some interesting papers and monographs; and my work has been reviewed by all the more influential medical, and some literary periodical journals, eliciting the discussion of certain disputed points. I have carefully collated such of these as have been brought under my notice, with a view to ascertain the facts and opinions they contain, and how far they tend to confirm or to correct the principles and practice inculcated in my own book; and, since it will impose on me very little additional labour, I purpose, in a few papers, to lay the results of this investigation before the readers of the ASSOCIATION JOURNAL.

The present paper will embrace, mainly, statistical facts: and I commence with the statistics of tuberculous diseases in London, for the year 1852, from the Registrar-General's *Summary of the Causes of Death*, very recently distributed. My work on tuberculosis contains similar records as late as the termination of the year 1851.

The population of London, as estimated in this report, to the middle of the year, was 2,420,619; the total deaths were 54,213. The following table shows the deaths from tuberculous diseases:—

TABLE I.

	QUARTERS ENDING				Total.
	March 27.	June 26.	Sept. 25.	Dec. 25.	
Scrofula	131	124	106	86	447
Tabes Mesenterica	198	194	279	167	838
Phthisis	1811	1790	1672	1662	6935
Hydrocephalus ..	448	437	406	304	1595

In all, 9,815. This gives the proportion of deaths to the population living:—

From Tuberculosis in the aggregate 1 in 246.6
 „ Scrofula 1 in 5413.
 „ Tabes mesenterica 1 in 2769.
 „ Phthisis 1 in 349.
 „ Hydrocephalus 1 in 1517.

And, to the total number of deaths, the proportion is:—

From Tuberculosis 1 in 5.5
 „ Scrofula 1 in 121.2
 „ Tabes mesenterica 1 in 64.6
 „ Phthisis 1 in 7.8
 „ Hydrocephalus 1 in 35.7

It thus appears, that tuberculous diseases were in a trifling degree less fatal in 1852 than in 1851;* since, in the latter year, by the tables of the Registrar-General, the deaths from these diseases, in the aggregate, were 1 in 5.6 of the total number of deaths; and the deaths from phthisis amounted to 1 in 337.8 of the population, or, as respects the total number of deaths, to the extent of one decimal point, they were 1 in 7.8; that is to say, the proportion was precisely the same.

We have before us, in the next place, the *Statistical Reports on the Sickness, Mortality, and Invaliding, among the Troops in the United Kingdom, the Mediterranean, and British America*, by Colonel Tulloch and Dr. Balfour; being a continuation of the reports, of which four volumes were previously presented to Parliament, and including the principal facts connected with the health of the troops for

the ten years subsequent to March 1837. My object with this highly important volume is solely to extract the vital statistics having reference to tuberculous diseases, although it contains equally interesting matter relating to other maladies. The contents of this volume are the more important, inasmuch as it furnishes information connected with our subject, derived from large bodies of men at the same periods of life, within the limit of fifteen and fifty years, and even, as respects a vast majority, between twenty and forty years of age, subject to nearly the same regimen and discipline, with habits of life extremely analogous, and generally very well known; the principal difference being, that they serve in separate localities and different climates.

The aggregate strength of the troops serving in the United Kingdom, for the ten years, was 266,680. The “Abstracts”, published with the report, contain very little notice of hydrocephalus or tabes mesenterica; these being, in the main, diseases of periods of life antecedent to the commencement of military service. In the whole force, during the ten years, only three cases of the former, and two deaths, are recorded; and the latter is not specified.

The cases of scrofula admitted into hospital were 1,078, with 15 deaths, viz.:

	Admitted.	Died.
Dragoon Guards and Dragoons	179	—
Foot Guards	147	2
Infantry of the Line	752	13
Household Cavalry	Not mentioned.	
	1078	15

Thus, the annual average admitted into hospital was rather more than 4 per 1,000, and the deaths 1 in 17,778.

The number of deaths from scrofula in the army, compared with the number of deaths from the same cause in the general population, is as 1 in 17,778 to 1 in 5,413. Two circumstances may be brought forward to explain this discrepancy: 1. The period of life for military service is not that at which scrofula is most prevalent, or most frequently proves fatal; this is shown by the statistics introduced into my work,* by which it appears that, in 1847 at least, the proportion of the male population, from fifteen to fifty years of age, who died of scrofula, was 1 in 6,673, and, from twenty to forty years of age, 1 in 6,744—the age of a vast majority of soldiers coming within the latter period: 2. The principal reason appears to be, that scrofula and its signs are grounds of exemption from military service.

Before we consider phthisis, it is necessary to state that, in the report, the aggregate number of *pulmonary diseases* as a class is given, and also certain groupings; and, since the deductions of the authors are founded in a great measure upon the statistical results thus obtained, I adopt the more important tables bearing directly on the subject of tuberculosis, with the addition of others framed by myself to elucidate particular points.

The following table will furnish, in the first place, a general view of the prevalence of disease of the lungs.

TABLE II.

The proportionate number of cases of disease of the lungs, viewed as a class, to the aggregate strength of the troops serving in the United Kingdom.

	Aggregate strength, 10 years.	Annual ratio per 1000.	
		Admitted.	Died.
Dragoon Guards and Dragoons	54374	152	7. 3
Foot Guards	40120	161	13. 8
Infantry of the Line	160103	171	10. 2
Household Cavalry	12083	—	6.55

The diseases by which this sum of sickness and mortality is made up, are thus specified in the Statistical Report:—

* On Tuberculosis, p. 370.

* Table XIX, p. 400.

TABLE III.

Diseases of the Lungs in the Troops serving in the United Kingdom during 10 years. Aggregate strength, 266,680; mean strength per annum, 26,668.

	Household Cavalry, 12,088.		Dragoon Guards and Dra- goons, 54,874.		Foot Guards, 40,120.		Infantry of the Line, 160,108.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Inflammation of the lungs	Not stated.	—	337	24	539	42	1897	155
Pleurisy		—	16	2	31	2	311	10
Spitting of blood		—	115	18	311	17	382	36
Consumption		76	386	307	654	479	1657	1241
Acute catarrh		2	6382	12	4591	7	19488	55
Chronic catarrh		—	939	29	301	7	3375	135
Asthma		—	46	5	—	—	86	2
Difficulty of breathing		1	60	3	15	—	240	7
Breast pang		—	—	—	1	1	—	—
Total		79	8281	400	6443	555	27436	1641
Ratio per 1000 of mean strength..		6.6	152.	7.3	161.	13.8	171.	10.2

The annual ratio of deaths from pulmonary diseases per 1000 living of the civil population, in twenty-four large towns, estimated by Colonel Tulloch from the Registrar-General's Reports, appears to be—

From 20 to 40 years of age	6.3
„ 15 to 50 years of age	6.51

So that the proportion of deaths from these diseases, of which consumption forms by far the most considerable item, is very much greater among soldiers than in a town population. In the foot guards it is as 13.8 to 6.3, and in the army in the aggregate as 7.3 to 6.3.

I now proceed to compare the mortality from *phthisis*, in the British troops, with the mortality from the same disease in the male population of England and Wales, at the same periods of life, which is not done in the report.

The aggregate strength of the troops, in the years 1846-7, being 30,280, the deaths recorded from *phthisis* were 249; this gives 1 death in 121.6.

The male population of England and Wales, between the ages of fifteen and fifty, estimated to the middle of the year 1847, was 4,150,888, and the deaths from *phthisis*, 16,764; the male population from twenty to forty years of age, during the same year, numbered 2,502,233, and the deaths from *phthisis* were 11,089; * these figures give—

From 20 to 40 years of age	1 in 225.6
„ 15 to 50 years of age	1 in 247.6

So that the proportion of deaths from *phthisis* recorded in the British army, stationed at home, may be stated at about double the proportion of deaths from the same disease, in the male population of the kingdom, at the same periods of life.

In addition to this, 71 soldiers died of hæmoptysis, which, not being recorded as *phthisis*, I have omitted. This tends to show that the estimate for the army is under rather than over the truth.

It appears that the profession of a soldier, even in times of peace, is not conducive to health; and that the chief source of mortality among soldiers, as among civilians, at the age of military service, is disease of the lungs; and, moreover, that the great difference in the mortality of different troops exhibits itself especially in this class of diseases. The infantry suffer more than the cavalry; in the household cavalry, the deaths are much the same as among the civil population; but the mortality is greater in the foot guards than the aggregate mortality from all diseases, at the same periods of life, among the population generally; and this high mortality is mainly attributable to consumption. Colonel Tulloch and Dr.

Balfour regard the circumstances which, by their combination, act as causes of this mortality, to be as follows: 1. Defective barrack accommodation; 2. The great amount of night duty; 3. The deteriorating influence of a residence in large towns, giving greater facilities for, and temptation to dissipation. The high mortality in the foot guards is referred to some cause specially connected with the metropolis; since, in regiments of the line brought to London, the loss was still greater than in the guards, whom these replaced; and conversely, when the guards took the place of troops of the line abroad, the admissions and deaths in the former were considerably below their usual average. Thus, the admissions into hospital for pulmonary disease, and the deaths, were:

	Admissions per 1000 mean strength.	Deaths per 1000 mean str.
In Regiments of the Line serving in Canada	157	6.3
In the Foot Guards serving in Canada	108	6.5
In the Foot Guards serving in the United Kingdom	161	13.8

As respects barrack accommodation, the insalubrity of the sites of those in the Tower of London, and the Portman Barracks, is especially mentioned, as resulting in an increased number of fever and pulmonary cases, the two classes of diseases upon which the mortality most depends. The following is the ratio per 1,000 of mean strength admitted into hospital for diseases of the lungs, in the different barracks:

The Tower of London	176
Portman Barracks	179
Wellington Barracks	163
St. George's Barracks	185.
Detached (St. John's Wood, Kensington, Hyde Park, etc.)	139
Windsor Barracks	161
Winchester Barracks	130
Regiments of the Line in the Tower	199

The deaths are not stated, the majority being chronic cases, and the subjects of them liable to frequent removals; so that the mortality could be of very little use in determining the influence of each locality over the disease.

The returns exhibit a remarkable uniformity in the admissions into the military hospitals and deaths among the foot guards and regiments of the line, under the heads of inflammatory affections of the lungs. There is no great difference in the admissions for chronic diseases of this class; but the deaths from the latter, in the foot guards, are nearly double those in the Dragoon guards and Dragoons, and about one-third higher than in regiments of the line, as shewn in—

* Idem.

TABLE IV.

	Diseases of the Lungs. Annual ratio per 1000 of mean strength.		Inflammation of the lungs, pleurisy, acute catarrh. Annual ratio per 1000 of mean strength.		Spitting of blood, consumption, chronic catarrh, asthma, and difficult breathing. Annual ratio per 1000 of mean strength.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Dragoon Guards and Dragoons	152	7.9	124	.7	28	6.0
Infantry of the Line	171	10.2	135	1.3	36	8.9
Foot Guards	161	13.8	120	1.3	32	12.5
Household Cavalry	Not stated.	6.6	Not stated.	.2	Not stated.	6.4

Most of the deaths returned under the head "chronic catarrh" were found, on examination of the Reports, to have been really cases of consumption.

By Table III we find that the fatal termination of phthisis was not traced.

In 79 cases out of 386 Dragoons.
 " 175 cases out of 654 Foot Guards.
 " 416 cases out of 1657 The Line.

These numbers include all who survived sufficiently long to be placed on the pension list, or who partially recovered, but were subsequently taken again into hospital as new cases, and, accordingly, can by no means be regarded as instances of recovery.

An interesting part of the Report, bearing directly on the subject of tuberculosis, is that which refers to the duration of life among soldiers after having been placed on the pension list for consumption. We find that, in the force generally, among those pensioned on account of this disease, the mortality, as compared with the mortality from the same disease among those who remain in the service, is greatly diminished. It is true that the tables exhibit a very high mortality among pensioners from the foot guards, who, for several years before their discharge, had resided chiefly in the metropolis. This, however, is an exception, the mortality being one-third higher than that of the general mass of pensioners, chiefly owing to the additional prevalence of consumption, so common to these men, and so fatal during their servitude; but the duration of life generally shows a diminished mortality. Of 501 individuals among the dragoon guards and dragoons serving at home, attacked by consumption and hæmoptysis, 325, or 10 in 15½, died "during the comparatively limited period that a soldier is under hospital treatment"; the remainder not being instances of recovery, but including all who survived long enough to be placed on the pension list, or who partially recovered. Of 307 soldiers pensioned for the same disease, only 187 died in the course of sixteen years.

It has been lately discovered that this circumstance is in part attributable to fraudulent practices by personation after decease; owing to which, the true rate of mortality has been concealed by a reduction of the number of deaths below its natural standard. This has been actually effected to a considerable extent, for the purpose of drawing the pension after the decease of the individual; and since the detection of these frauds, the rate of mortality has considerably increased.

But this is by no means an adequate explanation of the whole of the discrepancy; and Col. Tulloch infers that the disabilities must have been exaggerated. He states that, making all allowance for the latitude permitted in stating the diseases for which soldiers are discharged for pension, it is impossible to avoid drawing the conclusion that many of the diseases in question have been simulated, or that the medical officers must have been much deceived as to their serious character.

In the review of my work in the *Monthly Journal*,* and in some private communications, it has been objected, that

I am inclined to place too much reliance on statistics of this nature. The Edinburgh reviewer, remarking on my chapter relating to the Causes of Tuberculosis, considers that all true research into this matter must be founded on an accurate diagnosis and a sound pathology; in which sentiment I most cordially agree, as shown by the fact, that I have devoted above one hundred pages to the Symptoms and Diagnosis, and above two hundred pages to the Special Pathological Anatomy of the disease. But he further states, that such elements form no essential part of modern statistics, which accordingly merit no confidence. I believe, notwithstanding the different conclusions arrived at by Mr Phillips and myself, to which the reviewer refers, and which I will notice again in a subsequent paper, that this is too sweeping a condemnation of the medical statistics in question. Throughout my work I have dwelt on and regretted the imperfections of this branch of science, and have inculcated and endeavoured to practise the utmost caution in forming deductions; but, at the same time, I should regret exceedingly an error in the opposite direction causing their use to be neglected. As respects such a disease as phthisis, I do not believe that the reports furnished to the Registrar General and the War Office are so utterly worthless. The returns are uniformly made by qualified medical practitioners. I know very well that errors of diagnosis are very frequent; but these are errors committed during the lifetime of the patient, and generally in the earlier period of the disease. It is not probable that medical practitioners can very frequently make erroneous returns, after this disease has run its course and terminated in death. On my own experience, I affirm that, whether in public or in private practice, I scarcely remember a case where phthisis has been predicated, by a medical practitioner, before a *post mortem* examination, and found to be absent. It is true that tubercles are more frequently found, unexpectedly, where death has been produced by other diseases; and this leads to the remark, that sources of error which affect the total range and operate at one time as well as another, however this may render caution and qualification necessary, do not vitiate the statistics for comparative inductions, particularly when those statistics are on a large scale. Thus, in the present paper, I have shown from Colonel Tulloch's and the Registrar General's reports, that death from phthisis in the foot guards was about twice as frequent as in the male civil population, at the periods of life for military service. Were I to adopt the formula two to one, and reason therefrom, I should commit a very grave mistake. In the first place, the comparison is made between a period of about thirty years in the one case, and one year in the other; although the numbers are very much greater in the latter than in the former period. In the next place, I am assured of the deficiency of facts, especially those relating to the complications of disease, and the occasional errors in the data upon which both the Registrar General's and the Military Superintendent's results are founded. Nevertheless, it can scarcely be denied that it is a broad and highly important statistical fact, that death occurs much more frequently from phthisis in the Foot Guards serving in London, than in the civil population; a fact, respecting which we might have entertained conjectures, but of which we should have had no knowledge, had it

* July 1853.

not been for statistics. Other equally apposite instances might be drawn from the above tables, and the legitimate deductions which they furnish; and I shall avail myself of some of these in elucidation of certain points in a future paper. But this one is, I think, sufficient to obtain the admission that these statistics, although imperfect, have a positive value; and I may add, that they will be found to possess a highly important relative value, when employed to counteract hasty generalisation, from statistical data, more accurate in themselves, but upon too limited a scale.

Adverting, then, to another statistical fact, the apparent increased duration of life among soldiers discharged the service for consumption, as compared with the duration of life among those remaining in the service, and the explanations of that fact by Colonel Tulloch and Dr. Balfour, referring it to fraud, malingering, and errors of diagnosis,—is not another, and a more satisfactory explanation admissible? Is it not possible that some of these men, actually affected with phthisis, recover after their discharge from military service and military regimen; or, that the disease is for a longer or shorter time arrested? Precisely analogous circumstances occur in relation to prisoners and prison discipline. Dr. Baly found the mortality from consumption during one year, in the Millbank Penitentiary, nearly four times more than the mortality from the same disease in the metropolis; and among a population of 76,535 prisoners, in the prisons and penitentiaries of various countries, he found the deaths from phthisis 1 in 118·7 of the whole number living, and 1 in 2·9 of the deaths.* But Dr. Baly states that "Prisoners who are even in an advanced stage of consumption, and who in the infirmary were gradually and rapidly getting worse, on release from confinement immediately improved." The true causes of this improvement after release from imprisonment, or discharge from military service, are as interesting and important a practical question, as the causes of the production of tuberculosis, and their *modus operandi* during imprisonment.

The statistical information before us, as to the present prevalence of phthisis both in the civil and in the military populations of this kingdom, leads me to conclude this paper with another remark, which must have occurred to many readers. Considering the high opinions for some time past entertained of the curative powers of cod liver oil, which has now been several years in general use, it must be admitted that the ultimate results are by no means encouraging. The comparison between the years 1851 and 1852, exhibits but a very trifling amelioration. Nor is there reason to be much better satisfied with these gross results, when we trace the disease back chronologically to a period previous to the introduction of the remedy; for, although, in 1841, the proportion of deaths to the population, from the four forms in the aggregate, and from phthisis in particular, was considerably greater, yet the amelioration observable cannot be attributed to this remedy alone, which has been in general use only during the last few years; and in 1850, the fatality was proportionately less than during either of the two subsequent years. So, also, we find, by comparing the statistics in Colonel Tulloch's recent and former reports, that during the last ten years, no decided amelioration appears, either in the frequency or the fatality of this disease. Our disappointment at this result is the greater, inasmuch as the statistical records of Philadelphia indicate a very great diminution of deaths from phthisis during the years 1850 and 1851, which Dr. Wood, in his work on the Practice of Physic, recently published, has attributed to the general use of the oil. For my own part, I am not in the slightest degree shaken in my opinion of the value of the oil, notwithstanding its manifest general failure as regards a cure. As stated more fully in my work, I have always regarded it as an auxiliary to a rational system of therapeutical indications; and I still fear, that we are deprived of the full measure of its beneficial

agency, by its employment, too frequently, on the empirical principle.

The statistics of tuberculosis in the troops serving in the Mediterranean and British America, during the last ten years, will form the subject of a future communication.

3, Norfolk Crescent, Hyde Park, Sept. 1853.

ACCOUNT OF THE YELLOW FEVER OF ANTIGUA, AS IT PREVAILED IN 1853.

By THOMAS NICHOLSON, M.D.

[The following paper was received by us subsequent to the publication of Dr. NICHOLSON's paper, at p. 807 of our number for September 16th. EDITOR.]

YELLOW FEVER broke out in Antigua on the 15th of May, 1853,* in the person of a delicate female, a native of Scotland, who had been only eighteen months or two years in the island. This case was reported to me by an express from my son, when I was at St. Kitt's, whither I had gone for change of air, having suffered for some months from a severe attack of acute rheumatism. No other case occurred for several days; but when I arrived, on June 3rd, I learnt that my son had two other cases on his list; one, a young Scotchman, who resided not many yards from the house in which the first case occurred; the other, an army surgeon, living in another part of the city. Both these proved fatal on the fifth day, with black vomit. Cases were now added daily to the list till the end of July, our last case having proved fatal on the 31st of that month.

The following table contains an abstract of all the cases which I attended myself, or with my son, exclusive of those I saw in consultation with other medical men:—

Race.		Recovered.	Died.	Total.
Europeans	Adults	23	9	32
White Creoles	Adults	3	0	3
"	Children	0	2	2
Mixed race	Adults	0	0	0
"	Children	5	1	6
American		1	0	1
Portuguese		2	1	3
		40	13	53

The type of this epidemic, in all cases that came under my observation, was certainly that of the *ardent* form. I did not meet with a single case of the *apyretic* or *congestive* type, such as I have witnessed in former epidemics. The patient was most frequently seized in the morning. No decided rigor was observed, but he awoke with a feeling of having slept heavily, as if from a narcotic. This was immediately followed by intense headache and pain in the back; the vessels of the conjunctiva became injected and red; the force and velocity of the pulse great; and the heat of the surface pungent. At this period, the tongue presented an unusual appearance. About the third day, the febrile heat subsided; the cheeks, which had been of a florid red colour, assumed a darker hue; the lips were red, and the gums spongy and very vascular; the hands and nails became livid, and, when pressed upon, it was long before the blood returned to the cutaneous vessels. By-and-bye, a yellow tinge was perceptible on the conjunctiva, and on each side of the nose, which spread gradually over the neck and chest. Hemorrhage from the nose and mouth now took place; flatulency was very distressing; and the vomiting, which was distressing from the first, now became more urgent, and, in the fatal cases, the matter ejected was mixed with dark flakes, like the lees of port wine, which gradually became blacker and more copious till death closed the scene. In those cases which terminated favourably, the discharges from the bowels were copious, and of the darkest sap-green; and the urine was abundant, and of a good colour. In fatal cases, the motions had not the

* Medico-Chirurgical Transactions, vol. x.

† On Tuberculosis, p. 483.

* May is usually the hottest month in the year.

alightest tinge of green or yellow; and they exhaled an offensive odour like putrid albumen. In those cases, the urine was frequently suppressed, and symptoms of *uræmia* were more or less apparent.

None of the cases in my own practice presented unequivocal marks of *petechiæ*; but a military officer, under the care of Dr. Furlonge, was spotted like a leopard from head to foot: even the mucous membrane of the mouth exhibited the same symptoms of extravasation.

Death occurred most frequently on the fifth day: one died on the fourth day, two on the sixth, and one on the seventh day. In those cases in which the urinary secretion was not suspended, death took place by *asthenia*; the patient retaining his intellect till the last. When *uræmia* existed, convulsions and coma preceded death.

From a variety of causes, no *post mortem* examinations were made.

TREATMENT. When I arrived, I found the lancet had not been used in any case; but purgatives, and five grain doses of quinine, frequently repeated, with the usual auxiliaries, were chiefly confided in. The quinine so administered appeared to me to be decidedly injurious, and it was abandoned.

In simple cases, where there was no symptom of local congestion or inflammation, purgatives of calomel, colocyath, and jalap, saline refrigerants, and effervescing draughts, formed the chief medicinal treatment. In more severe cases, five grains of calomel were interposed every two hours. The cold douche was always most agreeable to the patient, and was constantly had recourse to in the first stage. When the headache continued beyond the second day, blisters were applied to the neck or forehead with good effect.

In all cases in which at my first visit there were symptoms of cerebral or hepatic congestion, or when the force of the circulation was so great as to threaten destruction to the capillary system, I had recourse to blood-letting; and, if we may judge of the propriety of the operation by the rules laid down by Dr. Marshall Hall, we must decide in its favour, although it did not always cure the disease. The loss of blood was well borne in every case. In one patient only was syncope induced, after the loss of twenty-four ounces, and he rapidly recovered. In all the other cases a much larger quantity of blood was drawn, whilst the patient was in the sitting posture, and syncope did not occur. The effect produced was vomiting, copious perspiration, bleaching of the eyes, and relief of the headache. When permanent reduction of the pulse followed these effects, the case invariably did well; but when the velocity of the pulse continued, the case proved a bad one, and, in my opinion, would have resisted every kind of treatment.

To prove that blood-letting did not do harm, I would mention that it was had recourse to only in the worst cases, and yet not one of these died before the fifth day, whilst two of them lived till the sixth, and one till the seventh day. Of twelve cases in which the lancet was used, six recovered, and six died. In no case was the operation repeated; and it is a question whether the advocates of this practice would not have deemed it right to repeat the operation at a short interval, when the pulse continued quick. But the prejudice which has been excited by modern writers against large detractions of blood in fevers deterred me.

Having lost in succession four cases in which blood-letting was performed, either by myself or in my presence, with all the immediate effects which follow a successful operation, I considered that I was then bound conscientiously to try the empirical or abortive treatment, with large doses of quinine and calomel, as recommended by Dr. Blair of Demarara. The first case that occurred for this trial was that of a young Scotchman, who had recently come to the island. The second dose produced great congestion of the brain, and a stupor from which he could scarcely be roused, and he died on the fourth day. Nevertheless, our next case was treated in the same way, with twenty grains of calomel and twenty-four grains of quinine. Great drowsiness was the immediate result, and we were deterred from continuing the

practice. We resumed our former mode of treatment, and the patient recovered.

It is unnecessary to enter upon the treatment that was pursued after hæmorrhages and black vomit occurred; for I have no confidence then in any medicinal astringent, or in anything but the most diligent exhibition of diffusible stimulants. Patients have sometimes recovered after all hope was abandoned. This was the case with two seamen, who were landed here from a ship bound from St. Thomas to Barbadoes. They were in the last stage of the disease, with hæmorrhages from the nose, mouth, and anus, and black vomit, when admitted into the Infirmary. Sulphate of alum with quinine, tannic acid, and acetate of lead, were successively prescribed; but I discovered that they took nothing freely except their wine.

PERISCOPIC REVIEW.

SURGERY.

SUCCESSFUL CASES OF OPERATION ON THE BONES OF THE FACE.

In the periodicals of the current year, we have met with accounts of two remarkable successful operations on the bones of the face.

The first case occurred in the practice of Dr. B. LANGENBECK of Berlin. It is reported in the *Deutsche Klinik* for 30th April, 1853.

CASE I. MEDULLARY CARCINOMA OF THE UPPER JAW; EXCISION OF THE WHOLE OF THE LEFT UPPER JAW BONE, AND NEARLY ALL THE RIGHT; ALSO OF THE LEFT NASAL BONE, AND OF THE ETHMOID BONE: RECOVERY. A. J., aged 19, an unmarried female, was admitted into hospital on February 17th. With the exception of repeated attacks of intermittent fever, the patient had enjoyed good health. No hereditary predisposition to carcinoma had appeared in her family. In the summer of 1852, she felt a violent pain in the teeth and ear on the left side, and perceived that the left nostril was less permeable to air than usual. At Michaelmas of the same year, she was seized with pains in the forehead; and some time afterwards, a swelling was noticed in the left nostril. This became conspicuous under the skin of the cheek, extending outwards from the ala nasi; and from this time it rapidly increased in size. In the right half of the nose, a similar but much smaller tumour appeared, some weeks before the admission of the patient into hospital; this had been preceded by obstruction of the nostril, and by pain in the teeth and right upper maxillary bone. At the end of January, the tumour arrived at the surface by a perforation of the upper lip, in a direction downwards and outwards from the left nostril.

On examination, there was found in the region of the left superior maxillary bone a tumour of about the size of a moderately large orange. It was covered at the centre by a red skin, and presented, at the part above referred to, a perforation in the upper lip; while it was also visible through the expanded left nostril. In the neighbourhood of the tumour, which was scarcely sensible to pressure, there was an oedematous swelling of the face, painful to the touch, and most conspicuous at the inner angle of the left eye. On the right side there was a smaller swelling, more easily felt than seen; it seemed to occupy a large part of the nostril, so that the finger could be introduced only with difficulty. On this side, there was oedematous swelling of the inner angle of the eye and the lower eyelid; but nothing abnormal was perceived in the nasal bones. On examining the mouth, the whole of the left side of the upper lip, beyond the middle line, as far as the right ala nasi, was occupied by the tumour, which was pressed on by the incisor and first molar teeth in the left upper jaw-bone on the inside, and by the skin of the upper lip in front. A part of the tumour, in the neighbourhood of the teeth, was covered with ulcerative exudation. Almost the entire extent of the hard palate, especially at its anterior part, was a very irregular projection of the mucous membrane, caused by pressure from above downwards of the tumour, which flattened the arch of the palate. In it were several ulcerated spots, into which a probe could be passed for some distance, especially on the left side. On this side the tumour extended as far back as the molar teeth; and four weeks

previously, the three molars had been pushed out by it; the second bicuspid, which still remained, was loose. On the right side, the swelling was about three lines distant from the alveolar border. The teeth, both those which had been removed and those which remained, were in excellent preservation; the velum palati and soft parts were healthy. The exhalation from the tumour was very fetid, and could only be somewhat improved by the use of chlorine water. The general health was not greatly impaired; digestion was good; the pulse was 116. The patient had pain only in the teeth, by which she had been deprived of sleep during some nights. She did not observe that she had lately lost flesh to any remarkable extent.

The diagnosis was easy, as no other than a carcinomatous tumour could have produced the phenomena presented. The prognosis also admitted of no doubt; for it was plain that, if the tumour were left to itself, its rapid progress would soon destroy the patient. An operation was therefore performed on February 22nd, by Dr. Langenbeck.

The patient was placed on a somewhat elevated seat. Chloroform was administered, and she remained under its influence during the first part of the operation. An incision was made on the left side through the cheek, from above the lachrymal sac, perpendicularly downwards, passing close to the ala nasi, as far as the upper lip near the angle of the mouth. From the upper end of this incision, a horizontal one was carried outwards, parallel with the edge of the orbit, as far as the zygoma. The flap was turned back, and a portion of the tumour brought into sight. The bulb of the eye was now separated from the orbital part of the upper jaw-bone; and the frontal and temporal processes were divided by a saw and forceps. On the right side, an incision was carried obliquely from the malar bone to the angle of the mouth; and the whole of the middle part of the face, surrounding the nose, was separated and pushed upwards. The nasal process of the left upper maxillary bone was now divided with bone forceps; this bone, which was entirely involved in the disease, along with the left nasal bone, was removed, with a part of the bone on right side. By removal of a diseased part of the wall of the left frontal sinus, this cavity was laid open; and the right upper jaw-bone was removed by sawing it obliquely downwards and outwards from the upper part of the foramen lacerum to below the infra-orbital foramen. The vomer was divided with bone-forceps; and, by powerful pressure downwards, the upper jaw was removed from its connection with the pterygoid processes: the soft palate was separated by an incision close to its attached borders. After the removal of the principal part of the tumour, the remaining parts were removed with forceps, so that the greater part of the ethmoid bone as far as the cribriform plate was taken away. Some portions which still remained, and which could not be reached without great difficulty, were touched with the actual cautery. Carcinomatous masses were removed from the inner surface of the skin, and from the nose and upper lip. The hæmorrhage was not considerable, all the arteries which were wounded at the commencement of the operation having retracted and ceased to bleed. Dossils, with threads fastened to them, were placed on the surface of the wound; the threads hanging out at the angle of the mouth, and through the nostrils. The incisions in the face were then united by knotted and twisted sutures.

Chloroform was used at the commencement of the operation, but was not repeated when its effect passed off, on account of the danger of the entrance of blood into the air-passages. The patient bore the operation very courageously: she fainted once, but only for a short time. After the operation, she drank some wine: it was administered partly by a teaspoon, and partly through a tube. Cold lotions were applied, and a quarter of a grain of acetate of morphia was given. In the evening, the pulse was 120, and stronger than immediately after the operation.

The tumour was found on examination to be medullary carcinoma. It occupied nearly the entire upper maxillary region, and produced a strong arching forward of the canine fossa on the left side, but less on the right. Besides projecting through the hard palate into the mouth, it filled all the other neighbouring cavities, as the nostrils, the maxillary sinuses, and the left side of the frontal sinus, so that it extended as far as the base of the skull. The adjoining bones were perforated by it in some parts, but were otherwise healthy. The tumour was throughout of a white medullary appearance, with spots of effused blood in some parts. On microscopic examination, it was found to consist entirely of roundish cells with several nuclei; no fibres nor spindle-shaped cells were anywhere apparent.

The subsequent daily reports show a steadily favourable pro-

gress of the case. On March 9th the patient sat up: on the 26th, the whole of the wounds in the face had cicatrised. On April 19th, the patient was dismissed. The cicatrices in face had become small; there was slight œdema of the right lower eyelid, and of both left eyelids. The nose was somewhat sunken, being deprived of its osseous support, and had at the point a slight inclination to the left. The cheeks had regained a fair amount of their original roundness. The opening of the mouth, which had been diminished by the removal of a portion of the upper lip, could only be closed by pushing up the lower lip; and not perfectly then, as the upper lip and cheeks were almost entirely deprived of motion, through division of the twigs of the facial nerve. In the cavity of the mouth, the greatest part of what had been removed during the operation was replaced by new deposit, so that the soft palate, excepting a small spot in the centre, was attached nearly as firmly as before. The most perfect reparation had taken place on the left side; the least in the centre and on the nasal bones. The newly formed masses were partly covered with mucous membrane, partly with purulent exudation. Speech had been almost unintelligible soon after the operation; but had become as distinct as could be expected. Deglutition was perfect; but the patient was naturally as yet unable to chew anything. The general health was good; and the catamenia had appeared at the proper time, and continued for the usual period. Whether the cure will be permanent, can only be shown by time.

The second case is given in the *Union Médicale* for Aug. 11.

CASE II. IVORY EXOSTOSIS OF THE ETHMOID BONE, OCCUPYING THE ENTIRE RIGHT SIDE OF THAT BONE: COMPLETE EXTIRPATION: RAPID RECOVERY, WITH PERFECT PRESERVATION OF THE FUNCTIONS AND MOVEMENTS OF THE EYE. M. MAISONNEUVE presented, at a meeting of the Academy of Sciences, a young man from whom he had three months previously removed the right half of the ethmoid bone, on account of exostosis.

T. J., aged 22, a workman, of robust constitution, in the early part of March 1853, began to feel a kind of weight and dull pain in the orbital region, and the right eye became more projecting than the other. He had first paid little attention to this: but soon the orbital pain became intense, and his eye felt as if squeezed in a vice. The organ began to turn outwards, and to project from the orbit, pushing the eyelids forward. A medical man who was consulted recognised the presence of exophthalmia, caused by a hard tumour towards the deep and interior part of the orbit: and he advised the patient to place himself under the care of M. Maisonneuve.

On July 5th, M. Maisonneuve saw the patient for the first time. The right eye was completely pushed out of the orbit, towards the temple. The eyelids covered the eye very imperfectly: and the conjunctiva was inflamed. The tears pursued their regular course; and vision was not entirely lost. At the internal angle of the eye was felt the rounded point of a tumour, evidently deeply seated, whose presence was ascertained by depressing the soft parts. The tumour had an osseous hardness; it was scarcely sensible to pressure; but it was the seat of dull continued pain, which fatigued the patient much, and prevented sleep. The corresponding nostril was free. M. Maisonneuve diagnosed the existence of exostosis of the interior wall of the orbit—probably ivory exostosis.

The patient had never received a blow on the eye; he had never had syphilis, nor cutaneous diseases, nor scrofula. Before attempting surgical interference, M. Maisonneuve determined to try the effect of iodine. Half a drachm of iodide of potassium was given in twenty-four hours. This was continued for a fortnight, without effect; and, as the tumour increased in size and the pain continued, an operation was determined on.

On July 14th, the patient having been chloroformed, a semi-circular incision was made along the internal part of the circumference of the orbit, commencing above the eyebrow. The soft parts were dissected as far as the bones: the periosteum comprised in the flap carried with it the orbicularis muscle and the pulley of the superior oblique. This dissection disclosed the anterior part of the tumour, and a portion of its internal surface. At this stage, three or four arterial twigs were ligatured: and now commenced the difficult part of the operation.

The tumour, encrusted by the inner wall of the orbit, filled more than two thirds of that cavity. Its base was not narrowed, and seemed to be continuous with the superior and inferior, as well as with the interior walls of the orbit. Its posterior extremity was too deeply seated to allow its limit to be ascertained. The anterior part alone offered a mammillated projection, by which hold could be taken of the tumour. M. Maisonneuve first made several attempts to use the saws of Charrière, Martin,

etc.; but the narrowing of the cavity prevented their employment. Liston's forceps were then tried; but these made no impression on the tumour, and two pairs were broken in the attempt.

The surgeon then tried to make impression on the tumour with a hammer and chisel. It resisted this treatment also; but one of the projections, of the size of a nut, was detached after great effort, and thrown to a distance. This circumstance decided the success of the operation. Behind the part thus removed, the tumour presented a neck or groove where the osseous tissue was less dense. The chisel, forcibly driven by the hammer, penetrated to a certain depth; and a very slight degree of mobility was immediately perceived in the tumour.

It now seemed as if the operation would be easily completed: but new difficulties arose. The tumour formed, in the nasal fosse, a projection almost similar to that in the orbit; and these two portions were in a manner strangulated by a bony ring formed above by the frontal, below and in front by the superior maxillary bone and its ascending process. It was only after long and laborious efforts, with levers of all kinds, forceps, etc., that the tumour was at last removed entire.

On introducing his finger into the deep cavity left by the removal of the tumour, M. Maisonneuve discovered that its interior was perfectly smooth, and lined with a sort of tomentous membrane. There was no apparent communication with the maxillary sinus nor with the nasal fosse.

During this difficult operation, the eye had not been injured, and the bones in the vicinity of the tumour had been carefully guarded. M. Maisonneuve therefore replaced the eye in the orbit, and united the edges of the wound by the twisted suture. The operation continued an hour and a half.

No inflammatory symptoms arose either in the brain, or even in the deeply seated structures of the face, or in the eye. The eye, when replaced, almost immediately resumed its functions: its movements all remained perfect. The wound healed by the first intention; and the traumatic fever was scarcely sensible.

The tumour was found to be an ivory exostosis; it resembled in form the ethmoid bone. Its antero-posterior diameter was five *centimètres* (nearly two inches); and its transverse and vertical diameters each four *centimètres* (an inch and a half). Its inner surface was smooth and regular; the outer was curved and covered with projections. The upper surface presented, in front, a deep excavation, which showed traces of a rupture; at this point the tumour had been united with the frontal bone to the extent of two *centimètres* (seven-tenths of an inch). The anterior surface was divided vertically by a groove, whose edges embraced the ascending process of the superior maxillary bone; the posterior part represented a round edge, the upper tubercle of which corresponded to the optic foramen. The tumour weighed twenty-eight *grammes* (432 grains).

On August 9th, it was difficult to determine on which side the operation had been performed. The cicatrix was imperceptible; the eye was perfectly similar to the other; it executed all the movements of elevation, depression, adduction, abduction, and rotation. The eyelids retained their mobility, and the lachrymal apparatus properly performed its functions.

REMOVAL BY TRACHEOTOMY OF A GRAIN OF CORN LODGED AT THE BIFURCATION OF THE BRONCHI.

Dr. B. S. G. PEACHY, in his "Clinical Reports of the College Infirmary of Richmond (Virginia, U.S.)," published in the *Virginia Medical and Surgical Journal* for April 1853, describes the following case, which occurred under Dr. Johnson.

R. S., of Powhatan county, Virginia, aged 8, while running with a grain of corn in his mouth, got it jostled into the larynx, whence it fell into the trachea, and finally lodged at the bifurcation of the bronchi. At this point it remained for ten days before the patient was brought to the infirmary. At the time of entrance he appeared much distressed and uneasy, felt sore all along the trachea, and disposed "to cough out something in his throat". When the patient was directed to cough, the foreign body was distinctly felt to strike against the sides of the larynx and trachea. It was determined to place the patient under the influence of chloroform, and to perform tracheotomy. An incision was made in the median line; the fascia was cautiously dissected from the trachea before incising the latter, inasmuch as an incision made directly through both would have been attended with escape of air, which, finding its way into the cut areolar tissue would have given rise to emphysema, an occurrence zealously to be guarded against. The slight hemorrhage having been arrested, the trachea was next incised to the extent of some five or six rings. The irritation occasioned by the entrance of

air through this opening caused violent heaving of the chest. The face at times was perfectly livid. This lasted several minutes, when comparative quiet seemed to be restored. As soon as blunt hooks were introduced to expand the wound and allow extrication of the foreign body, the spasmodic efforts would recur and prevent their insertion. Having once succeeded, however in dilating the incision, a violent fit of coughing expelled the grain of corn, and all irritation at once subsided. The edges of incision were brought together by Liston's adhesive strips, and cold water was applied. With the exception of considerable fever the night subsequent to the operation, and some excitement and heat of skin for a day or two after, the patient suffered not, but recovered entirely, and was discharged in less than a fortnight.

DIAGNOSIS OF FRACTURE OF THE BASE OF THE SKULL.

In the *Annales de la Société Médico-Chirurgicale de Bruges*, as quoted in the *Gazette Médicale* for August 6th, M. GIGOT expresses his opinion that the escape of blood by the ear and subconjunctival ecchymosis are not always pathognomonic of fracture of the base of the skull, though they are nevertheless of great importance in the diagnosis of injuries of this organ. He has noticed a case where a fall on the head was followed by deep bluish red ecchymosis in the subconjunctival tissue of the inner half of the left eye, and by the discharge, during two days, of a rather large quantity of serous transparent fluid through the right ear. There were at first somnolence and general semi-paralysis; there was also a swelling, of the size of a nut, an inch below and to the right of the occipital protuberance. In spite of the unfavourable symptoms, the patient began to recover in five days, and got completely well.

M. Gigot explains the escape of watery fluid, by the laceration of the arachnoid cul-de-sac which accompanies the auditory nerve in the internal auditory meatus. The infiltration of the subconjunctival cellular tissue was produced probably by more or less extensive detachment of the bones of the orbital arch. The blood would then traverse by imbibition the fibrous layer, to be effused into the loose cellular tissue which surrounds the globe of the eye, and is connected with the subconjunctival cellular tissue; and thus in time it would arrive at the cellular tissue of the eyelids.

ARBUTUS UNEDO IN BLENNORRAGIA.

In the *Union Médicale* for August 2nd, Dr. VENOT of Bordeaux states that he has employed the *arbutus unedo* in cases of blennorrhagia and blennorrhœa. Its property depends on a highly astringent principle. He uses it in the following forms:

Injection. Take of aqueous extract of *arbutus unedo*, 30 parts;

Distilled water, 100 parts.

Syrup. Take of aqueous extract of *arbutus unedo*, 25 parts; Cold distilled water, 125 parts.

Dissolve, filter, and mix with simple syrup, reduced a fourth part by boiling, 500 parts.

Mixture. Take of syrup of *arbutus*, syrup of Tolu, each 30 parts;

Distilled pine-water, 100 parts.

Mix: to be taken in spoonful doses.

Pills. Take of extract of *arbutus unedo*, extract of *rhatany*, each 75 grains.

Mix and divide into twenty-five pills; two to be taken morning and evening.

Dr. Venot states that this medicine surpasses *rhatany*, and is an admirable adjunct to *cubebs* and *copaiba*.

FRACTURE OF THE TROCHLEA OF THE HUMERUS.

In the *Archives Générales de Médecine*, as quoted in the *Gazette Médicale* for April 16th, M. LATOIGN describes a variety of fracture of the trochlea of the humerus. The following are its diagnostic signs.

The fracture of the trochlea may be produced by a fall on the palm of the hand: it leaves the passive movements of the fore arm entire: extension of the limb is accompanied by inclination inwards of the forearm on the arm at a very obtuse angle, the summit of which corresponds to the epitrochlea: in resisting this, there is an abnormal amount of transverse mobility, and distinct crepitation: the ulna is not displaced backwards or inwards: the olecranon is immoveable on the ulna: the two condyles of the humerus are immoveable, either on the bone, or on each other.

REPORTS OF SOCIETIES.

TWENTY-THIRD ANNUAL MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

[Held at Hull, September 7th to 15th, 1853.]

WEDNESDAY, SEPTEMBER 15.

REPORT OF COUNCIL.

The General Committee assembled in the Library of the Infirmary, at 1 o'clock, when Professor PHILLIPS, the Assistant General Secretary, read the Report of the Council. This consisted of an account of their proceedings with regard to certain scientific subjects which had been referred to them at the last meeting of the association at Belfast, in 1852.

TREASURER'S ACCOUNT.

Mr. NINNIS read the abstract of the Treasurer's account; from which it appeared that the statement for the year was—

Receipts - - - -	£ 1715	1	0
Payments - - - -	1487	1	7
Balance at the Bankers' and in Treasurer's hands	227	10	11

FIRST GENERAL MEETING.

The first general meeting was held in the Mechanics' Institution, at 8 P.M. Colonel SABINE, the retiring President, took the Chair, and forthwith resigned it to Mr. HOPKINS, the President-elect, who delivered an inaugural address. He reviewed the progress which had been made during the last few years, in astronomy, terrestrial magnetism, the nature of heat, and geology. We are compelled to omit any abstract of Mr. Hopkins' luminous remarks on these subjects; but we must transfer to our pages some excellent observations on the objects of the Association.

"There are probably few amongst us of whom the inquiry has not been made—after any one of our meetings—whether any striking discovery had been brought forward?—and most of us will also probably have remarked that an answer in the negative has frequently produced something like a feeling of disappointment in the inquirer. But such a feeling can arise only from a misapprehension of what I conceive to be the real and legitimate objects of the British Association. Great discoveries do not require associations to proclaim them to the world. They proclaim themselves. We do not meet to receive their announcement, or to make a display of our scientific labours in the eyes of the world, or to compliment each other on the success that we may have met with. Outward display belongs not to the proceedings, and the expression of mutual compliment belongs not to the language, of earnest minded men. We meet, gentlemen, if I comprehend our purpose rightly, to assist and encourage each other in the performance of the laborious daily tasks of detailed scientific investigation. A great thought may possibly arise almost instantaneously in the mind,—and the intuition of genius may almost as immediately recognise its importance, and partly foresee its consequences. Individual labour may also do much in establishing the truth of a new principle of theory; but what an amount of labour may its multifarious applications involve! Nearly two centuries have not sufficed to work out all the consequences of the principle of gravitation. Every theory, as it becomes more and more perfectly worked out, embraces a greater number of phenomena, and requires a greater number of labourers for its complete development. Thus it is that, when science has arrived at a certain stage, combination and cooperation become so essential for its further progress. Each scientific society effects this object in a greater or less degree; but much of its influence may be of a local character, and it is usually restricted by a limited range of its objects. Up to a certain point, no means are probably so effective for the promotion of science as those particular societies which devote themselves to one particular branch of science; but as each science expands, it comes into nearer relations with other sciences, and a period must arrive in this general and progressive advance which must render the cooperation of the cultivators of different branches of science almost as essential to our general progress, as the combination of those who cultivate the same branch was essential to the progress of each particular science in its earlier stages. It is the feeling of the necessity of combination and of facility of intercourse among men of science that has given rise to a strong wish that the scientific memoirs of different societies should be rendered, by some

general plan, more easily and generally accessible than they are at present:—a subject which I would press on your consideration. It is by promoting this combination, that the British Association has been able to exert so beneficial an influence,—by bringing scientific men together, and thus placing, as it were, in juxtaposition every society in the country. But how has this influence been exercised? Not assuredly in the promotion of vague theories and speculative novelties; but in the encouragement of the hard daily toil of scientific research, and by the work which it has caused to be done, whether by its influence over its individual members or on the Government of the country. Regarding our Association, gentlemen, in this point of view, I can only see an increased demand for its labours, and not a termination of them, in the future progress of science. The wider the spread of science, the wider will be the sphere of its usefulness."

Mr. Hopkins, in concluding his address, after referring to the importance of science as a means of supplying the present wants of men, proceeded to say that—

"If we would view science under its noblest aspects, we must regard it with reference to man, not merely as a creature of physical wants, but as a being of intellectual and moral endowments, fitting him to discover and comprehend some part at least of the laws which govern the material universe, to admire the harmony which pervades it, and to love and worship its Creator. It is for science, as it leads to this contemplation of nature, and to a stronger sense of the beauties which God has spread around us, that I would claim your deeper reverence. Let us cultivate science for its own sake, as well as for the practical advantages which flow from it. Nor let it be feared lest this cultivation of what I may term contemplative science, if prosecuted in a really philosophic spirit, should inspire us with vain and presumptuous thoughts, or disqualify us for the due appreciation of moral evidence on the most sacred and important subjects which can occupy our minds. There is far more vanity and presumption in ignorance than in sound knowledge; and the spirit of true philosophy, be it ever remembered, is a patient, a modest, and a humble spirit."

THURSDAY, SEPTEMBER 8.

SECTIONAL MEETINGS.

The Committee of Sections met at 10 o'clock, and the Sections at 11 o'clock.

[We shall give the reports of the Sectional Meetings in a collected form in our next number.]

A SOIRÉE

was held in the Music Hall in the evening, when about 650 persons were present. The Hall was tastefully decorated, and specimens and objects of interest were exhibited.

FRIDAY, SEPTEMBER 9.—SATURDAY, SEPTEMBER 10.

SECTIONAL MEETINGS

were held on these days.

MONDAY, SEPTEMBER 12.

PLACE OF MEETING IN 1854.

Invitations for the next year's meeting were received from Liverpool, Glasgow, Dublin, Leeds, Brighton, and Gloucester.

J. HEYWOOD, Esq., M.P., moved, and Mr. SMITH, of Jordan Hill, seconded, that the meeting in 1854 be held at Liverpool. This motion was carried.

ELECTION OF OFFICERS.

The following officers were elected:—

PRESIDENT-ELECT: Lord Hartowby. VICE-PRESIDENTS: Lord Wrottesley; Sir P. M. de Grey Egerton, Bart.; Dr. Whewell; Professor Owen; W. Lassell, Esq.; and J. B. Yates, Esq. LOCAL SECRETARIES: Dr. Dickinson, and Dr. D. P. Thomson. LOCAL TREASURER: Mr. R. McAndrew. SECRETARY: Colonel Sabine. ASSISTANT GENERAL SECRETARY: Professor Phillips. COUNCIL: Dr. Walker-Arnott; Sir H. De la Beche; C. C. Babington; Prof. Bell; Prof. Daubeny; Prof. E. Forbes; Prof. Graham; J. P. Gassiot; W. R. Grove; R. Hutton; L. Horner; J. Heywood, M.P.; Sir C. Lemon; Dr. Miller; Dr. Lankester; Prof. Powell; Sir R. Madden; H. E. Strickland; Prof. Stokes; and the Bishop of Oxford.

TUESDAY, SEPTEMBER 13.

MEDICAL BREAKFAST.

On Tuesday morning, the medical visitors of the British Association, by invitation of the resident medical officers of Hull, sat down to a sumptuous breakfast. Amongst the strangers present, were Dr. Balfour (Grimsby), Dr. Balfour, Dr. Neil Arnott, and Dr. Balfour.

Dr. Latham, Dr. Lankester, Dr. Burgess, Dr. Daubeny, Dr. W. Arnott, Dr. Helmholtz, Dr. Barbridge, J. Hegg, Esq., J. P. Bell, Esq., R. J. Bell, Esq. The following resident medical gentlemen were also present—Dr. Horner, Dr. Sandwith, Dr. Cooper, Dr. Daly, Dr. Bell, Dr. Archibald, Dr. King, F. Huntingdon, Esq., R. Hardey, Esq., J. Dossor, Esq., J. Lowther, Esq., J. H. Gibson, Esq., H. Munroe, Esq., J. H. Locking, Esq., C. Beckett, Esq., R. Craven, Esq., E. Twining, Esq., R. L. Sleight, Esq., W. Hay, Esq., E. Reckitt, Esq., H. Lee, Esq., W. Hodgson, Esq., T. Atkinson, Esq., T. T. Lambert, Esq., J. Wilson, Esq. Dr. Horner occupied the chair, and H. Munroe, Esq., the vice-chair.

The president, Dr. HORNER, spoke in eulogistic terms of the high honour which the medical men of Hull felt in having the privilege of entertaining the medical members of the British Association. He was also proud to speak of the good feeling and unanimity of sentiment which pervaded the medical profession here; and particularly adverted to the cause of that existing friendship, as being derived from the social and friendly character of their meetings. With pleasure he saw so many of his medical colleagues present, anxious to do honour to the British Association.

Dr. NEIL ARNOTT, F.R.S., referred to the unanimity of feeling amongst the members of the medical profession generally; a feature not so universally seen in any other profession in the country. A French medical man who had lately visited him (Dr. Arnott), seemed surprised at the attractive character of the meetings of medical men in London; such meetings in France being the reverse.

The President proposed "The British Association".

Dr. R. G. LATHAM, F.R.S., spoke of the high character and position which the medical men held in the British Association, owing, in a great measure, to the *bona fide* character of their education. The peripatetic habits of the association encouraged a social feeling amongst the members of the profession.

Dr. SANDWITH proposed, "The Medical Visitors", and remarked that the local papers read before the British Association, he had no doubt, would be found peculiarly interesting to strangers. He was pleased to notice the active part which the medical men of Hull had taken in the proceedings of the association. The British Association was the means of bringing into existence the many creditable local papers read; and it was particularly adapted, by its intelligence and its genius, to evoke a spirit of emulation in science and philosophy, as well as that of commerce. He spoke as to the great edification received by the members of the profession here, from the elaborate scientific papers read at the meeting.

Dr. LANKESTER, F.R.S., had been a constant attendant of the British Association meetings for sixteen years, and therefore had some claim for his services. Although no purely medical section existed, the sections of natural history, physiology, and ethnology, were those in which medical men could take interest. Dr. L. spoke in favour of the objects of the association, and more particularly adverted to the friendly manner in which the members had been received in Hull.

Dr. WALKER ARNOTT, F.R.S., spoke in eulogistic terms of the reception of the members of the British Association, and proposed "The Resident Medical Men".

H. MUNROE, Esq., in reply, spoke of the great pleasure and unanimous feeling the profession had in inviting the members of the association to breakfast.

SECTIONAL MEETINGS.

Many of the Sections closed their business on this day.

A SOIRÉE

was held in the evening in the Music Hall.

WEDNESDAY, SEPTEMBER 14.

REPORT OF COMMITTEE OF RECOMMENDATIONS.

Several recommendations made by the Committee, involving grants of money, were adopted. The sum of £200 was granted to the Council for the maintenance of the Observatory at Kew; £20 to Mr. Rankine, Dr. Robinson, Professor Hodgkinson, and Mr. Ward, to prepare a report on the Cooling of Air in Hot Climates; and other sums, varying from £50 to £5, for reports on various scientific subjects.

The preparation of various other reports, not involving grants of money, was also resolved on.

The following resolutions were also passed:—

That the following papers, with the consent of the authors, be printed in full in the *Transactions* of the British Association for the year 1853:—James Oldham, Esq., On some of the Physical Features of the Humber; and On the Rise, Progress, and

Present Position of Steam Navigation in Hull. J. P. Bell, M.D., Observations on the Character and Measurements of Degradation of the Yorkshire Coast.

That the thanks of the British Association be given to the Parliamentary Committee for the unceasing attention they have paid to the interests of science, both in communications to Government, and in proceedings in the Houses of Parliament.

That the members of the British Association have learned with satisfaction that it is the intention of Government to direct, that in future, daily Meteorological Observations shall be made at sea, in correspondence with the plan adopted by the Government of the United States.

CONCLUDING GENERAL MEETING.

The concluding General Meeting was held in the Saloon of the Mechanics' Institute.

PRESIDENT'S ADDRESS.

The President spoke in high terms of approbation of the labours of the Local Committee, and of the whole of the arrangements. The rooms for the Sections had been more than usually convenient. He spoke also very highly of the local papers contributed, and of the public hospitality of the Local Committee and of the Mayor. Intellectually, as in every other respect, this meeting had been eminently successful.

Mr. W. SMITH, of Jordan Hill, moved, and the MAYOR seconded, a vote of thanks to the President.

MEMBERS PRESENT.

Professor PHILLIPS was happy to be able to announce that this had been a most successful visit. The returns made up to three o'clock that day, showed that there had been present 141 old life members, 13 new life members, old annual members 50, new 58, of associates 308, of ladies 230 [cheers], and of foreigners 6; making a total of 881. The amount paid by these was £904; and there had also been £22 received for books.

The meeting then adjourned.

[To be continued.]

CREWKERNE AND YEOVIL DISTRICT MEDICAL SOCIETY.

The sixth general meeting was held at Crewkerne on the 18th instant.

PROPOSED UNION WITH THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

After the ordinary business had been transacted, a deputation from the West Somerset Branch of the Provincial Medical and Surgical Association held a conference with the members. The present unrepresented and unorganised condition of the medical profession was fully discussed.

Mr. GILLET (the President of the Branch) showed how important it was that they should be united on certain points before they asked Parliament to legislate. He advocated the Provincial Association because it was the only society sufficiently large to have an influence with Government; and he believed that if it were as widely and as warmly supported by medical practitioners as it deserved to be, and as he hoped it would be, no ministry could refuse to listen deferentially to its opinion. It was only by sinking minor differences, and by uniting together in the support of the great principles upon which the profession is agreed, that real and permanent benefit would arise. By strengthening the power and augmenting the numbers of this Association, those reforms for which we are so anxious, can be best accomplished. By parliamentary representation, which also was most likely to be obtained by organising the ranks of the profession, we should have our interests (hitherto he was sorry to say treated without respect, as witness the new Vaccination Act) protected, and our station in society acknowledged by those who already knowing our usefulness nevertheless greatly undervalue it.

Dr. WOODFORD, the honorary secretary to the Taunton Branch also expatiated on the good effects already produced by the Association, and upon the still higher sphere of utility which he believed was now opening before it. He said that as the gentlemen present had borne witness to the excellence of the ASSOCIATION MEDICAL JOURNAL, the organ of the Association, he need not speak in its praise: but he would simply ask the members if they had not, in the weekly receipt of it, more than a "quid pro quo" for their guinea. But it was on far higher grounds that he advocated the cause of the Association. The Journal was only a means towards the accomplishment of great

ends. It was only by joining hand in hand in the support of one great influential national institution, such as the Association ought to be, and is now becoming, that the profession could make its advice or its remonstrance be heard in quarters where at times the welfare of the community demanded that they should be listened to with respect and deference.

Dr. Woodforde then entered into several details connected with the constitution and working of the Association. At the conclusion of his address, it was determined that the formal decision of the Yeovil and Crewkerne Medical Society should be made known to the West Somerset Branch of the Association as soon as the Honorary Secretary had communicated with the other members.

Dr. Tomkins, of Yeovil, and Dr. Cowdell, of Dorchester, were prevented from attending the meeting. Mr. Arden, the Honorary Secretary of the Dorset Branch, and Mr. Cory, of Bridport, the President, were invited to attend. The deputation consisted of Mr. Gillett, Dr. Woodforde, Dr. Kelly, Mr. Alford, Mr. Marchant, and Mr. Burt.

During the conference, it was suggested that if there were a sufficient number of members resident in the Crewkerne and Yeovil district, a meeting of the Branch might after the union be held once a year in the immediate neighbourhood, alternately with one in the Taunton and Wellington locality.

Since the meeting took place, of the proceedings of which the above is a condensed account, several of the members of the Society have signified their desire to join the Provincial Medical and Surgical Association.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the Annual Meeting held in July, the Report for the past year was read and adopted. The following officers and Committee for the year were appointed:—

PRESIDENT:

Sir James Clark, Bart., F.R.S.

TRUSTEES:

Sir C. Hastings, M.D., D.C.L.	William Newnham, Esq.
Dr. George Burrows, F.R.S.	Joseph Toynbee, Esq., F.R.S.

OTHER MEMBERS OF THE COMMITTEE:

Edward Ambler, Esq.	Joha Ince, Esq.
John Bacot, Esq.	Dr. Bence Jones, F.R.S.
Wm. Bowman, Esq., F.R.S.	J. R. Martin, Esq., F.R.S.
John Churchill, Esq.	G. Pilcher, Esq.
Dr. John Conolly, D.C.L.	E. Saunders, Esq.
G. F. Dale, Esq.	William Self, Esq.
George Fincham, Esq.	Dr. Sibson, F.R.S.
Sir John Forbes, M.D., D.C.L.	Henry Sterry, Esq.
Joseph Hodgson, Esq., F.R.S.	Dr. West.
Thomas Hunt, Esq.	Erasmus Wilson, Esq., F.R.S.

TREASURER AND HONORARY SECRETARY:

William Newnham, Esq.

HONORARY SECRETARY TO THE COMMITTEE:

Joseph Toynbee, Esq., F.R.S.

[The Report will be found at page 734 of our account of the Swansea meeting.]

EDITOR'S LETTER BOX.

MEDICAL METEOROLOGY.

LETTER FROM J. C. BLOXAM, Esq., TO THE EDITOR.

SIR,—Some days ago, I wrote a few lines to you respecting the nature of the medical statistics that should be combined with meteorology. I have at present some cases under my observation which would serve to illustrate my meaning.

A lady, who is an habitual sufferer from indigestion, and has constantly a cutaneous eruption, has pain low in the left side, which is much aggravated by movement, and by any respiratory effort. The pain might be supposed to depend upon a rheumatic affection of the muscles, or on some irritation of the bowels or the kidney, or on the state of the spinal cord. A

lady, who is very subject to nervous affections connected with an asthenic state of the system as regards health and strength, has a severe stiff neck, the pain extending to the spine, down the arm, and down the side. Two children are suffering from sickness, anorexia, and severe pain in the stomach and bowels, attended in one with tendency to syncope, or pain in the loins. An elderly lady is attacked occasionally and temporarily with a paralytic condition of the arm and leg, with nervous shooting pains in the same limbs; she falls into a state which is described as being "like fainting"; she passes occasionally large quantities of pale coloured urine, some of which, that was passed whilst the quantity was not excessive, and the colour was not deficient, had the normal specific gravity and the normal acidity. An old man, with stethoscopic signs of dilatation of the ventricles of the heart, complains of severe palpitation of the heart, and such frequent and severe "faintings", that "they will be the death of him". He also complains of loss of appetite and distressing flatulence. A young woman, who has stethoscopic signs of impaired action of the heart, and I should say, contracted cavities, without either hypertrophy or dilatation, and who suffers habitually from palpitation and nervous pains in the cardiac and adjoining regions, is complaining at present of distressing palpitation, which is rather relieved than otherwise by exercise.

These cases, if classed as separate diseases, would appear to have very little connexion with one another; but, looking to the symptoms, I think they may all be considered to be connected with an impaired state of innervation; and this state, I have no doubt in my own mind, depends upon some meteorological phenomenon. I have not attempted to discover what the meteorological peculiarity is; and if I were to attempt it, I should probably fail. The barometer has been for several days above its average height, and there has been occasional fine and pleasant weather; but there is also frequent rain; there is fog in the valleys at night, and fog on the hill tops in the day. I think the peculiarity should be sought for in the electric state of the elements; not, however, in the absolute electric state of the atmosphere or the earth, but perhaps in the relative electric state of the upper regions of air, and the lower, or the earth's surface—a state that is probably *belonging* to the period of the year. I commonly observe that females affected with dilatation of the heart, or with nervous affections of the heart, or with chlorotic or anemic affections, complain of this period of the year; whilst those affected with hypertrophy of the heart complain in the spring.

I have not met with any cases of diarrhoea; but I think the present meteorological condition only requires some slight modification to determine the existence of such cases. I have observed diarrhoea and English cholera to occur when the temperature at night is very low compared with that of the preceding day; and, during a cholera epidemic, a cold clear night, following a hot day with constant sunshine, will often turn the scale against individuals, and determine an attack of cholera.

Much depends upon the mode in which meteorological changes are stated; and perhaps the least useful for the present purpose is that of stating mean values in the way that is usually done in forming meteorological tables. I think you have said, in your editorial capacity, that extreme values are more important; and no doubt they are so; but I am inclined to believe that well arranged mean values would be more useful still. Meteorological mean values for comparatively long periods, such as seasons or months, will serve to explain many phenomena of disease; but changes that occur in shorter periods of time than these would probably explain many more; and it would be a different order of phenomena that would be explained by mean values for each of these periods, as well as by extreme values. The great defect, I think, in the ordinary meteorological tables, for our purposes, is, that successive periods are observed which have no connexion either with meteorology or with pathology, but only with the calendar; one period beginning where the former ended. Now, there may be some very peculiar character belonging to the latter half of September and the first half of October; and yet this peculiarity may be entirely lost in the mean value of either September or October. Then we want mean values for shorter periods than months. I should say that ten days would be the most useful period; and it appears to me that these should not be arranged so that, the 1st—10th constituting the first period, the 11th—20th would constitute the second period; but the 2nd—11th would form the second period; the 3rd—12th the third, and so on.

I take much interest in the present meteorologico-pathological move; and I have no doubt that great results will be obtained

sooner or later from such an undertaking as you are entering upon; but I think we have as yet great difficulties to encounter.

I am, etc.,

JOHN C. BLOXAM.

Newport, Isle of Wight, Sept. 15th, 1853.

FINANCE AND MEDICAL REFORM.

LETTER FROM JOHN GRABHAM, M.D., TO THE EDITOR.

SIR,—Permit me to express a feeling of regret excited by that part of the financial statement which shews an *expenditure of £200 for Medical Reform!* I assure you, I belong to a not inconsiderable section of the Association, which would not willingly contribute sixpence towards *officious interference*; but holds the belief that it has defeated useful legislation; and that if Sir James Graham's first bill had not been opposed, our position would be far better than it is. Certainly, we should be correctly registered; and empiricism must have received a heavy blow by the penal clause against unauthorised assumption of titles. I hope our funds will be no more squandered on "presumptuous sins".

If our reformers had begun at the beginning, and considered the evils usually attendant on medical pupillage at hospital schools—so painfully described by Mr. Collins, of Harlow, in your last number—they might, indeed, have found legitimate occupation, and earned our gratitude by efforts to correct the chief source of our social degradation.

I am, etc.,

JOHN GRABHAM.

Lonsdale Square, Islington, September 19th, 1853.

[The vote of £200 to the Medical Reform Committee was carried at Oxford; but at the Swansea meeting no additional grant was passed, nor indeed was there any proposed. We are glad to learn, however, that a liberal fund is now being raised by voluntary contributions.

The subject referred to in the concluding paragraph of Dr. Grabham's letter at present engages our attention. The evil is painfully notorious; but we are anxious to have a somewhat matured plan for its remedy, before we make it a prominent topic of discussion.—EDITOR.]

FALSE AND GENUINE BASHFULNESS IN WOMAN.

LETTER FROM WILLIAM BAYES, M.D., TO THE EDITOR.

SIR,—I fully coincide with the remarks which you appended to my paper on Sterility.

In my desire to avoid too great prolixity, I fear I have fallen into the other extreme; and that, in my last paragraph, I have allowed my meaning to remain obscure.

Perhaps the word "timidity" would have conveyed a clearer impression than "bashfulness". Daily experience will convince any inquirer that immodesty is opposed to fertility.

"Genuine bashfulness" is, as you say, one of the "most charming attributes of woman", and is both health-bearing and health-born. It is not this to which I alluded in terms of repression; but a hyperæsthesia, a painfully nervous excitability, a diseased, atonic, unhealthy sensation, which no more bears comparison with its natural type, than does some sickly exotic of a greenhouse to its prototype growing luxuriantly in the tropics.

Genuine bashfulness is a thing of the heart—a glowing, impulsive feeling: the thing I spoke of is a parasite, planted in the brain, that chills and freezes, never warms.

I should not thus have troubled you, were it not that I fear that my silence might lead others to misconstrue the paragraph, which, I now perceive, said either too much or not enough.

Thanking you for pointing out what I otherwise might not have seen,

I am, etc.,

WILLIAM BAYES.

Marine Square, Brighton, Sept. 23, 1853.

MEDICAL EDUCATION.

HOSPITALS AND MEDICAL SCHOOLS IN ENGLAND.

(Continued from last Number.)

GUY'S HOSPITAL (SOUTHWARK).

CONSULTING PHYSICIAN: Dr. Bright. PHYSICIANS: Dr. Addison, Dr. Babington, and Dr. Barlow. ASSISTANT-PHYSICIANS: Dr. Hughes, Dr. G. Owen Rees, and Dr. Gull. SURGEONS: Mr.

Cock, Mr. Hilton, and Mr. Birkett. ASSISTANT-SURGEONS: Mr. Alfred Poland and Mr. T. Callaway. OBSTETRIC PHYSICIANS: Dr. Lever and Dr. Oldham. SURGEON-DENTIST: Mr. T. Bell. SURGEON OF THE EYE INFIRMARY: Mr. France. APOTHECARY: Mr. Stocker.

This hospital contains 549 beds.

Students must give satisfactory testimony as to their education and conduct; they will be required to pay £40 for the first year; £40 for the second; and £10 for every succeeding year of attendance. The sum of £100 in a single payment entitles the student to a perpetual ticket.

Dressers, clinical clerks, assistants, resident obstetric clerks, and dressers in the eye ward, are selected from those students who have attended a second year.

MEDICAL SCHOOL. WINTER SESSION. Medicine. Dr. Addison; M., W., and F.

Surgery. Not announced; Tu., Th., and Sat.

Anatomy, Descriptive, Surgical, and Pathological. Mr. Hilton and Mr. Birkett; daily.

Physiology. Dr. Gull; M., W., Th., and Sat.

Demonstrations on Anatomy, in the dissecting room. Mr. Callaway and Dr. Habershon; daily.

Demonstrations in Morbid Anatomy. Daily.

Chemistry. Dr. Alfred S. Taylor; Tu., Th., and Sat.

Natural Philosophy. Tuesday, at seven.

Moral Philosophy. Rev. T. H. Bullock, Chaplain to the Hospital.

Clinical Medicine. Dr. Addison, Dr. Babington, and Dr. Barlow.

Clinical Surgery. Mr. Cock, Mr. Hilton, and Mr. Birkett.

Clinical Lectures on Midwifery and Diseases of Women. Dr. Lever and Dr. Oldham.

SUMMER SESSION. Materia Medica. Dr. Owen Rees; Tu., Th., and Sat.

Botany. Mr. Johnson; Tu., Th., and Sat.

Medical Jurisprudence. Dr. Alfred Taylor; Tu., Th., and Sat.

Midwifery. Dr. Lever and Dr. Oldham; daily.

Practical Chemistry. Dr. Odling; M., W., and F.

Demonstrations on Cutaneous Diseases. Dr. Addison and Hughes; M., at one.

Clinical Lectures. Dr. Hughes, Dr. Owen Rees, and Dr. Gull.

Regional Anatomy. Mr. Hilton or Mr. Birkett.

Dental Surgery. Mr. Bell and Mr. Salter.

Pathological Anatomy. Dr. Lloyd.

SCHOOL OF ANATOMY AND MEDICINE (1 GROSVENOR PLACE).

WINTER SESSION. Medicine. Dr. Daniell and Dr. Sibson; W. and F. Fees, £5:5, and £6:6.

Surgery. Mr. Pilcher and Mr. Smith; Tu., Th., and Sat. Fees, £3:3, and £5:5.

Descriptive and Surgical Anatomy. Mr. G. E. Blenkins and Mr. J. R. Lane; daily. Fees, £6:6, and £8:8.

Anatomy and Physiology. Mr. Lane, Mr. G. E. Blenkins, and Mr. J. R. Lane; daily. Fees, £6:6, and £8:8.

Chemistry. Mr. Rodgers; M., W., and F. Fees, £5:5, and £6:6.

SUMMER SESSION. Materia Medica and Therapeutics. Dr. Lankester; daily, except Sat. Fees, £5:5, and £6:6.

Botany. Dr. Lankester; M., W., and F. Fees, £3:3, and £4:4.

Medical Jurisprudence. Mr. Warder; M., W., and F. Fees, £3:3, and £4:4.

Midwifery. Mr. Bloxam; daily, except Sat. Fees, £3:3, and £5:5.

Practical Chemistry. Mr. Rodgers; Tu., Th., and Sat. Fee for course, £3:3.

Microscopical Anatomy. Mr. G. E. Blenkins.

General fee to the whole of the courses required by the College of Surgeons and the Apothecaries' Company, including one course of Practical Chemistry, forty-two guineas, half of which may be paid on the entrance of pupils, and the remaining half in January.

Clinical prizes will be awarded for the best reports of medical and surgical cases occurring in the wards of the hospital at which the student attends.

NEWS AND TOPICS OF THE DAY.

[Continued from page 852.]

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA. The triennial meeting was held at the Court House of Three Rivers on Wednesday, 13th ultimo. Dr. Morin in the chair.

The secretary read a report, from which it appeared that during that period seventy-five students presented themselves before the governors for license, and that of this number sixty-one were admitted to practise as physicians, surgeons, and accoucheurs; two as chemists and druggists; and twelve were rejected. Seventy gentlemen came up for preliminary examination, of whom sixty passed, and ten were remanded.

The treasurer submitted his statement, showing a balance of £127:16:9 to the credit of the College.

On motion by Dr. David, seconded by Dr. Russell, it was unanimously resolved that a delegate be named to attend the American Medical Convention, and that the secretary be instructed to ascertain whether the person so attending can take his seat as a representative. And it was further resolved, that the President-elect be the first delegate, and afterwards the delegate chosen by the Board of Governors.

The ballot for the election of governors resulted in favour of the following gentlemen:—

QUEBEC. City: Drs. Morin, Fremont, Marsden, Sewell, and Landry. District: Drs. Michaud, Marmette, De Salles, La-terriere, De Chene, Von Iffland, Dubois, and Boudreau.

MONTREAL. City: Drs. Holmes, Munro, Campbell, Jones, Sutherland, Peltier, Bibaud, and Tavernier. District: Drs. Weillbrenner, Sabourin, Chamberlin, Brigham, Boutillier, Valois, and Foster.

DISTRICT OF THREE RIVERS: Drs. Badeau, Gilmour, and Dubord.

DISTRICT OF ST. FRANCIS: Drs. Glines, Fowler, and Johnson. The newly appointed governors having met together, elected the following office-bearers (the two first and the fifth unanimously):—

President	Dr. Holmes.
Vice-President for Montreal	Dr. Boutillier.
Vice-President for Quebec	Dr. Fremont.
Registrar and Treasurer	Dr. Jones.
Secretary for Montreal	Dr. Peltier.
Secretary for Quebec	Dr. Landry.
H. PELTIER, M.D.	} Secretaries.
J. E. LANDRY, M.D.	

There are now seventy-five registered members enrolled on the books of the College:—forty-three to Montreal, thirty-one to the city, and twelve to the district; twenty-five to Quebec, nineteen to the city, and six to the district; five to the district of St. Francis and Three Rivers; and two to Three Rivers. Of these, but thirty-eight were present, one of whom was entrusted with sixteen proxies.

IMPUDENCE OF A FILTHY QUACK. A case was last week brought before Sheriff Henderson of a somewhat novel nature. The pursuer was Mr. Patrick O'Neill, designating himself "surgeon, Dundee", and the defender Mr. William Norrie, clerk in the Dundee and Arbroath Railway Company's office. The account charged on was "To damage and loss sustained by me on account of your having destroyed, dilapidated, and defaced my bills, on the 9th day of August, 1853, which were posted on Broughty Castle and otherwise on several other occasions, and also for attempting to destroy my reputation as a medical adviser; moderately estimated at £5." Copies of the "bills defaced" were produced in Court, the nature and contents of which may well be guessed. Mr. William Kerr, writer, who appeared for Mr. Norrie, submitted to his Lordship if the productions exhibited were of a nature to be put on the walls of such a public place as Broughty Castle, the constant resort of respectable people at this season. In addition, Mr. Kerr produced a mandate from the manager of the railway, to whom the castle belongs in property, authorising Mr. Norrie to prevent any person putting up bills on the walls: and he said that he was prepared to adduce evidence that the bills were not taken down by Mr. Norrie, but by the regular servants of the company. Mr. Kerr also proceeded to put some questions to the pursuer, with the view of establishing that he had no claim to the title he assumed. In answer to these questions, the pursuer admitted that a few years back he earned his living by manufacturing shoe blacking, which he vended through the country along with lucifer matches, and that in the course of his peregrinations he on one occasion en-

countered a strange adventure at the Castle of the Laws with a coloured servant of the then proprietor, and which afterwards formed the subject of judicial proceedings. The charge against Mr. Norrie was dismissed. (*Dundee Warder.*)

APOTHECARIES' HALL:—PASS LIST. Thursday, August 18th, 1853:—William Altham, Bentham, Yorkshire; William Roger Banks, Birmingham; Edward John Longton, Southport, Lancashire; William John Newman, Sydney; George Mayris Pittcock, Deal, Kent; Peter Williams Rolston, Devonport; George Stopford Taylor, Sheffield; Thomas M. Williams, Wellow, near Oberton, Notts.

Thursday, August 25th:—Thomas Creed, Ballinstona; Benjamin Davies, Froodvale, Carmarthen; Frederick Abell Humphry.

Thursday, September 1st:—John William Farley Dadley, Patrington, Yorkshire; Fergus Ferguson, Bolton; William Johnson Dawson Hutchinson, Yorkshire; William Younge Jeeves, Sharrow Grange, Yorkshire; George Kirk, Middlesborough-on-Tees; Charles West Roberts, Bristol; Samuel Thorpe, Manchester.

Thursday, September 8th:—John Holmes Jephson, Birkenhead; Sydney Jones; James Douglas Kelly, Liverpool; George Mundie, Dalston.

APPOINTMENTS.

*[*An asterisk is prefixed to the names of Members of the Association.]*

*BIRKETT, John, Esq., elected Surgeon to Guy's Hospital, in the room of the late Bransby Cooper, Esq.

CALLAGHAN, Charles, Esq., appointed House-Surgeon to the Kent County Ophthalmic Hospital.

CALLAWAY, Thomas, Esq., elected Assistant-Surgeon to Guy's Hospital.

FIFE, George, M.D., of Newcastle-on-Tyne, appointed Physician to the Queen's Hospital, Birmingham, in the room of the late Dr. Samuel Wright.

JORDAN, R. C. A., M.B., re-appointed Medical Tutor in Queen's College, Birmingham.

NEVINS, J. Birkbeck, M.D., elected Assistant-Surgeon to the Eye and Ear Infirmary, Liverpool.

*SYMSON, T., Esq., elected Surgeon to the Lincoln General Dispensary.

TAYLOR, R. Hibbert, Esq., elected Surgeon to the Eye and Ear Infirmary, Liverpool.

OBITUARY.

*[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]*

CROOM, George, Esq., Surgeon, at 3, Argyle Square, Edinburgh, aged 43, on September 14.

DAVIS, Richard, Esq., of Ramsbury, Wilts, at St. Aubin's, Jersey, aged 42, on September 5.

EDWARDS, John, Esq., Surgeon, at Dorchester, aged 54, on September 15.

HARRIS, Walter William, Esq., Assistant Surgeon 1st West India Regiment, at Kingston, Jamaica, lately.

KENNY, M. W., Esq., Staff Surgeon in the Indian army, lately.

LINTON, Charles, Esq., Surgeon, one of the medical officers at the battle of Trafalgar, aged 70, on September 3.

NORTON, Matthew, Esq., Surgeon, of Gloucester Place, New Road, at Jersey, aged 75, on September 2.

POWELL, J. G., Esq., Surgeon, at Bristol, where he had practised nearly fifty years, aged 73, on Sept. 12.

PRICE, Charles, Esq., Surgeon, at Brighton, aged 77, lately.

STALLARD, John Pinfold, Esq., Surgeon, at Leicester, aged 61, on September 7.

*TOMS, William, Esq., Surgeon, at Barnfield House, Kingsbridge, Devon, aged 55, on September 18.

WALLACE, John Andrew, Esq., Surgeon, at Carlisle Terrace, Bow, Middlesex, by suicide with prussic acid while labouring under mental depression from pecuniary difficulties, aged 51, on September 2.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XL.

LONDON: FRIDAY EVENING, OCTOBER 7, 1853.

NEW SERIES.

THE MEDICAL METEOROLOGY OF THE ASSOCIATION JOURNAL.

Our arrangements for carrying into effect the plan of daily meteorological observation and record, already described, are now completed; and the first page of observation is given in this day's number. The delay which has taken place has been occasioned by circumstances which require a little explanation.

In consequence of numerous applications addressed to Dr. MOFFAT for information respecting ozone, that gentleman had consigned the preparation of the ozone test-paper to Mr. JOHN COX of Peckham, with full instructions as to the mode of testing, etc. To this we alluded in a foot-note of our introductory article on medical meteorology (p. 748). Just at the time of the appearance of that article, Dr. Drew of Southampton issued a circular among meteorological observers, stating that he had lately had an interview with Dr. Schönbein of Bâle, the discoverer of ozone, and inviting British observers to make records on Dr. Schönbein's plan of notation, and transmit quarterly their ozone-tables to Dr. Schönbein. The *modes of notation* respectively adopted by Drs. Schönbein and Moffat differ considerably from each other; and it is hardly necessary to say that a want of uniformity of modes would be a serious disadvantage. Argument with regard to the respective merits of the two plans would probably be inconclusive, and would consume valuable time. The shortest way to obtain uniformity was by concession. With a modesty characteristic of the true devotee of science, Dr. Moffat most readily conceded the point, and has consented, with the other observers, to adopt Dr. Schönbein's method of notation. Deference to the claims of the discoverer, and a wish to facilitate practical co-operation, are the motives by which Dr. Moffat has been guided.*

Any discussion of the respective merits of the two plans of notation would now be out of place, as the question is practically settled; but we may be allowed to remark, that the experience of Dr. Moffat in observations on ozone, with special relation to diseases, is probably greater than that of any other observer, not excepting the discoverer. For a period of nearly six years, Dr. Moffat has unremittingly pursued his quiet course of daily, almost hourly, observations; thus giving an example of that patient and steady attention to phenomena which must ultimately lead to sound inductions, and to a knowledge of general laws. This course of observation was commenced almost immediately after the announcement of the discovery of ozone, in April 1848. Various formulæ for the preparation of the test-paper were tried, and a table of notation was formed. As early as 1848, at the annual meeting of the British Association for the Advancement of Science, held at Swansea, Dr. Moffat's observations on ozone were noticed, and speci-

mens of his test-paper were exhibited. An abstract of these proceedings was given in the *Athenæum*. A paper on "Medical and Agricultural Meteorology and Atmospheric Ozone" was read at the British Meteorological Society, on March 23rd and April 27th, 1852. Another paper on the same topics, but particularly treating of the atmospheric causes of the potato disease, was read in May last; and abstracts of these papers were published in the *Athenæum*.

This short statement of Dr. Moffat's services to science with regard to ozone observations seems necessary to enable our readers to appreciate fully (as we do), that gentleman's modesty in relinquishing, for the sake of uniformity, and for the interests of science, his own plan of notation, sanctioned as it has been by long experience and a considerable degree of success. We will conclude by expressing a hope that, shortly, the results of Dr. Moffat's extensive course of observations may be given to the readers of this Journal.

Having thus explained the causes of some little delay, we may advert with pleasure to the fact that an increased attention to meteorology is already observable. Not fewer than *sixty gentlemen*, residing in various parts of the country, are about commencing observations on ozone, in concert with the discoverer, Dr. Schönbein. Judging from the communications which we have received from numerous influential members of our Association, and from others eminent in science, our own scheme of medico-meteorological records has excited very great interest both at home and abroad.

A good beginning has been made this day; and now we have only to proceed in the proposed course of persevering and faithful record of observations, in order to arrive at important inductions. When daily meteorological changes and daily accessions of diseases and deaths shall have been faithfully noted, side by side, and for a considerable length of time, we shall have tables of data from which we may soundly generalize and make inductions. As we have said in our article of August 26th, relations between health and atmospheric changes, now only suspected or supposed, may, by industrious and strict observations, be brought out from the wide domain of hypothesis, and become established among the truths of science. That important hygienic precepts and sanitary reforms must sooner or later follow the labours upon which we are now entering, is too evident to require argument.

PRIVATE PRACTITIONERS AND THE NEW VACCINATION ACT.

No words are sufficiently strong to represent the alarm and disgust which the New Vaccination Act is creating among *private practitioners* throughout the kingdom. During the last week, we have received no end of letters on the subject. The union medical officers, however, as a body, seem to be satisfied, or at least they are quiet; and at this there need be no surprise, because none of them are losers, and some are pecuniarily gainers, though their vaccination services are still, in our opinion, greatly undervalued. Sir John

* Mr. John Cox, of 3, Rye Lane, Peckham, has received the agency of Schönbein's test-paper and ozonometer.

Pakington committed a great blunder when, in spite of the combined resistance of the medical press, and of the profession, he recklessly carried the act through Parliament, after Lord Palmerston had reassured the profession by stating, on the 1st of August, to Dr. Cormack, Dr. Fraser, and Dr. Semple—a deputation from the Metropolitan Counties Branch of our Association—"that the request for delay seemed very reasonable; that he thought that Sir John Pakington would be satisfied this session with having had the bill amended in Committee, and that it would be submitted to their deliberate consideration. Lord Palmerston stated that he had little doubt that the bill would, under all the circumstances of the case, be postponed until next session." As a statesman, we say that Sir John Pakington committed a *blunder*, because we believe that it was from good motives that he resolved to carry his measure in defiance of the united demand for delay on the part of the profession. However that may be, we have to deal with the present, and not with the past. An act of Parliament has been passed, which most wantonly places private medical practitioners at the mercy of poor-law guardians, and which, if not altered immediately, is certain—we speak from letters before us—to excite innumerable heartburnings between private practitioners and union surgeons, and seriously to interfere with the former in their relation to their patients among the working classes and tradespeople.

While we speak thus strongly against the part which Sir John Pakington has acted in this business, and express our determination to agitate for justice and fair dealing till they be conceded, we ought not to refrain from stating that unlooked for elements of good may yet be extracted from the working of this act, especially from the registration of all legally qualified practitioners, which has, within the last month, been carried out all over the kingdom by the Registrar-General.

Private practitioners must arise in one united mass, and give government no rest till they are protected in the discharge of their professional duties from the interference of poor-law guardians, to which they are cruelly exposed by the looseness of the new act. Our readers will find this referred to by a correspondent in a subsequent page, and it is the burden of many letters now before us. It is not, however, by letters and leaders that all can be achieved: united action is required. If the act be amended, it may yet produce good effects: but, in its present state, it is unworkable and unjust.

THE EAST SURREY CHOLERA SOCIETY.

WE last week promised to "speak of the formation of local cholera committees by members of the Association, and other respectable practitioners willing to co-operate with them". We are glad to find that the duty of establishing such committees of public health is generally recognized by the profession, and that in various places the medical men are co-operating with the clergy, not only in preparing to meet the pestilence, but also to secure data, while it is present, for subsequently preparing an accurate history of its progress and character. Whilst we strongly advise our professional friends to co-operate with the other members of society in carrying out these laudable schemes, we would urgently request them to bear in mind that, unless they *take the lead and act in concord* in their respective neighbourhoods, local cholera committees cannot possibly be of

the slightest use. We had intended to offer a few suggestions upon the manner in which these committees ought to be constituted, and the plan of working which they ought to adopt; but, as we find that the medical men of East Surrey are already organising themselves as a "Cholera Society", we defer enlarging upon the subject till we can lay before our readers the prospectus of this new institution, which, we have no doubt, will be judiciously and energetically conducted.

The following advertisement appears in the newspapers of this day. We reprint it here, in the hope that, if any of the numerous members of the Association resident in East Surrey have not already responded to the call, they may do so with as little delay as possible.

"EAST SURREY CHOLERA SOCIETY. It is proposed to form a Society for the observation of Cholera in East Surrey. Qualified Practitioners of Medicine willing to co-operate for this purpose are requested to communicate immediately with the Provisional Committee.

"B. W. RICHARDSON,

"Hon. Sec. to the Prov. Committee.

"Mortlake, October 5th, 1853."

We understand that, during next week, a preliminary meeting will be held at Richmond, Mortlake, or Croydon; and that, subsequently, local sub-committees will be formed for the different towns.

THE MARCH OF CHOLERA.

HITHERTO, the progress of the pestilence in 1853 corresponds remarkably with its career in 1831-32, and in 1845-49. Both of these epidemics began at the end of harvest, and continued for about fifteen months. The following passage from the Cholera Report is correct as regards the former epidemics, and is also applicable to the present:—

"The cholera in England kept pace in its development with the wheat plant, which took root in October, germinated in the winter, flowered in June, filled in July and August, was cut down by the reaper before the first week in September, when cholera was most rife; and would have been dead ripe in October and in November, when cholera ceased."

We may, therefore, expect the outbreak to subside now, and to burst forth again in spring, reaching its climax next August.

Newcastle has been very much more severely visited this year than any other town in the kingdom: in fact, the cases which have occurred in other places have been few in number. On the 3rd of October, it was officially reported that "the total number of deaths in Newcastle during the present outbreak had been 1,413. In the same period (*viz.*, the first thirty-three days), during the prevalence of epidemic cholera in 1831-32, the number of deaths was only 229.

We shall in due time give as complete a history of the epidemic as can be obtained; but from week to week we shall call attention only to its more striking features.

MEDICAL EDUCATION IN SCOTLAND AND IRELAND in our next number.

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ORIGINAL COMMUNICATIONS.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE ŒSOPHAGUS.

By C. E. REEVES, B.A., M.D.

SIMPLE ULCERATION.

SIMPLE ulceration of the Œsophagus presents the same character as that of the stomach. It generally commences in the mucous membrane; but it may arise in the submucous cellular tissue from abscess, from tubercular deposits, or from thickening occurring either above or below the point where it exists, from pressure by an enlarged Œsophageal gland, by tumours pressing on the Œsophagus, by aneurism, or by ossification of the rings of the trachea; from abscess of the lungs, or of the cellular tissue external to the canal; or in consequence of caries of the vertebra.

It is extremely rare to meet with more than one ulcer, unless where abscesses are immediately in contact: except when it arises from follicular inflammation; then the ulcers will be numerous. This last form of ulceration is only met with in acute Œsophagitis.

Simple ulcers vary in size and shape. When small, they are generally oval or round; but when large, they are more or less irregular. Their depth and appearance will vary; the mucous membrane may be only destroyed, the submucous cellular membrane participating or not; the muscular substance being laid bare, or in part or wholly destroyed, leaving only the external membrane; or the walls of the trachea may be more or less destroyed. It rarely happens that the edges of the ulcer present indications of chronic thickening. A soft and spongy or somewhat infiltrated condition, with a state of vascular congestion of the surrounding parts, is the most frequent. When perforation into a cavity has taken place, they usually present all the characters of perforated ulcer of the stomach; namely, as if punched out.

The point of the canal opposite the bifurcation of the trachea is the most frequent position, and Albers (*Atlas der Pathologischen Anatomie*), has collected the following cases from various sources to prove this.

	Cases.	On the bifurcation.		Other situations.
		M.	F.	
Keppelhout - -	2	2		
Sandfort - - -	1		1	
Kunze - - - -	1	1		
Wade - - - -	1	1		
Hecking - - -	1	1		
Albers - - - -	4	4		1 external to the bifurcation.
Heister - - - -	1			Position not named.
Baillie - - - -	1			Position not named.

In eighteen deaths which he has also collected, the following were the ages of the patients:—

Ages.	Males.	Females.
From 1 to 10 years	1	0
" 10 to 20 years	1	1
" 20 to 30 years	1	0
" 30 to 40 years	1	1
" 40 to 50 years	2	0
" 50 to 60 years	4	2
" 60 to 70 years	1	0
" 70 to 80 years	1	0

In two cases the age is not mentioned.

He remarks, that in three deaths before 20 years, two occurred in scrofulous subjects, and one in a tuberculous person.

The following cases have been collected by myself, some of those cited by Albers being unavoidably included:—

Age.	Sex.	Position in canal.	Terminations.
53	F.	Upper part.	Bronchitis, not caused by disease.
67	M.	Where it passed under aorta.	Exhaustion.
Adult.	M.	Opposite the bifurcation of trachea.	"
7	F.	Just above diaphragm.	Perforation into pleura.
7	F.	"	"
Adult.	M.	Just before passing to the right.	"
—	M.	Above the cardia.	"
—	M.	"	"
17	M.	Not named.	"
46	M.	Near centre.	Perforation of aorta.
51	M.	3 in. above cardia.	"
Aged.	F.	Not named.	"
Aged.	F.	Upper third.	Erosion of small vessels.
25	F.	Lower third.	Perforation of pericardium.
12	M.	"	Abscess of right lung.
58	M.	"	Ditto.
Adult.	M.	Not named.	Ditto.
54	M.	"	Ditto, and perforation of trachea.
50	M.	Middle third.	Ditto, ditto.
34	M.	Opposite fourth dorsal vertebra.	Ditto, and from it into pleura.
51	M.	Upper part.	Perforation of trachea.
55	M.	Above bifurcation of trachea.	Ditto: gastritis, and colonitis.
60	M.	Below bifurcation of trachea.	Abscess in walls, and perforation of trachea.
3	M.	Half an inch below bifurcation.	Perforation of right bronchus.
63	M.	"	"
12	—	Middle third.	Abscess in walls.
Adult.	F.	Opposite fifth or sixth dorsal vertebra.	Abscess in posterior wall, caries of vertebra.
52	F.	Just below bifurcation of trachea.	Abscess in walls.
60	M.	Upper third.	Abscess in post. walls.
60	F.	"	Destruction of thyroid gland; perforation of larynx.
—	F.	"	Narrowing below ulcer.
42	M.	"	"
36	F.	Lower third.	Narrowing above ulcer.
59	F.	Near cardia.	Two sinuses entering lungs.
Adult.	F.	Lower third.	Abscess below trachea, commencing with Œsophagus and trachea.

In these cases, thirty-five in number, thirteen occurred in females, and twenty one in males: in one case the sex was not named.

CASE I. ULCERATION OF THE SUPERIOR PART OF THE ŒSOPHAGUS: DEATH FROM BRONCHITIS. F., aged 53, had good health until within the last eight months, when, after an attack of inflammatory affection of the throat, she began to experience a sensation as if a hair was arrested there. This produced constant hawking, nearly every minute, of clear mucus. The sensation increased in extent within the last four months; and she then observed that the mucus became streaked with yellow matter, and occasionally with blood. From the commencement, she had suffered from severe heat and dryness in the throat, and a constant desire for cold drinks. On the appearance of the blood, she began to experience difficulty in swallowing, particularly anything hard, or any stimulants or sour substances. Insensibly she got into the habit of taking none but the blandest kinds of food. During the last ten weeks, the quantity of fluid

hawked up had increased; and she found that, if she did not clear the throat well, the first mouthful of fluid was very apt to be rejected. For the last three weeks, cough had begun to trouble her, and her voice had become hoarse; and with the cough, for the last two months, there had been a rather copious expectoration. On examining the throat, it was pale, and covered with mucus; but, on her making an effort to swallow, it was seen to be red below. The right side of the œsophagus, below the thyroid cartilage, in the vicinity of the upper part of the trachea, on pressing with the finger, was painful, and hawking and retching were produced, followed by the ejection of about a teaspoonful of muco-purulent matter and mucus. The thyroid on this side seemed enlarged. The use of a strong solution of nitrate of silver, applied by means of a piece of sponge attached to a wire, was had recourse to: this seemed of considerable benefit, with milk diet. But she was seized with bronchitis, then very fatal; and she sank in four or five days.

A small ulcer existed in the œsophagus, of the size of a sixpence: the parts around it were vascular, and slightly thickened; the mucous and submucous membranes were destroyed, and some of the muscular fibres exposed. The trachea was, opposite the ulcer, red and vascular to the extent of a half-crown, and covered with muco-purulent matter; the chordæ vocales were thickened; and the thyroid was enlarged.

CASE II. ULCERATION OF THE ŒSOPHAGUS OPPOSITE THE BIFURCATION OF THE TRACHEA.* A gentleman had suffered for some weeks from gradually increasing difficulty in swallowing. Fluids met with an obstruction about the middle of the œsophagus, which retained them about a minute, and then rejected them, mixed with viscid purulent matter. After this had occurred twice or three times, the passage became clear, and they then descended in small quantities into the stomach. He sank soon after.

An ulcer of a spongy character existed in the canal, opposite the bifurcation of the trachea. The canal was so narrowed by it, that, although it was contained in a kind of pouch, the anterior wall of which was formed by the mucous membrane of the trachea, fluids could scarcely pass.

CASE III. ULCERATION, WITH OSSIFICATION OF THE HEART. M., aged 67,† until four months ago, had good health; he then began to suffer pain in swallowing, just as the food was entering the stomach; and, before it had been there long, to vomit it up. He was now much worse; food did not remain down more than two minutes. The pain was constant, extending outwards under the left false ribs; the pulse 100, feeble, and intermittent. Broth clysters were thrown up. He gradually sank, and died seven months from the commencement of the illness.

A large ulcer, two inches long and one inch broad, existed in the œsophagus, at the point where it passed under the aorta. Fluid existed in both sides of the chest, and the stomach was slightly inflamed. The substance of the heart was ossified; the ossification followed the course of the septum, from the base to apex; in some places it was two inches broad, and of unequal thickness. The pericardium was thickened, and adhered to the heart.

Baillie, in page 51 of his *Morbid Anatomy*, illustrated with plates, gives a drawing of a simple ulcer of the œsophagus, but no history of the case.

Billard (*Maladies des Enfants*) mentions the case of a female infant, seven days old, which was brought to the infirmary on the 2nd of May, with the members hard and cedematous. It had green diarrhoea, and nearly constant vomiting of glairy matters, with frequent regurgitation after drinking. The heart's action was weak, and the skin cold. On the second day, it vomited green liquid, and died the same evening. An ulcer existed at the lower extremity of the œsophagus, six lines long and four broad. The mucous membrane was destroyed, and the base of the ulcer was formed of cellular tissue alone.

ULCERATION, WITH PERFORATION OF THE WALLS OF THE ŒSOPHAGUS INTO THE PLEURAL CAVITIES.

CASE I. A female, aged 7,* had been brought up almost entirely on bread since she was weaned. She had been suffering for the last day or two from constant retching, pain in the epigastric region, and thirst. The abdomen was hard; the tongue clean and red. Demulcents, with mint tea and liquor opii sedativus, were ordered; and by the next day the retching was less severe. By the advice of a medical man, who considered her to be labouring under disorder of the stomach, an emetic mixture was given, and I ceased to see her. She sank thirteen days afterwards.

One inch above the cardia, an ulcerated opening, with smooth edges, existed, communicating with the left pleural cavity. The mesenteric glands were enlarged, but all the other viscera were healthy.

CASE II. F., aged 7,‡ of good general health, was seized with diarrhoea, which lasted several days. After dinner one day, she was seized with vomiting. During the night, fever set in, with severe thirst and faintness; next day, nausea and convulsions were joined, followed by extreme feebleness, violet hue of face, dilated pupil, burning skin, with very difficult and painful deglutition. She died thirty-six hours from the commencement of the vomiting.

In the œsophagus, from an inch and a half to two inches above the diaphragm, was an oval aperture, four-fifths of an inch long, and two-fifths of an inch broad. The right side of the pleura was filled with a brown fluid, in which floated dark green flocculent shreds.

CASE III. A man§ much addicted to drink had a relapse from delirium tremens, and died suddenly in a convulsive fit. For a year before his death, he had suffered from dyspeptic symptoms, for which many remedies had been taken in vain. During the last two days, he had had several loose motions. On the morning of the day of his death, he awoke, after a good night, quite free from dyspepsia; at two P.M. he fell into a convulsive fit, and died three hours afterwards.

In the œsophagus, immediately before its transition to the right, an opening, about the size of a crown-piece, existed, with smooth edges, communicating with the pleural cavity, which contained from twelve to sixteen ounces of brown fluid. The pericardium adhered to the heart. The liver was large, grey, and soft. The arachnoid was thickened: both it and the ventricles contained some fluid.

Mr. T. W. King, under the head of Digestive Solution of the Œsophagus (*Guy's Hospital Reports*), has published the case of a man suffering from diabetes, who died in a convulsive fit. At the *post mortem* examination, one side of the œsophagus, just above the cardia, was found eroded. He does not state the aspect of the perforation, whether it presented the characters of an ulcerative one, or of one arising from digestive solution.

Dr. Copland has recorded a case of a young man of drunken habits, who died after suffering a few days from symptoms of affection of the œsophagus. A perforated opening was found near the cardia. I quote the case from memory. In his remarks on the subject, he considers the case of Mr. King to have been analogous.

CASE IV. A student, aged 17,§ of weak constitution and contracted chest, was seized with severe discharge of blood from the mouth, which, after placing his life in great danger, declined. Pus mixed with blood was then excreted. This again was followed by spitting of blood, which lasted two months. After this, copious and frequent discharges of blood from the nose came on. He had also a burning pain above the left orifice of the stomach, which resisted every remedy that was employed. Respiration was always difficult, and he could lie only on the right side. He sank gradually.

In the œsophagus, two inches above the diaphragm, an

* Watson, in Howship's Practical Observations on Indigestion, p. 8.

† Dr. Simmon, in vol. I of Medical Communications.

• Thilow, in Baldinger Neues Magazin für Aerzte, 1790.

† Guersant, Dict. des Sciences Médicales, Case rare, tome xix, p. 345.

‡ Heyfelder, in Med. Annalen, 1868.

§ Heister, in Acta Natur. Cur. Obs., clxxxiii.

aperture existed, an inch in diameter; and through this the fluid found in the chest must have made its way, as it smelt strongly of cordial water.

ULCERATION WITH PERFORATION OF THE AORTA, SMALL VESSELS, AND PERICARDIUM.

CASE I. PERFORATION OF THE AORTA. M., aged 46,* on the 30th of April, 1837, after indulging freely in beer, drank a considerable quantity of ardent spirits. The next morning, he felt generally indisposed, with pain in the breast and stomach. An emetic gave him considerable relief. On the 2nd of May, he complained of loss of appetite, severe thirst, and severe pain under the sternum, accompanied with slight cough. On the 6th, difficulty was experienced in swallowing; and, at a spot in the upper third of the canal, fluids seemed to regurgitate before descending into the stomach. Leeches and demulcents were ordered. The symptoms continued up to the 19th with little alteration, except an evening exacerbation, when a small quantity of blood was brought up. On the 20th, it amounted to four pounds. Blood was also passed by stool. He sank the same day.

In the œsophagus, near its centre, a small ulcer existed, surrounded by traces of inflammation. The ulcer was half a line long and three lines broad: it had penetrated the aorta at the point where the left carotid was given off.

CASE II. M., aged 51,† a week previously first complained of deep seated pain at the top of the sternum, shooting to the spine. One hour before being seen, he had had profuse hæmorrhage, of a bright frothy character, from the mouth. Acetate of lead was given internally, and ice was applied to the chest. The next morning, his pulse was 100, small; the respiratory murmur was deficient, with dulness on percussion in the upper part of the left lung. Half an hour after this, he had a return of the hæmorrhage, which proved fatal.

In the œsophagus, three inches above the cardia, a circular opening existed, three and a half inches in diameter, with smooth edges. Below it, an irregular erosion existed, involving partly the œsophagus, and partly the stomach. In the aorta, at the point where the descending part of the arch terminated, and corresponding with the first named ulcer, but somewhat higher, an irregular opening, with jagged edges, was found. The walls of the artery were much thinner at this point than at any other; and, half an inch lower down, an atheromatous patch existed, the centre of which was in a state of ossification. A free communication existed between the aorta and the œsophagus. The stomach was distended with a large coagulum of blood. The duodenum contained loose coagula, and the rest of the intestinal canal contained blood in a fluid state. In the upper part of the left lung, some crude tubercles existed.

Van Doveren mentions the case of an old woman, who died from discharge of arterial blood from the mouth. An ulcer was found in the œsophagus; it had penetrated the aorta. The stomach was distended with fluid blood.

In the following case, the hæmorrhage came from small vessels:—"An aged female", says Dr. Copland, in his *Dictionary* (art. *ŒSOPHAGUS*, page 912), "had been under my care for years, for disordered digestion, accompanied with psoriasis. A few days before death, she was attacked with symptoms of œsophagitis and pharyngitis, attended by a constant hacking cough, and great depression of strength. On the eighth or ninth day of the attack, sudden and profuse hæmorrhage from the throat occurred, without any effort: death followed. The stomach contained a pint and a half of blood, partly fluid, and partly coagulated; and the mucous membrane was softened. The pharynx was of a dark colour, with purple coloured patches. In the upper third of the œsophagus, towards its anterior, on the left side, an irregular ulcer existed; it had destroyed the mucous and submucous coats, and in some parts the muscular. The parts around the ulcer were soft, tumid, and of

a purple hue. The bottom of the ulcer was red and vascular. Hæmorrhage had occurred from erosion of the small vessels."

CASE III. ULCERATION OF THE ŒSOPHAGUS PERFORATING THE PERICARDIUM. F., aged 25,* a servant, entered St. Mary's Hospital, under Dr. Chambers, January 23rd, 1852. Her face was anxious and pale; her conformation good; yet she was weak and reduced. She menstruated regularly. Three months back, she began to suffer from nausea, and to vomit frequently after meals. At the end of a month, difficulty in swallowing manifested itself, which had increased, with an aching, digging pain between the shoulders, and occasionally pain in the epigastrium. A piece of dry bread, on being swallowed, met with an obstruction near the top of the sternum. The pulse was 80; the tongue slightly furred; the skin cool; the bowels and urine natural. The back of the pharynx was slightly abraded. The matters vomited were frothy and acid. The respiratory murmur was deficient, though loud and coarse. In this state she continued up to the 2nd of March, when she had constant cough. The next morning, she was found pulseless, with livid lips and face. She died soon afterwards.

The pericardium was found distended; and, on puncturing it, air made its escape, followed by a thin, yellow, sour-smelling fluid. The œsophagus, from the bifurcation of the trachea to within half an inch of the diaphragm, was, in its whole circumference, the seat of ulceration. An opening communicated with the pericardium; and a little lower down was another, which opened into a small ulcerated cavity, at the root of the lung. The stomach was placed in a vertical direction; its pyloric extremity being situated an inch below the superior spinous process of the ilium.

ULCERATION OF THE ŒSOPHAGUS TAKING PLACE FROM WITHOUT.

CASE I. FIBROUS TUMOUR ATTACHED TO THE ARCH OF THE AORTA.† M., aged 68, robust, an agricultural labourer, had suffered for three months from difficulty in swallowing, with severe pain, which compelled him to return that which he had taken. This difficulty was greater with solids than with fluids. He had a constant sense of constriction at the upper third of the sternum; here the obstruction to swallowing existed, and here pain was excited. He had no fever nor cough. By a milk diet, he was much restored. At the expiration of two months, he again returned, with hectic, cough, and purulent expectoration. For some days, the deglutition had been quite easy. He sank in the course of a few days.

Adhering to the arch of the aorta, a fibrous tumour, impregnated with pus, was found, which pressed on the œsophagus. The œsophagus, for two fingers' breadth at this point, was quite destroyed, except a very thin layer. The lungs were filled with grumous and ichorous matter.

CASE II. ENLARGEMENT OF THE THYROID GLAND: ULCER: PERFORATION OF THE TRACHEA. F., aged 51,‡ from her youth had difficulty in deglutition, from some obstruction in the neck, rendering the introduction of an instrument necessary at times. The difficulty now became so great that fluids and sopped bread only could be made to descend. Solids did not produce pain; their descent was simply impossible. The thyroid, and the glands of the right side of the neck, were swollen and hard. Remedial measures had no influence on the affection. Low fever set in, accompanied with œdema. Viscid fluid flowed constantly from the mouth. A troublesome cough manifested itself; it was first dry, then with sanguine foetid expectoration, and accompanied with great anxiety in the chest. At last, fluids, when taken, excited severe coughing, and she soon sank.

The glands on the right side of the neck were hard, and of the size of walnuts, closely adhering to the internal

* Horning, in *Esterreich. Med. Jahrbucher*, 1845.

† Flower, case reported to the *Medico-Chir. Soc.*, June 7th, 1853.

* Transactions of the Pathological Society of London. Session 1851-52.

† Girelli, cited in *Annali Universali di Medicina*, 1833.

‡ Sandifort, *Mus. Anatomica*, lib. i, tab. cvi, fig. 3.

jugular vein. On section, they were found to contain a soft granular substance. The thyroid was hard and tuberculated, and at one point it had pressed on the œsophagus, and narrowed its diameter. Above this point, the œsophagus was considerably dilated; it was livid in colour, and its tissue was soft and spongy. On its being cut, foetid sanguinous fluid issued, like that expectorated during life. Several ulcers existed; and at the lower part of the cricoid cartilage was one which communicated with the trachea.

ABSCESSSES OF THE OESOPHAGUS RESULTING FROM OR ENDING IN ULCERATION.

CASE I. M., aged 66,* of robust health, contracted a severe cold, with inflammation of the throat. Deglutition became difficult, and soon impossible. This state was attended with fever. When seen seventeen days from the commencement of the attack, there was but slight redness of the throat. The lower part of the pharynx, although not swollen, was very tender on pressure. The food was rejected, mixed with much slimy mucus. Bleeding, leeches, and calomel, produced no favourable effect. A little pus mixed with blood was hawked up; but this gave no relief to the symptoms. He began to cough up a large quantity of foetid pus, and sank twenty-four days from the commencement of the attack.

The œsophagus was found to contain much foetid pus, which oozed through an ulcerated opening, communicating with an abscess behind it and the lower part of the pharynx.

CASE II. A lady,† while suckling her first child, began to complain of obtuse pain between the shoulders and in the præcordia, and at last of cardialgia, with pain of a like character in swallowing. At times she rejected her food, with viscid mucus, the moment it reached the point where the pain existed. She was advised to discontinue suckling, and take bland emetics and purgatives. By these measures, much benefit was produced; so that she was enabled to get down a little very finely chopped meat. The improvement, however, was only temporary. Various other remedies were had recourse to, but to no purpose. She had at last vomiting of thin blood with the food. Slow fever followed, and soon afterwards she died.

Opposite the fifth or sixth dorsal vertebra, an abscess existed. The œsophagus was ulcerated, and the posterior part of the lung was sphacelated. The liver was soft, and the pelvis of the kidney contained pus.

CASE III. A man,‡ whose health until February of 1849 had been good, began to feel pain in the middle of the sternum on swallowing. This increased, and very soon became constant; deglutition of solids became impossible, and that of fluids was attended with more and more difficulty, and at last they were quite arrested. Some weeks after this, while making an effort to swallow some fluid, some pus and blood was brought up: this occurred again, and the deglutition of fluids became possible. He went on improving, and was soon able to swallow solids. In September, in consequence of taking cold, the difficulty in swallowing returned; and he had a sensation as if a sore spot existed in the œsophagus. The appetite failed, and he lost both flesh and strength. The swallowing of fluids soon became difficult; and, by the 28th of October, the attempt to swallow the smallest quantity excited sudden and severe cough. He sank on the 3rd of November.

The glands of the œsophagus were hard and enlarged. In the canal, an inch below the division of the trachea, an opening, of the size of a fourpenny piece, existed, which communicated with the left bronchus. The pleura on this side was adherent.

CASE IV. ABSCESS IN THE WALLS OF THE OESOPHAGUS, FOLLOWED BY ULCERATION. A child, between 12 and 13,§ whose health had been previously good, was taken in the

commencement of December 1807 with a severe cough, and great difficulty of breathing on the slightest exertion. To these, fever of an irregular character was soon added. In the beginning of February, the cough was constant, and the fever doubled in intensity. On the 3rd, the oppression and suffocative sensation were very severe; the pulse was very rapid; the expectoration glairy and transparent. No trace of opacity was observed until the end of the month, when it became opaque and purulent. The epigastrium was rather tender, and the abdomen often voluminous. The emaciation was severe and increasing; the abdomen became hard, and the fever constant; and, for three days before death, she vomited incessantly black matter, like that from cancer of the stomach. She died on the 6th of March.

The œsophagus contained black fluid; on its posterior and lateral aspects, it was pierced by two round ulcerated openings; these communicated with a sac, the outer wall of which was formed by the external covering of the œsophagus. This sac adhered to the inferior, posterior, and interval of the right lung, and below rested on the liver. It still contained some of the fluid like that in the œsophagus, and which had been vomited. The lung of this side was small, and contained several small tubercles. Several of the bronchial glands, below the bifurcation of the trachea, were of the size of pigeons' eggs, but not in a state of supuration. The great omentum was covered with tubercles.

CASE V. ULCER FOLLOWED BY ABSCESS IN THE WALLS OF THE OESOPHAGUS. A F., aged 52,* delicate, became in the winter of 1782 much troubled with dyspepsia, and when seen in the following February (1783), she had nausea, with frequent retching and difficulty in swallowing; by emetics and purging, considerable relief. On the 28th, the difficulty of swallowing returned with a sense of suffocative constriction in the throat; this was somewhat relieved by foetid julep. By the 26th of March, the pain and difficulty in swallowing was very severe, all taken being returned. Two ounces of quicksilver, swallowed, seemed to clear the passage for a short time. The same night she had a rigor, and she retched all food even after it had entered the stomach; the pulse was small and quick. If she took a large quantity of fluid, it seemed to make its way by its weight into the stomach, but a small quantity was rejected before reaching it. Porter agreed better with her than anything else. She now became better for some weeks; but on the 25th of April she had another attack. After swallowing the same amount of mercury as before, with other remedies, she again passed a month of comparative ease. At the end of this time she had another attack, followed by profuse discharge of saliva from the mouth, to the amount of a pint and a half in twenty-four hours. She became much reduced, and had constant pain in the side; her stools contained at times a slimy matter, after the discharge of which, the flow of saliva from the mouth was much lessened. Some calomel was given without any increase of saliva. In July, rigors appeared, and the pain in side increased much in severity; the pulse sank, and she vomited all food; constant fever with severe thirst were also present. Broth clysters were given; she at last sank into a state of stupor, and died at the end of twenty-four hours.

The *post mortem* examination was made by John Hunter. In the walls of the œsophagus, below the division of the trachea, an abscess existed, communicating with the canal, which was ulcerated to the extent of four inches. The stomach was contracted, and contained some green fluid like bile.

ULCERATION OF THE OESOPHAGUS WITH PERFORATION OF THE TRACHEA, BRONCHI, OR AFFECTIONS OF THE LUNGS.

CASE I. ULCER OF THE OESOPHAGUS: PERFORATION OF THE TRACHEA: ABSCESS IN RIGHT LUNG. M., aged 50,† entered St. Thomas's Hospital in February 1781. He had been suffering for a few days from difficulty in swallowing: the

* Berlin Med. Zeitung, 1842.

† Zelsner, *Hæmus (Œsophagi Morbus)*. In Haller's *Disput. ad Morb.*, lib. vii.

‡ Berlin Medicinische Zeitung, 1840.

§ Halle, *Bibliothèque Médicale*, tome xx.

* Garthshore, *Medical Communications*, vol. i.

† Keir, in *Medical Communications*, vol. i.

food met with some obstruction near the middle of the sternum, and in less than a minute was rejected; and with fluids, severe cough was excited. The breathing was difficult, and he had had cough for some months duration, with copious expectoration of pus; the breath was foetid; he had frequent shivering fits; the pulse was strong and hard; he was bled and blistered, but he sank ten days from the commencement of the difficulty in swallowing.

In the upper part of the right lung a large cavity existed: it had destroyed the substance of the œsophagus, from the first to the third or fourth dorsal vertebra. An opening existed between the œsophagus and trachea, half an inch in size. The œsophagus, stomach, and trachea all contained pus.

CASE II. ULCERATION OF THE ŒSOPHAGUS COMMUNICATING WITH AN ABSCESS IN THE RIGHT LUNG. M., aged 58,* much exposed to sudden variations of temperature, and in the habit of drinking largely of spirits, although not to intoxication. Until he reached the age of 55 his health was good; he then became subject to a troublesome cough with mucous expectoration tinged with blood, and the pulse was full and hard. Blood was taken; cough mixture was given, and he was ordered to abstain from drink. Pain in the præcordia soon after came on when swallowing solid food, and increased in severity; the cough also returned. Various remedies were given, and at last mercury; this was followed by great benefit, and he soon was able to swallow with ease, and for a year he continued well. The cough then returned, attended with a sense of uneasiness and pain in the right side; the pulse was full and hard; the bowels constipated; the appetite gone. Leeches and laxatives were used; the last produced much relief. Difficult deglutition soon manifested itself; the food was rejected mixed with mucus, and even fluids soon ceased to pass. The exhibition of mercury was now unattended with any benefit, and he gradually sank.

The œsophagus, in the lower part, for four fingers breadth in extent, was hardened and in close connexion with the right lung; in the upper part it was much diluted and presented a great number of large mucous glands. The thickened part presented an opening communicating with a cavity in the right lung, which would admit the passage of the little finger.

CASE III. ULCERATION OF THE ŒSOPHAGUS WITH PERFORATION COMMUNICATING WITH A CAVITY IN THE RIGHT LUNG. A man† was severely squeezed in the neck by one of his comrades. For some days after, he had slight difficulty in swallowing; this gradually increased, and at the end of four months solids would not descend: at this time he took cold, and his voice became affected. On his admission into the hospital, fluids only would pass, and these only with very great precautions, otherwise cough was excited and they were returned. A bougie was arrested opposite the first ring of the trachea. He had frequent cough, with a copious expectoration, like the little round masses met with in chronic laryngitis. The respiratory sounds were feeble on both sides, yet no positive disease could be said to exist. He had no fever; his appetite was good; he had not lost much flesh, although his strength was reduced. Milk was his sole nourishment. A slight febrile indication soon afterwards set in; he had constant headache, the voice became nearly extinct, and the emaciation increased. Three days before death he had delirium; the fever doubled, with great agitation; the next day the agitation was less, but the delirium continued; the pulse was soft and compressible; in the evening it became small and intermittent, and the face pinched, and he sank the next morning at 5 A.M.

Serum existed under the arachnoid, but none in the ventricles; the veins of the surface were gorged, and the substance of the brain was soft but not discoloured. The œsophagus was narrowed so as scarcely to admit a female catheter. The obstruction was two and a third inches in length, and formed of soft fungoid-like vegetations; the mucous membrane was destroyed. In the centre of this ulcer two openings existed

of nearly the same size, capable of admitting a female catheter, separated from each other by a thin layer of membrane. These openings ended in a canal, large at its commencement, which ended in an excavation the size of a hen's egg in the upper part of right lung, and which contained a little purulent fluid. This cavity was not lined by a false membrane; the surrounding tissue was infiltrated, and several small bronchial tubes opened into it. The right lung was adherent and increased in density from capillary bronchitis, the left with sanguinous infiltration, in the superior lobe: in the inferior, three black cysts of the size of nuts existed. The larynx and trachea presented no change. The liver was gorged, and contained five or six pea-like, grey bodies. The kidneys were also gorged.

CASE IV. ULCERATION OF THE ŒSOPHAGUS, PERFORATION OF TRACHEA, AND ABSCESS IN THE RIGHT LUNG. M., aged 54;* health good. In December 1821, his appetite began to fail; he had flatulence and heartburn, with pain and uneasiness after eating, accompanied with spitting of frothy mucus. In the following January, he experienced a difficulty near the stomach in swallowing food. This symptom gave him very little trouble until May, when it became severe; some kinds of food exciting it more than others, large quantities of fluid being necessary to make it descend. Ropy mucus was also discharged by retching from the gullet. He began now to suffer from an uneasy sensation in the upper part of the right side of the chest, extending into the axilla. A probang passed with ease into the stomach, but it was followed by a great increase of pain in the præcordia and in the chest. By the 24th of July, he had lost much flesh, and his pulse had become quick. On the 1st of August, after more than usual fatigue from business, he had in the night a febrile attack, with severe pain in the upper part of the right side of the chest, shooting to the back. No cough. Pulse 100, full. He was bled and blistered, and had antiphlogistic diet. On the 6th, cough manifested itself, particularly on taking food, but seldom at any other time, except at night, when it was very troublesome, and attended with a little frothy mucous expectoration. He seemed, up to the 24th, to make some slight improvement; but on that day he had a severe shivering fit, followed by fever, and great increase of the pain in the chest. Deglutition was at times very difficult, and the cough most distressing. On the 26th, nothing would pass; cough very severe; pulse 112, strong. An elastic tube was introduced, but it would not pass lower than the upper part of the sternum. A catheter descended somewhat lower. Some beef-tea was injected through it, but it produced violent cough and threatening suffocation. In the night, the power of swallowing returned, and he took without difficulty a pint of chocolate. The cough continued very troublesome on taking liquids, and most offensive purulent matter was expectorated. On the 28th, he was sometimes able to swallow, at others not; little of whatever was taken reaching the stomach. In the evening, he discharged a portion of slough by expectoration. Pulse 96; skin hot and dry. There was but little alteration in the symptoms up to the 1st of September, when he sank. He had lost flesh; his tongue had become dry; the purulent expectoration had diminished, but he passed it in his motions; but the retching and sickness continued very severe, yet nothing was brought up. During the last twenty-four hours of life, he had been able to swallow; and even brandy and water could be taken without exciting cough.

The right lung, in its upper and posterior part, contained a large abscess; the œsophagus and trachea forming a portion of its walls. The œsophagus was destroyed in one-half of its circumference, to the extent of four inches in length. An opening existed in the trachea, from half an inch above the bifurcation to the same distance below it, on the right bronchus. The tissue of the lung was condensed around the abscess. In the œsophagus, a line of tubercles, of the size of split peas, existed under the mucous membrane; below this, near the cardia, a large

* Blenlaud, *Icones Anat. Pathologicae*.

† Vigla, in *Archives Générales de Médecine*, 1846.

* Hay, in *Transact. of Medico-Chir. Society of Edin.*, 1834.

tubercle was situated on the external part of the canal. At the point of junction of the stomach and œsophagus, an irregular mass of hardened glands existed, which compressed the opening, yet admitted the passage of the little finger with ease. The other viscera were healthy. During the latter period of life, he was nourished by beef-tea enemata.

CASE V. ULCERS OF THE ŒSOPHAGUS, COMMUNICATING WITH CAVITIES IN THE RIGHT LUNG. F., aged 12,* entered the Hôpital des Enfants, September 12th, 1840. She had had scarlet-fever in July; the eruption disappeared, yet the fever increased, and was attended with pain in the right breast. She soon began to expectorate purulent foetid matter. She had foetid breath, with vomiting and retching, and great emaciation. To these symptoms, after her admission, diarrhœa was joined. The stethoscope gave indications of a cavity in the right lung. On the 16th, after coughing, she brought up ten drachms of venous spumous blood, with a gangrenous smell: the same occurred on the following day. She sank on the 21st, after suffering from severe pain in the right side of the chest.

In the median line of the œsophagus, near its centre, four ulcerated perforations existed; the superior one was longest: they communicated with a cavity in the right lung, capable of holding a small apple; this again communicated with a second, of the size of a plum, in the superior part of the lung; and this one communicated with another half its size. The first cavity was lined with a false membrane, and both it and the second contained flakes of grey pulmonary substance, with foetid grumous fluid, of a gangrenous odour. Into the second a bronchial tube opened; it, as also did the smaller cavity, contained some dark clots of blood, mixed with caseous matter. Other cavities, but isolated, existed, containing dark gangrenous diffuent matter, and, in other parts, tuberculous infiltration. The bronchial glands were large and black.

CASE VI. ULCERATION OF THE ŒSOPHAGUS, COMMUNICATING WITH ABSCESS IN THE RIGHT LUNG, WITH PERFORATION OF THE PLEURA. M., aged 34,† had good health up to January 1833, when he began to vomit his food a quarter of an hour after it had been taken, if it consisted of solids: this was accompanied by pain in the upper part of the epigastrium. Some pills, which he obtained from a medical man, so far relieved him, that the affection ceased to trouble him, except when he took solids. On the 27th of June, he entered the Klinik at Bonn. His aspect was somewhat yellow and emaciated; tongue white, and mouth overflowing with mucus; and he complained of a kind of sticking pain in the upper part of the epigastrium, extending to the sides. Respiration was noisy in the subscapular region, with dullness on percussion; but he had no cough. Swallowing was followed by constriction in the breast, and a sensation as if some obstacle existed in the dorsal region to the descent of the morsel, which did not make its way into the stomach until eructations and discharge of water had taken place. A probang was introduced to the extent of nine inches, and, on being withdrawn, the sponge was found covered with viscid mucus. Hunger was very great; the thirst moderate; the bowels constipated; and the urine yellow with sediment. The motions obtained by laxatives were black. The pulse and skin were natural. Leeches, belladonna, clysters, and milk diet were used. On the 30th, he complained of severe pain in the right breast. On the 14th of July, the belladonna affected his throat and eyes; and on the 17th he passed a bad night, from a troublesome cough. Dullness on percussion, and deficiency of respiration, on the right side of the chest were observed. On the 25th, the pain had not increased, but it had extended more towards the sternum. On the 7th of August, a sound was introduced, and produced severe pain in the vicinity of the cardiac orifice of the stomach; and the cough now excited

retching. On the 12th, the pain and cough were very severe; and on the 14th he had diarrhœa, with pain in the upper part of the abdomen, increased by pressure. The urine was scanty. On the 15th, the cough was worse; the urine scanty, and dark red; the pulse 100, hard and small; the pain in the chest was severe. Pleuritic symptoms being evident, six ounces of blood were taken by cupping, but without relief. On the 17th, he had muco-purulent expectoration, frequent retching, and severe dyspnœa. Pulse 120, small. On the 21st, the pain and dyspnœa were much increased, with ægophony in the right mammary region. Death took place on the 25th.

The œsophagus was ulcerated from opposite the fourth dorsal vertebra to near the cardiac orifice of the stomach. In its upper part, an opening, two inches in diameter, communicated with a cavity in the lower lobe of the right lung, six inches long and four broad, containing black foetid fluid: this again opened into the right pleura. The pleura was adherent, and contained about four pounds of yellowish white fluid, of a sour foetid smell, with oil-globules and pieces of fat floating in it. The upper lobe was infiltrated with red serum; the lower part of the middle lobe crepitant, but would not float in water; the lower, in the vicinity of the cavity, was soft and infiltrated; it also contained a small cavity, of the size of a nut, filled with yellow fluid. The pericardium contained five or six ounces of fluid; the heart was normal. The cardiac opening of the stomach was quite free; but the mucous membrane was swollen, with some traces of ulceration. The liver was very large, extending to the left side.

CASE VII. M., aged 12, of a somewhat scrofulous habit, while playing with some schoolfellows, swallowed a piece of slate-pencil, about half the length of the finger, with a piece of thin string attached to its centre. Some efforts were made to extract it by himself; but these not succeeding, they took him to a surgeon, who, after making an attempt to withdraw it, pushed it with an instrument into the stomach. Severe pain was excited, and some retching of mucus and blood took place. He ate his dinner without much difficulty, after the first two or three mouthfuls; and he had a slight sensation of soreness, which, for the next seven or eight days, continued much in the same state. The swallowing was rather better; but he had great difficulty in swallowing dry bread, which seemed to meet with some obstruction near the lower part of the breast-bone: it was deep seated, and attended with a kind of agonizing sensation in the spine. In this state, the first fifteen days after the accident were passed. He then began to complain of a pain in the right side of the chest, and to suffer from slight feverishness, accompanied by an unusual amount of thirst. The pain in swallowing also increased, and he had also slight nausea, with a tendency to retch. He now fell under my notice. There was absence of respiratory murmur at the point where pain was complained of; but this was more distinct posteriorly than anteriorly; and here, both above and below the point, some crepitation could be detected. He had also slight cough, with dark expectoration. The pulse was quick and small. Leeches were applied to the seat of pain; milk diet, and small doses of calomel and opium were ordered. For a week after, he seemed to improve slightly; the pain was rather less; the cough was not quite so severe; and the fever was somewhat diminished; but the thirst continued. At the end of this time, he had a distinct rigor one evening; and, four days after, he began to expectorate foetid purulent matter. This increased in quantity; the cough became more distressing; and the voice was affected. He had now constant sense of chilliness; his cheeks were livid, his eyes sunken and brilliant. A cavity was detected in the right lung. When pus appeared, the pain in swallowing increased; and fluid, if taken too rapidly, excited retching and vomiting. A constant sense of distressing constriction existed in the upper part of the throat. Ten days before death, after drinking a large teacupful of fluid to allay the thirst, severe vomiting was excited, and foetid pus was brought up. From this moment, fluids taken seemed to pass partly into the chest, and partly into the stomach;

* Bordet, Sur la Gangrène Pulmonaire, Arch. Gén. de Méd., 1843.

† Hecking, Diss. de l'œrfor. Œs. Ulcerat. Bonnæ, 1834, in Albers' Atlas der Pathologischen Anatomie.

but they did not immediately excite cough. His bowels became relaxed; his stomach very irritable; and he had tenderness in the epigastric region; and he died.

In the lower third of the œsophagus, an ulcer, three-quarters of an inch in length, and half an inch broad, existed. The mucous membrane, to the extent of three-quarters of an inch in circumference, was dark, and easily raised; the sub-mucous and muscular tissues were softened. From the centre of the ulcer, an opening, which would just admit the point of the little finger, passed into an abscess the size of a moderate sized orange, the walls of which, formed by the substance of the lung, were soft, and infiltrated with pus. The mucous membrane of the lower part of the œsophagus was vascular and swollen; that of the stomach was the same; and that of the small and large intestines was highly vascular in parts. In the liver, several small specks of pus existed, surrounded by vascularity. The kidneys were red and vascular; in the pelvis of the right one, a trace of pus existed. In the upper lobe of the right lung, some tubercles existed, in a softened state; the left lung was highly congested; and here and there some red nodules existed, varying in size from a pea to a walnut, as if from deposit of pus.

CASE VIII. ULCERATION OF THE ŒSOPHAGUS: PERFORATION OF THE TRACHEA: GASTRITIS, AND COLONITIS. M., aged 55,* entered the hospital in June. Some weeks before, when tipsy, he had fallen against some sharp body. This was followed by pain in the upper part of the right side of the thorax, and difficulty in swallowing solids. Leeches and blisters removed the pain, but the difficulty in swallowing remained. A small tube was passed down into the stomach with some difficulty, from meeting with some resistance in the upper part of the sternum. On withdrawal, its orifice was found filled with puriform mucus mixed with blood. He left the hospital, and during the next two months the dysphagia increased, and he was reduced to live on milk with bread reduced to pulp. At the end of August he re-entered. Two attempts were made to pass a catheter, but without success; but a third succeeded. Some solution of nitrate of silver was introduced on a sponge attached to a piece of wire. Cough soon came on, with hawking up of glairy pus mixed with blood. On the 25th of November, in a fit of coughing, he brought up what was supposed to be a piece of slough; and from this moment no fluid could be introduced. An attempt was made to pass a catheter, but it failed. On injecting a little water through it into the gullet, it was rejected, and severe cough was excited, with expectoration of bloody mucus; and any attempt to swallow was followed with the same results. On the 28th, a tube was passed with much difficulty twice: after this it was passed frequently. Symptoms of gastritis set in, and he sank on the 14th of December. The œsophagus, above the bifurcation of the trachea, was ulcerated and thickened to the extent of four inches, and an opening the size of a shilling existed midway between the larynx and the lower part of the trachea. Below this point, the canal was red. The mucous membrane of the stomach and the colon, as low as the sigmoid flexure, was inflamed. The mucous membrane of the trachea, both above and below the opening, was highly vascular, and covered with purulent mucus. Some traces of recent inflammation existed in the right pleura.

CASE IX. ULCER OF THE ŒSOPHAGUS, COMMUNICATING WITH ABSCESS, AND WITH THE TRACHEA. M., aged 60,† a baker, for the last ten years much addicted to spirits, became in the course of August 1833 subject to an attack of catarrh, which was followed by difficulty in swallowing. Food seemed to meet with some obstruction, and this particularly if he swallowed it without being well masticated; considerable pain was also produced. On the 1st of September, the food began to be returned, mixed with a large quantity of mucus, and he was much troubled with a

dry cough; particularly on swallowing fluids, which, however, met with no difficulty or obstruction. The bowels were constipated; and the pulse was varying, at times full, at others small. Tartar emetic was applied externally, and mercury given internally, much relief following. In the middle of October, the pain and cough became much worse, from a piece of potato of the size of a pea being arrested. At the end of twenty-four hours it was got rid of; and by the end of the month he was enabled to swallow without much difficulty. But on the 9th of November the difficulty in swallowing returned; severe cough set in some moments after food had been swallowed; and the food was also returned mixed with slimy mucus. The next day he had mucous expectoration with the cough; and towards the end of the month, he never coughed without bringing up particles of food taken some time before. His health began to sink. Three days before death, which took place on the 20th of December, all he attempted to swallow was returned with severe coughing.

In the œsophagus an ulcer existed, three inches long and two inches broad: in the centre of it was an opening capable of admitting a bean, communicating with an abscess, which opened also into the trachea by two openings of about the size of beans; the superior one an inch above the bifurcation, the other four lines below, in the right bronchus.

CASE X. ULCERATION OF THE ŒSOPHAGUS, WITH PERFORATION OF THE RIGHT BRONCHUS. M., aged 3,* entered the Hôpital des Enfants, May 22, 1823. He had suffered from cough for six months. Of late it had been of a convulsive character, but was now somewhat better: he had also been subject to diarrhœa, and was now suffering from it. He had sweats, anorexia, and great difficulty in swallowing fluids, from its producing severe cough. There was mucous râle in the post part on the right side of the thorax, and the voice was hoarse. The diarrhœa again stopped; but it returned again on the 25th, with great increase of the cough, severe thirst, and death.

In the œsophagus, a quarter of an inch below the bifurcation of the trachea, an ulcerated opening two lines in diameter existed, communicating with the right bronchus.

CASE XI. ULCERATION OF THE ŒSOPHAGUS, WITH PERFORATION OF THE RIGHT BRONCHUS. M., aged 63,† since youth addicted to drink, swallowed in a fit of drunkenness some pieces of glass. Some months after, he began to complain of a pain in the breast, which continued for some time, and then became more severe, and of a burning character, attended with difficulty in swallowing, from the food meeting with some obstruction near the ensiform cartilage. Four months later, he began to suffer from cough; and afterwards the swallowing of fluids or solids excited it, and they were returned mixed with slimy mucus. The breath was unaffected. He died in one of the fits of coughing.

In the œsophagus, an ulcer the size of a five-shilling piece existed; and from it an opening of the size of a four-penny piece passed to the right bronchus.

ULCERATION DEPENDING ON CHRONIC INFLAMMATION OF THE CANAL.

CASE I. CHRONIC INFLAMMATION: ULCER: DESTRUCTION OF THE THYROID GLAND, AND PERFORATION OF THE LARYNX. A female, aged 60,‡ from a cold, became subject to difficulty in swallowing, which remained much in the same state for fifteen months; then pain occurred, with hawking up of a viscid substance. In spite of treatment, the disease gained ground; her voice became sharp and whistling, and the expectoration tinged with blood; at last it was only with the greatest difficulty and pain, and in a certain position, that fluids could be made to descend. The pain was referred to a spot a little below the thyroid cartilage. The fluid expectorated consisted first of altered blood with a peculiar foetid smell, and then of pure pus. She had constant burning thirst, and great emaciation: low fever at last set in, accompanied with delirium, which was followed by death.

* Lindesay, Transactions of the Medical and Physical Society of Calcutta, vol. viii.

† Hecking, Diss. de Perfor. Œs. Ulcerat., Bonnæ, 1834, in Albers' Atlas der Pathologischen Anatomie.

* Leblond, Thèse de Paris, 1822. No. 196.

† Albers, Atlas der Pathologischen Anatomie.

‡ Taranget, Jour. de Méd., Chir., et Pharmacie, 1786.

The œsophagus was in a state of gangrene from the commencement of the trachea downwards, for four fingers' breadth; below this the canal was considerably narrowed from chronic inflammation. The thyroid gland was quite destroyed; and communications existed between the pharynx and larynx.

CASE II. CHRONIC INFLAMMATION: ULCER. A female* had for the last ten years of life suffered from difficulty in swallowing, and very frequently during the last two years food was very apt to lodge, and could only be got rid of by retching. In September 1744 she was unable to swallow solids, and soon afterwards had the same difficulty with liquids. The throat seemed paler than usual: she had constant dryness, but no fixed pain, discharge from the mouth, or fœtor of breath. For six weeks before her death she was nourished entirely by broth clysters.

The upper part of the œsophagus, for three inches of its length, was converted into a tough brown viscid substance: below this point the canal was narrowed. The thyroid gland was enlarged.

CASE III. CHRONIC INFLAMMATION: ULCERATION BELOW THE STRICTURE. F., aged 36,† within twelve months before her death began to suffer from dysphagia, which gradually increased. She took mercury without benefit. When seen, ten months from the commencement of the affection, no solids would pass; fluids passed only with great difficulty and severe pain, which extended to the Eustachian tubes. An attempt was made to pass a bougie, but it was arrested opposite the cricoid cartilage, a smaller one was then tried and passed, but the irritation produced was so great, that it could not be introduced again. Great difficulty was experienced in hawking up the phlegm, and at last this became impossible. For six days before her death, nothing entered the stomach.

Behind the cricoid cartilage a contraction of the canal existed, nearly obliterating it; half an inch below, two spots of ulceration existed. The thyroid and lymphatic glands were enlarged: this had taken place on the exhibition of the mercury.

CASE IV. CONGENITAL DYSPHAGIA: CHRONIC INFLAMMATION: ULCER BELOW THE STRICTURE COMMUNICATING WITH THE LUNGS. A lady, aged 59,‡ had been subject since infancy to a remarkable difficulty in swallowing. For the last thirteen years it had been very troublesome; and if the food was not well masticated before being swallowed, it became arrested and spasm was produced. Eight months before death, she was seized with pain a little above the pit of the stomach and a sense of chilliness in the back: these sensations left her, but returned at the end of a month, and continued. The food, when swallowed, passed down to the seat of the pain, which seemed to exist close to the orifice of the stomach. The passage of the first morsel was attended with severe agony, but after the second it was less. In addition to the pain, she had constant heartburn, and violent retching; these symptoms increased much in severity during the last six weeks of life, and she spat up a quart of mucus a day, and when the food was arrested, it returned mixed with mucus. A short time before death, an aphthous eruption appeared on the tongue, which spread to the fauces; and at the same time great difficulty in breathing set in.

The aphthæ were found, after death, not to have spread beyond the fauces. The œsophagus was contracted, but not thickened: behind the cricoid cartilage, an inch lower down, a second contraction existed: after this it became larger throughout, but was smaller than common. The canal, for three inches below the bifurcation of the trachea, was in a state of ulceration: from it two sinuses passed into the lungs, but did not communicate with any of the bronchi. The parts surrounding the ulceration were thickened and condensed.

CASE V. CHRONIC INFLAMMATION OF THE ŒSOPHAGUS: ABSCESS: ULCERATIONS COMMUNICATING WITH THE ŒSOPHAGUS AND LEFT BRONCHUS. A man,§ who had drank freely of

spirits, had suffered once from an affection of the stomach, and several times from *delirium tremens*, became, in January 1831, subject to pain in the chest and stomach. The last was relieved by remedies, but the other continued, and was followed by difficulty in swallowing, which increased to such an extent, that solids ceased to descend, and the same difficulty at last extended to fluids. He lost much flesh and strength. In July and August he suffered severely from hunger and thirst; his skin was hot; and fluids had ceased to enter the stomach. An attempt was made to pass a small tube, but without effect. On the 1st of September, he began to suffer from cough with purulent expectoration: and on swallowing fluids, they remained some time at the point where the obstruction existed; cough then came on, and they were rejected. This state continued up to time of death on the 24th. He was nourished by clysters.

From the middle of the œsophagus, as low as the orifice of the stomach, hard gristly thickening existed; and it was so narrowed, that the smallest catheter would not pass. Opposite the lower part of the trachea, a large mass of cellular tissue existed, which was in close connexion with the parts adjacent. This was found to be the sac of an abscess. Communications existed between it and the œsophagus and the left bronchus.

CASE VI. CHRONIC INFLAMMATION: ULCERATION. M., aged 42,* received, six months previously, a kick from a horse in the epigastric region, by which severe pain was excited. He soon after had an attack of ague. Difficult and painful deglutition set in after a cold, attended with burning sensation in the upper part of the epigastrium, and tenderness on pressure. No vomiting or nausea after eating existed, nor cough or difficulty in breathing. The appetite was good, and the bowels natural. A laxative on the 5th of June produced much relief. On the 7th, the difficulty in deglutition became much worse, and on the 11th, a dry cough set in with constriction of the throat, fetid odour from the mouth, and heartburn. The obstruction seemed to exist at two points, near the larynx and at the orifice of the stomach. On the 15th, the cough was worse, much viscid mucus being brought up. By the 22nd, the strength was much reduced: and fœtid pus was coughed up. He sank one month from this time. The obstruction at the upper part of the canal disappeared a fortnight before death.

The œsophagus opposite the fifth dorsal vertebra was so narrowed for an inch of its length, that a pen with difficulty could be made to pass; above this the canal was enlarged, and contained purulent ichorous fluid. The whole of this tract was of a livid grey hue and adherent to the trachea: the two canals seemed to have a common orifice. The lungs were not adherent, but they were filled with spumous serum and blood. No fluid was found in the pleural cavities.

Harrington Square, London, Sept. 1853.

ON DEGENERATIONS OF THE GLANDULAR STRUCTURE OF THE STOMACH.

By C. HANDFIELD JONES, M.B.Cantab., F.R.S., Assistant Physician to St. Mary's Hospital.

It is an ungrateful task for the pathological observer to have to add to the number of morbid changes, which, there is but too much reason to fear, are irremediable. From this unwelcome knowledge, however, one advantage, at least, results: that the mind of the practitioner is saved from that painful feeling of disappointment which naturally follows when we find remedies of no avail in cases where we trusted they might have been potent for good. It is at least some satisfaction, though a poor one, to know that our best-directed efforts to restore healthy action may fail, not because our measures were inappropriate to the case, but because the structure whose function we would restore had perished. Probably there is no organ in the body on whose

* Wilmer, Cases and Remarks in Surgery, 1779.

† Home, On Stricture of the Urethra and Œsophagus.

‡ Ibid.

§ Meyer, Berlin Med. Zeitung, 1836.

* Mauchart, de Strumâ Œsophagi, in Haller's Disp. Chir. Selecta, lib. ii.

healthy condition so much of our comfort depends as the stomach, none, in consequence, whose ailments have been more studied and written upon; and yet it seems rather remarkable that hitherto we have had no careful investigation of the morbid changes which its mucous membrane (that most essential part of it) undergoes. No one has yet done for the stomach what Johnson, Simon, and Frerichs, not to mention others, have done for the kidney. And yet the mucous membrane of the stomach is a true gland structure, essentially different from that of the intestine; its follicles are not mere involucri of the surface, they possess a much higher function than that of merely secreting mucus. Examination of a vertical section of the healthy tissue shows that in the greater part of its extent it is made up of parallel tubes ranged side by side, and so close together that there are scarcely any interspaces discernible. These tubes are nearly of the same size as, and altogether very similar to, those of the kidney; the chief difference is, that they are more filled with epithelium, and do not exhibit a distinct central canal. They terminate as they reach the corium of the mucous membrane by blind extremities, which are often slightly bulged, and sometimes slightly branching. Above, they open into shallow fossulae, which are well represented in Bowman and Todd's *Physiology*, vol. ii, p. 193. These fossulae are lined by an epithelium consisting of columnar particles, while that which fills the tubes consists of nuclei imbedded in granulous matter, and very numerous large nucleated cells full of granulous contents. This gastric glandular epithelium differs from the renal in this important circumstance relative to the discharge of its function, that it does not remain, like the latter, attached to the basement membrane, the wall of the tube, but is thrown off and constitutes itself a part of the secretion. In the pyloric region, the fossulae are very much deeper, and the entering tubes much shorter; while low villi, containing single capillary loops, spring from the partition walls of the fossulae. In the other regions of the stomach there are no true villi, but a deceptive appearance is occasionally presented by papilloid masses of altered epithelium exuding from the tubes.

One morbid condition which is not uncommonly observed, is an atrophic state of the lower ends of the tubes and of their epithelium. The latter, then, consists of coarse granular matter, with a few stunted, starved-looking nuclei and cells which often contain oily molecules. The lower blind ends of the tubes are faintly marked, and sometimes are evidently tending to disintegrate; at the same time the interspaces between adjacent tubes seem wider, as if some had already disappeared. In some cases the epithelium is altered, containing no healthy cells, but filling up the tubes with a coarse granular matter, while they themselves are not atrophied.

A fatty change in the epithelium is not uncommon, and in some degree is scarcely to be regarded as of pathological import. The lower ends of the tubes in our domestic animals are often quite opaque from the presence of much oil in the epithelium: there is, however, in such instances, no indication of wasting or breaking up of the tubes. Sometimes the glandular tissue seems to undergo what may be called true fatty degeneration: the tubes lose much of their natural aspect, and become converted into cylindrical tracts of granular matter loaded with oil drops. When the epithelium is in a fatty state, the inner surface of the stomach will often be found to be of a dead dull white colour; and it is rather remarkable that sometimes the change is confined to patches of varying extent, perfectly circumscribed. This change in the colour of the stomach is noticed by Andral as the result of chronic gastritis.

Together with a varying degree of atrophic change in the tubes themselves, there is often observed a remarkable alteration of the submucous tissue, or rather of the areolar tissue which forms a kind of corium to the mucous membrane. On viewing a vertical section, masses of nuclear particles are seen heaped up among the fibres, where they come in contact with the blind ends of the glandular tubes; these increase and advance upwards between the tubes, and

occasion or coincide with their atrophy. The masses of nuclei are separate from each other, a certain space of healthy tissue intervening between them. The spots occupied by the nuclear deposits are sometimes depressed, so as to give rise to an appearance of open follicles. In an extreme instance the nuclear deposit has so increased as to cause almost a complete atrophy of the tubes, debris alone of which can then be discerned amid the altered intervening tissue. Vascular injection is by no means a constant accompaniment of this condition; and when it exists, it has not appeared to me at all clear that it was not of a passive kind. Together with the nuclei there is a certain quantity of granulous matter, which varies, however, in amount: it is not generally enough to conceal the nuclei.

Sometimes the exudation shows some tendency to the production of fibroid tissue, but I have never seen this developed in a very marked manner. Perhaps, however, contraction of the surrounding areolar tissue may have been the cause of the peculiar alteration observed in the following instance.

In a female, of thin and spare habit, who had been ailing two years, and who died of bronchitis with emphysema and dilatation of the heart; the liver was in a highly nutmeg state, and its Glissonian sheaths were considerably thickened; the kidneys were not healthy, and they contained reddish yellow pigment, the sign of former extravasations of blood. The mucous membrane of the stomach in the region adjoining the pylorus had a mammillated aspect, and was of a reddish brown colour. It was covered over with small, indistinct, sometimes whitish eminences, which were very apparent on a vertical section as whitish grain-like masses in the deeper parts of the mucous membrane. These masses consisted of tortuous tubes crowded and packed together, and filled with an epithelium consisting of small sized cell particles containing oily molecules, and of free nuclei imbedded in abundant granular matter. The basement tissue of the tubes was distinct in the masses, but could not be traced upwards to the mucous surface. In fact, the convoluted tubes seemed quite destitute of any outlet for their contents. The masses were separate from each other, and were closely girt by layers of fibroid tissue which seemed to compress them. In their intervals there was no trace of tubes. The epithelium of the surface preserved its usual columnar form.

I subjoin further details of the examination of some instances of the degenerative changes in the gastric mucous membrane above described.

A pallid, ill nourished female, aged 22, who had long suffered with epigastric uneasiness and bad digestion, died of phthisis and bronchitis. She had been fifty-one days in the hospital, and had undergone the operation for ruptured perinæum, which proved quite successful. The contents of the stomach were acid. Some portions of the mucous lining were of a dead white, and presented the appearance of numerous quasi-follicular orifices; the rest was of a faint reddish grey tint. There was no vascular injection anywhere. The white parts of the mucous membrane showed on a vertical section parallel rows of tubes filled especially at their deeper parts with oil laden cells of very perfect form and great consistence; these cells contained oil dots, opaque and black (but not drops), imbedded in much granulous matter. Besides the cells, the contents of the tubes consisted of free nuclei and granulous matter. The tubes were not broken up; but every here and there the row was interrupted, and there was left an empty looking space, which was occupied either by remains of tubes atrophied and containing merely a faint granulous matter, or by a mass of nuclei only. In one section the tubes existed only at the upper half or two-thirds of the vertical extent of the mucous membrane, while at the lower they were atrophied and replaced by a mass of nuclei. It was these interruptions in the continuity of the tubes which gave the appearance of follicular orifices. In the pale non-whity portions of the mucous membrane the epithelium was much less fatty.

A man, aged 63, died with empyema, the consequence of an accident which had fractured several ribs. The cornea

presented distinct arcus seniles. There was but slight fatty change of the muscular fibres of the left ventricle. The kidneys were not quite healthy; there were cysts on their surface. The inner surface of the stomach was of a pale colour, rather uneven; the mucous membrane to the eye was not much altered, but under the microscope the tubes were found to be extremely wasted, and in many parts quite lost, and replaced by a granular and fibrous tissue containing multitudes of ill shaped nuclear particles. In some parts there were groups of convolutions and bulgings of the tubes, stuffed with an opaque granulous and oily matter. The atrophy of the tubes was extremely marked. There was fibrinous deposit in the spleen.

A female, aged 19, died with syphilitic phagædena of the genitals. The stomach presented a natural aspect, with the exception of some slightly raised spots of the size of a pin's head in the vicinity of the pylorus. These seemed to be produced by accumulations of epithelium in the fossulæ. The tubes in this part were in a normal state. In the mid-region of the stomach the tubes were much wasted, those remaining only contained a granulous and oily matter.

In a middle-aged female, dying with scirrhus pylori, the stomach was found distended to some extent; its muscular coat was much hypertrophied; its mucous membrane apparently healthy. On closer examination, the lower ends of the tubes near the pylorus were seen to be aggregated into bunches, while in other parts they were very indistinct, evidently atrophied, and surrounded by intertubular exudation, consisting of nuclei and granulous matter. In one section, two large cysts were seen, full of a transparent fluid, and lined by a delicate vesicular epithelium. They lay in the substance of the mucous membrane. The kidneys were granular and cysted. There was considerable fibroid thickening of the capsule of the spleen, and some also of that of the liver.

A man, aged 51, addicted to drinking, and subject to gout, died with double pneumonia, pleurisy, and pericarditis, after five days' illness. The kidneys were healthy. The stomach appeared markedly mammillated in its mid-region; it was not injected. The tubes appeared pretty natural, but were obscured by an interstitial exudation, developing itself into nuclei and granulous or perhaps indistinct fibroid matter: at one part there was a large nodular accumulation, consisting solely of nuclei. From this mass, the nuclear deposit extended in smaller quantity among the tubes, and would, at a later period, have no doubt occasioned their atrophy. The mucous membrane of the fundus was red and softened; but its tubes were quite natural, and unobscured by any intervening exudation. The pyloric portion, like the cardiac, showed no trace of mammillation: there was, however, in this part very considerable intertubular fibroid formation, with infarction of the lower ends of the tubes by oily and granular matter; and gathering up of their lower parts into bunches. Many tubes in this part were also atrophied, so that a section no longer presented a continuous row.

In a female, aged 43, who died of uterine cancer, the mucous surface of the stomach was of a dead white colour throughout. The tubes were not wasted, but were filled with a very opaque fatty epithelium. In the mid-region, towards the greater curvature, there was a marked mammillated aspect; this very nearly disappeared after dissecting the mucous membrane from the submucous, and spreading it out. It was probably caused by some irregular contraction. The liver was excessively fatty.

A female, aged 87, died with universal jaundice; the femur was fractured by a fall some days before death. The liver was somewhat granular on the surface, and the Glissonian sheaths appeared somewhat thickened. The ductus communis choledochus was obstructed at its lower part by a soft mass of biliary pigment matter; the gall-bladder was hence enormously distended. The kidneys were wasted and granular. The stomach was very large; the mucous membrane was quite pale, but not manifestly unhealthy to the eye. Under the microscope, it was seen to be gravely altered; there was very little trace of tubes to be discovered even on

repeated examinations; here and there were some traces of them, but in by far the greater part of the tissue they had perished. Their place was occupied by a quantity of nuclear particles, granulous and some oily matter, and occasionally fat vesicles. The formation of nuclear particles had extended quite into the corium of the mucous membrane.

A man, aged 37, died with general peritonitis, after the recto-vesical operation, undertaken in consequence of the urethra being obliterated by stricture. The stomach appeared natural to the eye. In the middle and the splenic regions, the epithelium of the tubes consisted of small, stunted, atrophied particles, appearing more like empty vesicles than anything else; it was not fatty. In the pyloric third, the epithelium was not atrophied; large granular round and oval cells were present in the exuding contents of the tubes, besides free nuclei and granulous matter.

A stout man, aged 52, man, in apparent health, died with extravasation of blood within the cranium, after a blow. The mucous lining of the stomach had a dead white appearance, and seemed to be irregularly mammillated, or as if its surface was every here and there somewhat elevated. The epithelium of the tube was much atrophied; it consisted of stunted cells, granular matter, and ill developed nuclei. The tubes themselves were wasted in some degree; their deep ends were most affected, and lay imbedded in a stratum of granular matter, containing numerous nuclear particles, which infiltrated the areolar tissue. Acetic acid brought the intertubular nuclei more plainly into view.

I do not intend on this occasion to enter into any detailed examination of the causes and nature of the above changes; I can only state that I am not inclined to regard them as of inflammatory origin. They seem to us to belong much more nearly to the class of pure and simple degenerations, occurring as primary morbid phenomena, from the decay of vital power. Hyperæmia has not appeared to form any constant or necessary element of these textural changes. In the case of the nuclear formations, it is clear that there is intertubular exudation; but we have no evidence to show that it is the product of inflammatory action; I should rather consider that, owing to derangement of the natural assimilative power, the plasma, which should have formed healthy epithelium and other structures, was developed into these abnormal organizations. The morbid action seems to acknowledge a relation to cirrhosis of the liver, and to changes of the like kind. The newly formed fibroid tissue in cirrhosis is often loaded with nuclei, quite similar to those produced in the gastric masses. It is of course a matter of great difficulty to study satisfactorily the genesis of these morbid states; for, although there is strong ground for supposing that they exist in many of the multitudinous valetudinarians who are the commonest subjects of medical treatment; yet, as such individuals live on for years, and often die of some acute malady, there is seldom an opportunity of examining the organ affected while the change is in progress. To this subject I hope to devote much attention in future years, and shall be very thankful to any *confrère* who will furnish specimens and brief histories of the symptoms existing during life.

The practical results which the above investigation, as far as it has extended, supplies are:—1. That we may expect not unfrequently to meet with cases where the digestive power of the stomach is permanently weakened by the decay of more or less of its glandular structure. 2. That, in a still greater number of cases, the digestive power is weakened from an atrophy of the epithelium, which, it is conceivable, may, by judicious administration of light nourishing food, cod-liver oil, and gentle tonics, be reproduced in a more healthy state. 3. That we must be cautious in leeching or blistering epigastria for the removal of congestion, which may have no existence. The further our operation extends, the more do we become convinced that the most hopeless diseases with which we have to deal are those depending on essentially changes in the

rations of organs. Who would not rather have to deal with an acute pneumonia or pericarditis, than with a case of confirmed morbus Brightii? How often does our healing skill hang its head in hopeless foreboding when our diagnosis has revealed the existence of an organic lesion! This must of course often be; but how needful then does it become that we should be thoroughly aware of these degenerative tendencies, and exercise the utmost vigilance to anticipate and stay those destructive changes which we are unable to reverse.

1, Southwick Place, Hyde Park, London, Sep. 22nd, 1853.

BRAIN AND HEART DISEASE, WITH EXTRAORDINARY AND LONG CONTINUED REDUCTION IN THE FREQUENCY OF THE PULSE.

By ALEXANDER HENRY PATERSON, Esq.

CASE. T. S., aged 62, a merchant in Glasgow, came under my care on Sept. 25th, 1852. He was a short, very stout, and apparently healthy man, with a quick intelligent face and an energetic manner. In his previous habits he had been very active; he had travelled much for many years, and was very temperate. His previous health had been good, except that he had had frequent attacks of chronic bronchitis since the age of 18, and had within the last three years had three attacks of giddiness, caused by strong mental excitement, and producing momentary insensibility. On these occasions he fell to the ground, but immediately recovered himself, and had not either before or afterwards any headache, paralysis, or other symptom of brain disease.

In April 1852, Mr. S. was for the greater part of the day engaged in looking over a farm a few miles from home; and on his return, he endeavoured to overtake an omnibus. For this purpose he ran up a hill; and, having taken his seat, suffered much from difficulty of breathing and palpitation. These symptoms increased, and a few hours after his return home he was seen by a physician, and found to be dangerously ill, with congestion of the lungs and bronchitis. For many days he was unable to lie down; the pulse, which in health had been about sixty, now beat twenty-six times in the minute. Anasarca rapidly showed itself in the legs and thighs. The kidneys acted very imperfectly. The brain, and nervous system generally were unaffected.

The treatment was diuretic and expectorant; and at the end of a month the more urgent symptoms abated. The lungs continued very generally congested; the cough was troublesome, the expectoration copious, and the anasarca diminished. Mr. S. breathed easily when the shoulders were well supported, but could not lie flat down, and suffered very much from shortness of breath on making the least exertion, particularly in attempting to walk up stairs.

Mr. S. continued gradually to improve till September, when he was advised to winter in a milder climate; and for that purpose he came to Bowdon. His general appearance I have described. He at this time had no blueness of lips, or other indications of venous congestion. His extremities were cold unless well clothed; he could take exercise with pleasure on a perfectly level surface, but on attempting to walk up a slight ascent or a few stairs, his breathing became painfully hurried, and he said that he lost all power. The tongue was clean and healthy; the skin pale, otherwise normal; the appetite was tolerable, but he suffered much from flatulence. The kidneys acted freely. There was slight pitting at the ankles; the bowels were rather sluggish. He had had for some years a seton in the neck for the attacks of giddiness, and had for the last two months also had one in the left side. The pulse was 28, full, and pretty strong. Mr. S. suffered from no pain, and chiefly complained of disturbed nights. He had his shoulders supported by two or three pillows, but was apt to slip from them, and was then disturbed by difficulty of breathing and increased cough. He was also, frequently, when free from this,

unable to sleep on account of restlessness. The pulse had been as high as 32, but had not exceeded this since April.

A careful examination failed to detect any symptoms of cerebral or spinal disease. The lungs appeared generally dull, and mucous *râles* were heard all over them, particularly posteriorly. There was frequent cough, with very free expectoration of frothy mucus. The heart beat with increased impulse, but the stroke was undecided and the sounds confused and indistinct. The impression given by the physical signs was that there existed either pericardial effusion, or absence of the mitral valve; but the extreme stoutness of the patient and the *râles* in the chest obscured the diagnosis. Mr. S. had for some months been taking sarsaparilla with acetate of potash, and pilula ferri cum assafoetida; as well as some mild aperients. This plan of treatment was continued by me, with some occasional variations of the diuretics.

In the course of a few weeks, Mr. S. very decidedly improved. His pulse rose to 32. His cough was much relieved, and he could walk slowly up stairs without pain or much distress. The chief annoyance was from flatulence and restless nights. The diet was most carefully regulated, and medicine was nearly left off. On October 16, I was hastily sent for, and found Mr. S. apparently dying. The surface was cold; the face of a lead colour; the veins of the neck were very turgid; the breathing was stertorous; there was partial insensibility, and a feeble pulse of 28.

Mr. S., having on the previous day dined on Irish stew, had gone to bed in his usual health. Early in the morning, feeling some nausea, he rose for the purpose of taking a Seidlitz powder, and fell back in the state I have described. He shortly afterwards vomited; and, after taking some brandy and chloric ether, he gradually recovered his usual state.

My patient now had again an interval of tolerable health; he could walk two or three miles, wrote, read, and talked well, and for an hour or two at a time; and with increased care in his diet, he avoided a recurrence of such attacks.

In January 1853, Mr. S. had a few friends to dinner, and appeared in tolerable health. In the course of the evening, he went for a purpose of nature into the yard. While he was there, a servant quickly opened a back door. Being startled, he sprang a few steps backwards, and fell fainting to the ground. He was with difficulty carried to a sofa, and slowly recovered. About this time he complained of wandering pains in the head; and I thought his memory rather affected. After consulting his former medical attendant, we agreed to apply a blister to the nape of the neck, and give two grains of blue pill twice a day till the gums were slightly affected. The medicine was taken for nearly three weeks; it then produced the desired effect, and appeared to have caused some intermittence in the pulse. It was given up, and I did not again detect any head symptoms.

About the 12th of March, Mr. S. pointed out a pimple between his shoulders with a hardened base. This quickly enlarged, and became a carbuncle of the size of a cheese plate. The treatment consisted in occasional small doses of opium, wine and good diet, and stimulating poultices. I did not venture to make a free incision, fearing a dangerous return of the fainting and collapse. This carbuncle was followed by two more, smaller in size, but still giving extreme pain, and causing much thirst and restlessness. The pulse at this time varied; being on April 17th, at 10 A.M. 36, and at 5 P.M. 46. It was intermittent, particularly when sitting up in bed, and before taking food. I ventured on May 1st to lance the last carbuncle freely; and my patient bore the operation very well. He now began to recover his strength, his appetite being good. On the 4th of May, he got down stairs, and noticed his legs pitting, but there was no fluid above the knees. His urine was examined, and found to be natural in quantity and quality. His pulse was stronger (about 30), with occasional intermissions. On 23rd May he left Bowdon, and shortly afterwards returned to Scotland.

From Dr. Bell, of Glasgow, I have received the following account of the conclusion of this extraordinary case:

"Your old patient died at last (July 28) very suddenly. He was seized with a fit of dyspnoea, followed by the expectoration of several mouthfuls of blood. The difficulty of breathing rapidly increased; and he died, I think, about four hours after the commencement of the attack."

Dr. Bell also informs me, that a large tumour appeared some weeks before his death in the abdomen; it pressed on the rectum, and caused much pain, diarrhoea, etc. I very much regret to add that no *post mortem* examination could be obtained.

REMARKS. I have preferred to give an incomplete account of this case, to allowing all record of symptoms which appear so uncommon to be lost. An elderly man lives from April 1852 to July 1853, with a pulse averaging about 32; and at last dies, more apparently from the effect of some of the evident symptoms, than from the obscure cause of the disease. The physician, Dr. Bell, under whose care Mr. S. placed himself in May 1852, believes that he had suffered for some years from hypertrophy of the heart; that the run in April ruptured the *chorda tendinea* of the mitral valve; and that the alteration in the number of pulsations depended either on some effusion about the origin of the eighth pair of nerves, or on obscure brain disease. My own opinion coincided with Dr. Bell's, except that I thought there was some pericardial effusion, though not to any great extent. The treatment was very simple. The points chiefly attended to were, the avoidance of all excitement, simple diet, and a warm dry air, with ample clothing.

Altrincham, Cheshire, September 10, 1853.

FATAL POISONING FROM ARSENIC TAKEN TO INDUCE ABORTION.

By THOMAS BROWN, Esq.

On Monday, October 21st, 1850, I was requested to see Sarah Weston, at the Lock, Weston-on-Trent, a single woman, aged 24 years. On my arrival, I ascertained that she came from her situation as domestic servant at Alvaston, a distance of seven miles, on the Saturday evening previous; and that during the journey she suffered from pain and vomiting, the latter continuing on her arrival at home, where she was prematurely delivered (by a midwife) of a male child. It was not until Monday morning that the friends with whom she lived thought it necessary to send for a surgeon; and, in the meantime, all traces of the matter ejected from the stomach had been removed. I found my patient delirious and unconscious, with a cadaverous countenance, and feeble rapid pulse. The abdomen was tender on pressure, and somewhat distended: there was urgent thirst and constant jactitation. Leeches to the abdomen and an opiate were at once ordered; but no alleviation of the symptoms took place; and death occurred within seven hours from the time I first saw her. In two hours afterwards, the infant of which she had been delivered also died.

Being called in after every actual symptom of poisoning was absent, I attributed the death to peritonitis: and the bodies were speedily interred, without, however, any medical certificate from myself or any other medical practitioner. On the second day of interment, some rumour prevailed that the subject of our case had been the victim of foul play; and this report gaining ground, the coroner for the county at once ordered the body to be exhumed. This was done on the 28th of October, 1850, just three days subsequent to interment.

In company with a neighbouring surgeon (Mr. John Smith), I proceeded to the barn where the body was exposed for examination. On carefully inspecting the oesophagus and cardiac portion of the stomach, there was no appearance of poisoning; but as we traced downwards near the pyloric orifice, we at once perceived erosion or ulceration of the mucous membrane, with a well defined line of demarcation.

I conveyed the stomach to my surgery, and the contents were tested by Marsh's apparatus, as well as by some of the more simple or uncertain modes; but having regard for the stomach (as a specimen of the action of arsenic, which was forwarded to the museum of the Sheffield Infirmary), I forbore subjecting the same to strict analysis, particularly so, as in the evidence adduced at the inquest it was clearly proved that the deceased had procured arsenic, and had taken it for the purpose of procuring abortion. The verdict was in accordance with this evidence.

September 22, 1853.

PERISCOPIC REVIEW.

PRACTICE OF MEDICINE AND PATHOLOGY.

DEGENERATION OF MUSCLES: MICROSCOPIC EXAMINATION.

The *Union Médicale* for May 7th, contains an account given by Dr. DUCHENNE, of an examination made by him of the right arm of a man who had died with muscular atrophy.

The subject was a man, aged 32, a mountebank, who had been under the care of M. Cruveilhier, labouring under general atrophy of the muscles, with loss of power of motion. Deglutition, speech, and respiration, gradually became impeded; and he died during an attack of influenza, from inability to dislodge the mucus which accumulated in the bronchial tubes.

A very full account of the case, and of the *post mortem* examination, is contained in an essay read before the Academy of Medicine by M. Cruveilhier, and published in the *Gazette Médicale* for April 16th, 1853.

All the muscles, although much atrophied, had almost preserved their normal colour; these muscles had undergone no change of structure. The brachialis anticus alone presented a pale grey colour. Several of the muscles on the front of the fore-arm were only tendons, having some muscular fibres attached to them; these fibres were for the most part of good colour, and of normal structure. There were no traces whatever of the pronator teres; more deeply, there were found some remains of the muscular fibres belonging to the superficial and deep flexors, and to the pronator quadratus. These fibres varied in colour from yellowish to pale grey. The fibres having the latter colour had the appearance of gelatine more than of muscle. All the muscles of the palmar surface of the hand were in the last stage of depraved nutrition, except some muscular fibres of the hypothenar eminence.

The muscular fibres were examined under the microscope by Dr. Duchenne and MM. Aran and Mandl. Their volume and texture were normal in those muscles which had preserved their colour, and which had been ascertained during life to be obedient to the electric or the voluntary stimulus.

Fig. 1.

Fig. 2

Fig. 3

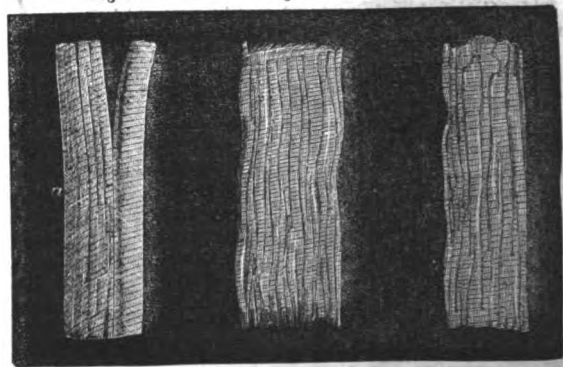


Fig. 1 represents healthy fibre with transverse striæ. Some longitudinal fibres are seen.

Fig. 2 and 3 represent the first degree of degeneration. The transverse striæ are less distinct; they are frequently interrupted, are lost here and there, and at last are altogether displaced. The longitudinal fibres become more distinct.

Fig. 4.

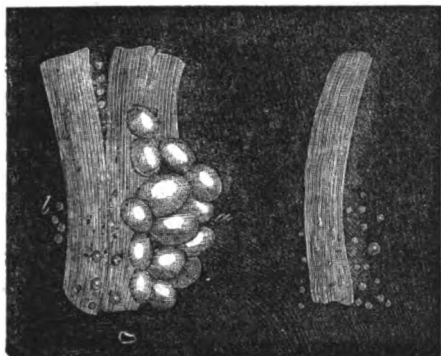


Fig. 5.



Fig. 4. The transverse striæ have entirely disappeared. Outside the muscular fibre is some adipose tissue; and there are some drops of fat in the fibre.

Fig. 5 represents a portion of fibre, in which the longitudinal fibrils have preserved their character, and are undulated.

Fig. 6.

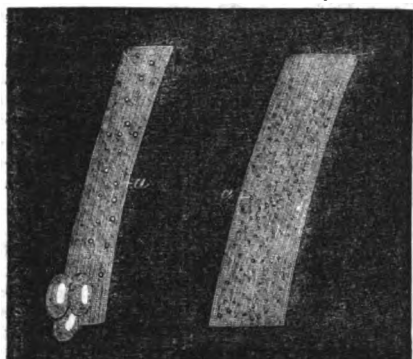


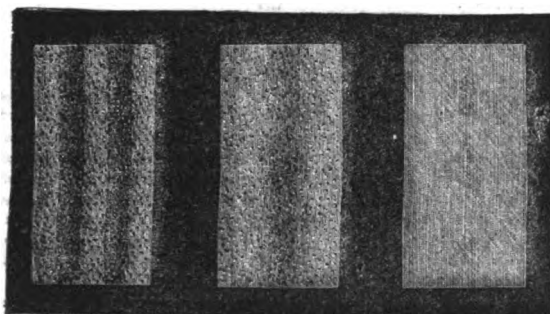
Fig. 7.

Figs. 6 and 7 represent the third degree of degeneration. The longitudinal fibrils are less distinct; the oily molecules are more abundant, and in Fig. 7 nearly cover the longitudinal fibrils.

Fig. 1.

Fig. 9.

Fig. 10.



These figures represent the fourth degree. The longitudinal fibrils have disappeared; and the oily molecules, having become more abundant and diffused in Fig. 9, are no longer distinct in Fig. 10, in which the fibre appears as an amorphous mass.

Each degree of fatty transformation corresponds to the amount of decoloration of the muscular fibre.

Dr. O'Leary has followed in the tadpoles of frogs the transformation of organic cells into muscular fibres. He has distinguished in this four principal phases, which seem to M. Duchenne to correspond exactly to the four degrees of change through which a muscle passes in assuming fatty degeneration; only the process takes place in the opposite direction. Dr. O'Leary has furnished M. Duchenne with the following account of his observations.

"1. The organic cells which at a later period form the muscular fibre, are at first composed of a transparent envelope, of two or three nuclei, and of a multitude of granular molecules, which present movements in the interior of the cell: these molecules often hide the nuclei. The nuclei are angular and elongated, of different sizes, and reflect light like fat-globules.

This stage continues twenty-four hours after the segmentation of the yolk.

"2. After a certain time, the enveloping membrane disappears; the nuclei become very distinct, being surrounded by granules disseminated over a wider space. These granules soon gradually disappear, and there only remain isolated nuclei, which have acquired a certain degree of growth. This stage continues nearly three days.

"3. Longitudinal lines begin to be formed on the nuclei, as if by a kind of retraction of the matter composing them. These lines become more and more distinct. This stage continues a little more than twenty-five hours; and it is only at the seventh day from the end of segmentation that the longitudinal lines appear. Two days afterwards, the following stage is entered on.

"4. There gradually commences to appear a second series of lines (the transverse striæ), which at last partly conceal the first. At this point, the future muscular tissue is composed of a mass of little parallelograms with transverse striæ and longitudinal lines, the latter being indistinct, and disposed more or less regularly. From this time, the only change which these parallelograms undergo is a simple increase in size in every direction, by means of which they approach each other, and form continuous fibres.

"These observations were all made at intervals of half an hour, during from twelve to fifteen hours at a time. The first stage was watched for forty-eight hours."

HOOPING COUGH AND ASTHMA.

Dr. PERRY, of Matagorda, says, in the *Boston Medical and Surgical Journal*,—"The recent epidemic of whooping-cough was unusually severe, and along the Colorado very fatal. During the acute stage, I did not find nitric acid beneficial; after that had passed, any alternative or nervous sedative seemed to exercise a beneficial effect.

"In young children (under three years), the disease was attended with high fever, bilious vomitings, inflammation of the bowels, and spinach coloured stools, which, if neglected or treated with mercurials, generally proved fatal in four or five days.

"In such cases I found a solution of nitrate of silver, of from four to five grains to the ounce, administered in teaspoonful doses every three or four hours, to act admirably, relieving the cough, and soon changing the nature of the discharges.

"I administered chloroform internally in every stage without benefit. Perhaps I was too cautious. Externally over the throat, and on the spine and abdomen, it sometimes seemed to act well.

"During paroxysms of asthma, I have seen no relief from nitric acid. During the interval, when there has been torpor of the liver, as is apt to follow repeated attacks of the disease, doubtless attributable to the removal of the blood in the organ and destruction of its vessels during the paroxysms, I have thought it very useful, but not otherwise. In the internal use of chloroform, however, we have almost a specific. Administered when the paroxysm is forming, it will generally prevent its full development, and given during its height, will moderate all the urgent and distressing symptoms. I have used it ever since the discovery of the article, and have been generally successful, if not in curing, at least in palliating."

FUSEL OIL IN TUBERCULOSIS.

In the *Virginia Medical and Surgical Journal* for April 1853, we find the following remarks by Dr. MOVILL WYMAN, of Cambridge, U.S.

"The diseases in which I have used fusel oil about a year and a half are tubercular affections of the lungs, and scrofulous diseases generally. The dose is four or five drops three times daily, gradually increased to as large a quantity as the stomach will bear. It is most conveniently given in wine or other alcoholic liquor, with which it readily mixes. I have not thought it did as well with those who have a red tongue, or a tendency to diarrhoea, as with others. The results so far have led me to believe it has a tendency to suspend the action of tubercular disease; but in medicine 'experience is fallacious and judgment difficult', and correct inferences can seldom be drawn except from many cases.

"I was first led to make use of this oil from considering the well known fact, that those in the habitual and excessive use of alcoholic drinks are not subject to tubercular disease in the same proportion as others. By careful inquiry, I was also led to believe that it is the coarse alcoholic drinks which are most

remarkable for this protective quality; New England rum, 'rot-gut' whiskey in this country, and the fusel liquor of the north of Europe; those, in fact, which produce bloating and fattening.

"The most striking difference in the two classes of liquors is in the quantity of fusel oil contained in them, the coarse liquors containing much, the fine liquors very little; indeed, the less they contain, the smoother and less fiery they become. The coarse liquors produce, in fact, a disease which may have a power antagonistic to tubercular degeneration, just as measles and scarlet fever, or measles and typhoid fever, or cancer and phthisis are antagonistic. Thinking, therefore, that the protective power may exist in the fusel oil, I have administered it as a medicine."

OPHTHALMOLOGY.

PRISMATIC SPECTACLES IN STRABISMUS.

The *Medical Times and Gazette* for August 27th contains a paper by Mr. SPENCER WELLS, on the cure of squinting by the use of prismatic spectacles. Theoretically, we shall not enter upon the question; for, indeed, we scarcely understand the principle on which such an apparatus is to act in altering the direction of the squinting eye. Practically, Mr. Wells has tried the plan in three cases; in two, it seemed to be doing some good; in the third, which was a decided case (we presume, from this, that the others were slight), it failed completely, and the author was obliged "to have recourse to the old method of binding up one eye". As we believe that, in most cases, this method is useless, and the new method is thus confessedly its inferior, we shall wait for further evidence of the power of these lenses in curing strabismus.

EPICANTHUS.

We find the record of a bad case of double epicanthus treated successfully by Mr. HAYNES WALTON, by excising a vertical slip of skin on each side of the nose, and bringing the margins together with the hair-lip suture. The disease was cured, and inversion of the nasal extremity of the eyelids removed.

IS MELANOSIS CANCEROUS?

In the January number of the *Annales d'Oculistique*, M. PAMARD writes "à l'infirmer l'opinion généralement admise sur la nature cancéreuse des mélanosis". As we understand it, the matter stands thus. The black substance of melanosis is not cancerous, but it may be combined with, or deposited on or in any structure, normal, benign, or malignant; and the fact is, that, in the majority of cases, it is combined with soft cancer, and hence forms the tumour known as malignant melanosis, which, however, it must be acknowledged, is less malignant, that is, may be removed with less certainty of its being reproduced, than ordinary encephaloid cancer. We think this is, in brief, the state of the question.

EPIPHORA.

In the September number of the *Monthly Journal*, Mr. BENJAMIN BELL records two cases of epiphora from slight displacement of the puncta, as lately described by Mr. BOWMAN, treated successfully, as that gentleman recommends, by slitting up the duct upon a probe, and thus artificially extending the orifice upon the conjunctiva.

OSSIFICATION OF THE VITREOUS BODY.

In Virchow's *Archiv.* for 1853, p. 580, Dr. VON WITTICH has published the dissection of the disorganized and shrunken eye of a man aged 60, in which the posterior part of the vitreous body appeared converted into true bone. The choroid was thrown into shrivelled folds, the capsule of the lens opaque, and the lens itself the subject of earthy deposition. Traces of the retina were found lying behind and surrounding the bony mass which occupied the posterior part of the vitreous humour. This substance was true bone, as evidenced by its numerous corpuscles; it was cup-shaped anteriorly towards the lens, passing into a softer semi-gelatinous substance, which was evidently altered vitreous humour, and upon the anterior surface of which the zonule of Zinn could be distinctly observed. The bony substance sent forward small prominences into this softer matter.

Our author concludes from the true ossification here observed, that the vitreous body possesses a true cell-texture, as, in tissues destitute of this, we may have calcareous matter deposited, but not true bone formed.

PRESBYOPIC AMBLYOPIA.

Under this name, M. SICHEL describes (*Ann. d'Ocul.*, February 1853) the weakness of sight induced in long sighted persons by forcing their eyes to look habitually at objects within their true focal distance; reading, sewing, etc., without the necessary glasses. Now, with all respect to M. Sichel, we cannot help thinking that we have here no novelty, but merely asthenopia, accompanied with more or less ocular congestion and irritation.

Let us keep clearly in view the two elements of this complex malady: *asthenopia*, consisting in an impaired power of adjusting the eye to the vision of near objects; and *amblyopia*, consisting in irritability of the retina, and differing from amaurosis in being a symptom of exhaustion and morbid excitability, and not of paralysis, although it may of course end in that.

The blindness of the amaurotic is constant: that of the amblyopic is induced by exertion of the organ, and disappears when it is allowed to rest; that of the asthenopic is, properly speaking, not blindness at all, since the smallest object can be seen at all events for a few seconds, and distant objects always well. We cannot see why asthenopia, induced in a presbyopic person by injudiciously reading or sewing at the ordinary distance, should in its nature be a different disease from the asthenopia induced in a person of ordinary vision by engraving or watch-making at four or five inches distance. Nor do we think that M. Sichel has much enlightened us in the matter of treatment.

Rest to the eye, and its employment on distant objects only; local depletion, and counterirritation when necessary; and a judicious derivative and alterative general treatment, are surely just the means which any well informed ophthalmic surgeon would use in such cases, keeping always in view that the disease is one of local exhaustion, often complicated with congestion, and almost always with more or less constitutional derangement and debility.

OBSTRUCTION OF THE NASAL DUCT.

In a very prolix paper, M. DUBOIS of Bourdeaux ("ancien élève particulier d'interné de M. le docteur Sichel") recommends the duct to be dilated by catgut bougies soaked in a solution of nitrate of silver, and has painfully investigated the quantities of the salt which they absorb. M. Dubois give one case in which, after a three months' employment of these bougies, he finished the cure by metallic styles! We desiderate more extensive experience.

THE SPARKLING EYE.

This curious appearance, *Synchesis étincelant* of our French friends, obtained some time ago rather more attention than it was worth from certain writers in the *Annales d'Oculistique*. Dr. DIX of Boston, Massachusetts, has published a case of it in the April number of the *Virginia Medical and Surgical Journal*.

"Mr. M. S., aged 32, of Portland, Maine, had for some two years been blind from presumed amaurosis, when, about a year ago, it was observed that in the right eye a distinct and apparently lenticular cataract of a slightly yellowish whiteness existed. The left eye exhibited no affection of the crystalline system, but through the pupil reflected from the fundus of the globe a reddish yellow glare. In the left eye, the iris was tremulous. With the right eye, he had a perception of light; with the left, none.

"Mr. S. being informed that the removal of the cataract could be serviceable only in the event of the eye being found not to be amaurotic like its fellow, chose to avail himself of the very small chance of relief which an operation offered. I confined the first operation to a central division of the capsule, leaving the lens, which seemed to be somewhat more hard than its colour had indicated, *in situ*. Four weeks after, no inflammatory symptoms having occurred, and there being no evidence of absorption in the lens, I divided both the capsule and lens partly; the lens being softer than at the first operation.

"This operation has been repeated some four times in the course of the year. In the two last, the capsule and fragment of lens remaining seemed to be of a leathery toughness, and I reclined it with partial clearing only of the pupil; the cells of the vitreous humour being too much broken up to retain it where it was left by the needle. At the last operation, while in the act of displacing the cataract, I observed an appearance at the fundus like that in the left eye, and do not therefore propose anything further. In the meantime the patient thinks that he sees very much more light, and can at times distinguish large objects, as buildings.

"Two months after the last operation, which was...

some pain for two weeks, without any visible evidence of inflammation, the eye presented the following appearance.

"Throughout the anterior and posterior chambers of the aqueous humour, and as deep in the region of the vitreous humour as it is possible to look, were innumerable brilliant particles, floating and darting about with every motion of the globe, and some of them occasionally decomposing the rays of light and reflecting the prismatic colours. They vary in size from the least visible magnitude to that of a very small pin's head. They are of a little greater specific gravity than the medium in which they float, inasmuch as, when the patient has been for some time erect, a heap of them accumulates in the lower part of the anterior chamber, to the depth of about a third or quarter of a line. After holding the head forward for a few minutes, and then throwing it backwards, they will be seen in great numbers upon the whole surface of the iris, and it was the bright, sanded appearance of the iris which first attracted my attention.

"In reply to a letter from me, Dr. W. E. Chase, the medical adviser of Mr. S. at Portland, writes a year after my last examination of the case: 'The iris seems now almost entirely composed of brilliant particles moving in their places, but remaining attached to the membrane. Throughout the anterior and posterior chambers, an almost inconceivable number of these icy, glassy, brilliant spiculæ are darting in every direction, and really present a very beautiful appearance, to me quite anomalous. I did not observe any in the other eye.'

"From this I infer that a considerable increase of this morbid product (probably cholesterol) has taken place within a year. It should be noted also, that as in the case of Mr. Wilde, it occurred only in an eye subjected to some mechanical disturbance. This case differs from those observed in Europe, by showing a silvery, instead of a golden lustre.

"Mr. S. was of strumous habit and subject to hæmoptysis."

We think there can be no doubt that the sparkling bodies in question are really scaly crystals of cholesterol: they are like them, and like nothing else; and their colour, golden or silvery, will depend on that of the fluid in which they float. We remember opening a small ovarian cyst, the fluid of which swarmed with sparkling yellow crystals, which, separated from the serum by filtration, turned out to be colourless cholesterol.

It is not improbable that disorganisation of the retina may have something to do with the development of this fatty substance in the cavity of the eye.

NEW OPHTHALMOSCOPE.

Mr. T. SPENCER WELLS, in the *Medical Times and Gazette* for September 10, describes and figures an instrument recommended by M. Kotzius of Leipzig, as a great improvement upon the eye speculum of Helmholtz, as a means for illuminating the retina of the living eye, and displaying its aspect in health and in disease. It consists of a perforated mirror and a lens, attached to it by a jointed arm; the mirror is one inch square, and the lens is about an inch in diameter. The rays of light from a bright lamp, placed on the corner of a table in an otherwise dark room, are concentrated by the lens and thrown on the mirror, which, being held before the eye to be examined, throws the rays through the pupil (previously dilated by belladonna) on the retina, from which the light is again reflected through the small central aperture of the mirror to the eye of the observer, placed close behind. The patient and surgeon are of course seated close to one another, and by a little management a good view is obtained of the different parts of the retina.

With the assistance of this instrument, Mr. Wells has himself detected, in various forms of partial or total amaurosis, congestion and varicosity of the vessels of the retina, partial removal of the pigment in patches, and exudations into the substance of the retina, or on its surface. We need not add how much this discovery, should it prove as useful as Mr. Wells believes it to be, will conduce to the better understanding of the various forms of amaurosis, even should it not be found much to aid the treatment of that very imperfectly understood disease.

SCROFULOUS OPHTHALMIA TREATED BY IODINE FUMIGATION.

The *Gazette Médicale de Lyons*, as quoted in the *Gazette des Hôpitaux* for August 6, states that Dr. BOUCHET, physician to the Hôtel Dieu at Lyons, has been very successful in treating scrofulous ophthalmia by means of iodine fumigations.

Several ophthalmologists, and especially Dr. Mackenzie of Glasgow, have described small fungoid granulations as being present on the conjunctiva of the eyelids in cases of scrofulous

ophthalmia. Solid nitrate of silver can only be applied in parts: general cauterisation would be dangerous and painful. Iodine vapour fulfils the object of repressing the granulations without producing much pain.

The iodine may be applied by being vaporised on the heated blade of a knife or any flat instrument, which is held near the eye. But a better method is to place some iodine in a heated metal capsule, to which is fitted a glass tube with an enlargement at the end to fit the eye. The vapour is in this way entirely confined to the eye; and the patient is not suffocated by the fumes.

When the iodine vapour is applied, more or less acute pricking is felt; and sometimes there is a rigor, followed by epiplura.

The conclusions which are drawn are:—

1. Scrofulous ophthalmia may be cured by the use of iodine vapour alone, but only after the treatment has been long persevered in.

2. The cure is more rapid, if the ordinary epithems are at the same time employed.

3. There can be no doubt as to the greater efficiency of the common epithems when employed in conjunction with iodine vapour, than when used alone.

MIDWIFERY AND DISEASES OF WOMEN.

DIAGNOSIS BY AUSCULTATION DURING LABOUR OF A HYDROCEPHALIC FETUS.

At a meeting of the Biological Society of Paris, reported in the *Gazette Médicale* for Sept. 24th, M. BLot stated that twice during his residence as "interne" at the Maternity Hospital of Paris, he had had the opportunity of applying auscultation during labour in a novel way to the diagnosis of hydrocephalus. Twice in hydrocephalic cases in which the disease was so considerable as to present an obstacle to the head entering the superior strait of the pelvis, he found that the maximum intensity of the sounds of the foetal heart corresponded to a point very high up in the abdomen—once, it was on a level with the umbilicus, and the other time it was a little lower down; or, in other words, the maximum intensity was in that situation where it ordinarily exists in pelvic presentations, whilst at the same time the touch established that the head was the presenting part.

M. Blot attaches practical importance to these observations for two reasons, viz.: 1. Because when the nature of the presentation can only be determined by auscultation, a head presentation of a hydrocephalic foetus may exist, and not a breech presentation of a healthy foetus as might be supposed: and 2. Because when we find that with a presenting head we have the maximum intensity of the foetal heart at or near the umbilicus, we may be pretty sure that the foetal head is hydrocephalic, because hydrocephalus is the most common cause of enlargement of the foetal head.

The points insisted on by M. Blot are of some value in a practical point of view; but we have heard the foetal heart loudest at or near the umbilicus in twin cases with a presenting head, when both foetuses were healthy; and in one case of dystocia we remember having heard the same thing, although the pelvis of the mother was not narrow, and the only impediment to labour was the unusual bulk of every part of the foetus, which, two hours after birth, weighed within an ounce of twelve pounds. After a very tedious labour, both mother and child did well. We have before and since attended the same mother in easy and rapid labours. Such cases evidently limit the value of M. Blot's test.

HOLLOW APPARATUS OF VULCANISED INDIA RUBBER AS A MEANS OF ARRESTING HÆMORRHAGE IN PLACENTA PRÆVIA.

The *Annales et Bulletin de la Société de Médecine de Gand*, as quoted in the *Bulletin Général de Thérapeutique* for July 30th, state that M. LADOS employs hollow balls of vulcanised India rubber as a means of arresting uterine hæmorrhage in cases of placenta prævia. When the instrument is introduced in the vagina, he distends it with cold water, by means of a common clyster apparatus. In this way, the water can be easily renewed when its temperature becomes elevated. A similar apparatus has been employed in cases of uterine hæmorrhage by M. Diday, who, however, distended the apparatus with air. Cold applications should at the same time be made to the abdomen and the genital organs, and the pelvis should be elevated. If all these means do not succeed, nothing remains but for the accoucheur to induce labour.

RETROVERSION OF THE UTERUS: MODES OF REDUCTION: RELATION TO RETENTION OF URINE.

A discussion on the subject of Retroversion of the Uterus took place at the meeting of the Académie de Médecine on August 30. We translate it from the *Gazette Médicale* for September 3.

Dr. PRIOU, of Nantes, read an essay, in which he observed that the expressions used by authors in treating of retroversion of the uterus, proved that they only spoke from hearsay. Those, he said, who proposed to introduce the index and middle fingers of the left hand into the vagina, and the same fingers of the right hand into the rectum, could never have required to perform this manoeuvre; for they would have found it impracticable.

The author observed, 1. That when the uterus is firmly wedged in the pelvis, its neck does not offer resistance enough to enable the fingers to be made to bear on it with much power; 2. That the fingers, introduced into the rectum, are not sufficiently long to arrive at the fundus of a retroverted uterus, and which must be pushed beyond the sacro-vertebral projection before it can resume its ordinary position.

In order to replace an uterus retroverted during pregnancy, some authors have advised the introduction of the entire hand into the rectum or vagina. But is this, M. Priou asked, always practicable? It must not, however, be neglected, if it appear at all possible, and especially if other means of reduction have failed.

A lady, when about three months and a half pregnant, had retroversion of the uterus, with constipation and retention of urine. M. Priou at first attempted to depress the neck, which was behind the symphysis pubis, by means of the index and middle fingers of his right hand. Not succeeding in this, he placed the patient on her knees and elbows; he then, by introducing the two fingers into the rectum, succeeded in somewhat raising the fundus. The relief, however, was very incomplete; the retention of urine continued, and the uterus remained in the pelvic cavity. He then proceeded to effect the reduction in the following manner.

The patient having been placed on her knees and elbows, a sound, wrapped in linen and well oiled, was introduced into the rectum, so as to push upwards and forwards; while the operator endeavoured to act downwards and backwards on the cervical portion, by means of the hand introduced into the vagina. Considerable force was required to disengage the uterus from the pelvis. By this method, M. Priou succeeded, not entirely in restoring the uterus to its normal position, but at least in giving it sufficient space for enlargement. At the end of a week, the patient was enabled to leave her bed; and her pregnancy went on favourably to the natural period.

M. MOREAU remembered having met with a similar case about forty years ago, in a lady who was in the third or fourth month of pregnancy. To effect reduction, he introduced a piece of wood into the rectum, and pushed the fundus forward; while with two fingers in the vagina he directed the cervix backwards. Reduction was effected without much difficulty; and the lady was delivered of twins at the full period.

M. CAZEAUX had lately reduced a retroverted uterus in a different manner. The woman was a patient of Dr. Aran, and was pregnant three months. M. Cazeaux at first attempted reduction by introducing the fingers into the vagina; but failing in this, he placed the patient on her knees and elbows, with the pelvis much elevated, and introduced the entire hand into the vagina. He was thus enabled easily to effect reduction, and to push the uterus above the sacro-vertebral angle, where it remained. This mode of reduction appeared to him easy, at least in comparison with the great difficulty which attends other plans.

M. MOREAU had already tried this plan; and it was only after it had several times failed that he had recourse to the stick of wood. The introduction of the hand appeared to him productive of much pain; and he remembered having seen a woman faint while it was being performed, from the pain produced.

M. DEPAUL had met with only one case of retroversion, in which he readily procured replacement by introducing two fingers into the vagina, and two into the rectum. The patient was three and a half months advanced in pregnancy. He believed that each of the three methods described were nearly equally satisfactory in their results.

M. DANYAU observed that, in M. Priou's cases, the retention of urine appeared to be an effect of retroversion. But, in a tolerably large number of cases, the retention of urine must be considered as the cause, and not the effect, of retroversion. In a case of this kind, he had found the bladder enormously distended. He removed a large quantity of urine by the catheter: then, on introducing his fingers into the rectum, he was sur-

prised at the facility with which the uterus was, almost spontaneously, replaced. The opinion that retention of urine is sometimes the cause of retroversion is supported by the authority of Dr. Ramsbotham, who cites a number of cases in proof.

M. CAZEAUX did not perceive, in what M. Danyau had said, any proof that retention of urine was the primary cause of retroversion. Retention of urine is always consecutive to retroversion, which it aggravates and increases: it becomes a secondary cause.

M. MOREAU agreed in the opinion expressed by M. Cazeaux.

FRACTURE OF THE THIGH DURING PREGNANCY: UNION RETARDED UNTIL DELIVERY.

The following case is one of those which show the unfavourable influence exerted by pregnancy on the union of fractured bones. It is reported by M. DUPUY, in the *Journal de Médecine de Bordeaux*; and is quoted in the *Gazette Médicale* for June 25, 1853.

A healthy young woman fractured her left thigh in the third month of her pregnancy. She was admitted into hospital on May 25, 1852. The fracture, which was somewhat oblique, was easily reduced, and the usual apparatus was applied. On the thirtieth day, M. Dupuy found the ends of the bones as moveable as at first. The apparatus was reapplied; and perfect immobility was enjoined. The patient was carefully watched; and the bandages and strings were tightened from time to time, as appeared necessary.

At the end of two months, there was not the slightest appearance of union. The general health continued excellent. A starched bandage was applied, and remained on from July 25 to September 7.

On October 13th, towards the end of the eighth month, the patient was delivered of male twins; they appeared tolerably strong, but lived only a few hours. From this time, consolidation commenced; in a month afterwards, it was perfect, and the callus was solid. There was, however, a slight riding of the ends of the bone on each other.

LEUCORRHOEA OF THE VAGINAL PORTION OF THE UTERUS A CAUSE OF STERILITY.

Leucorrhœa has long been recognised as a cause of sterility; but it has not this effect where it occupies only the urethra and vagina. It is when it occupies the vaginal portion of the uterus, and is accompanied with tumefaction of the neck, that it proves an obstacle to conception. Professor SIGMUND of Vienna relates some cases of this kind in the *Wiener Medicinische Wochenschrift*; they are quoted in the *Gazette Médicale* for Sept. 3.

CASE I. Madame F., aged 23, of good constitution, had been married three and a half years. Four months after marriage, she was attacked with leucorrhœa, which resisted local and general treatment. On examination, there was found to be a moderate discharge from the vagina; the vaginal mucous membrane was pale; the vaginal portion of the cervix was rather red, and very much swollen; the os uteri was obstructed by a viscid plug. Menstruation was normally performed.

Cold water was injected three times a day; the cavity of the cervix and the surrounding parts were superficially touched three times a week with sulphate of copper; generous diet, a little wine, and exercise in the open air, were ordered; and sexual connexion was forbidden. In five months, the leucorrhœa was cured; in the sixth month, the patient became pregnant, and was in due time delivered of a healthy female child, and two years later of a boy.

CASE II. Madame de B., aged 20, of delicate formation, but enjoying good health, had been married six years, and had had leucorrhœa four years. There was vaginal leucorrhœa, increased before and after menstruation; the mucous membrane was slightly red, and the vaginal portion of the uterus was swollen and slightly excoriated, and bled readily; the os uteri was obstructed with a viscid yellowish plug; the cervix was very tender.

The same treatment was adopted. In ten months, the leucorrhœa was cured; three months later, the patient became pregnant, and was in time delivered of a healthy male child.

CASE III. Madame G., aged 27, had been married seven years. The general characters of this case were similar to those of the preceding ones; and the result of the treatment, as regarded the leucorrhœa of the cervix, was the same. The disease, however, reappeared at the end of two months, and was then successfully treated by the application of solid iodine of iron by means of a brush, and a weak solution of zinc. In a year, delivery of a healthy female child.

Dr. Sigmund has met with four similar cases, all which were cured in the same way. He does not pretend that sterility commencing with leucorrhœa of the cervix will always be cured when the latter is removed; but he insists on the necessity of a careful examination of the reproductive organs, and of an appropriate local treatment; because it is evident that leucorrhœa of the cervix, especially when the os is closed by a plug, must be a real obstacle to impregnation. It must be observed that, in all the cases observed by Dr. Sigmund, the leucorrhœa was purely local—a circumstance on which the success of the treatment in a great measure depends.

VARIOLA IN THE FŒTUS.

CASE I. Dr. WM. T. TAYLOR, of Philadelphia, reports the following case of variola in the fœtus in the *American Journal of the Medical Sciences* for July 1853.

"On the 8th of October, 1852, I was requested to visit Mrs. A. H., 26 years of age. On reaching the house, I found that she had miscarried, being in the fifth month of pregnancy. The pains having entirely ceased, I gave half an ounce of the wine of ergot, which soon caused the placenta to be expelled. Upon examining the fœtus, I was greatly astonished to find it completely covered with discrete variola in the pustular stage—apparently about the eighth day of the disease. Some of the pocks were well filled, and rounded on the top, whilst others were depressed in the centre. The mother had been vaccinated when a child; she never had had small-pox, nor had ever seen a case of the disease; but was always fearful of taking the contagion. Referring to a case of confluent variola, which I had attended a few doors from her residence during the early part of September, she remarked:—'I would never pass the house, but always crossed to the other side of the street.' A few weeks previous to her miscarriage, having been seized with a chill, which was followed by headache, sickness of stomach, and a severe pain in the small of the back, she was impressed with the idea that it was small-pox. This occurred on Friday, 24th September. Two days after, an eruption resembling prickly heat appeared on her face and arms. She drank a tea, made of ginger and sweet marjoram, 'to drive out the disease'; and feeling somewhat better did not seek medical advice. On Monday, 27th September, the eruption began to disappear, and on the following day it was entirely gone; but she did not feel perfectly well, for there were occasionally symptoms which she described as flashes of heat, and cold chills running all over her, with a dull aching pain through the stomach, and loss of appetite. These symptoms continued until two days before her abortion, when she felt a weight in the pelvis, attended with bearing down pains, which continued until she parted with the fœtus."

Two cases of intra-uterine variola are reported in the *Gazette Médicale* for September 24th, as having been read before the Société de Biologie.

CASE II. CONFLUENT SMALL-POX IN A FEMALE IN THE SIXTH MONTH OF PREGNANCY: ABORTION AT SIX AND A HALF MONTHS: FŒTUS PRESENTING NUMEROUS SMALL-POX PUSTULES, WITH ULCERATION OF THE STOMACH. By M. CHARCOT. S. D., an Irishwoman, aged 25, was admitted into the hospital of la Charité on April 16th, 1853. She appeared of strong constitution; she had never been vaccinated, nor had measles or scarlatina.

In the middle of the sixth month of pregnancy,—on March 19th,—she had an attack of small-pox, which was attended with much swelling of the face, and during three days by aphonia and dyspnœa. She was ill twenty-seven days.

Ten days after the commencement of the illness, the movements of the fœtus were felt to be more active; they then daily diminished, and towards April 10th they entirely ceased. The process of desquamation had then been going on for several days.

The patient was admitted into hospital to be treated for ophthalmia of the left eye, a sequela of the small-pox. The face was covered with thick crusts: there was no fever. The uterus reached to about three finger-breadths above the umbilicus; the parts of the fœtus could be felt, always in the same position. The patient now felt no fetal movements; she observed that her abdomen was flatter than it had been before her illness. Neither the pulsations of the fetal heart nor the placental murmur could be heard with the stethoscope.

On May 4th, labour pains appeared; and on the next day, at 10 A.M., the woman was delivered of a fœtus, which had probably been dead twenty-four days. The liquor amnii which escaped during labour was of a dark brown colour, and contained meconium, but was not remarkably fœtid.

EXAMINATION OF THE FŒTUS. The fœtus was a male, about thirty-five centimètres (nearly fourteen inches) in length. It was not fetid: but, from the prolonged maceration to which it had been subjected, the epidermis was readily detached.

The two pleuræ were filled with sanguinolent serous fluid. The lungs and thymus gland were quite healthy. The heart was healthy; the ventricles were empty. The liver, spleen, and kidneys were healthy. The peritoneal cavity was filled with a brown serous fluid. The intestines presented nothing remarkable on their external surface; but internally, the mucous membrane of the stomach presented two small round ulcerations of the size of pins' heads; one was seated in the large *cul-de-sac*, the other near the pyloric extremity. The œsophagus, pharynx, larynx, and trachea, presented no trace of ulceration.

On the external surface, pustules of various sizes were observed; they were grouped in a manner circumstantially detailed as follows.

Two large pustules were symmetrically disposed in the midst of the pectoral region on each side. The front of the abdomen was occupied by ten irregularly scattered pustules, of which three were very large. On the back, there were five large scattered pustules; one of which, a quarter of an inch in diameter, appeared formed by the confluence of several smaller ones, and occupied the centre of the lumbar region. On the front of the scrotum, were three small pustules; and five large pustules were scattered over the buttocks. The left upper limb presented twelve large pustules, two only being on the inner surface. On the right arm, there were only four small pustules—three on the summit of the shoulder, and one on the outer and upper part of the forearm. On the right lower limb were five scattered pustules, two of which were at the inner and front part. On the left lower limb were seven pustules, of which three formed a group on the lower third of the posterior and external surface of the leg. There were no pustules on the hands or feet.

The pustules, before the removal of the epidermis, were depressed in the centre; they were well marked, and of a dead white colour. The epidermis, when detached, raised a disk of false membrane; and there was always found in the thickness of the true skin a round ulceration, more or less deep and extensive. The largest ulcerations were four or five millimètres (about one-fifth or one-sixth of an inch) in diameter, and the smallest only two millimètres (three-fourths of an inch). Some of them occupied the whole thickness of the dermis, and at their bottom could be seen the adipose tissue, or even the superficial muscles: in other cases, the adipose tissue was covered by a fine transparent membrane, forming the bottom of the ulcer.

In most cases, the hair follicles in the vicinity of the ulcerations were hypertrophied. In some of the ulcerations, cicatrization had commenced: but some of them were filled with a yellowish cheesy mass, moulded to the shape of the cavity, and always raised with ease. In general, the ulcers in the dermis were conical, and the bottom of the ulcer was smaller than the upper part.

In April 1851, M. Charcot made before the same society some remarks on the structure of the variolous pustules in the fœtus.

CASE II. FŒTUS AGED SIX AND A HALF MONTHS, PRESENTING CICATRICES OF VARIOLOUS PUSTULES. By M. DEPAUL. M. H., aged 26, contracted small-pox about the middle of the sixth month of her second pregnancy. Abortion took place three days after the cessation of the fetal movements.

The fœtus was dead, and appeared to be of about the sixth month. The surface presented a number of yellowish spots, of the form and size of small lentil seeds. The corresponding parts of the skin were hard and thick. The cicatrices were numerous: there were nine on the left side, and four on the right side of the back; five on the front of the chest; one in the left axilla, and two in the right; fifteen on the forehead, and one, very large, on the nose. There were no lesions in the pharynx, larynx, œsophagus, or intestinal canal.

The woman recovered. The surface of her body presented the marks of numerous irregular cicatrices, apparently the results of confluent small-pox.

The above cases suggest, but do not satisfy inquiry. The poison of variola must have circulated in the blood of Mrs. A. H. if her fœtus was born with the eruption of that disease. Did the poison produce in the mother an abortive attempt at variola, as evinced by "the eruption resembling prickly heat", and by the other symptoms described by Dr. Taylor? Again, was the comparative immunity of the mother caused by her having been vaccinated? If the poison of variola can enter the system of a person in whom it cannot produce the characteristic phenomena of the disease, and if it can even circulate between

that person and her foetus, is it not probable that many illnesses which we are called upon to treat are abortive and unrecognisable cases of variola and of other poison diseases?

RUPTURE OF THE UTERUS IN A CAT.

M. LORAIN exhibited to the Société de Biologie de Paris on the 2nd of June, preparations of the uterus, etc., of a cat, which had died under the following circumstances.

The animal had been shut up for three days in a room without food, and had doubtless in consequence made great exertions to escape. Soon after the door was opened, she left the room, and was taken in labour. She produced four young ones, their birth being followed by severe hæmorrhage, which lasted for some hours. For the first three days she was allowed to have one of her kittens; but the secretion of milk was never well established. She suffered acute pain, vomiting, excessive thirst, parched tongue, and tumid abdomen. On the fifth day after delivery she died.

The lesions found on dissection are thus described by M. Lorain:—

The abdomen having been opened by an incision through its anterior wall, the uterus was exposed to view; its left horn appeared retracted and reduced to a very small size, and the right horn much increased in volume and apparently distended by a hard body. Upon several parts of the peritoneal covering of the intestinal tube and the liver, there were small albumino-fibrous masses, of a soft and only slightly adherent character. They were regarded as evidence of peritonitis, although there was no effusion of fluid into the peritoneal cavity. Upon raising the uterus, it was seen that the right horn was adherent to the transverse colon, and also to the mesocolon, by means of a clot of blood protruding from a circular rent in the right horn, of about one *centimètre* (two-fifths of an inch) in diameter. This clot formed a perfect plug, and extended into the uterine cavity. On cutting open the uterus, the left horn was found to be empty; the right horn was distended by a clot, which was solid, resisting, elastic, adherent, and which evidently had been formed for some days. It was the protruding part of this clot which has been already described. For about a *centimètre* around the rent, the uterus was thin and disorganised in its tissue.

TWISTING OF THE UTERUS IN THE COW.

In the Reports of the Société de Biologie, published in the *Gazette Médicale* for September 24, we find an abstract of a paper on twisting of the uterus in the cow, by M. A. GOUBAUX.

Simple or multiple twisting of the uterus has not unfrequently been observed in late years in cows; it takes place at the full period of gestation, and completely obstructs parturition. The author's object was to point out the causes of this accident.

The uterus of the cow, in its general characters, resembles that of the mare; it presents, however, certain peculiarities. Two of these are important, viz.: 1. The direction in which the cornua are turned; 2. The manner in which the organ is suspended by its broad ligaments.

1. The cornua of the uterus are conical, and are connected with the Fallopian tubes: they diverge forwards, downwards, and outwards, so that their upper border is convex, the lower concave. But as each cornua is turned on itself, the concave border is at first inferior, then posterior; and the convex border is at first superior, then anterior.

2. The broad ligaments are very generally not of the same size on the two sides. One, for example, arises from the inner surface of the flank, while that of the other side rises below, or rather in relation with the external angle of the ilium. Sometimes they both arise from the same point on each side. From whatever point they arise, each ligament passes from above downwards, and from without inwards, to terminate on the lower or concave border of each of the cornua of the uterus.

If—which does not always happen—the cornua of the uterus and the broad ligaments are during gestation always developed in the same proportion, the uterus must remain equally balanced: there can be no twisting until one of the balancing forces is destroyed. M. Goubaux observed, with M. Bouley, laceration of the left broad ligament in a cow which died from twisting of the uterus. This is the only case in which he has seen laceration; hence he believes that it is not a common cause of the twisting.

M. Chaveau, in an essay on the *Anatomical Disposition in the Cow of the Uterus and its Appendages, considered in its Surgical Relations*, inserted in the *Recueil de Médecine Vétérinaire* for 1848, writes as follows:

“If we consider that the broad ligaments have, during gestation, acquired a very great development, and that the cornu

opposite to that side on which the foetus is developed is very little increased in size, we can easily understand how the latter should become rolled round the ligament which supports it, thus producing complete twisting of the neck of the uterus. It hence follows that twisting of the uterus must always take place from within outwards, and from below upwards.”

M. Goubaux objects to this explanation as not sufficiently exact. From *post mortem* examinations of cows which have died with twisted uteri, and from experiments on the bodies of cows at the full period of gestation, he has arrived at the conclusion that the affection is due to a greater proportionate development in length of the long than of the broad ligament; so that the former extend much in front of their attached point, and the broad ligaments are thrown altogether backwards. An easy experiment illustrates this. If a body be cut across at the level of the anterior part of the lumbar region, and suspended so that the parts may be in their normal position, it is easy to give the uterus a rotatory movement on itself, so as to produce complete torsion. MM. Goubaux and Bouley once saw a case in which the uterus had made three turns and a half.

SURGERY.

NICKELS' ELASTIC PLASTER.

Mr. NICKELS, of Camberwell Green, has forwarded to us some specimens of a plaster of which he is the patentee. Its novelty consists in the extensibility, in one direction, of the material on which the plaster is spread, so that it is capable of being more accurately fitted to the parts on which it is applied than are the plasters in general use. The material varies in thickness to almost any required amount; and any kind of plaster may be spread on it. We consider Mr. Nickels' plaster an useful addition to our surgical armamentarium.

REPORTS OF SOCIETIES.

BRITISH ASSOCIATION:—SECTIONAL MEETINGS.

(Continued from last Number.)

SECTION A. MATHEMATICAL AND PHYSICAL SCIENCE.

COLONEL SABINE, President, in the absence of the Dean of Ely. The following communications were received:—

Continuation of Report on Luminous Meteors; by Professor Powell. On the Composition and Figuring of the Specula for Reflecting Telescopes; by Mr. Sollitt. On the Surface, Temperature, and Great Currents of the North Atlantic and Northern Oceans; by the Rev. Dr. Scoresby. On Dynamical Sequences in Kosmos; by W. J. M. Waterston. On the Action of the Winds which veer from the South-West and West, and North-West to North; by Mr. R. Russell. Provisional Report on General Determinants; by Professor Sylvester. A Communication from Sir John Burgoyne, Inspector-General of Fortifications, regarding the Progress made in the Publication of the Trigonometrical Survey; by Col. Sabine. Complete Concentric Irises seen from a Peak of Snowdon; by Mr. W. Grey. The Angle to be given to Binocular Photographic Pictures for the Stereoscope; by M. Claudet. On the Graduation of Standard Thermometers at the Kew Observatory; by Mr. J. Welsh. Report of the Committee appointed at Belfast to inquire into the Physical Character of the Moon's Surface, as compared with that of the Earth; by Professor Phillips. On Photographs of the Moon; by Professor Phillips. On Drawings of the Moon; by J. Nasmyth. On the Optical Phenomena and Crystallisation of Tourmaline, Titanium, and Quartz within Mica, Amethyst, and Topaz; by Sir D. Brewster. On the Production of Crystalline Structure in Crystallised Powders by Compression and Traction; by Sir D. Brewster. On a Proposed Barometric Pendulum for the Registration of the Mean Atmospheric Pressure during long Periods of Time; by W. J. M. Rankine. General View of an Oscillatory Theory of Light; by W. J. M. Rankine. Magnetic Phenomena in Yorkshire; by J. Phillips. New Laws of Magnetic and Diamagnetic Induction; by Professor Plücker, of Bonn. The Distribution of Electrical Currents in the Rotating Disc of M. Arago; by Professor Matteucci. Magnetism of Rotation in Masses of Crystallised Bismuth; by Professor Matteucci. Magnetism of Rotation developed in very small Insulated Metallic Particles; by Professor Matteucci. Elasticity of Stone and Crystalline Bodies; by E. Hodgkinson. Density of Saturated Vapours and their Liquids at the point of Transition; by J. J. Waterston. A Law of Mutual Dependence between Temperature and Mechanical Force; by J. J. Waterston.

SECTION B. CHEMICAL SCIENCE.

J. F. W. JOHNSTONE, Esq., President.

EMPLOYMENT OF THE HIGHER SULPHIDES OF CALCIUM AS A MEANS OF PREVENTING AND DESTROYING THE OIDIUM TUCKERI OR GRAPE DISEASE. BY DR. ASTLEY P. PRICE.

The author had employed a solution of pentasulphide of calcium, which having been found to act in no way injuriously to the young shoots of several plants, was applied to the grapes; the object in view being that the compound should be decomposed by carbonic acid, and that the excess of sulphur should be deposited with the carbonate of lime in a uniform and durable covering on the stems and branches of the vines. This was adopted; and although but few applications were made, the stems became coated with a deposit of sulphur, and the disease gradually but effectually diminished, in so much that the houses are now entirely free from any trace of disease or symptoms of infection. The young shoots are in no way injured by its application, and the older wood covered with this deposit of sulphur continues exceedingly healthy.

The following papers were also read:

Chemical Action of the Solar Radiation; by Mr. R. Hunt. Effect of Sulphate of Lime on Vegetable Substances; by Chevalier Claussen. Crystals from the Sea Coast of Africa; by J. Pearsall. Chemical Constitution of the Humber Deposits; by J. D. Sollitt. Cause of the Transmission of Electricity along Conductors generally, and particularly as applied to the Electric Telegraph; by the Rev. T. Exley. Origin and Composition of a Mineral called Rotten-Stone; by Professor Johnston. On the Determination of the available Amount of Chlorine contained in the Hypochlorites; by Dr. Astley Price. On the Spontaneous Decomposition of Xyloidine; by Dr. Gladstone. On the Decomposition of Water under Pressure by the Galvanic Battery; by J. P. Gassiot. A New Method for Determining the Commercial Value of Oxide of Manganese; by Dr. A. Price. On the Conduction of Electricity by Flame and Gases; by W. R. Grove. Properties and Compositions of the Coca Leaf; by Professor Johnston. New kinds of Galvanic Batteries; by Mr. Kukla of Vienna. Gases evolved in Steeping Flax, and the Composition and Economy of the Flax Plant; by Professor Hodges. Causes, Physical and Chemical, of Diversities of Soils; by Professor Johnston. Advantages from the Purification of Coal Gas by the Application of Water in an Instrument called "the Scrubber"; by G. Lowe.

SECTION C. GEOLOGY AND PHYSICAL GEOGRAPHY.

PROFESSOR SEDGWICK, President.

The following communications were made:

Physical Features of the Humber; by J. Oldham. Notices and Observations on the Humber; by T. Thompson. Waste of the Holderness Coast; by G. G. Kemp. Character and Measurements of Degradation of the Yorkshire Coast; by Dr. J. P. Bell. Remains of the Hippopotamus found in the Aire Valley Deposit, near Leeds; by H. Denny. Comparative Richness of Auriferous Quartz extracted at different depths from the same Lode; by Dr. J. Blake. Classification and Nomenclature of the Palæozoic Rocks of Great Britain; by Professor Sedgwick. On some Ayrshire Fossils; by Wyville Thomson, LL.D. Refracted Lines of Cleavage, seen in the Slate Rocks of Ballyrizora, in the County of Cork; by R. W. Townsend. The Cornbrash of Gloucestershire and part of Wilts; by Professor Buckman. A Chemical Cause of Change in the Composition of Rocks; by Professor Johnston. Remarkable Cases of Unconformity among the Strata of Yorkshire; by Professor Phillips. Dispersion of Erratic Rocks at higher Levels than their Parent Rock in Yorkshire; by Professor Phillips. A new Plesiosaurus in the York Museum; by Professor Phillips. A singular Fault in the Southern Termination of the Warwickshire Coal-field; by Mr. Twamley. Production of Gold in the British Isles; by J. Calvert. Observations on the Interior of the Australian Continent; by J. Calvert. On the curious Spiral Body in certain Fossil Sponges, and a Notice of Remarkable Fossils from the Yorkshire Strata; by Mr. Charlesworth. Formation of Boulders; by the Rev. T. Rankin. Pseudomorphous Crystals in New Red Sandstone; by H. E. Strickland.

SECTION D. ZOOLOGY AND BOTANY, INCLUDING PHYSIOLOGY.

C. C. BABINGTON, Esq., President.

REPRODUCTION OF THE LOWER EXTREMITIES IN WARM BLOODED ANIMALS. BY MR. ALLIS.

The case was that of a common song thrush. In November 1851, it moulted, and had every appearance of dying;

it was reduced to a skeleton and unable to walk; it lay on its back for six weeks, being fed by hand with raw beef, and occasionally with beef-tea and biscuit. Early in 1852 an unusual protuberance appeared at the bottom and in front of the tibia above the ankle joint; from these protuberances perfect tarsi and toes were developed, which came to maturity in about three weeks; this annoyed the bird greatly, and he destroyed the newly-formed members with his beak and by friction on the perch. He moulted again in September 1852; and in November he lost his original tarsi, and new ones were produced. In January last fresh tarsi were again produced; these displaced those formed in November from articulation with the tibia, and the displaced tarsi are now visibly located on the upper edge of those produced in January last, which latter differ greatly from the normal form, being larger and flatter, and bearing a resemblance to the tarsi of aquatic birds. They have feeble though perfectly developed toes, which are sufficient for the purpose of locomotion, and to enable the bird to perch. The living bird, showing the one pair of tarsi overlying those subsequently produced, was exhibited to the section by Mr. R. Cook, of York, its owner.

NATURE OF CILIARY MOTION. BY P. DUNCAN.

The author concluded that the cause of the bending and returning of the cilium resided in the cell-wall which sustained the cilia, and that, to a greater or less extent, the whole of the cell-wall is contractile.

The following papers were also read:

Living Aquatic Birds at Santry House, near Dublin; by W. C. Donville. Discoveries relative to the Chick in Ovo, and its Liberation from the Shell; by Dr. F. R. Horner. Utricular Structure of the Endochrome of a species of *Conferva*; by Professor Allman. Morphology of Pycnogonide, and Development of the Ova in some Isopodous and Amphipodous Crustaceæ; by Mr. Spence Bate. Diatomaceæ found in the vicinity of Hull; by Mr. J. D. Sollitt and Mr. R. Harrison. Structure of *Bursaria*, a genus of Infusorial Animalcules; by Prof. Allman. A species of *Priapulus*; by Professor J. Phillips. Structure of the *Hydra Viridis*; by Professor Allman. A curious Exemplification of Instinct in Birds; by the Rev. F. F. Statham. Mode of Growth of *Halichondria suberea*; by H. E. Strickland. Report of the Committee for the Registration of the Periodic Phenomena in Plants and Animals; by Dr. Lankester. Influence of the Circulation on the Mental Functions; by Dr. Fowler. Physiological Action of Inorganic Substances introduced directly into the Blood; by Dr. J. Blake. Additional Observations on a New System of Classifying Plants; by B. Clarke. British Lichens, containing Dyeing Lichens; by Professor Balfour. On Preserving the Balance between Vegetable and Animal Organisms in Sea Water; by R. Warrington. A New Species of Cometes, a genus of Humming-Birds; by J. Gould. Habits of Fish in relation to certain forms of Medusæ; by C. W. Peach. Method of Accelerating the Germination of Seeds; by R. Hunt. Report on the Vitality of Seeds; by H. E. Strickland. Partridges of the Great Water-shed of India; by H. E. Strickland. Connexion between Cartilage and Bone; by Dr. Redfern. Artificial Breeding of Salmon in the Swale; by J. Hogg. Photographic Plates and Illustrations of Microscopic Objects in Natural History; by Dr. Lankester. Growth of *Symphytum Officinale* in the Botanical Gardens of the Royal Agricultural College; by Professor Buckman.

SECTION E. GEOGRAPHY AND ETHNOLOGY.

DR. R. G. LATHAM, President.

ETHNOLOGICAL REMARKS UPON SOME OF THE MORE REMARKABLE VARIETIES OF MANKIND. BY R. G. LATHAM, M.D.

This paper referred to certain races, as represented by individuals now in London: 1. Zulus; 2. Earthmen (so called); 3. Authalians; 4. Asteks (so called).

1. The Zulus. Over and above the characteristics of the great Caffre family, to which these Zulus belong, they have another element of value. The tendency of modern research has been to draw a broad line of distinction between the Caffre and the ordinary Negro. Undoubtedly, points of difference exist between the more marked and typical forms of the two families. The present individuals, however, break down the supposed difference, rather than confirm it—and (assuming that the extent to which the typical Caffre of the Cape is contrasted with the ordinary Negro has not been exaggerated) they are valuable as specimens of transition.

2. Earthmen (so called). The term Earthmen is correct, so far as the two individuals to whom it is applied are members of the Bushman family, occupying a country whereof the geolo-

gical structure affords them caves and similar forms of shelter as the equivalents of houses. They are Bushmen Troglodytes, or (if the expression be preferable) Troglodyte Bushmen. Except so far as the imperfect character of their domestic architecture is the measure of their inferiority, they are in the same category with the other members of the family to which they belong—viz., the Bushman (or Saab) branch of the Hottentot. They seem to represent an extreme type, and to be of unmixed blood.

3. Aethalians. These have not been publicly exhibited. Their locality is the parts about Cape York; their language the Cowreaga. The height of the taller of the two was 5 feet 10 in., of the shorter 5 feet 9 in.; the chest was well developed, but the lower extremities were so attenuated as to show that the representation of the two Aethalians in Dr. Prichard's one-volume edition is by no means exaggerated. The skin was black; the forehead prominent (the capacity of the skull being small); the sclerotic yellow; the nose broad at base, aquiline, and very characteristic. They held little conversation with each other; so little that, at first, they were supposed to either belong to hostile tribes, or to speak mutually unintelligible languages. This, however, was found, on examination, not to be the case. The temperament was gloomy in one, lively in the other; neither, however, seemed to be unsusceptible to the influences of kind treatment; on the contrary, they showed visible signs of emotion on parting with the people of the house wherein they had passed a fortnight. They showed great power of that kind of imitation which consists in telling a story in dumb show. Their hair was more crisp and curled than straight; and this is, perhaps, the most important feature of their physiognomy. The idea of Papuan intermixture was entertained, but no proofs of it could be found. They are probably full-blooded Aethalians.

4. Asteks (so called). Considering that representations of heads similar to those of the two so-called Asteks are found on certain Mexican monuments; that in the case of the Lacondon and Indians, on the frontiers of Vera Paly and Yucatan, there is an actual instance of a still-existing imperfect independence; that there is special evidence to the existence of goitre in the localities around, it is considered that the individuals in question represent American analogies of the European cretin, where the same conditions that have made arrest of development endemic, have preserved an imperfect independence.

The following papers were also read:

Ireland, its Inhabitants and Language; by J. Hogg. Production of Gold in the British Islands; by J. Calvert. Oceanic Currents of the Atlantic and Pacific; by A. G. Findlay. Manners and Customs of the Jakutes; by Prince Emanuel Galitzin. Inquiry into the Variations of Climate within the Tropics, in Connexion with the Vertical Action of the Sun and the actual Motion of the Earth, especially with reference to the Climate of the Gulf of Carpentaria, in North Australia; by Trelawny Saunders. Navigation of the Plata, Panama, Paraguay, Vermigo, and Pilcomigo; by H. C. Dwerhagen. Sketch of the Progress of Discovery in the Western Half of New Guinea, from 1828 up to the present time; by G. W. Earl. The Popular Theory of an Arctic Basin: Is it true? by the Rev. Dr. Scoresby. Traces of a Bilingual Town (Danish and Anglo-Saxon) in England; by Dr. R. G. Latham. Influence of the Invasion of the Danes and Scandinavians in Early Times on certain Localities in England; by Sir C. Anderson. Dialects North and South of the Humber; by C. Beckett. Contributions to the Ancient Geography of the Arctic Regions; by Professor Rafns. A Journey to the Balkan, or Mount Hæmus, from Constantinople; by Lieut.-Gen. Jochmus. The Interior of Australia; by A. Petermann. Excursion to the supposed Tomb of Ezekiel; by T. K. Lynch.

SECTION F. STATISTICS.

J. HEYWOOD, Esq., M.P., President.

ANALYSIS OF THE MORTALITY FROM CHOLERA IN HULL IN THE AUTUMN OF 1849. BY DR. H. COOPER.

By tables was shown the total number of cholera and diarrhoea cases: the former, viz., 1,860, or one in 43 of the whole population; the latter 256, or one in 355. The number of cases occurring in males was 885; in females 975. Yet, allowing for the difference of number between the excess in the whole population, the female mortality was the greatest—one male having died to 1.1 female; while, in the whole population, there is one male living to 1.14 female. The diarrhoea return showed no difference in the number of the sexes. The cases were next analysed as regards age; and it was shown that in cholera the infant mortality, though very high, was not higher than that which occurs from ordinary causes of death at the

same age. The greatest mortality, compared with the annual average, appears to have occurred in the prime of life (from 30 to 35), where the ordinary mortality is very low. There is also an excessive mortality about 60; while the greatest immunity seems to be enjoyed from 15 to 25, and from 40 to 60. In diarrhoea, the important feature is, the great excess of infant and old age mortality. The localities in which there had been the greatest mortality were indicated by marking each death upon a map in the place in which it occurred. The map was tinted in shades; showing by deeper shades the parts of the borough where the levels were the lowest, and in which, therefore, the hygienic condition, as regards moisture and drainage, might be presumed to be the most defective. Three principles were found to govern and determine the position of the greatest mortality: the level, the density of the population, and their physical and social character. These points were illustrated by specifying certain localities in which the number of markings showed the disease to have been rife. The last analysis shown was that of occupation, which showed several curious results. The general inference from this analysis was, that 1,738 of the labouring classes and 122 of the gentry, traders, and well-to-do classes had suffered; and, assuming the former class to amount to 67,000, and the latter to 13,000, it follows that 1 in 40 of the labouring class, and 1 in 131 of the well-to-do class, were victims.

The following papers were also read:

Statistics of the Produce of the Northern Whale Fisheries from 1772 to 1852; by H. Munroe. On Decimal Coinage; by T. W. Rathbone. The Results of the Census of Great Britain in 1851, with a Description of the Machinery and Processes employed to obtain the Returns; by E. Cheshire. Electoral Statistics of the United Kingdom; by J. Edwards. Prevalence of Disease in Hull; by Dr. Cooper. Causes, Extent, and Preventives of Crime, with special reference to Hull; by the Rev. J. Selkirk. Result of some Researches relative to the new supplies of Gold, and to the Circulation of Bills of Exchange, 1848-52; by W. Newmarch. Summary of the Census of Switzerland; by Professor P. Chaix. Excessive Emigration and its Reparative Agencies in Ireland; by Mr. Locke. Suggestions for an Improved System of Currency and Banking; by Mr. Bennoch. Education of the Poor in Liverpool; by Dr. Hume.

SECTION G. MECHANICAL SCIENCE.

W. FAIRBAIRN, Esq., President.

NEW THERMOSTAT FOR REGULATING TEMPERATURE AND VENTILATION. BY W. SYKES WARD.

This apparatus consists of a series of flat circular hollow cases, about one foot in diameter and one inch deep, attached together in their centres. Each case contains a small quantity of sulphuric ether, which is readily affected by change of temperature. The cases, comprising about six, are suspended one under the other, and to the lowest one is attached a weight by a cord that passes over an eccentric pulley. On an increase of temperature the ether expands, and the weight falls down, and it is drawn up again by the pressure of the atmosphere on the external discs or the cases when the air is cooled. By connecting the weight with the ventilators of a conservatory, or other building, the temperature can be thus regulated to any required degree by a previous adjustment of the apparatus.

The following papers were also read:

Introductory Address on General Improvements in Mechanical Science during the past year; by W. Fairbairn. Report of the Committee appointed in 1852 to prepare a Memorial to the Hon. East India Company on the Means of Cooling Air in Tropical Climates; by W. J. M. Rankine. On Reaping Machinery; by A. Crosskill. The Rise, Progress, and Present Condition of Steam Navigation in Hull; by J. Oldham. A brief Description of Locking and Cook's Rotatory Valve Engines; by G. Locking. On Railway Accidents by Collision, and their Prevention; by the Rev. Dr. Scoresby; also by the Rev. F. F. Statham. A Description of some of the large Valves and other Machinery which have been employed for the Discharge of Water at the Manchester Waterworks; by J. F. Bateman. The Tubular, or Double Life-Boat; by Colonel Chesney. Recent Improvements in Machines for Tilling Land; by B. Samuelson. Experimental Researches to determine the Strength of Locomotive Boilers, and the Causes which lead to their Explosion; by W. Fairbairn. Experimental Apparatus to determine the Efficiency of the Jet Pump; by J. Thomson. Improvements in Machinery for Grinding Corn; by W. Crosskill.

[Abstracts of many of the papers read are given in the *Transactions*. We have been obliged to content ourselves with the

part with merely giving the titles; but, besides those few of which we insert abstracts, there are many which would interest those of our professional brethren who have inclination and opportunity to attend to the investigation of scientific subjects.]

ASSOCIATION INTELLIGENCE.

SUFFOLK BRANCH:—FIRST SOIRÉE MÉDICALE.

The first of a proposed series of Medical Soirées was held at the White Horse, Ipswich, on the 2nd of September.

The following gentlemen were present: A. H. Bartlett, Esq. (Ipswich); G. Bullen, Jun., Esq. (Ipswich); B. Chevallier, M.D. (Ipswich); C. M. Durrant, M.D. (Ipswich); J. C. Edwards, Esq. (Ipswich); T. H. Fenn, Esq. (Nayland); C. C. Hammond, Esq. (Ipswich); John Kirkman, M.D. (Melton); Robert Martin, Esq. (Holbrook), President; C. Mingay, Esq. (Dedham); George Sampson, Esq. (Ipswich).

PRESIDENT'S ADDRESS.

The PRESIDENT, having welcomed the members to the first of what he trusted would prove a series of useful meetings, and explained the origin of the "Soirées Médicales", stated that their object was not exclusively confined to the consideration of strictly medical topics, but that they should afford opportunity for the discussion of many subjects, which the limited time allotted to the annual meetings could not entertain; and that they should supply the means by which, on all matters of medico-political importance, the views and wishes of the Suffolk Branch of the Medical and Surgical Association may be made known to the parent society. He observed that such an organism established throughout the kingdom would indeed render the Association powerful for good; it would be correctly impressed with the feelings and requirements of the profession at large, while its own concentrated force would be immensely increased by the exertion of the influence of its various branches with the representatives in Parliament of their respective localities. In effecting any public measure, the President observed, delays and difficulties must be anticipated; but he was sanguine in the expectation, that the example the Suffolk Branch had set would receive general adoption, and that a machinery would thus be set in motion, capable of righting our profession, and obtaining for it the *locus standi* in society which it so lamentably needs, and to which it is so justly entitled.

TITLE OF THE MEETING.

Dr. DURRANT proposed, and T. H. FENN, Esq., seconded, "That this meeting bear the name of the Ipswich Quarterly Soirée Médicale, in connexion with the Suffolk Branch of the Provincial Association."

Dr. CHEVALLIER proposed, and C. HAMMOND, Esq., seconded, "That any duly qualified members of the medical profession may be invited and introduced to these meetings by a member of the Provincial Association."

PAPERS AND COMMUNICATIONS READ.

After some general conversation on the Medical Reform and Vaccination Bills—

Dr. DURRANT read an interesting paper "On the Predominance of Nervous Affections within the last few months". He also stated some favourable results from cod-liver oil in several cases of ocular, lingual, and facial neuralgia.

Mr. SAMPSON introduced a case of fungus hematodes of the orbit, the eye not being affected.

Mr. FENN related some cases of hydrocele, cured by simple puncture with a needle. These cases led to considerable discussion.

Dr. KIRKMAN read a paper on Paralytic Mania, its pathology and physiology, illustrated by several instructive cases.

The members were favoured by Mr. HAMMOND by some valuable illustrations with his microscope: and the first meeting of this proposed series ended with pleasure and profit.

DECISION OF THE CENTRAL COUNCIL REGARDING THE TRANSACTIONS.

Resolved—That it appears to this Council that the Reports read at Swansea are the property of the whole Association, and can therefore only be published by the Association for the benefit of the whole body; this Council therefore cannot sanc-

tion their publication by any limited number of members with an additional subscription, nor can they at present take the responsibility of their publication on themselves, because they have no available funds for that purpose.

Resolved—That the Secretary be requested to confer with the authors of the various reports and papers, and with the editor of the Journal, on the propriety of publishing them in the Journal, or of postponing their publication until the finances of the Association will permit the outlay.

JAMES P. SHEPPARD, *Secretary*.

[These resolutions were unanimously passed by the Central Council on the 17th, and were communicated to us by the Secretary on the 24th September, but we have not received any additional information. We are inclined to think that unless the Reports are heavily laden with tabular matter, their publication in the Journal might be accomplished at an expense quite within our means; but till we have seen the MSS., it is impossible to form any estimate of the cost of producing them. As the decision of the Central Council is conclusive against the publication of Transactions for a section of members by a separate subscription, we trust that those gentlemen who have addressed us for and against such a scheme, will see the propriety of our not inserting their letters.—EDITOR.]

MEDICAL BENEVOLENT FUND.

At the meeting of the Committee held on September 27th, the Treasurer announced that in July last the sum due to him was £20; since the above date, the sum of £100:17 had been received in subscriptions, and £28:4 in donations; the payments for benevolent aid, etc., being £80:10, leaving a balance due to the Treasurer of £15:4.

The following cases were considered and relieved:—

i. An elderly medical man who had practised thirty years in the parish of St. Mary-le-bone; after many losses and misfortunes, he is now in great distress. Recommended by Mr. Squibb and Mr. Lavies. Voted £5.

ii. The widow of a medical man residing in the east of London; she has to support a son, who is a medical man, but insane. Recommended by Mr. Self, Mr. Falconer, and Mr. Wilson. Voted £10.

iii. The widow of a surgeon who died after a long illness, leaving six children, under eleven years of age, wholly unprovided for. Recommended by Mr. Lord, Mr. Alford, and Mr. R. T. Smith. Voted £20; £10 to be given now, and £10 in six months.

iv. The widow of a surgeon who died from cholera in 1849. Relieved previously. Voted £5.

Several other cases were brought before the Committee; some were passed over as incomplete, or as not being suitable; others were deferred for further investigation.

EDITOR'S LETTER BOX.

THE NEW VACCINATION ACT AND PRIVATE PRACTICE.

LETTER TO THE EDITOR.

SIR,—That monster of injustice to the profession—the Vaccination Extension Bill—is now the law of the land: and surely, if it accomplishes nothing further than arousing a determination on the part of the medical practitioners to resist by a combined effort any further encroachments of a like character on their duties and their privileges, it will accomplish much. Based as it is on false principles, it never will effect what its promoters anticipate. That it will tend more than ever to engender a bad feeling and repugnance towards the practice of vaccination, even more than the act of 1840, is not difficult to see. A stand, immediate and determinate, ought to be made by the profession at large.

The injustice of the Act towards the private practitioner is very great; because it compels him to vaccinate numbers gratuitously, to prevent the parish doctor from interfering with his patients; and it appears that this is calculated upon by the guardians. The Act empowers them to contract with any medical practitioner. They contract, however, only with their own medical officers: and this, they say, will compel private practitioners to vaccinate their own patients, all which will be a saving to them! And of course they calculate upon private

practitioners giving certificates, etc., "without fee or reward" such "fee or reward" for similar duties performed by the union surgeon, be it remarked, is worthy of 1s. 6d. or 2s. 6d., as the case may be.

Another reason for this conduct on the part of the guardians is, that it appeases somewhat the complainers among their medical staff, by increasing their emoluments. They think that it cannot be wrong to take a slice off the general practitioner's loaf, and give it to the parish doctor. It also increases the fees of registrars—a body very badly paid for very onerous duties, no doubt.

Now, let us for a moment examine the working of the Act. It is contemplated that all the vaccinating, or the bulk of it, will be done by parish surgeons. These in many instances spread the report that they only are authorised by Government to vaccinate, and urge all to come to them—and this even when a child has been vaccinated by the family attendant. Thus it too frequently engenders a bad feeling between union surgeons and the private practitioner: and this appears to be one end which the guardians and the Poor-law Commissioners have in view, judging from their treatment of the latter. And yet, when cholera comes, they expect his aid to be sought; and I suppose, as usual, "without fee or reward".

The way in which vaccination was carried out by the officers of the old Act, as regards efficiency, etc., no doubt causes them to select the same operators again: yet I find, on referring to the *Medical Gazette* of a few years back, a case published of a public vaccinator (an union surgeon, of course) contracting with the guardians for 1s. 6d. a case, and employing a deputy, not a professional man, but a framework knitter (I believe), and giving him 3d. out of each case for his trouble: and I dare say the same public functionary is at the present time recommended and sanctioned as a fit person for the duties of vaccination.

Again: those medical men who are registrars as well as union surgeons will be glad of the present Act. To them the increase of salary will be an object; as they will find a ready excuse, and a neat opportunity, whilst registering the child, to hint that *they only* are duly authorised by Government to vaccinate: and the insinuation will be easily completed by the parents—that *none other* are authorised.

Finally: the poorer part of the population, be it said to England's disgrace, are the most unhealthy—living of necessity in habitations, often supplied by their richer neighbours, where fresh air and pure water find no access; and, moreover, compelled to gather around their very doors hotbeds of filth, manure heaps, cesspools, etc., engendering disease in every quarter. Yet it is from children bred, and born, and reared, or attempted to be reared, in such hovels as these, that we are to take vaccine matter, and then insert it in the arms of the children of the middle or upper classes. Could this be carried out effectually, and were the children of the often wealthy owners of cottage property to be vaccinated from the arms of the poor inhabitants of such cottages, richly would they be rewarded for the care they take of the poor, by witnessing in their own children the outbreak of unsightly diseases, such as are too often prevalent amongst the former.

There was one line of evenhanded justice which might have been followed. It was this: to furnish every duly qualified medical practitioner with a Case Book; to require him to make quarterly returns to the guardians of each district; and that the guardians should pay each and every practitioner furnishing such returns. In this way, every child would have been vaccinated; families would not have been intruded upon by a parish doctor; and every practitioner in the land would have been interested in furthering the extension of vaccination. This plan can be adopted under the Act. But the Poor-law Commissioners step in, and compel the guardians to contract *only* with their own medical officers. This was one main reason why the Act of 1840 proved abortive; and it again threatens to render that of 1853 a useless though more expensive piece of parliamentary lumber.

The Act comes into operation on October 1. Could not something be done before that time to prevent the Poor-law Commissioners from thus acting? or cannot the guardians be made to deal justly with the provisions of the Act? The Act does *not* expressly state that the guardians shall *only* contract with parish surgeons. Are they, or ought they, to be allowed to do this injustice with impunity?

I am, etc.,

A PRIVATE PRACTITIONER.

September 20th, 1853.

COMPULSORY VACCINATION IN PRIVATE PRACTICE.

LETTER TO THE EDITOR.

SIR,—I have this day received four books from the clerk of the Board of Guardians, with a note requesting me to attend to the various insertions, etc., respecting compulsory vaccination.

I take the liberty to trespass upon your time, for *your* opinion respecting the same, as I am at a loss altogether about the matter. Am I, as a private practitioner, compelled to return an account of all my *private* patients?

There is an appointed vaccinator in my village, and he has a large district, and no fixed places except his residence where to attend; neither are any days appointed: this I consider a loose way of carrying out the act.

Can I vaccinate, and charge the Poor Law Board with all I do? I am a medical officer for a district, but not an appointed vaccinator.

Your obliging me with a reply in the next number of the Journal, under the head of correspondents, I shall esteem a great favour.

I am, etc., H. P.

[Insist upon your right morally if not legally to be appointed a vaccinator.—EDITOR.]

AN APOLOGY FOR THE CLUB SYSTEM.

LETTER TO THE EDITOR.

SIR,—I have read several letters in our Journal condemning the club system. I know not in what position the gentlemen who write these letters may be; but I think, that had they understood a little more of the difficulties that beset a young man's entry into practice, they might have thought more, and written less.

I hold the appointment of surgeon to several benefit societies; and as they admit only males of adult age, I find but little illness among the members, and they therefore pay me very well.

Has it never occurred to the writers of these letters, or to yourself, to feel the advantages of a stated time when you may lay your hand on a certain sum of money?

In the intercourse I have with several medical men, I have heard it urged as an excuse for their not having insured their lives, and so making a provision for their families at their decease, that they never were sure of having the money when the premiums became due.

Now, had some of the gentlemen either possessed appointments to a club, or to the much abused union district, this would not have been the case; and we should then hear less of benevolent Mr. Newnham's plaintive appeals, and there would be a much inferior necessity for the Medical Benevolent College.

Before condemning the practice of others, it is perhaps as well to look at home, and inquire a little more into the subject, before it is held up to so much vituperation, and so much written against the system.

When old surgeons learn to treat their juniors with a little more consideration, and to snub them less, and do not talk so much of their being *only very young men*, then will be the time for "medical ethics", and a much more liberal feeling of one man towards another will exist in the ranks of the profession.

I am, etc.,

A YOUNG MEMBER OF THE ASSOCIATION.

Kent, September 27th, 1853.

[We are not opposed to the club system. We only wish to see it reformed. The remarks of a Young Member merit attention from at least some senior practitioners.—EDITOR.]

DR. MAYNE'S EXPOSITORY LEXICON.

LETTER TO THE EDITOR.

SIR,—Allow me, through the medium of the *ASSOCIATION JOURNAL*, to direct Dr. Mayne's attention to a glaring defect in the commercial arrangements of his Expository Lexicon. It is this: that the price of the work to subscribers is not less than to ordinary purchasers. Hence the latter have an advantage over the subscribers; for while each subscriber pays thirty shillings, a non-subscriber may obtain the Lexicon at a bookseller's at a reduction of ten, or perhaps more, per cent., according to the present usages of the trade.

I would suggest to Dr. Mayne to reduce the price of subscribers' copies from thirty shillings to twenty-four or twenty-five shillings.

Trusting that the author may be encouraged to make this valuable work to a conclusion,

I am, etc.,

October 4th, 1853.

NEWS AND TOPICS OF THE DAY.

AN ACT FURTHER TO EXTEND AND MAKE COMPULSORY THE PRACTICE OF VACCINATION.

[16 and 17 Victoria, cap. 100].

Whereas an Act was passed in the fourth year of the reign of her present Majesty, intituled *An Act to extend the Practice of Vaccination*: And whereas an Act was passed in the fifth year of the same reign, intituled *An Act to amend an Act to extend the Practice of Vaccination*: And whereas it is expedient that the practice of Vaccination should be still further extended. Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. Within six weeks after the passing of this Act the guardians of every parish or union, and the overseers of every parish in which relief to the poor shall not be administered by guardians, in *England and Wales*, shall, subject to the approval of the Poor-Law Board, divide such parish or union, if need be, into convenient districts for the purpose of affording increased facilities for the vaccination of the poor, and shall appoint a convenient place in each such district for the performance of such vaccination, and shall take the most effectual means for giving from time to time to all persons resident within such district due notice of the days and hours at which the medical officer or practitioner contracted with for such purpose will attend at such place to vaccinate all persons not already successfully vaccinated who may then appear there, and also of the days and hours at which such medical officer or practitioner will attend at such place to inspect the progress of such vaccination in the persons so vaccinated.

II. The father or mother of every child born in *England or Wales* after the first day of August in the year of our Lord one thousand eight hundred and fifty-three, shall, within three calendar months after the birth of the said child, or in the event of the death, illness, absence, or inability of the father and mother, then the person who shall have the care, nurture, or custody of the said child, shall within four calendar months after the birth of such child take or cause to be taken the said child to the medical officer or practitioner appointed in the union or parish in which the said child is resident according to the provisions of the first recited Act, for the purpose of being vaccinated, unless he shall have been previously vaccinated by some duly qualified medical practitioner, and the vaccination duly certified, and the said medical officer or practitioner so appointed shall and he is hereby required thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child.

III. Upon the eighth day following the day on which any child has been vaccinated as aforesaid, the father or mother, or other person having the care, nurture, or custody of the said child, shall again take or cause to be taken the said child to the medical officer or practitioner by whom the operation was performed, in order that such medical officer or practitioner may ascertain by inspection the result of such operation.

IV. Upon and immediately after the successful vaccination of any child the medical officer or practitioner who shall have performed the operation shall deliver to the father or mother of the said child, or to the person who shall have the care, nurture, or custody of the said child, a certificate under his hand, according to the form of schedule hereinafter inserted, marked (A.), that the said child has been successfully vaccinated, and shall also transmit a duplicate of the said certificate to the Registrar of births and deaths of the subdistrict in which the operation was performed; and such certificate shall, without further proof, be admissible as evidence of the successful vaccination of such child in any information or complaint which shall be brought against the father or mother of the said child, or against the person who shall have had the care, nurture, or custody of such child as aforesaid, for noncompliance with the provisions of this Act.

V. If any medical officer or practitioner shall be of opinion that any child is not in a fit and proper state to be successfully vaccinated, he shall thereupon and immediately deliver, without fee or reward, to the father or mother of such child, or the person having the care, nurture, or custody of the said child, a certificate under his hand according to the form of schedule hereinafter inserted, marked (B.), that the child is in an unfit state for successful vaccination, and such certificate shall remain in force for two calendar months from its delivery as aforesaid; and the

father or mother of the said child, or the person having the care, nurture, or custody of the said child, shall, unless they shall within each succeeding period of two months have obtained from a medical officer or practitioner a renewal of such certificate, within two months next after the delivery of the said certificate as aforesaid, and if the said child be not vaccinated at or by the termination of such period of two months then during each succeeding period of two calendar months until such child has been successfully vaccinated, take or cause to be taken to the said medical officer or practitioner such child to be vaccinated by him; and if the said medical officer or practitioner deem the said child to be then in a fit and proper state for successful vaccination, he shall forthwith vaccinate it accordingly, and shall deliver to the father or mother of such child, or person having the care, nurture, or custody of such child, a certificate under his hand according to the form of schedule hereinafter inserted, marked (A.), that such child has been successfully vaccinated; but if the said medical officer or practitioner be of opinion that the child is still in an unfit state for successful vaccination, then he shall again deliver to the father or mother of such child, or person having the care, nurture, or custody of the said child, a certificate under his hand, according to the said form of schedule (B.), that the child is still in an unfit state for successful vaccination: and the said medical officer or practitioner, so long as such child remains in an unfit state for vaccination, and unvaccinated, shall at the expiration of every succeeding period of two calendar months, deliver, if required, to the said father or mother of such child, or person having the care, nurture, or custody of such child, a fresh certificate under his hand according to the said form of schedule; and the production of such certificate shall be a sufficient defence against any complaint which shall be brought against the said father or mother, or person having the care, nurture, or custody of such child for noncompliance with the provisions of this Act.

VI. In all contracts to be hereafter made under the provisions of the first-recited act by any guardians or overseers of the poor with any medical officers or practitioners for the vaccination of the persons resident in their respective unions or parishes the sums contracted to be paid shall not be less than the following rates; that is to say, for every person successfully vaccinated at the residence of such medical officer or practitioner, or within two miles therefrom by the nearest public road, a sum not less than one shilling and sixpence, and for every person successfully vaccinated at any place more than two miles distant from such residence any sum not less than two shillings and sixpence.

VII. In the event of any medical practitioner acting under the provisions of this act being of opinion that any child that has been vaccinated by him is insusceptible of the vaccine disease, he shall deliver to the father or mother, or person having the care, nurture, or custody of such child, a certificate under his hand according to the form of schedule hereinafter inserted, marked (D); and the production of such certificate shall be a sufficient defence against any complaint which may be brought against the said father, mother, or person having the care, nurture, or custody of such child for noncompliance with the provisions of this act.

VIII. The registrar of births and deaths in every sub-district in which the operation has been performed shall keep a register of the persons of whose successful vaccination a certificate shall have been transmitted to him as above provided by the said medical officer or practitioner, and shall at all reasonable times allow searches to be made of any such register book in his keeping, and shall give a copy, certified under his hand, of any entry or entries in the same, on payment of the fee of one shilling for each search, and sixpence for each certificate.

IX. The registrar of births and deaths in every sub-district shall, on or within seven days after the registration of the birth of any child not already vaccinated within the said sub-district, give notice in writing in manner hereinafter directed, and according to the form of schedule hereinafter inserted, marked (C), to the father or mother of such child, or in the event of the death, illness, absence, or inability from sickness or otherwise of the father and mother, then to the person upon whom the care, nurture, or custody of such child shall have devolved, that it is the duty of such father or mother, or person having the care, nurture, or custody of such child as aforesaid, to take care that the said child shall be vaccinated in the manner directed by this act, and shall together therewith deliver to such person a notice of the days, hours, and places within the district of such registrar at which the medical officer or practitioner as hereinbefore provided will attend for the purpose of vaccination; and if after such notice the father or mother of the said child, or the person so having as aforesaid the care, nurture, or custody

of the said child, shall not cause such child to be vaccinated, or shall not on the eighth day after the vaccination has been performed take or cause to be taken such child for inspection according to the provisions in this act respectively contained, then such father or mother, or person having the care, nurture, or custody of such child as aforesaid, so offending, shall forfeit a sum not exceeding twenty shillings.

x. A fee of threepence shall be paid to such registrar for each child vaccinated in respect of which he shall have performed the duties required in this act; and he shall keep a book, to be provided as hereinafter directed, containing a minute of his having duly given such notice as hereinbefore directed; and the said fee shall be payable in the same manner as the fee now payable to such registrar for registering the birth of such child as aforesaid is paid.

xi. The Registrar-General for England and Wales shall and he is empowered and directed, within two months after the passing of this act, to frame and provide such books, forms, and regulations, as he may deem requisite for carrying into full effect the provisions of this act; and shall transmit the same to the superintendent registrars of each district in England and Wales, who shall deliver to the medical officers so appointed as aforesaid, and other duly qualified medical practitioners in the said district, such of the said books, forms, and regulations, as they may require for the performance of the duties imposed upon them by this act; and the expenses to be incurred by the Registrar-General under the provisions of this act shall be defrayed in the same manner as the expenses under the act of the sixth and seventh years of King William the Fourth, chapter eighty-five.

xii. All penalties by this act imposed shall be recoverable before any two justices of the peace for the county, city, borough, or place where the offence may have been committed; and the provisions of the act of the twelfth year of Her present Majesty, chapter forty-three, shall be applicable to the recovery of such penalties.

xiii. All penalties recovered under this act shall be applied in aid of the funds applicable to the relief of the poor in the parish or place maintaining its own poor wherein the offence may have been committed.

Schedules referred to by this Act.

SCHEDULE (A).

I, the undersigned, hereby certify, that _____, the child of _____, aged _____, of the parish of _____, in the county of _____, has been successfully vaccinated by me.
Dated this _____ day of _____, 185 _____.

(Signed) A.B.,

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (B).

I, the undersigned, hereby certify that I am of opinion that _____, the child of _____, of the parish of _____, in the county of _____, aged _____, is not now in a fit and proper state to be successfully vaccinated, and I do hereby postpone the vaccination until the _____ day of _____.
Dated this _____ day of _____, 185 _____.

(Signed) A.B.,

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (C).

I, the undersigned, hereby give you notice, and require you to have C.D. vaccinated within three (or four, as the case may be, according to the Second Section of this Act) months after the birth, pursuant to the Provisions and Directions of the Act of the 16 Victoria, cap. _____. As witness my hand this day of _____, 185 _____.

J.B.,

Registrar of Births and Deaths for the _____ sub-district (as the case may be).

SCHEDULE (D).

I, the undersigned, hereby certify that I am of opinion that _____, the child of _____, of the parish of _____, in the county of _____, is insusceptible of the vaccine disease.
Dated this _____ day of _____, 185 _____.

(Signed) A.B.,

Surgeon of the Union or Parish of _____ (or other Medical Practitioner, as the case may be).

COMPULSORY VACCINATION ACT. The act passed in the last session of Parliament, which makes it compulsory on the father or mother of every child born in England and Wales after August 1, 1853, to have the said child vaccinated within three calendar months, is now in operation. The duty of drawing up and issuing the various certificates and instructions for carrying out the provisions of this Act has devolved upon the Registrar-General, and the completeness and celerity with which this has been accomplished would astonish those who believe that nothing can be quickly and thoroughly executed in Government offices. It may be interesting to remark, that the issue of documents by the Registrar-General under this Act involved the supply of the following items:—3,000,000 forms of "certificate of successful vaccination" (schedule A.), made up into 30,000 books of 100 forms each, with an example prefixed; 3,000,000 forms of "duplicate certificate of successful vaccination" (schedule A.), made up into 30,000 books of 100 forms each; 750,000 forms of "certificate of unfitness for successful vaccination" (schedule B.), made up into 15,000 books of 50 forms each, with an example prefixed; 750,000 forms of "certificate of incapacity to receive the vaccine disease" (schedule D.), made up into 15,000 books of 50 forms each with example prefixed; 1,500,000 forms of "notice" (according to schedule C.), addressed to the "father or mother of the child, printed on loose sheets of foolscap, folded and put into parcels of 25 forms each, and further put into packets of four parcels each; 250,000 leaves of forms for the "register of successful vaccination," made up into 5,000 books of 50 leaves each, with "examples" and "instructions" prefixed; 20,000 copies of the Compulsory Vaccination Act, 16 and 17 Victoria, cap. 100.

MEDICAL METEOROLOGY. The *Athenaeum* of September 10th, says: "Our attention has been drawn to a paper in the ASSOCIATION MEDICAL JOURNAL on Medical Meteorology. The object of the paper is to draw the attention of medical men to the importance of the registration of disease in connexion with the conditions of the atmosphere. We have often pointed out the present unsatisfactory method of generalising with regard to the influence of climate and weather on the results of disease. The only documents of any value for this purpose that we possess are those of the Registrar General, and they are far too vague to give anything like precision to the inferences that may be drawn from them. The following supposed case, from the paper alluded to, illustrates our remark: 'A patient was seized by an attack of bronchitis on the 7th of April in any year, and during the prevalence of a cold north-easterly wind; that the patient died on the 14th; and that on the 17th the death was registered; but meanwhile, that, on the 13th, the wind had changed to a mild south-westerly breeze; it is obvious that the registration of the death on the 17th could have no value as a medico-meteorological fact.' The facts that are wanted to be of value in such a case are, the dates of the first seizure and the state of the weather previous to that time. A moist and warm atmosphere, or a cold and dry one, may suddenly set in and terminate a number of cases which have been very variously commenced. In order to supply the information desired, the ASSOCIATION MEDICAL JOURNAL has undertaken to publish meteorological tables in connexion with the history of particular cases of disease. In this way we have no doubt that some important facts will be elicited. Already the physiologist is in possession of a large number of facts which show the influence of the great forces of nature on the life of the organic world; and the prosecution of this subject by the medical man, will be but the following out of these researches, and giving to us a more intimate knowledge of the laws which control the existence of organic beings on the earth."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. In consequence of the reappearance of Epidemic Cholera, a special meeting of the Society will be held on Friday evening, October 7th, at 8 o'clock precisely, to consider the best method of investigating and treating the disease.

FIRE AT THE PRINTING OFFICE OF THE LANCET. The publication of our contemporary the *Lancet* was last week delayed for a day beyond the usual time, in consequence of the destruction by fire of the extensive printing establishment of Messrs. Savill and Edwards, Chandos Street, Strand, on the morning. The type of the *Lancet* was at the station when the fire broke out.

[News and Topics continued at page 891.]

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. I.—WEEK ENDING 1ST OCTOBER 1853.

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern of Barometer above the Mean Sea Level, 190 feet.

Observer: J. W. JEANS, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Degree of Humidity for the Day.	Wind.			Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Hail, Snow, Fog, Frost, Thunder, Aurora, and Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.	
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.		Direction.	Mean Force for the Day.								
	in.		°	°	°	°	°	°		a.m.	p.m.	0-6	am	pm					
25 Sep. S.	29.055		60.2	42.4	51.3	62.7	36.3	46.7	0.958	sbe.	wnw.	6			0 — 10				
26 — M.	29.367		55.2	40.4	47.8	62.7	41.5	33.3	0.580	nw.	wnw.	6			10 cl.-cu. s.				
27 — Tu.	29.698		56.7	40.4	48.5	59.3	35.0	45.1	0.889	sw.	sw.	1			2 cl.-cu.			Dy. Di. 7 a.m.	
28 — W.	29.615		64.3	52.4	58.3	70.3	49.5	54.4	0.829	wsu.	sw.	2			10 cl.-cu. s.				
29 — Th.	29.670		55.5	51.4	53.4	56.7	47.8	44.3	0.708	w.	wsu.	2			9 cl.-cu. sc.				
30 — F.	29.759		57.5	46.7	52.1	70.3	42.5	43.6	0.802	wbs.	wbs.	2			10 cl.-cu. cl.-s. sc.			Di. 3 p.m. Di. 7 p.m.	
1 Oct. S.	29.394		56.2	45.8	51.0		41.0	43.9	0.838	sw.	w.	2			7 cl. cl.-cu. cu.-s.				Measles 2. Diarrhoea. Pneumonia.
Column ..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

25 Sep. S.	29.194	29.951	63.0	47.0	55.0	69.5	43.5	50.7	0.792	s.	w.	4	2	4	5 cu.	.150	Inf. Ophthalmia.	Conv. Phthis.
26 — M.	29.483	29.677	58.0	47.0	52.5	60.0	43.0	42.1	0.645	nw.	nw.	2	2	0	4 ci.-cu. s.	.010	Vo. Dil. Cyn. T. Cyn. P.	
27 — Tu.	29.792	29.774	61.0	38.0	49.5	75.0	38.5	49.9	0.843	w.	sw.	1	1	1	6 cu.-s.	.000		Jaund. Maras.
28 — W.	29.771	29.729	63.0	48.0	55.5	70.5	46.0	56.2	0.798	sw.	sw.	2	0	0	8 cu.	.010		Di. Epil.
29 — Th.	29.781	29.738	62.3	53.5	57.9	66.5	50.0	48.8	0.771	wsu.	wsu.	1	1	0	9 cu.-s.	.000		Paralysis.
30 — F.	29.854	29.868	59.0	45.5	52.2	71.5	46.0	48.8	0.799	wsu.	w.	1	0	0	7 cu.-s.	.130	Inf. Vert. Cyn. T.	
1 Oct. S.	29.527	29.501	59.0	46.5	52.7	78.0	45.0	45.0	0.780	sw.	sw.	2	1	1	4 cu.	.110		

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

25 Sep. S.	29.50		64.	55.	49.5	68.	33.	51.0	0.991	s.	sw.	3			5 ci.-s. n.	.520	[Pneu. T. 2. Fe. Di. 2. Dy. 1. Neph. GoutConv. Di. Ph. Dy. Pneu. Hep. Di. Hep. Hem. Hamatu. Sc. F. Di. 2. Pneu. Oph. Ag. Di. 3. Hamtu. Oph. T. 2. Ery. Inf. Ch.	
26 — M.	29.64		60.	44.	52.0	66.	40.	40.6	0.749	w.	w.	3			0 cu.	.010		
27 — Tu.	30.00		63.	32.	47.5	66.	38.	45.0	0.814	w.	w.	0			5 ci.-s. c.		Frost.	
28 — W.	30.00		64.	48.	56.0	66.	46.	48.0	0.815	sw.	sw.	3			10	.020		Phrenitis.
29 — Th.	30.01		63.	57.	60.0	64.	55.	53.5	0.752	w.	sw.	3			10	.400		
30 — F.	30.02		63.	49.	56.0	69.	46.	53.9	0.842	w.	w.	0			5 cu.-s.	.040		
1 Oct. S.	29.68		60.	44.	52.0	64.	40.	51.6	0.888	w.	w.	1			5 cu.-s. n.	.100		

EXETER. Lat., 50.45.0 N.; Lon., 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTE, M.D.

25 Sep. S.	29.381		64.	46.2	55.1	67.7	40.	55.6	0.803	w.		5	9		3	.230		
26 — M.	29.817		58.2	44.7	51.4	62.	38.2	42.	0.700	nw.		3	3		3	.010		
27 — Tu.	29.878		65.	54.	59.5	70.5	49.7	53.5	0.990	s.		1	8		3			
28 — W.	29.981		66.8	54.6	60.7	69.9	50.7	54.9	0.843	w.		1	8		4	.020		Dropsy from
29 — Th.	30.006		61.	51.7	56.3	61.8	47.6	53.6	0.891	w.		1	4		7	.100		[Heart Dis-
30 — F.	30.028		60.	49.8	54.9	60.2	46.2	51.9	0.843	nw.		1	0		6	.030		ease, at 71.
1 Oct. S.	29.660		58.2	41.4	49.8	62.3	35.7	48.	0.815	nw.		2	7		5	.100		

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

25 Sep. S.	29.247		65.0	42.4	54.5	74.0		54.2	1.000	sw.		0.5			10	.310		
26 — M.	29.640		60.0	44.4	52.1	75.0		41.8	0.662	ne.		2.0			8	.020		
27 — Tu.	29.851		62.0	41.4	52.6	65.0		52.5	1.000	sw.		0.5			9			
28 — W.	29.918		60.0	48.4	56.2	66.5		56.3	0.893	sw.		1.0			10	.010	Pu. Conv. 11 a.m.	
29 — Th.	29.906		60.0	54.4	58.1	69.0		52.8	0.797	sw.		2.0			9	.050		
30 — F.	29.958		61.0	49.3	55.9	65.0		48.5	0.769	nw.		0.5			9	.190		
1 Oct. S.	29.574		63.0	43.4	55.8	69.0		34.3	0.944	w.		0.5			10	.130		

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

25 Sep. S.	29.310	29.291	60.5	51.5	56.			55.0	0.890	wsu.	wnw.	3.5			7 cu.-s.	.305		
26 — M.	29.771	29.890	61.	51.	58.			46.5	0.749	nw.	wnw.	3.			5 ci.-cu.	.055		
27 — Tu.	29.848	29.881	60.5	61.	55.7			58.6	0.891	sw.	wsu.	1.5			7 cu.-s.	.125		
28 — W.	30.011	30.002	60.	54.	57.			56.6	0.808	wsu.	wsu.	2.			5 ci.-cu.	.069		
29 — Th.	29.989	29.957	63.	58.	60.			58.3	0.944	wnw.	wnw.	3.			10	.111	Hazy.	
30 — F.	29.962	29.929	59.	57.5	58.7			56.3	0.946	nw.	ne.	1.			10	.347	Hazy.	
1 Oct. S.	29.681	29.707	60.	56	57.5			51.0	0.843	nw.	nw.	2.			6 ci.-cu.	.222	Neuralgia.	

[The returns from DR. MOFFAT and MR. MILNER were not received in time for this Number.]

The readings of the Barometer are corrected for index-error and capillarity, and reduced to the constant temperature of 32° F.

The maximum observations for the day, Cols. 3 and 6, are taken after Three o'clock p.m. in the winter, and Six o'clock p.m. in the summer, and indicate the maximum temperature of the same day.

The minimum observations, Cols. 4 and 7, are taken at Nine o'clock a.m., and indicate the minimum temperature of the same day.

The mean temperature of the day, Col. 5, is deduced from the maximum and minimum readings in the shade.

The temperature of the dew-point, and degree of humidity, Cols. 8 and 9, are obtained from Glaisher's Hygrometrical Tables.

The force of the wind, Col. 11, is noted by figures from 0 to 6: the latter representing the highest wind, and 0 a calm; the letter V means that the wind was variable.

Arrangements for Ozone observations are not yet complete.

The amount of cloud, Col. 13, is noted by figures from 0 to 10: a cloudless sky 0, and a cloudy sky without sunshine 10.

The class of cloud is noted by ci. for cirrus; ci.-cu. for cirro-cumulus; ci.-s. for cirro-stratus; cu. for cumulus; cu.-s. for cumulo-stratus; n. for nimbus; and s. for stratus.

In Column 14, a. represents aurora; f. fog; fr. frost; hl. hail; l. lightning; lu. ha. lunar halo; sl. sleet; sn. snow; so. ha. solar halo; t. thunder; and z. zodiacal light.

The amount of rain is registered at Nine a.m., and has fallen during the previous twenty-four hours.

Columns 16 and 17 are devoted to diseases and deaths. Any disease or death, the precise date of the commencement or occurrence of which is known to the observer, is entered in the proper column, on the proper date of its occur

remc. The name of the disease alone indicates that one case of the disease had occurred; but if more than one case of the same disease had occurred on the same day, the figure indicates the number. The entries of diseases and of deaths do not indicate the extent of practice of the observers, inasmuch as those diseases only are entered the precise date of the commencement of which is known to the observer within the week; all other cases are rejected. The deaths are supplied (with the consent of the Registrar-General) by the Registrar of deaths for the district.

Abbreviations used when several cases occur, and have to be entered, on the same day:

Abo., indicates Abortion.
Ag., Ague.
Ap., Apoplexy.
Ang. Pec., Angina Pectoris.
At., Atrophy.
Br., Bronchitis.
Card., Carditis.
Ch., Cholera.
Col. + Vom., Colic with Vomiting.
Col. — Vom., Colic without Vomiting.
Conv., Convulsions in Children.
Cr., Croup.
Cyn. L., Cynanche Laryngea.
Cyn. Pa., Cynanche Parotidea.
Cyn. Ph., Cynanche Pharyngea.
Cyn. T., Cynanche Tonsillaris.
Cyn. Tr., Cynanche Trachealis.
Di., Diarrhoea.
Dys., Dysentery.
Ent., Enteritis.
Epi., Epilepsy.
Epi., Epistaxis.
Ery., Erysipelas.
Fe., Fever.
Hæmatem., Hæmatemesis.
Hæmatu., Hæmaturia.
Hæmop., Hæmoptysis.
Hem., Hemiplegia.
Hep., Hepatitis.
Hoop. C., Hooping Cough.

Inf., indicates Influenza.
Ins., Insanity.
Mea., Measles.
Men., Menorrhagia.
Mum., Mumps.
Ncu., Neuralgia.
Neph., Nephritis.
Oph., Ophthalmia.
Paral., Paralysis.
Parap., Paraplegia.
Phren., Phrenitis.
Plcu., Pleuritis.
Pu. Con., Puerperal Convulsions.
Pu. Fe., Puerperal Fever.
Pneu., Pneumonia.
Prem. L., Premature Labour.
Qu., Quinsy.
Ret. U., Retention of Urine.
Rub., Rubella.
Rh. Ac., Rheumatism, Acute.
Sc. Fe., Scarlet Fever.
Sci., Sciatica.
Sm. P., Small Pox.
T., Toothache.
Ty., Typhus.
Ut. Hæm., Uterine Hæmorrhage.
Var., Varicella.
Vario., Variola.
Vrr., Vertigo.
Vom., Vomiting.

NEWS AND TOPICS OF THE DAY.

[Continued from page 890.]

ROYAL FREE HOSPITAL MEDICAL COLLEGE. The introductory lecture at the opening of the first session of the new medical school in connexion with the Royal Free Hospital was delivered by Dr. Tyler Smith, at eight o'clock in the evening of Tuesday, the 4th instant. The subject which the lecturer chose as the theme of his discourse was the progress and influence of medical teaching, especially in this country. Having rapidly glanced at the probable origin of medicine as a profession in ancient Egypt, its progress in the hands of the Greeks, Romans, and Arabians, and having referred to the establishment of the first hospital at Constantinople in the early ages of Christianity, and to the institution of the first course of instruction and the first medical diploma at Salerno in Italy, he proceeded to occupy the greater part of the lecture with a history of the rise and progress of medical teaching in England. This did not commence with hospital authorities; for six centuries elapsed between the foundation of St. Bartholomew's Hospital by Rahere in the beginning of the twelve century, and the formation of the first medical schools in London. Most of the modern hospital medical schools originated either in the annexation of some private school which had excited the jealousy of the hospital authorities, or in the formation of a new school in opposition to some already existing private institution. Dr. Smith referred to the beneficial influence which medical teaching exercised both on teachers and students. The great discoveries of Harvey, Galvani, Jenner, and many others, had been made by them when acting in one or other of these capacities. With regard to the examining-boards, he believed that the merit due to them was not so much that of originating the modern movement in advance, as of arranging and combining the already existing elements. Teaching first made them important. The Apothecaries' Act of 1815, the prosperity of the College of Surgeons, and the establishment of the University of London, are effects of the great medical educational movement of the age.

In speaking of the College of Physicians, the lecturer regretted that the college had become to a certain extent separated from the currents of teaching, and trusted that with their new charter, they would become the superintendents of the education of all the physicians of this country. The East India Company's medical service had also partaken in the march of improvement. Formerly, favouritism and private influence had much to do with the distribution of the medical appointments, except in the case of a few which were from time to time placed at the disposal of various medical schools, to be given to the most deserving competitor; but by a new Act, which

will come into force next year, the medical appointments will be given only to candidates selected after examination. Dr. Smith then compared the London with the Parisian hospitals; contending that the schools of the metropolis had reached such a position, as to render London the capital of the medical world; and, having passed in review the improvements and enlargements in the London hospitals, either complete or now in progress, he concluded with some brief observations on the origin and progress of the Royal Free Hospital and its Medical College.

The lecture, which was attended by about two hundred students and members of the profession, elicited universal approbation. After the lecture, tea and coffee were provided in the reading room of the College. The museum was open for inspection, and was visited by many who had been present at the lecture. It appears to be well provided with anatomical and pathological preparations, and with specimens of articles of materia medica.

ROYAL COLLEGE OF SURGEONS. Mr. T. M. Stone, who has for many years ably performed the duties of Librarian, has been removed to another office in the College; and Mr. John Chatto has been appointed Librarian in his stead.

ADVERTISEMENTS.

East Surrey Cholera Society.—It is

proposed to form a Society for the observation of Cholera in East Surrey. Qualified Practitioners of Medicine willing to cooperate for this purpose are requested to communicate with the Provisional Committee.

B. W. RICHARDSON,

Hon. Sec. to the Prov. Committee.

Mortlake, 5 October, 1853.

Medical Benevolent Fund.—Donations and SUBSCRIPTIONS (first) received since JULY 1, 1853.

	Donations.	Subs.
Alexander, Dr. Gervas, Halifax	10 0 0	1 1 0
Barchard, Mrs., Putney, by Dr. Cornack	1 1 0	1 1 0
Barrett, Mrs. Richard, Stourport	1 1 0	1 1 0
Bartlett, A. H., Esq., Ipswich	1 1 0	1 1 0
Benson, Patrick, Esq., Luton	3 3 0	0 10 0
Budd, —, Esq., Swansea	0 10 0	0 10 0
Burridge, Dr. Reginald, Taunton	0 10 0	1 0 0
Burt, G. M., Esq., Ilminster	1 0 0	1 1 0
Champs, Henry, Esq., Cheltenham	1 1 0	0 10 6
Cholmley, Dr., Upper Southwick Place	0 10 6	0 10 6
Coates, Martin, Esq., Salisbury	0 10 0	0 10 0
Crowdy, A., Esq., Billingsley Hall, Stratford-on-Avon	0 10 0	0 5 0
Crowdy, Mrs., ditto ditto	0 5 0	0 5 0
Davey, Dr. James, Bristol	2 0 0	0 5 0
Fortnum, —, Esq., Hereford	0 5 0	0 5 0
Griffith, J., Esq., Bristol	5 0 0	0 5 0
Harston, Alfred, Esq.	(2nd donation)	0 10 6
Hawkins, Caesar, Esq.	0 10 0	0 10 0
Henry, Dr. A., London	0 10 0	1 1 0
Heraopath, Dr., Bristol	0 5 0	0 5 0
Hoare, J., Esq., Swansea	1 1 0	0 5 0
Hore, W., Esq., Bristol	1 1 0	1 1 0
Imman, Richard, Esq., Preston	3 0 0	1 1 0
James, J. H., Esq., Exeter	1 1 0	0 10 6
Jenkin, J. F., Esq., Swansea	0 10 6	0 10 0
Kelly, Dr. Marwood, Taunton	0 5 0	0 5 0
Kidgell, George, Esq., Wellington	0 5 0	0 5 0
King, Dr., Bristol	0 5 0	0 5 0
Long, H. D., Esq., Stogumber	0 10 0	0 10 0
Lucas, Rudd, Esq., Long Ashton	0 10 0	0 10 0
M'intyre, Dr., Odiham	0 10 0	0 5 0
Marchant, R., Esq., North Curry	2 0 0	1 0 0
Marshall, Rev. Edward, Oxford	0 10 0	0 10 0
Mills, Miss, Billingsley Hall, Stratford-on-Avon	3 18 0	0 5 0
Milnthorpe, J., Esq., Thirsk	0 5 0	0 5 0
Morgan, W. F., Esq., Bristol, to complete a donat. of £21	0 5 0	0 5 0
Newell, —, Esq., Church Stretton	5 0 0	0 5 0
Ogle, Dr., Oxford	5 0 0	0 5 0
Paine, John, Esq., Farnham, in lieu of additional Ann. Sub.	5 0 0	0 10 0
Portello, Mrs., Farnham	0 5 0	0 5 0
Pyne, W. C., Esq., Wellington	0 5 0	0 5 0
Randolph, H. W., Esq., Milverton	0 5 0	0 5 0
Ruddock, R. M., Esq., Bristol	1 0 0	1 1 0
Skinner, D., Esq., Headcorn	1 0 0	1 1 0
Stevens, Richard, Esq., Markgate Street	1 0 0	1 1 0
T. C., by Mr. Parker, Woburn	1 1 0	0 10 0
Tegart, Edw., Esq., Jermyn Street	0 10 0	1 1 0
Webb, Matthew, Esq., Wellington	1 1 0	0 5 0
Williams, J. L., Esq., Carmarthen	0 5 0	0 10 0
Wills, George F., Esq., Crewkerne	0 10 0	0 10 0
Wilson, J. G., Esq., Bristol	0 17 0	0 10 0
Wine, Remanets, Bristol	0 17 0	0 10 0

A Report has been forwarded to every known Member of the Association; and it is earnestly hoped that this appeal on behalf of THEIR OWN Society will not be made in vain, to those whose duty as well as privilege it is to contribute.

Subscriptions will be thankfully received by the Treasurer, MR. NEWHAM; by the Honorary Secretaries, MR. NEWHAM and MR. TOYNBEE; or by any of the Committee.

Farnham, October 1, 1853.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLI.

LONDON: FRIDAY EVENING, OCTOBER 14, 1853.

NEW SERIES.

COMMUNICATIONS REGARDING CHOLERA AND LETTERS ON THE VACCINATION ACT IN OUR NEXT.

THE NUMERICAL STRENGTH OF THE ASSOCIATION IN OUR NEXT.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

THE FIRST PHYSIOLOGICAL MEETING IN LONDON.

THE first meeting that has ever taken place in London, for the purpose of debate on physiological subjects, was held on Monday last at the Medical Society. In this meeting was realised the scheme referred to in the Journal for February 18, and July 29; and we feel confident that all those gentlemen who have so long and so earnestly supported the scheme received a rich reward in thus witnessing a consummation of their untiring and not altogether thankful labours.

The report of the meeting will be found at another page. The rooms were well filled; and the discussion that took place was animated and interesting. Mr. LEE's paper could perhaps scarcely be called physiological in the strict sense of the word; it was rather a pathological subject illustrated by physiology; but we agree with Dr. LANKESTER, that physiological research is never so valuable as when it can be made to illustrate pathological questions. The success of John Hunter depended much, as we take it, upon his attempts at realising this position—attempts that gave to his works a practical bearing which none could resist.

Not the least interesting subject of the evening was the announcement by Dr. CRISP of the discovery of valves in the splenic veins of many animals. The preparations which he brought forward to prove the existence of these valves were exceedingly beautiful.

To pass to another matter:—we are desirous of answering once for all several inquiries that have been made to us by letter and word of mouth as to the relationship that exists between these physiological meetings and the Medical Society. The physiological meetings are a part of the Society itself. The Council elect twelve gentlemen, who are called the Physiological Committee. These gentlemen meet monthly, receive papers on physiological subjects, submit them to the necessary criticism, and make arrangements for their being read in public. The physiological meetings take place on the second Monday evenings of every month; the President of the Society presiding as usual. The papers that are read must either be written by a Fellow of the Society, or communicated through one. One paper is called the paper of the evening; but, before it comes on, there is a period given for the hearing of short communications on physiological points; and these brief communications, which often in similar meetings elicit a few minutes

of sharp discussion, are likely to prove highly interesting, and to deserve every possible encouragement.

A word more:—Is it not obvious to every unbiassed person that the Physiological Meeting of Monday evening was just as well conducted, in a scientific sense, as could have been the meeting of any special society? And does not the successful experiment to-day related prove satisfactorily the truth of a statement we have often made, viz., that one active society is competent to conduct, by means of sections, meetings connected with every department of medical science; and that to have several distinct societies where one is sufficient is a proceeding monstrously wasteful of money, and absolutely absurd?

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

The Quarterly Meeting of this Branch was held at the York House, Bath, on the evening of September 29th, under the presidency of HENRY CLARK, Esq.

There were present:

Joseph Barratt, Esq. (Bath); J. S. Bartrum, Esq. (Bath); W. H. Brace, Esq. (Bath); — Chapman, Esq. (Devizes); Henry Clark, Esq. (Bristol) President; E. Cockey, Esq. (Frome); John Colthurst, Esq. (Clifton); James Crang, Esq. (Tisbury); W. Davies, M.D. (Bath); C. F. Edwards, Esq. (Bath); Farnham Flower, Esq. (Chilcompton); Gustavus Gidley, M.D. (Bath); James Godfrey, Esq. (Bristol); — Godfrey, Esq. (Bath); F. Hanham, Esq. (Bath); Henry Hensley, Esq. (Bath); W. B. Herapath, M.D. (Bristol); Edw. Hodges, M.D. (Bath); George King, Esq. (Bath); Joseph Lancaster, Esq. (Clifton); Joseph Lawrence, Esq. (Bath); Crosby Leonard, Esq. (Bristol); Frederick Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); W. F. Morgan, Esq. (Bristol); George Norman, Esq. (Bath); John Ormond, Esq. (Bath); Joshua Parsons, Esq. (Beckington); G. Skinner, Esq. (Bath); Charles Smerdon, Esq. (Clifton); R. N. Stone, Esq. (Bath); J. G. Swayne, M.D. (Clifton); S. H. Swayne, Esq. (Bristol); John Thurnam, M.D. (Devizes); James Tunstall, M.D. (Bath); Thomas Washbourne, Esq. (Corsham).

DYSTOCIA FROM OSSIFIED FETAL HEAD. BY GEORGE KING, ESQ.

Mr. KING read a paper on the difficulty occasionally met with in labour, from abnormal ossification of the fetal head, and the treatment to be adopted. [This paper will be published in the JOURNAL.]

Dr. SWAYNE agreed with Mr. King upon the necessity of craniotomy in such cases. Abnormal ossification was a cause of protracted labour acknowledged by all practitioners. But he could not coincide with Mr. King's description of the difficulties attendant on the operation. In answer to a question by Dr. Herapath, he stated that, though no opportunity had yet presented itself for trying Dr. Simpson's plan of turning in preference to craniotomy, he quite felt that in many cases the former was the preferable mode. Mr. King had exaggerated the difficulty of perforating the cranium when the feet of the child had been brought down; though of course the difficulty was enhanced. Dr. Swayne exhibited two fetal crania, illustrating the very different sizes and conditions at birth.

Dr. HERAPATH had turned in three cases where otherwise craniotomy would have been requisite. In the first case, the pelvis was deformed; the brim was contracted, and the promontory of the sacrum thrown forward. In the previous labour, craniotomy had been performed. When he saw the woman, the passage through the pelvis had been long delayed; but there was not the difficulty in turning which he had expected. In about half an hour he succeeded in bringing down the feet, but

the child was dead. In the second case, where otherwise the child must have been destroyed, he turned it, and it was born alive. During his studentship he had attended a case which had not made a due impression on his mind. The woman's first child had been destroyed; but on this occasion the feet presented, and the child passed into the world without much difficulty.

The PRESIDENT drew attention to the peculiar point of Mr. King's paper. He (the President) had attended hundreds of cases, but had never lost a case from the child's head being the cause of its non-descent into the pelvis; and he felt sure that ossification of the fetal skull was very rarely indeed so extreme as to prevent the descent into ordinary, not of course into contracted pelves. In these latter cases there is no other step than craniotomy. There may be difficulties in the diagnosis; but when the practitioner has decided on his course, there is need of the utmost care that the soft parts are not lacerated by the descent of the cranial bones. When a portion of the cranium has been seized by the craniotomy forceps, the circle of the head necessarily becomes flattened, the bones diverge, and without care the soft parts may be injured.

Mr. KING stated that probably the two patients mentioned in his paper had some peculiar tendency to form highly ossified crania in their fetuses; as in these two he had chiefly noticed the phenomena detailed. As regarded the use of the forceps which he exhibited, the fetal bones were first to be broken down, then the forceps were to be carefully inserted between the neck of the uterus and the cranium.

THE DISCOVERY OF QUININE AND QUINIDINE IN THE URINE OF PATIENTS UNDER TREATMENT WITH THE SALTS OF THESE MIXED ALKALOIDS. BY W. B. HERAPATH, M.D.

Dr. HERAPATH described an application of a test for quinine and quinidine (which he had detailed in the *Philos. Mag.* for September), to the determination of these alkaloids in the animal fluids, especially in the urine. To eliminate the alkaloid, Dr. Herapath having recourse to the capital process of Stas,* founded on the capacity of ether for abstracting a *free alkaloid* from its aqueous solution, directs the clear liquid to be treated with slight excess of liquor potassæ, and subsequent agitation with ether. The ethereal solution will contain the quina or its analogue, if either or both be present.

To test this solution, it must be evaporated to dryness in a warm place, and to one drop of a mixture of acetic acid 3 iij, sp. rect. f. 3j, and dilute sulphuric acid ℥vj, a minute portion of this residue is to be added; and when solution has been effected, a drop of a dilute alcoholic solution of iodine. At first, if the residue be, or contain, quina, the brownish compound containing iodine and quina is obtained, which gradually changes into the very pretty green-pink polarising crystals which Dr. Herapath has called "sulphate of iodo-quina". Under the microscope, employing the selenite stage and single tourmaline, these crystals exhibit the respective complementary colours, red and green, when the pink stage is employed; blue and yellow with the blue stage.

For quinidine the author recommends a drop of the acid solution, as obtained above, previously to adding the tincture of iodine, to be suffered to evaporate to dryness on the glass slide, when the crystalline mass is to be examined by two tourmalines, crossed at right angles, but without the selenitic stage; when little circular disks of white, with a well defined black cross radiating from the centre, are perceived, if even minute traces of quinidine be present. With the selenitic stage, the black cross is replaced by one of great beauty, exhibiting a red and green fringe, the four intermediate sections being a bright orange, altering in tint according to the position of the analysing plate.

From the examination of the urine of a patient taking 40 grs. of quina disulph. daily, 1 4-10 gr. of quina were obtained from f. 3viij of urine, which is equal to about one-fourth of the quantity administered. We gather from a perusal of this communication that both the alkaloids in question were detected in this urine, but we are left somewhat in doubt as to the presence of quinidine. Satisfactory proof, however, is given of the passage of a portion of the quina salt through the system without the alkaloid undergoing any change; the paper closing with alluding to the probability of our being able, by means of this elegant test, hereafter to determine the *medical equivalent* of quina in a given disease.

The PRESIDENT observed that there could be no doubt as to the elimination through the kidneys of quinine. But what were the practical results of such investigations? Are we to give specific doses for specific diseases? If so, in each disease we

must endeavour to ascertain the appropriate dose; for in some diseases, patients will bear more of this remedy than in others, what is not required by the system being eliminated, partly through the kidneys. In a case of tetanus referred to, a large proportion of the remedy was thus eliminated; more having been taken than was required. By the term "toleration of a remedy", he meant that the system would take up a quantity of the remedy without disturbance; the superfluous portion then passing off by various excretory organs. He expressed his sense of the value of Dr. Herapath's investigations.

Dr. DAVIES called attention to the number of substances which we were accustomed to recognise as being eliminated by the kidneys; as the odour of asparagus, turpentine, copaiba, etc. When resident in the fever wards in Edinburgh, he had been much struck by the following facts. While in good health, after being some hours in the wards, he noticed at night that his urine possessed that odour so peculiar to fever. This he noticed for some months. By degrees, as his own health became feeble, and his system affected by fever poison, the odour lessened, till at length it ceased altogether on his being laid up by an attack of fever. This had convinced his own mind that a poison of so peculiar a character could be taken and thrown off by the system while vigorous, but that it was appropriated by it when weak, and at length the seed thus sown sprang into disease.

CASE OF FRACTURE OF THE CRANIUM IN AN INFANT AT BIRTH.

BY J. G. SWAYNE, M.D.

[This case is published at p. 901 of the present number.]

Mr. KING suggested that probably the child's cranium was more bony than usual, otherwise a fracture of the parietal bone could scarcely have occurred. Did the child die from the blood effused beneath the cranium?

Dr. TUNSTALL observed that such cases showed the absolute necessity for medical evidence before the coroner. Suppose this child had been illegitimate, or no one had been present, the mother might have been committed for manslaughter, and the judge would have said that medical evidence was imperatively required. In another case, a man who had been for some time ill, had died of hæmoptysis, of which he (Dr. Tunstall) gave a certificate. The neighbours then talked about the case, and an inquest was held. The jury brought in a verdict in the words of his certificate, without calling medical evidence.

Mr. HENSLEY asked if in such a case Dr. Swayne was entitled to make a *post mortem* examination, without giving the coroner notice of the accident to the child. He mentioned the following circumstance. A child had for a long time suffered from hydrocephalus: in the street, another accidentally run against it and knocked it down. Immediately, a clear colourless fluid, to the amount of a pint, oozed from its ears, with great relief, and the child got well. After a fortnight, the fluid reaccumulated, more active symptoms came on, and the child died. A *post mortem* examination was made, and a certificate was given that the child had died of disease of the brain. After a time, the coroner's man got scent of the case, and called on Mr. Hensley, stating that he had heard that the child had died after a fall. The coroner was informed by Mr. H. that the child's death was not dependent on the fall. However, he was not satisfied: he wrote to Mr. H. some most offensive letters, and at last had the child exhumed, that an inquest might be held. Mr. Hensley mentioned this case, to elicit from those acquainted with the rule, what course ought to be adopted by a medical man in such circumstances.

Dr. SWAYNE had certified that the death arose from a fall on the head leading to convulsions induced by the extravasation within the cranium.

Mr. WASHBOURNE mentioned several instances where the county magistrates had refused the coroner's fees, in cases of death either sudden or open to suspicion. This made the coroners very reluctant to call in medical evidence where they can possibly do without it.

Mr. STONE observed that medical men were too apt to give their labour gratuitously, consequently coroners and juries were only too happy to avail themselves of their unpaid services.

Mr. NORMAN said that, in cases of any doubt, medical men should not give any certificate till after the inquest was over. The object of the certificate was for the purposes of burial, as far as the public was concerned.

Dr. DAVEY would draw the attention of the meeting to the physiological points of such cases. In this case convulsions did not come on till the sixth day. Were these dependent on the injury to the brain? They were. Mr. Guthrie's experiments had shown that convulsions did not come on till three or four days after the injury. They do not seem dependent on the pressure of the brain or spinal irritation, but convulsions follow the inflammatory symptoms, because the inflammation

* This we shall have occasion to describe in an early number. EDITOR.

the brain and spinal chord has been disturbed. Cases of this kind present physiological and pathological phenomena of great interest.

INSTRUMENT FOR PARACENTESIS THORACIS. BY HENRY CLARK, ESQ.

The PRESIDENT exhibited an instrument which he had made for drawing fluid from the pleura by an exhausted receiver, and so preventing the entrance of air.

[A description and drawing will be published in the JOURNAL.]

Dr. HERAPATH had recently a patient with paracentesis abdominis, in a state of extreme exhaustion. He had removed the fluid by passing the tube of a stomach pump into the pelvic portion of the peritoneal cavity, while the patient was recumbent, and had thus drawn off all the water. The patient recovered. In another case, where similar means were used, the amount of fluid was not so great, but the disease was complicated with ovarian tumour. The fluid was removed successfully, and the patient then went into the infirmary. The ovarian tumour opened itself through the rectum, and thus the woman was cured.

Mr. HENSLEY and Mr. NORMAN detailed cases where an instrument like that exhibited would have been most useful.

Thanks having been voted to the authors of the communications and to the Chairman, the meeting broke up.

ORIGINAL COMMUNICATIONS.

FACTS AND OPINIONS RELATING TO TUBERCULOSIS, WITH COMMENTARIES.

By HENRY ANCELL, Surgeon.

NO. II.

MANY of the readers of the ASSOCIATION JOURNAL may not have the opportunity of referring to the original *Statistical Reports of the Sickness, Mortality, and Invaliding, among the Troops*; and it may be well to point out a few particulars illustrating the degree of accuracy attributable to them. The first and most important point is, that, by a standing order of the army authorities, a *post mortem* examination is required to be made in every case; and this rule is deviated from in the fewest instances possible. The sources of error are the usual ones of mistaken diagnosis and nosological imperfections. As soon as a man becomes seriously ill with chronic disease, he is invalided; and among those cases reported under "chronic catarrh," "hepatitis," and other designations, some may ultimately prove to be cases of phthisis. Again, among those invalided and discharged from the service, merging into the civil population, returns are not obtained of the ultimate results, or the causes of death. The consequence of these circumstances, *pro* and *con*, is, that the numbers representing the frequency of death from phthisis are always to be regarded as the *minima* of the actual occurrence of the disease. As respects the numbers representing the admissions, it must also be borne in mind, that the same cases, having been discharged cured or relieved, may be readmitted, when they are regarded as new cases; and the proportion of deaths to the admissions must not be taken absolutely, inasmuch as the difference between them is, to a great extent, made up of these readmissions. With the latter qualification, phthisis is a much more fatal disease than it would otherwise appear to be. Since these circumstances appertain to the whole series of the army statistics, they do not invalidate the comparison of one part with another; and, provided we bear in mind the sources of fallacy, and avoid adopting the numbers as positive mathematical data, they afford a most useful means of comparison with other statistical results. In such of the tables as I have worked out myself, I have, in most instances, omitted decimal fractions, since it is only where very decided differences exist that we can arrive at conclusions from such data.

The medical statistics of the British troops serving in the three Mediterranean commands, Gibraltar, Malta, and the Ionian Islands, during the sixteen years included in the report now under review, as compared with the statistics of

the previous twenty years contained in the former reports, indicate but little amelioration in pulmonary diseases in the aggregate, and none as respects tuberculosis; for, although, as seen in the following tables, the proportion of deaths to the amount of the force employed is, in some instances, diminished, the authors very justly attribute this circumstance, in the main, to the increased facilities for sending invalids home, since the establishment of regular steam communication with England, and the unavoidable omission of the results, where the individuals have been discharged the service.

The aggregate strength in the above commands, during the ten years, was 80,504 British troops, and 3,453 Malta fencibles, or natives of the island enlisted for ten years; in all, 83,957. For the reasons stated in the last paper, hydrocephalus is a rare occurrence, one case only being recorded; and tabes mesenterica is not mentioned. The number of cases of *scrofula* admitted into hospital among the British troops was 247, and among the Maltese troops 2; the proportions of admissions and deaths to the aggregate strength were as follows:—

	Strength.	Admission.	Deaths.
Gibraltar.....	33131	1 in 315	1 in 16565
Malta	21172	1 in 282	None.
Malta Fencibles..	3453	1 in 1726	None.
Ionian Islands	26201	1 in 391	1 in 26201

The number of cases admitted into hospital for *scrofula*, among the troops serving in the Mediterranean, was thus a small fraction over 3 per 1,000; while, among those serving at home, as shown in my first paper, it was 4 per 1,000.

Our next point is the aggregate amount of pulmonary disease, represented in

TABLE V.

The proportionate number of pulmonary diseases to the amount of the force, in the troops serving in the Mediterranean commands.

	Aggregate strength, 10 years.	Annual ratio per 1000.	
		Admitted.	Died.
Gibraltar.....	33131	132.	5.82
Malta	21172	140.	7.93
Malta Fencibles (Natives)	5547	23.8	3.8
Ionian Islands	26201	134.	0.22
Corfu and Vido	10063	145.	6.1
Paxo	413	75.	2.4
Santa Maura	1254	89.	.8
Cephalonia	3509	114.	5.3
Zante	2904	127.	4.6
Ithaca	571	117.	3.5
Cerigo	510	145.	3.9

This table comprises not only the deaths in the military hospitals abroad, but also the deaths, whether during the voyage or at Chatham, of troops invalided and sent home; but it does not represent the whole mortality, since the deaths after discharge from the service, as before stated, are not included.

In Gibraltar, from the year 1818 to 1836, the admissions and deaths per 1,000 mean strength, were respectively 142 and 5.5; the latter number not including the deaths among those invalided and sent home. In Malta, from 1817 to 1836, also omitting the deaths among invalids, the ratios were, respectively, 120 and 6 per 1,000. This shows for Gibraltar a rather considerable diminution both of admissions and deaths, compared with the numbers for the last ten years; for Malta, a considerable increase of admissions, the excess arising from the greater number of cases of acute catarrh, which prevailed in 1837, 1840, and 1841: and a slight diminution of deaths, as seen more clearly in the next table.

We have now to look to the relative proportions of each specified disease of the lungs contributing to the sum total of pulmonary sickness and mortality.

TABLE VI.

Specification of pulmonary diseases among the troops in the Mediterranean, with the number of admissions into hospital, and deaths, during ten years, from 1837 to 1846.

	Gibraltar, 33,131.			Malta, 21,172.			Malta Fencibles, 3,453.			Ionian Islands, 26,201.		
	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.
Pneumonia	333	20	1 in 16½	287	6	1 in 48	1	—	—	232	16	1 in 15
Pleuritis	158	2	1 in 79	22	—	0 in 22	1	—	—	33	1	1 in 33
Hæmoptysis	78	1	1 in 78	70	1	1 in 70	5	3	3 in 5	57	2	1 in 28½
Phthisis	176	116	2 in 3	129	91	2 in 3	7	6	6 in 7	145	89	1 in 1½
Acute catarrh	3027	3	1 in 1009	2009	11	1 in 183	52	1	1 in 52	2392	8	1 in 299
Chronic catarrh	525	8	1 in 66	303	16	1 in 25	10	2	1 in 5	588	18	1 in 32
Asthma	44	1	1 in 44	0	1	1 in 9	5	—	—	11	1	1 in 11
Difficulty of breathing..	31		None.	40			1	1	1 in 1	49	5	1 in 9
Pertussis	1		None.									
Total	4373	151	1 in 29	2908	126	1 in 24	82	13	1 in 6.3	3507	140	1 in 25
Annual ratio per 1000, mean strength	132	4.56		140	5.95		23.7	3.7		194	5.3	
Ditto, including deaths of invalids		5.82			7.93							

An important remark is made by the authors of the report, that the diminished mortality at Gibraltar during the last ten years is due, altogether, to a diminished number of deaths from inflammatory affections, and not at all to a smaller amount of tuberculosis pulmonalis; in illustration of which, they furnish the following ratios:—

	Deaths per 1000 mean strength.	
	1818 to 1836.	1837 to 1846.
Inflammation of the lungs .....	.93	.60
Catarrh .....	.65	.33
Consumption and hæmoptysis....	3.70	3.62

At Malta, also, the mortality from inflammatory diseases, during the last ten years, was only about two-thirds that of the previous twenty years; whereas, from consumption, it is represented by numbers almost identical. The mortality from pulmonary diseases in the aggregate was greater among the troops serving at Malta than among those serving in the Ionian Islands, in the proportion of about 8 to 6, although the climate of the former is much milder, and cold winds and sudden alternations of temperature are comparatively rare.

At Gibraltar, a special cause of improvement of the health of the force existed. In addition to the ordinary duties of a peace establishment, working parties were furnished, in considerable numbers, to assist in improving the fortifications; and the comparative immunity from disease enjoyed by these parties was often a subject of observation.

Comparing the amount of pulmonary disease, as measured by the admissions into hospital, among the troops serving in the United Kingdom, with the amount among those serving in the Mediterranean (Tables III, IV, V), it is found to be considerably greater in the former than in the latter. Comparing the number of deaths, the ratio per 1,000 is considerably less for Gibraltar, but greater for Malta, than among the dragoon guards and dragoons serving at home; it is less in Malta than among the infantry at home, by about 2 per 1,000.

This brings us to the more particular consideration of the amount of *tuberculosis pulmonalis* among the troops in the Mediterranean. The cases of phthisis in the different commands were as follows:—

	Admissions.	Deaths.
Gibraltar	1 in 188	1 in 285
Malta	1 in 164	1 in 232
Malta Fencibles	1 in 493	1 in 575
Ionian Islands	1 in 180	1 in 294

On reducing this to a mean of the three commands, the proportion of deaths from phthisis, in the British troops serving in the Mediterranean, is 1 in 271, being below the mortality among the male population at home at the period

for military service, and less than half the mortality among the military at home; but, unfortunately, for the reasons before assigned, the above numbers represent the minimum of deaths, and by no means the whole mortality from this disease.

In the Malta Fencibles, or native troops, with an aggregate strength of 3,453, during six years, the annual ratio per 1,000 admitted into hospital for diseases of the lungs was 23.8, and the annual deaths 3.8. Of a total of twenty-eight deaths, thirteen, or nearly one-half, were from pulmonary disease. Of twelve admissions for hæmoptysis and consumption, nine died, and there is no certainty of the others having recovered; so that, although they were considerably less liable to phthisis than the British troops, when attacked, the disease proved equally, if not more certainly, fatal.

Having thus shown the frequency and fatality of pulmonary affections, and particularly of phthisis pulmonalis, among soldiers in these various commands, the report refers to the liability of sailors to the same class of diseases while serving at the home and the Mediterranean stations. The data for the following table are extracted from the Navy Reports:—

TABLE VII.

Comparison of the sickness and mortality from pulmonary diseases in the naval and military forces in the Mediterranean.

	In the naval force: out of an aggregate of 100,464.		In the military force: out of an aggregate of 102,214.	
	Attacked.	Died.	Attacked.	Died.
Pneumonia and pleurisy	2598	86	2281	.92
Hæmoptysis	234	12	269	8
Phthisis	437	180	629	419
Catarrh	21971	27	11314	83
Asthma and dyspnoea ..	161	7	213	6
Total	25401	312	14706	606
Ratio per 1000 mean strength	258	3.1	144	5.9

The attacks of pulmonary diseases, viewed as a class, are thus nearly twice as numerous in the navy as in the army. The proportions, however, both of attacks and deaths, as regards inflammation of the lungs, pleurisy, and hæmoptysis, are almost identical in the two services; the difference being determined chiefly by catarrh and consumption, in reference to these two diseases, a very small difference appears. While the cases of catarrh are

in the navy as in the army, those of consumption are less, in the proportion of four and three-tenths to six and one-tenth. This fact, as well as the low number representing the deaths from these diseases in the navy, is considered to be, in part only, attributable to the facility for sending home all cases which begin to assume a serious character.

The following table is also given in the Report :—

TABLE VIII.

The proportionate numbers of the naval force attacked by consumption and hæmoptysis, on the Home and Mediterranean stations, during seven years, from 1830 to 1836 inclusive.

	Aggregate strength, 7 years.	Cases of consumption and hæmoptysis.	Ratio per 1000, mean strength.
Home Force	21493	174	8.10
Various Force*	16250	120	7.94
Mediterranean Command	55709	482	7.75

These tables furnish conclusive evidence of two things; that neither the climates nor the seafaring life exert any decided influence in preventing or retarding the development of consumption; for although, in the navy, only two-fifths of those reported as consumption appear to have terminated fatally (Table VII), the remainder must not be considered as having recovered. Many, no doubt, died after their return home and discharge from the service. At the same time, the reporters remark, that either the air or the excitement produced by the voyage appears sometimes to mitigate the symptoms, as in the case of soldiers sent home from Malta, apparently labouring under confirmed phthisis; who have sometimes arrived home with renovated health, and speedily returned to their duty.

Having given the statistical facts relating to tuberculosis among the troops serving at home and in the Mediterranean, I now proceed, in the same order, with the returns from British America. This includes four military com-

mands, viz., the Bermudas; Nova Scotia, New Brunswick, etc.; Canada; and Newfoundland. The latitude and climate of the Bermudas differ so greatly from those of other stations, that it will be necessary in most instances to treat of them separately. The aggregate strength in these islands, during the ten years, was 11,224, and in the remaining commands 120,989. As in Great Britain and in the Mediterranean, hydrocephalus and tabes mesenterica are extremely rare occurrences; they are not mentioned in the report from the Bermudas; and there were but two cases of the former, with two deaths, in the remaining commands. Of *scrofula*, there were 48 cases in the Bermudas, and an aggregate of 169 in North America, which numbers furnish the following proportions :—

	Strength.	Admissions.	Deaths.
The Bermudas	11,224	1 in 238	None.
Nova Scotia, New Brunswick, etc.	26,806	1 in 348	None.
Canada	90,456	1 in 1,016	1 in 30,152.
Newfoundland	3,727	1 in 1,242	None.

We now turn to pulmonary affections.

TABLE IX.

The proportionate number of pulmonary diseases to the amount of the force, in the troops serving in the various commands in British America.

	Aggregate strength, 10 years.	Diseases of the lungs. Annual ratio per 1000.	
		Admitted into hospital.	Deaths, including invalids.
The Bermudas	11224	134	9.4
Nova Scotia, New Brunswick, etc. ... }	26806	180	7.7
Canada	90456	157	7.44
Newfoundland	3727	190	4.3

The particular diseases which furnish these proportions are as follows :—

TABLE X.

Specification of Pulmonary Diseases among the Troops in British America, with the number of admissions into Hospital, and deaths, during ten years, from 1837 to 1846.

	The Bermudas.			Nova Scotia and N. Brunswick.			Canada.			Newfoundland.		
	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.	Admitted.	Died.	Deaths to Admissions.
Pneumonia	23	4	1 in 6	335	30	1 in 11	1580	124	1 in 13	25	1	1 in 25
Pleurisy	56	3	1 in 19	47	—	0 in 47	196	7	1 in 28	2	—	0 in 2
Hæmoptysis	44	4	1 in 11	60	2	1 in 30	236	18	1 in 13	20	—	0 in 20
Phthisis	100	54	1 in 2	149	111	3 in 4	524	327	1 in 1.6	15	13	13 in 15
Acute catarrh	1090	14	1 in 73	3647	13	1 in 280	10033	46	1 in 218	620	—	0 in 620
Chronic catarrh	146	13	1 in 11	538	33	1 in 16	1507	65	1 in 23	22	2	1 in 11
Asthma	12	1	1 in 12	21	—	0 in 21	20	—	0 in 20	9	—	0 in 9
Difficulty of breathing..	35	—	0 in 35	30	1	1 in 30	114	7	1 in 16	21	—	0 in 21
Pertussis	—	—	—	—	—	—	2	—	0 in 2	—	—	—
Total	1506	98	1 in 16	4836	190	1 in 24	14221	594	1 in 24	743	16	1 in 46
Annual ratio per 1000, strength	134	8.3		180	7.1		157	6.57		109	4.3	
Ditto, including deaths of invalids		9.4			7.7			7.44				

The proportion of consumption to the aggregate force, deduced from the last table, is as follows :—

	Admissions.	Deaths.
Bermudas	1 in 112	1 in 207
Nova Scotia, New Brunswick, etc. ...	1 in 179	1 in 241
Canada	1 in 172	1 in 276
Newfoundland	1 in 248	1 in 286

* The term "various" applies to ships, though reckoned on home service, employed occasionally abroad in various detached duties.

Thus, in Canada and Newfoundland, during these ten years, the proportionate number of deaths from phthisis was below that of the male population of England at the period of life for military service. In Nova Scotia, New Brunswick, etc., the proportion, during the year 1847, adopted in these papers for the purpose of comparison, was a very little above that of the male population at home from 15 to 50 years of age, and considerably less than that of the male population from 20 to 40 years of age. In Bermudas, the proportion was much greater than among the

civil population, and the dragoon guards and dragoons at home, and not much below the infantry of the line and the foot guards.

In the study of these statistics, then, the first, and one of the most important questions which presents itself, relates to the influence of migration to these widely different climates over the production or development of tuberculosis. We find that, contrary to the popular, and I may say, the professional view, migration to a warm climate afforded very little amelioration in any case except one, but in some cases an aggravation; and migration to a cold climate, instead of increasing, actually diminished the amount of this fatal disease. The cases admitted, and the deaths from consumption, were considerably less in number in the rigid northerly climates of Canada, Nova Scotia, and Newfoundland, than in Bermuda and Malta. This is shown again most unequivocally in the following:—

TABLE XI.

Comparison of deaths from consumption and hæmoptysis in Malta and Canada.

1837—46.	Aggregate strength.	Admitted for consumption and hæmoptysis.	Died of these diseases.	Ratio per 1000 mean strength.	
				Admitted.	Died.
Malta.....	21172	208	92	9.8	4.3
Canada	90456	760	345	8.4	3.8

The statistics of the invalids discharged the service, on account of pulmonary disease, are, upon the whole, confirmatory of the same facts, as shown by the following proportion per 1,000 mean strength:—

Gibraltar	5.1	Canada	5.2
Malta	4.6	Nova Scotia, etc.,...	4.6
Ionian Islands	4.3	Bermudas	5.

Thus, the number invalided for pulmonary diseases, in the aggregate, is almost the same in Gibraltar, where the temperature ranges from 45° to 86°, as in Canada, where it ranges from 23° below to 87° above zero; and, whether we take as our criterion the number admitted into hospital,

the number of deaths, or the number invalided, there is less consumption in the British army in the northern climates than at home, in the Mediterranean, or in the Bermudas.

It is indeed one of the most remarkable circumstances, that, throughout the thirty years over which these and the statistics formerly published extend, the mortality from diseases of the lungs, and especially from tuberculosis pulmonalis, in the mild and comparatively equable climate of Bermuda, is much higher than in the North American colonies, with their extremes of heat and cold, and their long continued winters. That this circumstance is not accidental, we have a proof in the length of the period, and the uniformity of the results; and, also, in the fact that, by the statistics of the United States army, in East Florida, which is in nearly the same latitude as Bermuda, with a corresponding temperature, the admissions into hospital for consumption are much more numerous than in the northern regions. In Florida, they amount to eight and seven-tenths per 1,000 mean strength annually; while in the countries beyond the 40th degree of north latitude, including all those where the winter is most severe, the proportion admitted for the same disease is only seven per 1,000. Newfoundland has a climate more liable to sudden vicissitudes than any part of the American continent to which British troops are sent, and is subject to frequent and dense fogs throughout the year; and, as remarked by the authors of the Report, the small number of deaths from consumption affords another striking instance how little this disease appears to be influenced by those atmospheric causes which were at one time supposed to be most active in its production. The proportion of the whole force attacked annually was about four per 1,000; in the Mediterranean, out of an equal number, the proportion would have been five and six-tenths; among the infantry in the United Kingdom, ten and three-tenths; and in the mild and comparatively equable climate of Bermuda, nine per 1,000 mean strength.

For the purpose of affording every facility for comparison to those who interest themselves in these matters, I have drawn up the following more complete table, in three parts, of the proportionate numbers of the admissions, and the deaths from each disease of the lungs, to the number of the troops in every command:—

TABLE XII.—A. UNITED KINGDOM.

	Dragoon Guards and Dgns.		Foot Guards.		Infantry of the Line.		Household Cavalry.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Pneumonia	1 in 101	1 in 2205	1 in 74	1 in 955	1 in 84	1 in 1032	Not returned.	
Pleuritis	1 in 3308	1 in 27187	1 in 1294	1 in 20060	1 in 511	1 in 10010		
Hæmoptysis	1 in 467	1 in 3020	1 in 129	1 in 2360	1 in 419	1 in 4440		
Phthisis	1 in 140	1 in 177	1 in 61	1 in 83	1 in 96	1 in 129		
Catarrhus Acutus	1 in 8	1 in 4531	1 in 8	1 in 5731	1 in 8	1 in 2010		
Catarrhus Chronicus	1 in 57	1 in 1874	1 in 133	1 in 5731	1 in 47	1 in 1185		1 in 158
Asthma Periodica	1 in 1182	1 in 10874			1 in 1861	1 in 80051		1 in 6041
Asthma Convulsiva								
Dyspnœa Continua	1 in 906	1 in 18124	1 in 2674	None.	1 in 667	1 in 22871		1 in 12083
Angina Pectoris			1 in 40120	1 in 40120				

B. MEDITERRANEAN.

	Gibraltar.		Malta.		Malta Fencibles.		Ionian Islands.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Pneumonia	1 in 99	1 in 1656	1 in 73	1 in 3528	1 in 3453	None.	1 in 112	1 in 1637
Pleuritis	1 in 209	1 in 16565	1 in 962	None.	1 in 3453	None.	1 in 793	1 in 26201
Hæmoptysis	1 in 411	1 in 33131	1 in 265	1 in 21172	1 in 690	1 in 1726	1 in 459	1 in 13100
Phthisis	1 in 188	1 in 285	1 in 164	1 in 232	1 in 493	1 in 575	1 in 180	1 in 294
Catarrhus Acutus	1 in 10	1 in 11043	1 in 10	1 in 1924	1 in 66	1 in 3453	1 in 10	1 in 3275
Catarrhus Chronicus	1 in 60	1 in 4141	1 in 53	1 in 1923	1 in 345	1 in 726	1 in 44	1 in 1455
Asthma Period. Conv.	1 in 753	1 in 33131	1 in 2352	1 in 21172	1 in 690	None.	1 in 2381	1 in 26201
Dyspnœa Continua	1 in 10068	1 in 33131	1 in 1058	None.	1 in 3453	1 in 3453	1 in 534	1 in 5240
Pertussis	1 in 33131	None.						

C. BRITISH AMERICA.

	Bermuda.		Nova Scotia and New Brunswick.		Canada.		Newfoundland.	
	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Pneumonia	1 in 488	1 in 2806	1 in 80	1 in 893	1 in 56	1 in 729	1 in 149	1 in 3727
Pleuritis	1 in 200	1 in 3741	1 in 570	None.	1 in 461	1 in 12922	1 in 1863	None.
Hæmoptysis	1 in 255	1 in 2806	1 in 446	1 in 13403	1 in 383	1 in 5025	1 in 186	None.
Phthisis	1 in 112	1 in 207	1 in 179	1 in 241	1 in 172	1 in 276	1 in 248	1 in 286
Catarrhus Acutus	1 in 10	1 in 800	1 in 7	1 in 2062	1 in 3	1 in 1960	1 in 5	None.
Catarrhus Chronicus	1 in 76	1 in 863	1 in 49	1 in 812	1 in 60	1 in 1391	1 in 1095	1 in 1863
Asthma Period. Conv.	1 in 935	1 in 11224	1 in 1276	None.	1 in 4522	None.	1 in 414	None.
Dyspnoea Continua	1 in 320	None.	1 in 687	1 in 20806	1 in 793	1 in 12922	1 in 177	None.
Pertussis	—	—	—	—	1 in 45228	None.	—	—

Before we dismiss the facts relating to climate, it is worthy of note, that of all the localities embraced in this report, in which British troops serve—at home, in the Mediterranean, or in Canada,—the most marked immunity from the production or development of consumption, and other pulmonary affections, belongs to Santa Maura, which is the

exception to which I have already referred. In further illustration of this, the following table, copied from the report, furnishes a comparative view, according to another mode of grouping, of the frequency of these affections in the island in question, and in three other Mediterranean stations.

TABLE XIII.

	Santa Maura, 1,254.				Corfu, 16,963.				Malta, 21,172.				Gibraltar, 83,131.			
	Admitted.	Died.	Ratio per 1000.		Admitted.	Died.	Ratio per 1000.		Admitted.	Died.	Ratio per 1000.		Admitted.	Died.	Ratio per 1000.	
			Admitted.	Died.			Admitted.	Died.			Admitted.	Died.			Admitted.	Died.
Catarrh	92	0	73.36	0	2077	18	122.44	1.06	2402	27	113.45	1.27	3552	11	107.21	.33
Consumption & spitting of blood ..	5	0	3.99	0	151	70	8.90	4.13	208	92	9.82	4.34	254	117	7.67	3.47
Other diseases of the lungs ..	15	1	11.96	.80	232	15	13.68	.86	358	7	16.91	.33	567	23	17.11	.69

Only five admissions for phthisis and hæmoptysis, and not one death, among 1254 individuals, or a mean force of 125, occurred throughout ten years; and according to previous reports there were only three admissions in fifteen years. Had this immunity been confined to *deaths* from phthisis and other chronic diseases, the reporters state, that they might have been disposed to attribute it to several of the cases having been sent to Corfu, but it is manifested in the acute form, and more especially in the *admissions*; they further remark, "that this is not an accidental circumstance depending upon the irregularities which occasionally arise from the smallness of the numbers under observation, may be inferred from the peculiarity having occurred during the previous twenty years, when the mortality by this class of disease was scarcely half as high as in any of the other islands".

These circumstances render the question of the topography of the island highly interesting, not to say important, and I know no better source of information than Colonel Tulloch's former report. Santa Maura is about twenty-three miles long by ten broad, situated 39° N. Lat. 20° 30' E. Long., and about a hundred yards from the mainland of Greece. It has a chain of mountains running north and south through its whole extent, and rising in some places to 3000 feet, with secondary ridges intersecting the island in various directions. The soil is alluvial, or a rich loamy earth, tenacious of moisture, generally very scanty, the surface exhibiting to view a large proportion of bare rock interspersed with small patches of verdure. There are no rivers, but torrents flow from the mountains during the winter months, converting some of the valleys into lakes and marshes during the rainy season. The temperature is extremely variable, its annual average about 65½°, seldom falling to the freezing point in the low grounds, but occasionally there is snow on the hills. The range of the thermometer in autumn sometimes exceeds 20° in twenty-four hours. The quantity of rain and the seasons in which it falls are much the same as in the Ionian Islands generally, in which the mean of nine years was 44.86 inches. Like the rest of the Ionian Islands, it does not appear to possess any immunity from extremes of dryness and moisture, and of tempestuous and calm weather, which often succeed each other in a few hours; it is extremely liable also to mists and

rain with the south winds, and is subject to earthquakes sometimes continuing without intermission for several weeks. When the wind blows from the snow-capped hills the sensation of cold is said to be experienced as strongly as in more northern latitudes. There is only one fresh water lake of any extent, about six miles to the south of the town, in the bottom of a valley surrounded by high mountains, which becomes dry in summer, and the soil produces rich crops. The principal fortress, with the barracks, is far from being favourably situated, as this stands on a low narrow strip of land close to a shallow muddy lagoon. The troops have no duty to perform beyond the ordinary guards, which do not come round oftener than about once in five days. Owing to the low price of wine and spirit the facilities for intoxication are very great, and in none of the islands have so many cases of *delirium tremens* occurred. The prevalent diseases, both among the troops and the natives, are fevers, continued, remittent, and intermittent, but particularly remittent fever, and the experience of this island tends to support the conclusion that tuberculosis pulmonalis is less common in low marshy situations where these fevers prevail.

This description, taken with the fact of the long continued comparative immunity of the troops from tuberculosis, is extremely interesting. It is only to be regretted that the numbers are not larger, so as to inspire more confidence in the result. It is suggested in the report, as worthy of consideration, whether a sanatorium for soldiers labouring under chronic diseases of the lungs might not be established there with advantage, for the whole command. Considering the present state of the question respecting the influence of climate over tuberculous diseases, I should say that, even as an experiment only, this would be most desirable.

The statistical reports before us furnish some new facts by which we may estimate the influence exercised by season over tuberculous diseases. In my work, I have shown from a variety of records, that contrary to the general opinion, the season of the year appears to have little or no relation, as a cause, to tuberculosis pulmonalis. (On *Tuberculosis* p. 507). This result was arrived at from data contained in the tables of the Registrar General, and the Army Reports previously published; and in the recorded in-

vestigations of the point by Louis and other individuals. From these documents, it appeared that neither the occurrence of phthisis, nor the mortality, is materially greater or less in spring, summer, autumn or winter, in any of the countries where the disease prevails. The statistics before us are, upon the whole, confirmatory of this view. By the first table of the present series of papers, the deaths from tuberculosis returned to the Registrar General during October, November, December, January, February and March, were 4,867; and during April, May, June, July, August, September and October, 5,008. The deaths from phthisis during the same periods, were, respectively, 3,473, and 3,462; although, taking the latter disease alone, there is a slight excess in the earlier months of the year, thus:—

For the Quarter ending March 27	1,811
" " June 26	1,790
" " Sept. 25	1,672
" " Dec. 25	1,662

In exemplification of the same subject, the following table is drawn from the Army Reports. On examining its details, there is, perhaps, as remarked in the report, no cause of surprise at the uniformity of the results in the Mediterranean commands, where the climate is, comparatively, so little variable according to the season of the year, but if we had not been apprised of it by the facts detailed in the former reports, the case, as respects British America, would be otherwise.

In the first place, the ratio per 1000 in hospital with pulmonary diseases, in Great Britain, on the first day of the month, during ten years, was as follows:—

January	8.1	July	5.6
February	8.6	August	4.8
March	8.2	September	5.3
April	7.2	October	5.2
May	6.7	November	5.8
June	5.4	December	6.7

TABLE XIV.

The Number of Admissions into Hospital, and Deaths from Pulmonary Diseases, in every Month throughout the Year, among the Troops serving in the Mediterranean and in British America.

	MEDITERRANEAN.								BRITISH AMERICA.							
	Gibraltar.		Malta.		Ionian Isles.		Total.		Bermuda.		Nova Scotia and New Brunswick.		Canada.		Total.	
	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.	Adm.	Deaths.
January . . .	290	15	263	16	324	10	877	41	149	6	392	14	1325	50	1744	64
February . . .	310	14	215	10	283	13	808	37	115	7	285	24	1296	67	1581	91
March . . .	361	10	200	9	316	10	877	29	104	8	379	21	1184	63	1563	84
April . . .	294	9	221	14	273	13	788	36	135	8	302	16	1215	60	1607	76
May . . .	336	11	202	9	300	13	838	33	131	3	357	12	1172	48	1549	60
June . . .	315	7	212	5	244	7	771	19	100	3	339	14	961	40	1300	54
July . . .	304	3	182	6	214	3	700	12	94	6	304	13	1200	36	1513	49
August . . .	289	4	205	9	211	11	705	24	149	7	279	12	974	39	1255	51
September . .	283	8	197	5	237	10	717	23	104	6	248	8	812	39	1060	47
October . . .	279	10	259	10	218	11	756	31	123	10	298	7	1058	29	1356	36
November . .	188	13	224	16	193	9	605	38	96	6	335	6	1094	33	1429	39
December . .	317	11	217	13	271	13	805	37	97	7	405	10	1212	51	1617	61

Although, in Great Britain, pulmonary diseases as a class, among the troops, are at their minimum between July and October, the difference, as compared with the coldest months, in the number under treatment, is only as 5 to 8. In Canada, there is a larger proportion of deaths from December to April; but, on analysing the causes of death, it appears that 124 of the total number resulted from pneumonia, and 327 from phthisis, and since, in all probability, although it is not stated in the report, death from pneumonia was most frequent during the severe season, this would make up the difference, and leave phthisis as fatal at one season as at another. In the Bermudas, where there were only four deaths from pneumonia, there is no marked difference in the mortality in the cold as compared with the warm season.

Taking diseases of the lungs, in the aggregate, the slight differences which exist between the proportions of cases occurring during the summer and winter quarters, in North America, are shown by the following reduced table of the numbers attacked:—

TABLE XV.

	Canada.	Nova Scotia and New Brunswick.	Bermuda.
First Quarter	3805	1050	368
Second Quarter	3348	1088	366
Third Quarter	2995	831	347
Fourth Quarter	3364	1038	316

Thus, in Canada, the excess of cases in the first quarter of the year when the weather is "most severe", we may say intense, is only one fourth more than between July and September; and in Nova Scotia the only difference of any importance is about one-fifth in favour of the quarter from July to September. The mean temperature between this

quarter and the one which precedes it, differed about 40°, being to that extent warmer; but the quarter ending June 30th, which is much warmer than either of the two that precede it, presents absolutely the most cases of pulmonary disease. At all events, we have no evidence that the season of the year exercises any uniform influence, over the production of tuberculosis, in promoting its development as a disease of the lungs, or in hastening or increasing its fatality.

TABLE XVI.

The number of cases of pneumonia with the proportion of deaths and recoveries, and the number of admissions into hospital for phthisis among the troops in the United Kingdom, the Mediterranean and British America, and in the aggregates of the naval and military forces serving in the Mediterranean.

	Pneumo.	Died.	Recovered.	Phthisis.
United Kingdom:				
Dragoon guards & dragns.	337	24	313	386
Foot guards	539	42	497	654
Infantry of the line . . .	1897	155	1742	1657
Gibraltar	333	20	313	176
Malta	287	6	281	129
Ionian Isles	232	16	216	145
Santa Maura	6	1	5	5
Bermuda	23	4	19	100
Nova Scotia, N. Brunsw. etc.	335	30	305	149
Canada	1589	124	1455	524
Newfoundland	25	1	24	15
Naval force in Mediterranean	2598	86	2512	437
Military force in ditto . . .	2281	92	2189	629

These statistics shew an absence of any relation between the frequency of inflammatory affections of the lungs and of

phthisis. In a former part of this paper it was stated that during the previous twenty years, as compared with the last ten years, at Gibraltar, inflammatory affections were more prevalent, and at Malta they were one-third more in number, and yet, at both stations, the amount of consumption was almost identical throughout the two periods. That the fact of this total want of relation may be clearly seen, I have constructed Tables XVI and XVII.

Thus, in Bermuda, where there were only 23 cases of pneumonia, there were 100 cases of *phthisis*, and in Nova Scotia where there were nearly fifteen times as many cases of pneumonia, there were only 150 cases of *phthisis*. In Canada, with 1,589 cases of pneumonia, there were only 524 cases of *phthisis*, whereas, in the foot guards at home, with only 497 cases of pneumonia, there were 654 of *phthisis*. Again, in the naval force, 2,598 cases of pneumonia correspond with 437 cases of *phthisis*, while in the military force, 2,281 cases of pneumonia correspond with 629 of *phthisis*.

TABLE XVII.

The number of cases of "acute and chronic catarrh", with the proportion of deaths and recoveries, and the number of admissions into hospital for phthisis, among the troops, in the United Kingdom, the Mediterranean, and British America, and in the aggregates of the naval and military forces serving in the Mediterranean.

	Catarrh.	Died.	Recovered.	Phthisis.
United Kingdom :				
Dragoon guards & dragns.	7321	41	7380	386
Foot guards	4692	14	4878	654
Infantry of the line	22863	190	22673	1057
Gibraltar	3552	11	3541	176
Malta	8402	27	3375	129
Malta fencibles	62	3	59	7
Ionian Isles	2980	26	2954	145
Santa Maura	92	None.	92	5
Bermuda	1246	68	1178	100
Nova Scotia, N. Brunsw. etc.	4185	46	4139	149
Canada	11540	111	11429	524
Newfoundland	651	2	649	15
Naval force in Mediterranean	21971	27	21944	497
Military force in ditto	11314	83	11231	629

For "catarrh" we may no doubt read "bronchitis", in its various degrees; and thus, the principle that I have elsewhere laid down, that bronchitis can in no sense be regarded as a cause of tuberculosis, and that bronchitis alone can in no sense be regarded as a cause of consumption, is confirmed by these statistics. The sailor, who is half his time on deck, in periods of four hours duration, every night and day, constantly leaving his bed at twelve at night, or four in the morning, and passing from an over heated atmosphere to the open air, with exposure to all the vicissitudes of the weather, is twice as frequently attacked with catarrh or bronchitis as the soldier, who is only on guard every fourth or fifth night, and remains exposed but for two hours at a time, during which he is generally protected by his sentry box or great coat; and with this increased liability to bronchitis on the part of the sailor, and the actual occurrence of double the amount of the catarrhal affections, the sailor is much less liable to consumption than the soldier.

I have thus extracted from the original reports the statistics having a direct reference to tuberculosis, and more especially to pulmonary consumption, and placed the whole of the facts in a connected statement before the readers of the ASSOCIATION JOURNAL, believing that they are well calculated to promote the study of some very important points in the history of tuberculous diseases. I shall have occasion to refer to the tables in a future paper: in the meantime, they appear to justify the following conclusions:—

That tuberculosis is more frequent in the army, at home and abroad, than in the civil population of the United Kingdom.

That it is more frequent in the army serving at home than in the army serving either in the Mediterranean or in British America.

That it is more frequent in the army serving in the Mediterranean and Bermuda than in Canada, Nova Scotia, New Brunswick, etc., and Newfoundland.

That it is much more frequent in the army than in the navy, in the home and in the Mediterranean services.

That the season of the year has no considerable influence over the production of tuberculosis, or its local expression in the lungs, nor over its fatality, either in the United Kingdom, the Mediterranean, or in British America.

That there is no fixed relation between the amount of inflammatory diseases of the lungs and the amount of tuberculosis, or of consumption, in any of the climates. Where there is the greatest number of cases of inflammatory affections, there is often found the smallest number of cases of consumption; where there is the smallest number of inflammatory attacks, recoveries, or deaths, there is frequently the greatest number of consumptions; and in a third group, the proportionate frequency of inflammatory affections of the lungs and of consumption have a close correspondence.

3, Norfolk Crescent, Hyde Park, Oct. 1853.

CASE OF FRACTURE OF THE CRANIUM IN AN INFANT AT BIRTH.

By J. G. SWAYNE, M.D., Lecturer on Midwifery at the Bristol Medical School.

[Read at the Quarterly Meeting of the Bath and Bristol Branch of the Association, Sept. 29th, 1853.]

On Monday, June 6th, Mr. Coster, one of my pupils, was called to attend Mary M., aged 29, living in Eugene Street; the messenger desiring him to come as speedily as possible. He arrived at the house in less than a quarter of an hour, when he found the child born, and the funis broken about three inches from the umbilicus. He immediately secured the short end with a ligature, to prevent further hæmorrhage (not much, however, had occurred from the source); and then proceeded to remove the placenta, which was already detached. He was informed by a woman who was present, that the labour came on very unexpectedly, and that the patient was delivered in the upright position, the child falling on the floor. On examining the child's head, he discovered that it was much bruised, and discoloured with blood extravasated beneath the scalp and over the left parietal bone. He applied water-dressing to the injured part, and visited the mother and infant on the two following days. They both seemed to be progressing favourably, and the swelling upon the child's head had become somewhat reduced in size. For the next three days, the child took the breast fairly, as well as some food, and appeared in other respects well, until Sunday, the 12th (six days after its birth), when the mother perceived that it would no longer suck, and that the countenance was much altered.

Mr. Coster was again sent for about eight o'clock in the evening of the same day, when he found the child struggling in a severe paroxysm of convulsions. The fits recurred every five or ten minutes, and appeared to affect all the muscles of the body. The face was livid, the pulse very quick, and the pupils turned upwards, and apparently contracted. Mr. Coster directed the child to be placed in a warm bath, with cold effusion to the head, and 3j of oleum ricini to be taken immediately. The fits returned very frequently during the early part of the night, and the child seemed to be sinking fast. The pulse was very weak, and almost imperceptible. The bowels had been moved by the oil. The warm bath was repeated, with the addition of a spoonful of mustard; but the child died at half-past twelve the same night.

A post mortem examination was made on Tuesday by my request, in which I was assisted by my friend Mr. Coe, and my pupils Messrs. Coster and Granville. The child had the appearance of a healthy male infant, born at the full time.

Over the superior part of the left parietal bone, the scalp was swollen and discoloured to the extent of a half-crown piece; it had very much the appearance of one of those sanguineous tumours or cephalæmata which are occasionally formed upon the presenting part of the head, in consequence of pressure. On pressing upon it with the finger, a clot could be felt beneath the scalp, and, in the centre of this, an irregularity in the bone, which might have been caused either by a bony ridge or a fracture. The head was then opened, and the parietal bone, which was fractured, removed. On examining its inner surface, a clot of blood, rather larger than a shilling, and about a third of an inch thick in the centre, was seen between the dura mater and bone at the seat of the injury. An incision was then made into the external tumour, which laid bare a small clot between the pericranium and bone. On washing away this clot, we discovered beneath it a fissure in the parietal bone, of about an inch and a half in length. Upon that part of the surface of the brain which corresponded to the injury, the vessels of the pia mater were much congested. With this exception, there was no other morbid appearance in the brain, or in any other of the viscera which we subsequently examined. In accordance with my instructions, Mr. Coster stated, in a certificate, that the cause of death was fracture of, and effusion of blood beneath, the cranium, the result of a fall during birth.

A coroner's inquest was subsequently held upon this case, partly in consequence of our certificate, and partly because the suspicions of the neighbours were excited respecting the cause of death. The woman was unmarried, and had twice before given birth to illegitimate children. I can say very little about this inquest, as, having received no notice of it, neither of us was present; nor could we find any account of it in the Bristol papers. I believe, however, the verdict returned was in accordance with the certificate which we had given of the death.

REMARKS. This case presents some features of interest, especially in a medico-legal point of view. The time which elapsed, namely, six days, between the occurrence of the injury and the supervention of convulsions, is worthy of notice. The symptoms produced were not those of compression, properly so called, but rather such as would arise from irritation of the grey matter of the brain; and they do not appear to have been developed until the clot effused underneath the dura mater had acquired a certain degree of hardness. The convulsive attacks were in many respects analogous to those epileptic seizures which we see in the adult, as a result of pressure upon the brain from bony growths, tumours, etc.

Had it been possible to arrive at a correct diagnosis of the nature of the injury during life, the case would, I think, have justified surgical interference. The cranium might have been trephined over the fracture, and the clot removed with some prospect of success, provided the operation had been performed sufficiently early, before the symptoms of cerebral irritation had become fully developed.

In a medico-legal point of view, the case is interesting, as it shows that fracture of the child's cranium may sometimes be a result of delivery in the erect posture.

This is a subject which has been much discussed by medical jurists. Chaussier performed some experiments on the bodies of still-born children, allowing them to fall with their heads downwards on a paved floor, from a height of eighteen inches; and he found that out of fifteen cases, one or other parietal bone was fractured in twelve. On the other hand, the cases collected by Dr. Klein, of Stuttgart, show that fractures of the cranium as a result of delivery in the upright posture are exceedingly rare. Out of 183 cases, in which the women were rapidly delivered whilst standing, sitting, or kneeling, not one child died nor did any fracture of the bones or severe external injury take place. The explanation of this discrepancy between the results of cases which have actually occurred, and of analogous experiments which have been performed, may, I think, be found in the circumstance that when delivery takes place in a standing

posture, the child falls obliquely instead of directly downwards, in consequence of its following the direction of the vaginal canal which is obliquely downwards and forwards, especially near the os externum. It thus becomes expelled forwards against the clothes of the mother, and these, as well as the umbilical cord, serve to break the violence of its fall. Still, however, if we can credit the testimony of the woman and those around her, the instance I have just related proves that fracture of the cranium may occasionally result from such accidents. Although the character of these witnesses is by no means above suspicion, yet the circumstantial evidence tends to corroborate their testimony. The cord had all the appearance of having been broken and not cut. According to the account of the woman who was present at the delivery, the child was taken up from the floor, beneath a table upon which the mother was leaning at the time of its birth: and we find accordingly that the injury was exactly of that kind and in that situation where we should expect it, when a child falls upon the floor with its head downwards. There appears to have been no ground for supposing that it was inflicted by the mother or any other person present, for the purpose of destroying the child: for, had it been so, it is most improbable that the party inflicting it should not have proceeded to further violence, but have remained satisfied with the result of a blow which caused no appreciable symptoms at the time. Such a view appears to have been taken by the coroner's jury, who, by their verdict, acquitted the parties of any such intention.

Clifton, Bristol, October 1858.

SINGULAR CASE OF ALOPECIA.

By JOHN BARCLAY, M.D., Physician to the Leicester Infirmary.

[Read at the Meeting of the Midland Branch of the Association, at Leicester, on Sept. 1st, 1858.]

MR. A. B. applied to me in February last on account of complete baldness. He is twenty-four years of age, a printer, of florid complexion, sanguine temperament, steady habits, and married.

He had been working hard in a close and confined room seven months previously, when he noticed the hair begin to fall from the scalp. This was soon denuded, and then his beard and whiskers followed. The hair on the pubes and in the axillæ, on the arms and legs, next disappeared, and lastly, the eyebrows and eyelashes, so that when I saw him, he was perfectly hairless from head to foot.

His general health was considerably affected; his appetite was good; but the digestion impaired; and he complained of a sensation of languor and general debility. The excreta were normal. I ordered him a preparation of steel, and friction of the scalp, with a stimulating liniment. The form in which I prescribed the latter was two drachms of tinctura lyttæ to half a pint of rosemary water, which I have usually found a very successful remedy.

In three or four weeks, he found the smarting cease to be produced by this strength of the lotion, and there was no improvement in the state of the skin. I directed him to increase the proportion of the tinctura lyttæ at his own discretion.

By the end of the second month of treatment, he had gradually come to use pure tinctura lyttæ for friction to the head, the skin of which was totally insensible to its effects, while the fingers smarted considerably while applying it.

He has continued the internal remedies with slight intermissions up to the present time, with very marked benefit to his general health, which is now quite reestablished; but there is not the slightest appearance of a return of the hair on any part of the body. When examined with a lens, the bulb of the hair seems gone, but the root is still there through which the hair penetrated the cuticle. There is a slight down upon the ears, which has just appeared; but with this exception, he remains hairless.

I have recommended sea air and bathing, but this is difficult of attainment to one dependent on his own industry in the Midland Counties.

It is the only case of complete alopecia I have ever met with in the course of my practice; and I am not aware of any recorded instances.

Leicester, September 1st, 1853.

PERISCOPIC REVIEW.

MICROSCOPICAL DISCOVERY.

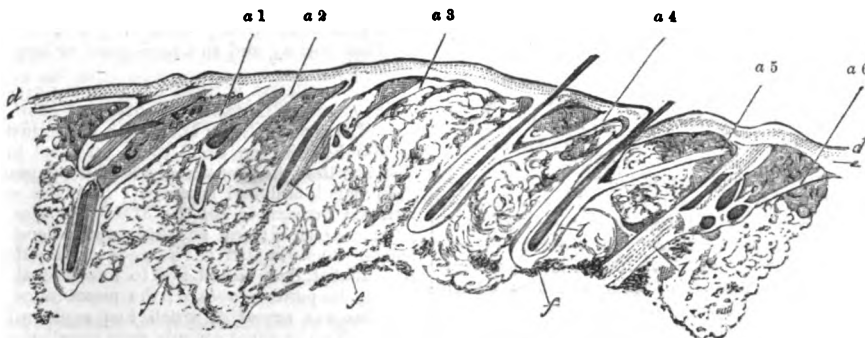
MUSCULAR TISSUE OF THE HUMAN SKIN.

In the fourth number of the *Journal of Microscopical Science*, Mr. JOSEPH LISTER gives interesting confirmation of Kölliker's account of the muscles of the true skin.

Portions of the skin having been partially dried, and then cut into thin slices, exhibit, when again moistened, delicate bands of unstriated muscle, rising in the surface of the dermis, close to the epithelium, and thence descending obliquely, to be inserted into the hair-follicles. "The muscles are seen to arise in all

cases from the most superficial part of the corium, and to pass down obliquely to their insertions into the hair follicles immediately below the sebaceous glands." In sections made as above described, it is at once remarked, that all the muscles (a 1, a 2, a 3, a 4, etc., of the annexed figure) are on the same side of the respective hair follicles, viz., on that side to which the hair slopes. This arrangement of the muscles is exactly that which is best adapted for erecting as well as protruding the hairs, which must be drawn by their contraction nearer to the perpendicular. That this erection as well as protrusion of the hairs does occur, our author has satisfied himself by artificially exciting the state of "cutis anserina" on his own arm and leg. Tickling a neighbouring part will often induce horripilation; and if the eye is kept on an individual hair at this time, it is seen to rise quickly as the skin becomes rough, and to fall again as the horripilation subsides. Each hair-follicle of the scalp possesses but one muscle. Mr. Lister has not been able to confirm Henle's statement, that muscular fibres exist in parts of the skin destitute of hair, such as the palm and the sole.

From these researches, it is obvious that there exists an intra-dermal muscular tissue, the function of which is to move the hair follicles, and perhaps, by some degree of pressure, to stimulate the glands which lie close to the muscles to increased secretion.



GLANDS IN CONNEXION WITH THE EYE AND NOSE.

Dr. SAPPEY has published, in the recent numbers of the *Gazette Médicale* (Nos. 33, 34, 35), some researches on the glandular secreting apparatus of the eye and nostrils.

He describes the orbital and palpebral portions of the *lachrymal gland* as usual, and states that the ducts passing from the former, to the number of three, four, or five, pass through the inferior division of the gland, on their way to the conjunctiva, and receive in this course the secretion of some of the lobules of that part of the organ; while the greater part of these lobules pour their secretion into two or three separate ducts, which pierce the conjunctiva in a line with those before mentioned. The acini of the lachrymal gland Dr. Sappey has succeeded in injecting with mercury.

The *subconjunctival glands* are from ten to twenty-five in number, conglobate; and each pours its secretion by the duct upon the surface of the membrane, where it is reflected from the lid upon the eyeball at its upper nasal aspect. The *ciliary sebaceous glands* are two to each eyelash, and quite resemble the sebaceous glands of the hairs in other parts of the body: it is these, and not the Meibomian glands, which pour out the secretion so usually noticed in ophthalmia tarsi.

The mucous secretion of the nose is poured out, according to Dr. Sappey, not from follicles, but from glands, not unlike in general arrangement to the Meibomian glands of the eyelids. They consist of grape-like bunches of acini, arranged along the excretory duct, into which they pour their secretion by short subsidiary branches. The main ducts run vertically through the mucous membrane, and open by circular orifices on its surface. In some parts of the nasal mucous membrane, as on the anterior part of the outer wall of the nostrils, they are very numerous; in others, more widely scattered. Our author has not succeeded in finding these glands in the thin membrane of the frontal and maxillary sinuses.

BLOOD-VESSELS OF THE LUNGS.

Dr. JAMES NEWTON BEALE has submitted to the Royal Society (*Phil. Mag.*, September) the results of a series of careful injections of the pulmonary and bronchial vessels, which, he finds, have no communication whatever with one another; and

the most novel result of his investigations is, that the so called bronchial artery does not supply the bronchi at all.

The pulmonary artery may be thoroughly injected without the fluid passing in the least degree into the "bronchial" vessels, and vice versa.

i. The pulmonary artery makes no anastomosis whatever with any other artery, nor do its own branches anastomose with one another; its branches are distributed directly to the air-cells, and none go to any of the other tissues of the lungs, except some few which perforate the subpleural cellular tissue, and are distributed to the pleura; some of these also cross the posterior mediastinum, beneath the pleura, and reach the thoracic pleura.

ii. The bronchial arteries end in veins, which ramify in the subpleural cellular tissue; the cellular tissue of the lung being the part supplied by these (so called) bronchial vessels. The greater part of these bronchial veins pass into the posterior mediastinum, and empty themselves into the oesophageal and other veins.

iii. The bronchial mucous membrane is very freely supplied with a very close plexus of vessels, of a peculiar and very characteristic description, which is found to ramify in every part of the bronchial membranes, even as high as the trachea. The whole of this plexus is a continuation of the vascular plexus of the air-cells, and therefore derived from the *pulmonary artery*, but only thus indirectly, as no branch of that vessel goes directly to the mucous membrane.

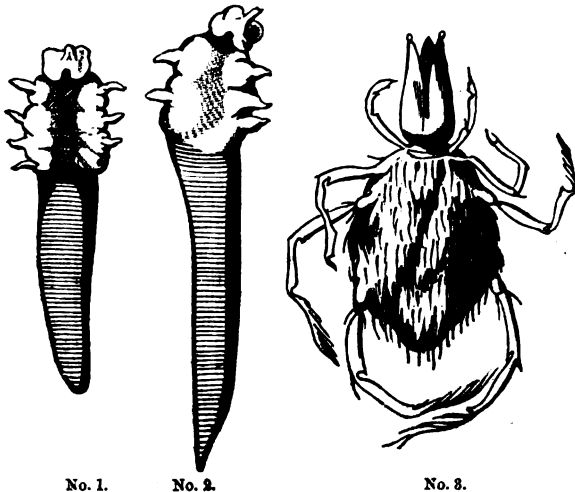
iv. The pulmonary veins are formed by the junction of two distinct sets of radicles: one set derived from that part of the air-cells most distant from the minute terminal bronchus entering each lobule, and which radicles form small trunks visible on the surface of the lung between the lobules. The other set is derived from the bases of the pulmonary lobule, and go to supply the bronchial mucous membrane before entering the pulmonary vein.

v. The coats of the lymphatic vessels of the lung are supplied by blood-vessels derived from the air-cells, and which terminate in the pulmonary veins; and the distribution of blood-vessels on the coats of the lymphatics bears a strong resemblance to that of the capillaries on the bronchial mucous membrane.

PARASITES OF THE HUMAN SKIN.

Dr. CABELL, of Richmond, Va., gives, in the *Virginia Medical and Surgical Journal* for April, a somewhat novel account of these parasites of the follicle and hair sac, which, however ugly, seem innocent creatures, in comparison, at all events, of *Acarus Scabiei*. We copy his description and figures.

"I have seen three distinct kinds of these parasites. The first, marked No. 1, is called *entozoon folliculorum*; it has a head, eight short legs, and a long cylindrical body. The head is composed of a proboscis placed between two palpi; the proboscis as well as the head and limbs can be protruded and retracted. The thorax is divided into four obscure rings, one corresponding with each pair of legs, and has a distinct line of demarcation separating it from the abdomen. This animalcule possesses great tenacity of life, and lives many hours in oil, moving and retracting its limbs and head. The length of the parasite is .26 of a millimetre; the millimetre being about half a line. The second in order is much longer; has only six legs, and a very long and tapering abdomen. The head is similar to No. 1, but its thorax melts insensibly into its abdomen; both engravings represent the parasites each with one leg retracted completely, having the appearance of a mere ring. The length of No. 2 is .35 of a millimetre. The imperfect or embryonic entozoons, No. 3, are only .03 of a millimetre, and have been seen by me only in the sac, with the short eight legged parasite. The last one to be mentioned differs from the others both in shape and colour. I have found it once only. Whether the hair follicle is its proper habitation, or whether it found its way there accidentally, I am unable to say; but it is certainly capable of existing there as well as the parasites first described; for it is equally minute, being invisible to the unassisted eye. Its colour is orange red, and its form so much like the acari, that I have applied the name *acarus folliculorum* to it, and have always spoken of the other parasites simply as entozoons. Its length is .26 of a millimetre; the head is very long, and mitre shaped, and contains between its two divisions a lancet shaped organ, resembling a tongue. The thorax is very short, and has articulated to it the two anterior pairs of legs, which have many articulations, are shorter than the posterior, and terminated by two claws. The abdomen is rounded, covered with hairs, which are irregularly and sparsely scattered over the body and limbs, more abundant at the articulations. The posterior pairs of legs are much longer than the anterior, and terminate not in claws, but in many long and stiff hairs. The body is filled up with a granular, oleaginous looking substance; and since the preparation in Canada balsam has grown transparent by keeping, six or eight globular bodies, all of the same size, and looking like eggs, have been observed in the interior of the abdomen."



No. 1.

No. 2.

No. 3.

¶ The Nos. 1 and 2 of the above description seem to correspond with the animal well known from Mr. Wilson's description. We entertain great doubts whether they actually are distinct species; different sex would account for all the difference between them, save in the number of legs; and perhaps, if they are militant creatures, the chances of war may supply a reason for this. As to the "*Acarus*", since but one specimen has hitherto been seen, we prefer suspending our judgment on its actual citizenship of the American body.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, OCTOBER 8TH, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

INTRODUCTORY REMARKS.

The PRESIDENT said that, as he was about to read a paper, he would not occupy much time with preliminary remarks. There were, however, one or two topics to which he would briefly allude.

Cholera had reappeared with virulence. He would suggest that it might be a subject to be taken into special consideration by the Society, in order to endeavour to obtain clearer notions of the pathology and treatment of the disease.

A physiological section had been established: and he trusted that the Fellows of the Society would show their interest in it by attending its meetings.

There was also a point of melancholy interest to which he must allude—the death of Mr. W. F. Barlow, who had been appointed orator for the ensuing anniversary meeting. He (the President) had no personal knowledge of Mr. Barlow, beyond having met him at the Society and elsewhere; but from perusal of his writings, and from all that he had heard concerning him, he would certainly say that, in the death of Mr. Barlow, the Medical Society and the profession at large have sustained a great loss.

ABNORMAL PLACENTA. BY EDWARDS CRISP, M.D.

Dr. CRISP exhibited a placenta, and gave the following history of the case. Mrs. D. applied on August 24th to a surgeon in the Kennington Road to be attended in her confinement. She was then six months advanced in pregnancy: she was larger than usual, and had anasarca. Diuretics were given, and she went on favourably till the 31st. On that day, symptoms of labour appeared; and she lost much blood by uterine hæmorrhage. On seeing her, the surgeon, finding that the hæmorrhage had abated, determined not to interfere at present. In some hours, the pains increased; the membranes were ruptured, and a fœtus was expelled, which had apparently been dead some days. Two or three coagula were expelled with the fœtus; but there was no further hæmorrhage. In a quarter of an hour, the placenta of the child was thrown off. The uterus still feeling large, a second child was thought to be present: but when the mass which Dr. Crisp exhibited had been expelled, it returned to its usual size after delivery.

The weight of the placental mass exhibited was nine ounces. Its uterine surface presented the usual appearance; on the foetal surface there was no trace of an umbilical cord, but only an aperture from which the vessels seemed to diverge. The tufts resembled those of a normal placenta, but were very distinct: hence it presented the appearance of a placenta which had been long subjected to the action of water. There was no fatty degeneration.

The patient had miscarried in December 1852; the placenta was then expelled. She had felt no pain in the side until a fortnight before being seen, when she became anasarctous. Dr. Crisp suggested several questions, as arising from this case. How long had the placenta been present in the uterus? Had there been twins, of which one had been expelled at an early period? Could the placenta be nourished by the uterine vessels alone?

ON SOME UNRECOGNISED FORMS OF MENTAL DISORDERS. BY FORBES WINSLOW, M.D., D.C.L.

Dr. WINSLOW directed attention to some complicated, varied, and often obscure affections of the nervous system, disordering the mind. These morbid states might be viewed as pseudo, anomalous, and eccentric deviations from certain predetermined, cerebral, and psychological conditions. He wished to avoid the discussion of the question "what constitutes insanity?" He would restrict the term to deviations from mental health, accompanied by positive aberrations of the ideas, conjoined with lesions of volition, clearly justifying the exercise of moral restraint; and to those derangements of the intellect which authorise us in bringing these subjects under the protective influence of the law. The author was anxious to confine his attention to those cases where the mind might be said to be pathologically disordered, but not legally insane; and to draw notice to a large class of cases of disordered intellect, arising upon the surface of society, which had not hitherto been sufficiently recognised as the effect of certain social conditions, bringing those so affected within the medical treatment.

The disorders to which he referred were confined principally to the passions, affections, propensities, and moral sense. The attack often assumed the character of an exaggeration of some single passion, appetite, or emotion. This morbid cerebral state might exist without arresting medical attention, or demanding legal interference. These affections were generally insidious, of slow growth, and almost imperceptibly originating important organic alterations in the manifestations of the passions and affections. As this mental disorder frequently exhibits itself in a perversion of the feelings, alienation of the affections and erratic conduct, it engenders much concealed misery in domestic life. The patient may commit acts of cruelty and brutality towards those who have the strongest claims upon his affections. The naturally gentle, truthful, retiring, and self-denying, may become quarrelsome, cunning, and selfish; the diffident, bold; the modest, obscene; piety may degenerate into hypocrisy, or be exalted into fanaticism. Persons so affected manifest the characteristics of intemperance, both in thought and action, they are wayward and eccentric; their extraordinary conduct often giving rise to the suspicion, that they are either drunk or mad. Occasionally the disorder exhibits itself in a want of veracity amounting to disease.

In these anomalous pathological conditions of the mind, the reasoning and reflective faculties remain intact; hence the actual state of those disordered is not suspected, even by their most intimate associates, until the affection becomes apparent by the commission of some overt act of insanity. A person with a mind under the influence of positive disease has been known for a period to exercise great power of self-control. He may perform common duties in life without exhibiting very conclusive evidence to others of his actual morbid condition. He may be an unrecognised monomaniac, acting under the terrible and despotical influence of one predominant morbid idea, bringing ruin and desolation upon his once happy home; he may recklessly squander a fortune, which he has only accumulated after years of anxious toil; he may become brutal, vicious, criminal, a drunkard, a suicide, as the result of an undoubtedly morbid state of the mind; and yet pass through life as a sane, rational, and healthy man. In actual practice, all the varied shades of such unrecognised mental alienation are met with. The patients exhibit violent antipathies, harbour unjust suspicions, affect singularity of dress, gait, and conversation, are easily excited, are subject to violent and ungovernable paroxysms of passion from the most trivial causes, are lost to all sensibility and delicacy of sentiment, refinement of manner and conversation, are often obstinately riveted to the most absurd dogmas, and are prone to controversy. The disorder may manifest itself in morbid imitation, in inordinate mad ambition, in desire of praise or of notoriety, in a depressed, exalted, or vitiated state of the sexual appetite, or in morbid views of religion; and it is often associated with profound anaesthesia of the moral sense.

These affections are symptomatic in many cases of unobserved cerebral disorder, either originating in the encephalon, or produced by sympathy with morbid processes existing in other tissues in close organic relation with the great nervous centre. These conditions occasionally succeed febrile attacks involving the brain and nervous system, and often follow injuries of the head, inflicted either in early or in advanced life. They are also seen in association with genius; and, as the biographies of Cowper, Burns, Byron, Johnson, and Pope establish, the best and most highly gifted conditions of the mind do not escape.

Dr. Winslow then cited the particulars of several cases illustrative of each form of this class of unobserved mental alienation. He then referred to two other forms of oinomania, or insanity exhibiting itself in uncontrollable habits of intemperance, and to cases of neglected suicidal insanity. He then directed attention to the amount of untreated mental depression, associated with an irresistible suicidal propensity, which had prevailed within the last twelve or eighteen months. In many cases it had appeared from the evidence at the coroner's court, that the mental disorder had existed for weeks, and sometimes for months, without giving rise to suspicion of the presence of a dangerous degree of cerebral mischief. There are few morbid mental conditions so fatal as these apparently trifling, evanescent, and occasionally fugitive attacks of mental depression. This state of the brain is almost invariably associated with the suicidal impulse. Many persons, apparently rational, have committed suicide under the overpowering influence of some latent and concealed delusion. A patient, in his autobiography, described himself as having for three months had the idea of suicide constantly in his mind. His wife, friends, his children, observed his despondency; but they knew nothing of the "worm that gnawed within". Is this not a type of case more generally pre-

valent than we imagine? May not this man, with a mind driven to despair by a terrible concealed hallucination, be urged to suicide as his only escape from misery:—

"He hears a voice we cannot hear,
Which says he must not stay;
He sees a hand we cannot see,
That beckons him away."

The author, after making some observations on oinomania, and pointing out the necessity of recognising this form of cerebral disease as one amenable to treatment, adverted to a phase of mental alienation occupying a kind of neutral ground between positive lunacy and the stage of incubation, accompanied with intense consciousness of the presence of a morbid condition of mind. The patient knows that he is not as he should be, and prays earnestly for relief from his acute sufferings. Up to a certain point the power of self-control is retained, and the case affords to superficial observers no positive symptoms of mental alienation. In this intermediate state, patients often ask, "Am I insane?" He then referred at some length to the characters of Hamlet and Lady Constance, and cited passages from Shakespeare illustrative of this strange phase of morbid mind. An excellent illustration is afforded in the passionate exclamation of the Lady Constance, in reply to the legate's assertion of her madness:—

"Pand. Lady, you utter madness, and not sorrow.

Const. Thou art not holy to belie me so;

I am not mad: this hair I tear, is mine;

My name is Constance: I was Geoffrey's wife;

Young Arthur is my son, and he is lost;

I am not mad—I would to heaven, I were!

For then, 'tis like I should forget myself:

O, if I could, what grief should I forget!

Preach some philosophy to make me mad,

And thou shalt be canonized, cardinal;

For, not being mad, but sensible of grief,

My reasonable part produces reason

How I may be delivered of these woes,

And teaches me to kill or hang myself;

If I were mad, I should forget my son;

Or madly think a babe of clouts were he:

I am not mad; too well, too well I feel

The different plague of each calamity."—*King John*, act III, s. 4.

He observed that he might be asked, How can we accurately diagnose between such morbid conditions, and those natural states of the passions, emotions, and appetites which, though fraught with mischief, must be viewed as healthy manifestations? It is often the sudden and prolonged departure from natural habits, feelings, and passions, that justify a suspicion of the existence of mental alienation. This disorder of the mind is occasionally exhibited in simple exaggeration of one predominant passion or train of thought; and in these, as in other cases, the only safe standard is the ordinary character of the patient. A man may be brutal, subject to violent passions, licentious improvidence, and yet be sane; nevertheless, in many cases, all these symptoms constitute conclusive evidence of the existence of serious mental disorder. A naturally irritable man may be excited by circumstances calculated to engender a state of emotion; but the passion allied to insanity is often fanned into a flame by the most trifling causes. Healthy passion generally subsides after the removal of the exciting cause; but such is not the case with morbid emotions. Apart from the susceptibility to passionate excitement and the presence of great irritability of temper, the physician will generally discover other mental and physical variations from the natural and healthy conditions of the mind and body, which will assist him in arriving at a safe diagnosis. This morbid condition, whether exhibited in ungovernable passion, in alienation of affection, in perverted appetites, in irritability of conduct, or in loss of all sense of right and wrong, is generally associated with restless days and sleepless nights, as well as with impairment of the general health. Every case, however, must be viewed in relation to its individual characteristics, and to itself as a standard, and not in reference to any *a priori* theory, or predetermined test.

An interesting discussion ensued, in which Drs. Copland, Webster, Sibson, Cormack, and others, took part; but which, from other demands upon our space, we are unable to report.

PHYSIOLOGICAL SECTION.

MONDAY, OCTOBER 10TH, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

VALVES IN THE SPLENIC VEINS. BY EDWARDS CRISP, M.D.

Dr. CRISP exhibited several preparations and drawings of the splenic veins of various ruminant and rodent animals, with the object of shewing the existence of valves—a fact which seems to have hitherto escaped the attention of anatomists. In the horse, they are generally numerous; they vary, however, in number

very much in different individuals of the same species of animals. He had not found the valves in the mesenteric or other abdominal veins. It was only in certain classes of animals that they existed; in man and the quadrumana he had searched for them in vain.

Mr. RICHARDSON thought that Dr. Crisp had a distinct claim to the discovery of the valves in the splenic veins. There seemed no reason why the splenic veins should be valveless; but probably anatomists had concluded that it was so, from the absence of valves in the vena cava, and other abdominal veins. There are anatomical reasons why the vena cava should not have valves; for instance, in the pressure exerted by a gravid uterus they would have a most injurious effect.

MODE OF ACTION OF MORBID POISONS, AND OF THE SYPHILITIC POISON IN PARTICULAR. BY HENRY LEE, ESQ.

Mr. LEE divided poisons into those which begin to produce their effects immediately on their application, and those in which a certain time must elapse. The first class are absorbed in three ways: 1. Directly into the blood; 2. By the lacteals; 3. By the lymphatics; and to these we may add a fourth method, viz.; by local effect on the nerves. To the second class, those poisons which require a certain time to elapse before producing their effects, belongs the syphilitic poison. Mr. Lee entered on a critical examination of the doctrine of Hunter, that venereal infection takes place through the lymphatics; and contrasted his experiments on absorption with those of Tiedemann and Gmelin, Magendie, Segalas, etc. The latter observers had shown conclusively that veins absorb. Primary syphilitic sores were described as being either indurated, ulcerated, suppurative, or gangrenous; and Mr. Lee enunciated the law that an indurated primary sore is pretty certain to be followed by secondary symptoms, while a suppurative or ulcerative sore is almost always accompanied by a bubo, but is not followed by secondary symptoms. Constitutional symptoms seem to occur in an inverse ratio to affection of the lymphatics. Where there is suppuration or ulceration, the nidus of the poison is destroyed.

Especial allusion was made by Mr. Lee to the non-occurrence of secondary symptoms after inoculation, in the experiments made on syphilisation. This he explained by the fact that, in persons already affected, a fresh sore is almost always suppurative or ulcerative; and, in inoculation, a number of small sores are produced, having very much the same effect as a larger suppurative bubo.

Mr. Lee believed that the syphilitic virus loses its specific influence by passage through lymphatic glands; and he compared this with the experiments of the Abbé Fontana on the poison of the viper when taken into the stomach, and with those of Pelouze and Bernard on the Woorara poison.

Beyond the point of absorption, some changes are going on, perhaps, in the molecular structure. If we remove a chancre with the knife, in a few days the cut surface will assume a specific character. Hence Mr. Lee thought the blood in the neighbourhood of the sore infected rather than the lymphatics.

Dr. LANKESTER congratulated the Society on the opening of its physiological section. It might appear to some that Mr. Lee's paper was more pathological than physiological; he believed, however, that it was a very fit paper for the section, because physiology and pathology must go hand in hand in order to produce a good result. It is the general opinion that poison-diseases arise from some condition of the blood, but of the nature of which the microscope and chemistry have failed to inform us. He would ask Mr. Lee whether he had made microscopic examinations of the blood or pus in syphilis; and whether he thought that the whole blood was infected, or only for a certain distance round the sore?

Dr. SNOW believed that it is in the extra-vascular liquor sanguinis that the first action of such poisons as the syphilitic is first manifested. He referred to the occurrence of an indurated bubo in the groin, between the appearance of the primary sore and of secondary symptoms.

Mr. DE MÉNÉZ criticised Mr. Lee for having laid down a very attractive theory, without supporting it by sufficient facts.

Mr. RICHARDSON was surprised that the author had recognised the direct action of poisons on the nerves.

After some further discussion on the action of poisons between Drs. Crisp and Cogswell, Mr. Richardson, and Drs. Camps and James Bird, Mr. Lee replied, and the meeting adjourned.

EDITOR'S LETTER BOX.

MEDICAL ETHICS AND ASSOCIATION REFORM.

LETTER TO THE EDITOR.

SIR,—You will much oblige me by printing in the Journal the accompanying advertisements issued by members of the Association. I do not ask you to say whether they are professional or unprofessional; but I think you cannot object to give them a place for the general edification of our members, the majority of whom have no access to the newspapers in which they originally appeared.

I am one of those who long to see accomplished what you have often hinted at—the formation of a code of ethical laws, and the formation of a representative Council to enforce them. The General Council is, from its very nature, inoperative.

The first advertisement is from Dr. FAIRCLOTH, of Northampton, and runs thus:—

"Dr. FAIRCLOTH, M.D., Marischal College and University, Aberdeen, Fellow of the College of Surgeons of England, Senior Medical Officer of the Royal Dispensary, Northampton, and formerly a resident House Pupil in the General Infirmary at Northampton, etc., respectfully announces that he has commenced practising in the Higher Branches of his Profession."

—*Northampton Mercury*.

The next advertisement is by Mr. H. L. SMITH, of Southam, and is as follows:—

"Mr. SMITH, Member of the Royal College of Surgeons of London, Oculist and Aurist to the Infirmary of Southam, Warwickshire, for curing Diseases of the Eye and Ear, will attend at the George Hotel, Northampton, on the FIRST TUESDAY in each month.

"Subscribers to the Infirmary, in the vicinity of Northampton, sending patients, with recommendations, to consult Mr. Smith at the George Hotel, are requested to desire them to attend exactly at twelve o'clock."—*Northampton Herald*.

Is the Medico-Ethical Committee appointed at Swansea in operation? If so, allow me to suggest to its Secretary the advantages which would result from its proceedings being reported from time to time in the Journal. Members of the Association might often have valuable suggestions to make to the Committee, either privately, or through the Journal.

The numbers and the status of our members entitle our Association to take a higher ethical position than it at present possesses; and, had I not the belief that there is an awakening in our ranks to the importance of an ethical and general reform of our constitution, I would not subscribe myself, as I now do with sincerity,

A HOPEFUL MEMBER.

October 10th, 1859.

MEDICAL EDUCATION.

LICENSING BODIES IN SCOTLAND.

The following are the Licensing bodies in Scotland:—

EDINBURGH.—UNIVERSITY.

—ROYAL COLLEGE OF PHYSICIANS.

—ROYAL COLLEGE OF SURGEONS.

GLASGOW.—UNIVERSITY.

—FACULTY OF PHYSICIANS AND SURGEONS.

ABERDEEN.—UNIVERSITY AND KING'S COLLEGE.

ST. ANDREW'S.—UNIVERSITY.

UNIVERSITY OF EDINBURGH.

PRINCIPAL: John Lee, D.D. SECRETARY: Blair Wilson, Esq. DEGREE OF M.D. The candidate must have studied *four* years, during at least six months of each, in the University of Edinburgh, or in some other university where the degree of M.D. is given; unless, in addition to three *and* *medicis* in an university, he has attended, during six winter months, the medical and surgical practice of a general hospital, with at least eighty patients, and during the same period a course of *practical* anatomy.

He must give evidence—That he has studied in *an* university, anatomy, chemistry, *materia medica* and *pharmacology*, institutes of medicine, surgery, practice of medicine, the diseases of women and children, general *pathology* and anatomy (unless attended in the year of *extra* *medicis* allowed), during courses of six months: *clinical* *medicine*.

a course of six months, or two courses of three months each : and clinical surgery, medical jurisprudence, botany, and natural history, including zoology, during courses of three months. That besides clinical medicine, he has attended, for six months of another year, the medical or surgical practice of a general hospital, accommodating eighty patients. That he has attended, for at least six months, by apprenticeship or otherwise, the art of compounding and dispensing drugs. That he has attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, or that of a physician, surgeon, or member of the London or Dublin Society of Apothecaries. That he has studied, for one year previous to his graduation, in the University of Edinburgh.

Every candidate for the degree of medicine must deliver before the 31st of March of the year in which he proposes to graduate, to the dean of the faculty of medicine,—A declaration, in his own handwriting, that he is twenty-one years of age, or will be so before the day of graduation; and that he will not be then under articles of apprenticeship to any surgeon or other master. A statement of his studies in literature, philosophy, and medicine, accompanied with certificates. A medical dissertation, composed by himself, in Latin or English.

Before a candidate be examined in medicine, the medical faculty shall ascertain, by examination, that he possesses a competent knowledge of Latin. They shall then examine him, *visd voce*, or in writing—1. On anatomy, chemistry, botany, institutes of medicine, and natural history, bearing chiefly on zoology; and 2. On materia medica, pathology, practice of medicine, surgery, midwifery, and medical jurisprudence. Students may be admitted to an examination on the first division at the end of the third year of their studies.

If the candidate have satisfied the medical faculty, he will be summoned, on the 31st of July, to defend his thesis; and if the senate think fit, he shall be admitted on the first lawful day of August, to the degree of Doctor.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

No one is admissible as a fellow who has not obtained the degree of M.D. All petitions for the fellowship are determined by ballot. Graduates of foreign universities must submit to an examination before the examiners of the College, which shall consist—1. Of a dissertation in English, on some subject in the practice of physic selected by the examiners. 2. Of a *visd voce* examination in English, chiefly on symptomatology, pathology, and therapeutics of diseases; but in part, also, on anatomy, chemistry, botany, and physiology. 3. The examiners may institute such examination as they may consider advisable for satisfying themselves that the candidate has received a competent education.

The mode of election of a non-resident is the same as that of a resident fellow.

FEES. For a resident fellowship, £130; for a non-resident, £80; both inclusive of stamp duty. Fee paid by a resident licentiate, £100; by a non-resident £55; exclusive of any tax payable to government. Every resident fellow pays an annual subscription of £1 : 1 to defray the College expenses.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

Every candidate for a diploma must have followed the course of study, to be specified afterwards, in an university, or at the seat of an established school of medicine; the lectures delivered at a provincial school will be held as qualifying for one year's course of study, unless specially recognised for more.

COURSE OF STUDY. 1. Preliminary Instruction. Every candidate must have received instruction in the elements of mathematics, mechanical philosophy, and the Latin language.

2. Professional Instruction. The candidate must have been engaged during a period of not less than twenty-seven months, including three winter sessions, in attending—

Anatomy, two courses of six months each. Practical Anatomy, twelve months. Chemistry, Materia Medica, and Pharmacy, Institutes of Medicine or Physiology, Practice of Medicine, and Clinical Medicine, of each one course of six months, or of the last, two courses of three months each, during the period of hospital attendance. Principles and Practice of Surgery, two courses, six months each; or Principles and Practice of Surgery and Military Surgery, one course, six months each. Clinical Surgery, one course, six months; or two courses, three months each; during the period of his attendance at the hospital where they are delivered. Midwifery and Diseases of Women and Children, one course, three months. Medical Jurisprudence, one course, three months. Practical Chemistry, one course, three months, the number of pupils in each class being limited to twenty-five; or Analytical Chemistry, three months. Also a

course of instruction in Practical Pharmacy, at the laboratory of a surgeon or apothecary; or of a chemist and druggist recognised by the College; or of a public hospital or dispensary: and he must produce evidence that he has been engaged in compounding and dispensing medicines for six months. Those who produce certificates of having been for two years pupils or apprentices of regularly licensed practitioners, keeping laboratories for dispensing medicines, shall be held qualified in this branch.

The six-months' courses delivered in Edinburgh must consist of not fewer than a hundred and ten lectures, with the exception of clinical medicine, clinical surgery, and military surgery. The three-months' courses must consist of not fewer than sixty lectures. Two London courses of three months each will be taken as equivalent to one six-months' course.

The candidate must also have attended, for twenty-one months, a public general hospital containing on an average eighty patients.

Every candidate, on applying to the president, will be required 1. To produce evidence of his having attained the age of twenty-one years. 2. To present a tabular statement exhibiting the amount of his professional education. Unsuccessful candidates will be remitted to their studies for a period not, in any case, less than three months. Every candidate will be required to translate into English some portion of a Latin author.

FEE. For a diploma, £10; including all fees.

UNIVERSITY OF GLASGOW.

PRINCIPAL: Duncan Macfarlan, D.D. **CLERK OF SENATE:** Allen Thomson, M.D.

DEGREES IN MEDICINE. 1. Every candidate must lodge with the Clerk of Senate a certificate of moral character, with evidence that he has attained the age of twenty-one years.

2. He must have attended, for four Winter Sessions of six months each, an university in which medical degrees are conferred, and medicine is regularly taught. He must spend one at least of the four years at the University of Glasgow; and in each year he must have attended at least two courses of six months' duration. If he shall spend only one year or session at the University of Glasgow, he must attend not less than three courses of lectures delivered there, two of them at least being of six months' duration. If of less extent, two courses shall be held equivalent to one of six months.

3. He must produce certificates of attendance on the following courses of instruction, each of six months, with the exceptions mentioned below:—Anatomy; Chemistry; Institutes of Medicine; Botany, three months; Materia Medica and Pharmacy; Surgery; Practice of Medicine; Midwifery; Forensic Medicine, three months; Anatomical Dissections; Practical Chemistry, three months; General Hospital, two years, of not less than nine months each, or eighteen months. The hospital must contain eighty beds; clinical instruction must be given; and the student must spend at least half of the period in the physicians' wards.

4. Each candidate must lodge with the Clerk of Senate the above certificates, and a schedule of his course of study filled up, with an essay composed by himself on some medical subject of his own selection, on or before the 1st of March or the 10th of June.

5. No student shall be entered in any medical class later than the 1st of December (excepting those which do not meet till a later period) without the permission of the Senate; and every candidate for graduation shall be required to have his name enrolled in the University, on or before that day.

6. The examination shall be conducted partly in writing. Previous to the professional examination, the candidate shall give evidence that he possesses a competent knowledge of the Latin language; this examination in the Latin language may, at the option of the candidate, be in any year previous to the professional examination.

The examination shall be divided into two parts; the first comprehending Anatomy, Chemistry, Institutes of Medicine, and Botany; the second, the Principles and Practice of Medicine and Surgery, Materia Medica and Pharmacy, Midwifery, and Forensic Medicine. The candidate may undergo the first examination at the end of his second Winter Session, or at any of the following examination terms, provided he shall have attended the necessary lectures.

DEGREES IN SURGERY. The regulations are analogous to those for degrees in medicine.

The days appointed for conferring degrees in medicine and surgery are the last Wednesday of April, and the first Wednesday of August.

Fees for the degree of M.D., £15 : 8; government duty on

stamp for ditto, £10; fee for the degree of Chirurgie Magister, £10:10.

FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.

PRELIMINARY INSTRUCTION. Every candidate for the diploma must, either previously to or during his medical education, have received instruction in the elements of mathematics, in mechanical philosophy (by attendance on a course of not fewer than sixty lectures), and in the Latin language.

PROFESSIONAL INSTRUCTION. The candidate must have attended the following distinct courses of lectures during not less than twenty-seven months, in which must have been included three winter sessions of six months' duration each:—

Anatomy, practical anatomy, and surgery, two courses of six months; or surgery and military surgery, one course of six months; chemistry, one course of six months; practical chemistry, one course of three months; institutes of medicine, practice of medicine, materia medica, and midwifery and diseases of women and children, one course of six months each; clinical medicine and clinical surgery, two courses of three months each; medical jurisprudence and police, one course of six months; botany, one course of three months; general hospital, with at least eighty beds, twenty-one months; practical pharmacy, at the laboratory of a surgeon or apothecary, or of a public hospital or dispensary, or at that of a chemist or druggist recognised by the Faculty, six months. The Faculty recommend lectures on the eye, and Hospital for Eye Diseases. A three months' course of lectures on the eye, with six months' attendance on an Eye Hospital, will be considered equivalent to three months of a General Hospital. Lying-in Hospital. Hospital for Syphilitic Diseases. Pathological anatomy. Natural history and comparative anatomy. Greek, French, German, and Italian.

Each candidate shall be examined, partly orally, and partly by written question and answer. He shall translate Latin, write prescriptions, and be examined in preparations. The Committee of Examiners being satisfied, the candidate shall be entitled to his diploma, on subscribing the declaration authorised by law in place of extra-judicial oaths.

The unsuccessful candidates shall be remitted for not less than three months after a first rejection, and six months after a second, and their names shall be concealed. The whole of the deposited fee shall be returned on a first rejection; but on every future similar occasion, whether the examination may have been before the Faculty, or any other licensing board, or when the candidate, prior to application for a surgical license, may have been five years in practice, two guineas shall be retained.

Examination in Latin, on the second and following Saturdays in December, annually. Students who have taken a degree in Arts, from a University of Great Britain or Ireland, will be exempted from these examinations.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.

MEDICINE. Candidates for the degree of M.D. must be of the age of twenty-one years; they must produce satisfactory certificates of moral character, and of having studied classics and mathematics at an university, or at an academy of acknowledged reputation. All candidates, with the exceptions mentioned below, must have studied medicine for four years—one of which must be passed at King's College, Aberdeen—and must produce evidence of having attended the following courses:—Six months' courses: Anatomy, two courses; chemistry, one course; materia medica, one course; surgery, one course; institutes of medicine and physiology, one course; practice of medicine, one course; midwifery, one course. Three months' courses: Dissections, two courses; practical chemistry, one course; medical jurisprudence, one course; clinical surgery, one course; botany, one course; clinical medicine, two courses. Attendance on at least two courses is requisite to constitute an *annus medicus*. Certificates of attendance on a six-months' course of chemistry, previous to the commencement of medical study, will be received. For those who have a diploma of A.M., attendance on anatomy during the fourth session of the curriculum of arts, and on a full course of chemistry, will be considered as one medical session. Every candidate must have attended for two years an hospital containing 100 beds; and, during three months, a dispensary for the compounding of medicines. Previous to the medical examination, candidates not having the degree of A.M. will be required to translate a passage from Celsus.

The preceding regulations will be enforced in the case of all students who commenced their medical studies subsequent to October 1st, 1840. But practitioners who possess a license or diploma from any of the Royal Colleges of Physicians or Sur-

geons, or from the Apothecaries' Company, and who have been engaged five years in the practice of medicine, will be admitted to examination on producing their license or diploma, along with satisfactory evidence of good moral character, and of having studied the classics. Practitioners who commenced their medical studies before October 1840, and who have not been in practice for five years, will be exempt from a year's residence at King's College. Fees, £26:5:6.

N.B. The University and King's College is the only institution in Aberdeen which has a legal power of granting degrees in medicine.

UNIVERSITY OF ST. ANDREW'S.

DEGREE OF DOCTOR OF MEDICINE. Every candidate for a diploma in medicine shall produce satisfactory evidence:—1. Of unexceptionable moral character; 2. Of having had a liberal and classical education; 3. Of having completed the twenty-first year of his age. Fellows, members, and licentiates of the Royal Colleges of Surgeons of England, Edinburgh, and Dublin; of the Royal College of Physicians of London; of the Faculty of Physicians and Surgeons of Glasgow; and of the London Apothecaries' Company, are eligible as candidates for the degree of doctor of medicine, on producing their diploma or license. Candidates not holding any of the above qualifications must produce proof that they have attended lectures delivered by professors in some university, or by fellows of the Royal Colleges of Physicians or Surgeons of London, Edinburgh, or Dublin, for four complete winter sessions, or for three winter and three summer sessions, on the following branches:—Anatomy, two courses of six months each; practical anatomy or dissections, twelve months; physiology, one course of six months; chemistry, one course of six months; practical chemistry, one course of three months; materia medica and pharmacy, one course of three months; midwifery and diseases of women and children, one course of three months; surgery, one course of six months; clinical surgery, one course of six months; practice of medicine, one course of six months; clinical medicine, one course of six months: and that they have diligently attended, for at least two entire years, the medical practice in some public hospital in Great Britain or Ireland, containing not less than one hundred beds, and having a regular establishment of physicians, as well as surgeons.

EXAMINATIONS. *Examiners for Degrees in Medicine:* Dr. George E. Day, Mr. Arthur Connell, and Dr. William Piper. *Assistant-Examiner:* Dr. Andrew Anderson. The examinations commence on the first Wednesday in May, and the third Wednesday in October. The graduation fee is twenty-five guineas. In the event of a candidate being found unqualified, he shall forfeit five pounds of the graduation fee, which will be accounted for to him, when he passes his examination at a subsequent trial. Candidates can only be admitted to examination at other periods by a special grace of the Senatus Academicus. The graduation fee in this case is fifty guineas. The examination extends over two days, and is partly in writing and partly oral. On the first day, candidates give a written translation of a passage from a Latin medical author, and are examined in the elements of chemistry, in materia medica, and in anatomy and physiology. On the second day, they are examined in pathology and the practice of medicine, in the principles of surgery, and in midwifery. The degree is conferred on the following morning by the Rector, in the Hall of the Public Library of the University; and the diplomas are signed by the Principals and Professors of the University. Every candidate is required to present himself for registration to the Secretary, on or before the day preceding the examination, and to communicate by letter with the Professor of Medicine, at least a fortnight previously, stating what diploma or certificates he intends to produce.

The following are the MEDICAL SCHOOLS in Scotland:—

EDINBURGH.—UNIVERSITY.

—SURGEONS' HALL.

GLASGOW.—UNIVERSITY.

—ANDERSONIAN UNIVERSITY.

—ROYAL INFIRMARY.

ABERDEEN.—UNIVERSITY AND KING'S COLLEGE.

—MARISCHAL COLLEGE.

UNIVERSITY OF EDINBURGH.

Prospectus not received.

SURGEONS' HALL, EDINBURGH.

WINTER SESSION. Chemistry. Dr. George Wilson. First course, £3:5; second, £2:4; perpetual, £5:5. Surgery. Dr. R. J. Mackenzie and Mr. Spence. First course, £2:4; and £5:5.

Natural Philosophy. Dr. George Lees. Fee, £3:3.
 Clinical Medicine. Dr. A. Halliday Douglas; Tuesday and Friday, at twelve.
 Clinical Surgery. Dr. Dunsmure; Tu. and F., at twelve.
 Anatomy. Mr. John Struthers. Fees, £3:5; £2:4; £5:5.
 Materia Medica and Dietetics. Dr. Douglas MacLagan.
 Midwifery. Dr. Campbell. Fees, £3:5; £2:4; and £5:5.
 Practice of Physic. Dr. Alex. Wood and Dr. W. T. Gairdner. Fees, £3:5; £2:4; and £5:5.
 Analytical Chemistry. Dr. Wilson. Fee, £2 per month; or £10 per winter session.
 Practical Chemistry (three months). Fee, £3:3.
 Practical Anatomy. Mr. John Struthers, assisted by Dr. Greig; nine till four. Fee, £3:3; with demonstrations, £4:4.
 Anatomical Demonstrations. Mr. John Struthers. Fee, £2:2.
 Royal Infirmary. Fees, perpetual, £12:17; annual, £5:7:6; half-yearly, £3:5:6; quarterly, £1:13.
 Edinburgh Maternity Hospital. Fee, six months, £1:3.
 SUMMER SESSION. Natural Philosophy. Dr. Lees.
 Medical Jurisprudence. Dr. Rutherford Haldane.
 Midwifery. Dr. Keiller, Dr. J. Matthews Duncan.
 Clinical Surgery. Dr. Dunsmure.
 Practical Anatomy, with Demonstrations. Mr. John Struthers, assisted by Dr. Greig.
 Practical and Analytical Chemistry. Dr. Wilson.
 Operative Surgery. Mr. John Struthers.
 Pathological Anatomy. Dr. W. T. Gairdner.
 The introductory address will be delivered by Dr. R. J. Mackenzie, on Wednesday, November 2, at 2 p.m.
 The above courses of lectures qualify for examination at the various examining boards in Great Britain and Ireland.

UNIVERSITY OF GLASGOW.

WINTER SESSION. FACULTY OF MEDICINE. Surgery. Dr. Laurie. Fee, £3:3.
 Practice of Physic. Dr. John Macfarlan. Fee, £3:3.
 Chemistry, Practical Chemistry, and Analytical Chemistry. Dr. T. Anderson. Fees, Chemistry, £3:3; Practical Chemistry, £2:2; Analytical Chemistry, £4:4.
 Anatomy, Anatomical Demonstrations, and Practical Anatomy. Dr. Allen Thomson and Dr. Wm. Aitken. Fee, £3:3.
 Botany. Dr. Walker Arnott; at twelve. Fee, £3:3.
 Medical Jurisprudence. Dr. Rainy. Fee, £3:3.
 Materia Medica. Dr. John Couper. Fee, £3:3.
 Midwifery. Dr. Pagan. Fee, £3:3.
 Institutes of Medicine. Dr. Buchanan. Fee, £3:3.
 Lectures on the Eye. Dr. Mackenzie. Fee, £2:2.
 Royal Infirmary, visit at two.
 Clinical Lectures at three.

ANDERSONIAN UNIVERSITY, GLASGOW.

WINTER SESSION. Principles and Practice of Medicine: Dr. Andrew Anderson. Fees, £2:2, and £3:3.
 Surgery: Dr. R. Hunter. Fees, £2:2, and £3:3.
 Midwifery: Dr. Paterson. Fees, £2:2, and £3:3.
 Descriptive Anatomy: Dr. M. S. Buchanan and Dr. George Buchanan. Fees, £2:2, and £3:3.
 Anatomical Demonstrations: Dr. M. S. Buchanan and Dr. George Buchanan. Fees, £2:2, and £3:3.
 Practical Anatomy: Dr. M. S. Buchanan and Dr. George Buchanan, daily.
 Institutes of Medicine: Dr. E. Watson. Fees, £2:2, and £3:3.
 Chemistry, and Practical Chemistry: Dr. F. Penny. Fees, £2:2, and £3:3.
 Laboratory Manipulation: Dr. F. Penny, daily.
 Materia Medica: Dr. Easton. Fees, £2:2, and £3:3.
 Medical Jurisprudence: Dr. Crawford. Fees, £2:2, and £3:3.
 Natural Philosophy: Dr. Taylor. Fees, £2:2, and £3:3.
 Mathematics: Mr. Laing. Fees, £2:2, and £3:3.
 Royal Infirmary, £8:8, perpetual, with Clinical Lectures.
 Eye Infirmary, £2:2, for six months. Lying-in Hospital, 10s. 6d, for six months. Dressers are appointed, without fee, from the students.
 SUMMER SESSION. Botany: Dr. Joseph Bell. Fees, £2:2, and £3:3.
 Midwifery: Dr. Paterson. Fees, £2:2, and £3:3.
 Practical Chemistry: Dr. Penny. Fees, £2:2, and £3:3.
 Anatomical Demonstrations and Surgical Anatomy: Dr. M. S. Buchanan and Dr. George Buchanan. Fees, £2:2, and £3:3.

Practical Anatomy: Dr. M. S. Buchanan and Dr. George Buchanan, daily. Fees, £2:2, and £3:3.
 Fee for each class, £2:2.

ROYAL INFIRMARY, GLASGOW.

PHYSICIANS: Dr. Weir, Dr. Ritchie, Dr. Easton, Dr. Bell, and Dr. McGregor. SURGEONS: Dr. Lawrie, Dr. A. Buchanan, Dr. Hunter, Dr. Fleming, and Mr. Wm. Lyon. MEDICAL SUPERINTENDENT: Dr. J. C. Steele.

FEES. Perpetual, £8:8; for one year, £5:5. Perpetual to those who have previously entered: For one year, £3:13:6; for six months to holders of surgical diplomas, £2:2.

UNIVERSITY AND KING'S COLLEGE, ABERDEEN.

Prospectus not forwarded.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.

FACULTY OF MEDICINE. WINTER SESSION. Practice of Medicine: Dr. Macrobin. Fee, 3:3.

Surgery: Professor Pirrie. Fee, £3:3.

Midwifery, and Diseases of Women and Children: Dr. Dyce. Fee, £3:3.

Anatomy: Professor A. J. Lizars. Fee, £3:3.

Institutes of Medicine: Dr. Ogilvie. Fee, £3:3.

Practical Anatomy and Anatomical Demonstrations: Professor A. J. Lizars and Dr. Beveridge. Fee, £2:2.

Chemistry: Dr. Clark and Mr. Brazier. Fee, £3:3.

Practical Chemistry: Dr. Clark and Mr. Brazier. Fee, £3:3.

Materia Medica: Dr. Henderson. Fee, £3:3.

Natural History: Dr. Nicol. Fee, £3:3.

Janitor's fee for each class, 2s. 6d.

SUMMER SESSION. Botany: —. Fee, £2:2.

Medical Jurisprudence: Dr. Ogston. Fee, £2:2.

Practical Anatomy and Demonstrations: Professor A. J. Lizars and Dr. Beveridge. Fee, £2:2.

Histology: Dr. Beveridge. Fee, £2:2.

Practical Chemistry: Dr. Clark and Mr. Brazier. Fee, £3:3.

Hospital practice daily, at the Royal Infirmary. Perpetual fee to the hospital, £8:8. The resident physicians' and surgeons' assistants are selected from the senior students. Fee, £25, which includes bed and board. Dresserships are conferred on students without fee.

LICENSING BODIES IN IRELAND.

The following institutions grant medical diplomas and degrees in Ireland:—

DUBLIN.—QUEEN'S UNIVERSITY.

—ROYAL COLLEGE OF SURGEONS.

—KING'S AND QUEEN'S COLLEGE OF PHYSICIANS.

—APOTHECARIES' HALL.

THE QUEEN'S UNIVERSITY IN IRELAND.

REGULATIONS. Every candidate for the degree of M.D. shall produce a certificate from the Council of one of the Queen's Colleges that he has passed matriculation examination for arts, and has been admitted a matriculated student of the College in the Faculty of Medicine. The curriculum shall extend over a period of at least four years, and shall be divided into two periods of at least two years each. The first period shall comprise the following lectures:—Chemistry, Botany, and Zoology; Anatomy and Physiology; Practical Anatomy; Materia Medica and Pharmacy; six months each. The second period shall comprise:—Anatomy and Physiology; Practical Anatomy, Theory and Practice of Surgery; Midwifery and Diseases of Women and Children; Theory and Practice of Medicine; six months each: Medical Jurisprudence, three months. In addition, candidates shall have attended during the first period: Practical Chemistry, three months; Medico-Chirurgical Hospital, containing at least sixty beds, with Clinical Lectures, six months. And during the second period: Practical Midwifery, six months; Practical Pharmacy, three months; Medico-Chirurgical Hospital, with Clinical Lectures, eighteen months.

Candidates shall pass two examinations: the first comprising the subjects of the first period of the curriculum; the second comprehending subjects of the second period. Students may present themselves for their first examination at the termination of the first period of the curriculum, or at any after period to be fixed by the senate previous to their undergoing the second examination.

By the charter, candidates must have attended at least one-third of the lectures in one of the Queen's Colleges. For the remainder, certificates will be received from the lecturers in universities, colleges, or schools recognised by the University.

Candidates must have attended in one of the Queen's Colleges, lectures on one modern language, and on natural philosophy for six months; and they will be examined in these subjects.

The examinations will be conducted principally by printed papers, to which written answers shall be given; but the examiners shall also be at liberty to add *vis à voce* examinations on the subject of the written paper.

The above regulations will be binding on all students commencing their medical studies on or after the 1st October, 1853; but students already engaged in their medical studies may either complete their courses according to the Ordinance of 30th June, 1850, or according to the present ordinance.

EXAMINERS FOR THE YEAR. Chemistry: Dr. Edmund Ronalds. Anatomy and Physiology: Dr. Charles Croker King. Medicine: Dr. John Banks. Surgery: Dr. James S. Hughes. Materia Medica, Pharmacy, and Medical Jurisprudence: Dr. Aquilla Smith. Midwifery, and Diseases of Women and Children: Dr. Henry L. Dwyer. Zoology and Botany: Dr. George Dickie.

ROYAL COLLEGE OF SURGEONS, IRELAND.

President: William Hargrave. **Vice-President:** Charles Benson. **The Council:** Sir Philip Crampton, Bart.; Alexander Read; Arthur Jacob; A. Ellis; R. C. Williams; R. Adams; J. Barker; W. Colles; J. H. Power; Edward Hutton; J. Macdonnell; H. Irvine; J. S. Hughes; Robert Pentland; Robert Mayne; Richard G. H. Butcher; Augustus E. Tabuteau; Samuel G. Wilmot. **Honorary Secretary of the College:** Edward Hutton. **Secretary of the Council:** Henry Maunsel. **Court of Examiners:** T. Rumley; J. Smyly; C. Fleming; O'Brien Bellingham; R. Tuohill; Thomas Byrne; Francis Battersby. **Examiners in Midwifery:** Robert Johns; Alfred McClinton; Samuel L. Hardy.

PROFESSORS. Anatomy and Physiology: Arthur Jacob. Descriptive Anatomy: J. H. Power. Surgery: H. Porter and W. Hargrave. Medicine: C. Benson. Chemistry: W. Barker. Materia Medica: R. C. Williams. Midwifery: T. Beatty. Medical Jurisprudence: T. P. Geoghegan. Botany: A. Mitchell.

Fellows of the College are members of the Corporation, and are admitted by examination; letters testimonial are granted to licentiates; and a diploma in midwifery to fellows and licentiates educated and examined in that branch of surgery.

FELLOWSHIP. Candidates must be twenty-five years of age, and must give proof of liberal preliminary education, and good conduct. They must produce certificates of surgical studies for six years (three of which must be in Dublin), and also of practice as house-surgeon or dresser in an hospital; as well as of attendance on hospitals, lectures, and dissections, as required from licentiates; with the addition of Botany, Comparative Anatomy, and Natural Philosophy. **FEE, £20 : 5**; if the candidate be a licentiate, £10 : 10.

LETTERS TESTIMONIAL. Candidates are required to produce certificates of preliminary classical education; of four years' professional study (three of them in metropolitan schools), also three years' attendance on hospital lectures and dissections. **FEE, £21.**

MIDWIFERY DIPLOMA. Candidates must be fellows or licentiates, and must produce certificates of attendance on midwifery lectures and practice, with proof of having attended thirty cases of parturition.

Candidates for the Fellowship and Letters Testimonial are publicly examined on two separate days, in anatomy, physiology, surgery, practice of medicine, and pharmacy. The examiners are elected by a sworn jury of the Council appointed by lot, teachers being ineligible.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Visitors: The Lord High Chancellor of Ireland; the Lord Chief Justice of the Queen's Bench; the Lord Chief Justice of the Common Pleas; the Chief Baron of the Exchequer. **President:** W. F. Montgomery. **Vice-President:** Aquilla Smith. **Censors:** Thomas Brady; William Stokes; Aquilla Smith; James Foulis Duncan. **Treasurer:** John Mollan. **Registrar:** W. E. Steel, 15, Hatch Street. **Professor of Midwifery:** W. F. Montgomery. **Professor of Medical Jurisprudence:** Thomas Brady. **Examiners in Midwifery:** W. O'Brien Adams; Henry Law Dwyer; Fleetwood Churchill. **Inspectors of Apothecaries' Shops:** Thomas Brady; Aquilla Smith; James Foulis Duncan; W. E. Steel.

Physicians practising in Dublin, and within seven miles thereof, and those attached to county infirmaries and prisons in Ireland, are required by the charter and statutes to possess the license of the college.

Candidates for the license who have completed the following

course of education are admissible to examination: Anatomy, Chemistry, Practice of Medicine, Materia Medica, Institutes of Medicine and Midwifery, Demonstrations and Dissections, of each six months. Botany, Medical Jurisprudence, of each three months. Medico-Chirurgical Hospital, two years and a half; and Lying-in Hospital six months. Graduates in Medicine of any university in the United Kingdom, and surgeons of four years' standing or upwards, are admissible to examination on producing their diplomas. Surgeons under four years' standing are required to have attended Botany, Institutes of Medicine, and a Lying-in-Hospital. Candidates undergo two days' examination on the above subjects, except medical graduates and surgeons of seven years' standing, who are examined in the subjects of the second day only, viz.: Practice of Medicine, Institutes of Medicine and Midwifery. Surgeons who are A.B.'s, in addition to these subjects, are examined also in Botany and Materia Medica. Members of any Apothecaries' Company are ineligible for admission. Licentiates of three years' standing, who are graduates of the Universities of Oxford, Cambridge, or Dublin, are alone eligible to the Fellowship.

FEES. License, £30; stamp duty, £15; Fellowship, £20; stamp duty, £25.

APOTHECARIES' HALL OF IRELAND.

EDUCATION OF APOTHECARIES. Every candidate must undergo two separate examinations, one for the certificate of apprenticeship, the other for the license to practise.

Every candidate for the certificate of apprenticeship will be examined in the following books. In Latin: the Catiline War of Sallust, and the first three books of the *Æneid* of Virgil. In Greek: the Gospel of St. John, and the first twenty Dialogues of Lucian, or the first two books of Homer's *Iliad*. In French: Telemachus, or the History of Charles XII. In Science: the first two books of Euclid and Algebra, to the end of simple equations.

Every candidate for the license to practise must lay before the court the certificate of apprentice; the indenture of apprenticeship, enrolled according to Act of Parliament, and bearing the certificate of a good moral character, and of having fulfilled the period of his apprenticeship; certificates, that he has diligently attended at least one course of lectures on each of the following subjects at the Apothecaries' Hall, or some other recognised school of medicine: Chemistry, Anatomy and Physiology, six months; Practical Chemistry, Botany, and Natural History, three months; Materia Medica, Demonstrations and Dissections, Theory and Practice of Physic, Surgery, Midwifery, and the Diseases of Women and Children, six months; Medical Jurisprudence, three months.

Attendance for the entire period of eighteen months on the medical and surgical practice in an hospital or hospitals, recognised by the Court. Also, a certificate of having assisted in at least thirty cases of midwifery practice, twenty of which must be attended in a recognised hospital.

The examination for the license to practise as an apothecary will be in Chemistry and General Physics; Pharmacy, Theoretical and Practical; Materia Medica and Therapeutics; Natural History and Medical Botany; Anatomy and Physiology; the Theory and Practice of Medicine; Midwifery; Medical Jurisprudence.

Graduates in Medicine of any of the British or Irish Universities, or those who possess letters testimonial from any of the Royal Colleges of Surgeons in Great Britain or Ireland, will be admitted to examination for the license on producing proof of three years' legal apprenticeship to a qualified apothecary practising with open shop in Ireland, and of a professional education equal to the curriculum prescribed by the Council.

The examination for the license to act as assistant to an apothecary is confined to Chemistry and Theoretical and Practical Pharmacy. The candidate for the assistant's license may present himself for examination at the termination of three years' apprenticeship.

The Court of Examiners sits every Friday at two o'clock, and examines candidates in the order in which their names appear on the list. Candidates must lodge their testimonials a clear week before the day of examination. A rejected candidate cannot be readmitted to examination until the end of six months.

An examination of apothecaries' apprentices takes place at the Hall, on the first week in May, annually, upon some subject in Pharmaceutical or Pathological Analysis, publicly announced at the commencement of the previous winter session, and a prize of five guineas is awarded to the successful competitor.

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. II.—WEEK ENDING 1st OCTOBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
 Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.							Degree of Humidity for the Day.	Wind.		Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Hall, Snow, Fog, Frost, Thunder, Thunder and Lightning, Aurora, Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours	DISEASES.	DEATHS.	
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Direction.		Mean Force for the Day.								
2 Oct. S.	29.611	29.672	64.2	29.5	40.9	62.	22.5	86.9	0.796	a.w.	p.m.	0—6	am	pm	0 — 10	Fr.	in.		
3 — M.	29.917	29.932	65.5	32.2	42.9	62.	26.5	88.7	0.802	wsw.	wnw.	2			6		0.005	Di. 2. Urticaria.	
4 — Tu.	29.598	29.434	68.	45.5	50.7	60.	37.	48.5	0.844	w.	wsu.	1.5			3.5, cu.		0.026	Qu. Di. Urticaria.	
5 — W.	29.262	29.190	69.7	49.5	53.6	66.	45.	51.5	0.934	ese.	ese.	3			10, cu.-s.		0.005	Neu. 2 a.m.	
6 — Th.	29.377	29.541	61.7	48.5	49.1	65.	43.	47.	0.901	nne.	nnw.	2			10, ci.-s. a.		1.212	[a.m. Urticaria.	
7 — F.	29.306	29.317	56.7	46.5	50.6	62.	40.	49.5	0.934	n.	e.	2			10, n. cu.-s.		0.113	Di. 2.30 p.m. Di. 3	
8 — S.	29.434	29.436	69.2	47.5	52.4	67.5	45.	51.	0.934	nnw.	ene.	1			10, n. cu.-s.		0.004	Di. Abo.	
												1			6, ci.-cu.	Fog.	0.020		
Column ..	1	2	3	4	5	6	7	8	9	10	11	12			13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MOFFAT, M.D.

2 Oct. S.	29.504	29.598	60.5	41.0	45.7	61.0	36.0	40.6	0.749	w.	nw.	3	1	0	6, ci. cu.-s.	Hail.	0.20	[Neu. 2. Cyn. Ph.	
3 — M.	29.794	29.790	64.5	38.5	46.5	68.5	30.0	42.3	0.783	w.	sw.	2	1	2	4, cu. ci.		0.10	Di. and Vom. 2. Di.	
4 — Tu.	29.409	29.590	58.0	42.0	50.0	63.0	31.0	47.0	0.815	s.	se.	2	1	0	10		0.10	Di. Neu.	
5 — W.	29.025	29.049	57.5	50.0	53.7	61.0	40.0	53.0	0.958	se.	se.	10	0	0	9, ci. ci.-s.		0.20	Toothache	
6 — Th.	29.249	29.265	53.5	50.0	51.7	63.0	48.0	50.0	0.934	ebn.	ebn.	2	0	0	10		0.60	Neu. [Hæmop.	
7 — F.	29.159	29.156	52.5	48.0	50.2	65.5	48.0	50.0	0.966	0	0	0	0	0	10		0.15	T. Cyn. Ph. Men.	Chronic Perit.
8 — S.	29.264		58.5	48.0	53.2	75.0	44.0	51.5	0.937	0	0	0	0	0	7, cu. ci.		0.15	Neu. Di. Cyn. Ph.	

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

2 Oct. S.	29.582		50.8	38.7	44.7		36.0	37.2	0.846	w.	w.	2			2, ci.-cu.-cl.-s.	Lighting	0.050		
3 — M.	29.860		52.0	35.0	43.9		31.3	36.3	0.821	ww.	sw.	2			1, ci.-ci.-cu.	[all evg]	0.020		
4 — Tu.	29.649		55.0	41.1	48.1		34.5	45.8	0.938	ssw.	sbw.	4			10, ci.-cu.-s.		0.080		
5 — W.	29.199		56.0	52.7	54.8		49.8	53.7	0.906	se.	se.	1			10, ci.-cu.-cl.-s.	Mist.	0.090		
6 — Th.	29.238		51.5	50.4	50.9		50.0	50.3	0.966	ne.	n.	1			10, ci.-a.-cl.-cu.-s.	Mist.	0.500	Diarrhoea.	Disease of [heart, 1.
7 — F.	29.236		54.0	48.4	51.2		48.0	49.0	0.939	sbw.	s.	0			10, ci.-cu.-cl.-s.	Mist.	0.180		
8 — S.	29.243		53.8	43.2	48.5		40.0	47.3	0.931	w.	nbz.	0			10, ci.-cu.-a.-cl.-s.	Mist.	0.010		

REDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

2 Oct. S.	29.682	29.731	56.0	37.5	46.7	61.5	37.0	39.7	0.803	w.	w.	1	0	0	6, cu.		0.00	Inf. Di.	Di. Decay.
3 — M.	29.941	29.966	54.3	33.0	43.6	61.0	34.5	38.5	0.696	nw.	nw.	1	0	0	6, cu.		0.04	Di. Col. Vom.	Phthisis.
4 — Tu.	29.838	29.662	64.0	36.5	45.2	70.0	37.0	48.6	0.891	s.	s.	2	2	2	9, cu.		0.10	Di. 2. Inf. 2	
5 — W.	29.306	29.190	56.0	48.0	52.0	67.5	31.5	51.0	0.934	se.	se.	1	2	2	10, cu.		0.20	Di. 2. Tio. Dol. Inf.	Fem. Hernia.
6 — Th.	29.322	29.317	55.0	43.0	49.0	60.0	44.5	49.0	1.000	sw.	nw.	1	0	0	8, cu.		0.20	Vom.	Phthisis.
7 — F.	29.320	29.337	55.0	46.5	50.7	60.0	49.5	48.0	0.932	w.	ssw.	1	0	2	9, cu. ci.-cu.		0.02	Di.	Decay.
8 — S.	29.399	29.412	56.5	41.5	50.5	60.5	44.5	49.0	0.873	ne.	ne.	1	0	0	8, cu.		0.01	Inf.	Phthisis.

WAKEFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

2 Oct. S.	29.65		57.	36.	46.5	64.	32.	42.	0.759	w.	w.	1			1, cu.		.05	Col. Vom.	
3 — M.	30.08		58.	28.	43.	68.	26.	39.7	0.808	w.	w.	0			0, cu.			Ch. 2. Abo. Ery.	
4 — Tu.	30.01		56.	31.1	43.5	66.	27.	46.0	0.816	sw.	sw.	2			10, ci.-s. n.		.70	Inf. Sc. Fe. Di. T.	At et. 65.
5 — W.	29.40		58.	51.1	54.5	59.	50.	51.0	0.934	sw.	sw.	2			10		.62	Eut. Rh. Di. 2. Conv.	
6 — Th.	29.46		67.	37.	52.	73.	34.	49.0	0.968	w.	w.	0			5, ci. ci.-s.		.62	Sc. Fe. Epil. Hoop. C.	
7 — F.	29.50		64.	44.	54.	70.	39.	46.0	0.871	w.	s.	0			5, cu. cu.-s. n.		.01	Pneu. Ery.	
8 — S.	29.53		64.	50.	57.	74.	48.	50.0	0.968	s. var.	sw.	0			10		1.06	Hys. Di. Men. T.	

EXETER. Lat., 50.45.0 N.; Lon., 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTER, M.D.

2 Oct. S.	29.919	29.960	55.7	35.0	45.3	59.7	30.2	42.9	0.931	n.	ne.	2	0	0	3, cu.		.07		
3 — M.	30.108	30.105	54.5	43.	48.7	50.7	36.7	42.8	0.866	nw.	sw.	2	7		5, cu.		.01		Melm. bowels
4 — Tu.	29.653	29.721	58.	52.2	55.1	57.2	48.4	51.	0.934	sw.	w.	2	8		8, cu.		.74	[obstructed	
5 — W.	29.366	29.237	60.	44.7	52.9	65.	44.	54.3	0.944	w.	w.	2	0		5, cu.		.04	Billious vomiting	[with conges- tive fever.
6 — Th.	29.447	29.472	61.	40.7	50.8	58.3	37.3	52.	0.934	nw.	n.	1	0		6, cu.			Billious congestion	
7 — F.	29.431	29.386	59.9	30.1	49.5	62.2	34.8	48.	0.970	n.	sw.	1	0		4, cu.			[with impending	
8 — S.	29.523	29.493	60.7	41.4	51.	66.	41.4	41.3	0.980	nw.	s.	1	0		5, cu. n.		.14	[Apop. (Ver.?)	

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

2 Oct. S.	29.913		60.0	39.4	48.3	65.0		38.1	0.802	nw.		0.5			1				
3 — M.	29.909		60.0	35.4	47.1	73.0		40.8	0.803	nw.		0.5			8				
4 — Tu.	29.912		59.0	39.5	50.8	73.0		47.2	0.815	sw.		1.0			10				
5 — W.	29.399		60.0	40.4	52.6	82.0		44.4	0.867	sw.		0.5			10		0.87	[after.	
6 — Th.	29.319		56.0	41.4	48.5	66.0		45.9	1.000	nw.		0.5			10		0.21	Fog in	
7 — F.	29.358		62.0	45.4	52.8	61.0		47.0	0.871	ne.		0.5			7		0.01		[frac. of th.
8 — S.	29.438		59.0	46.4	51.6	70.0		50.0	0.932	nw.		0.5			10				[paral comp. rectum and Phth. Dis. of

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

2 Oct. S.	29.875	29.916	55.	48.	51.5		43.	0.735	nw.	nw.	2.				cu.-s. ci.-cu.	Hail.	.041	Jaundice.	
3 — M.	30.014	30.058	54.5	46.	50.3		45.	0.768	wnw.	wnw.	1.				ci.-cu.		.194	Apop. 4 a.m.	
4 — Tu.	29.916	29.744	57.5	45.5	51.5		52.0	0.890	se.	se.	2.5				ci.-s.			Di.	
5 — W.	29.264	29.279	59.	53.5	56.3		54.5	0.944	sw.	sw.	1.				ci.-s.		.487	Hæmop.	
6 — Th.	29.331	29.370	57.5	51.	54.2		52.6	0.900	wnw.	wnw.	1.5				ci.-cu.		.391		
7 — F.	29.356	29.391	59.	51.5	50.3		54.3	0.844	sw.	sw.	1.				ci.-cu.		.027	Di. 2.	Apop. 6 p.m.
8 — S.	29.442	29.411	57.5	51.5	55.0		51.1	0.888	sw.	se.	1.				ci.-ci.		.166	Di.	Dropsy. Dis. [of heart.

NEWS AND TOPICS OF THE DAY.

MEDICAL SOCIETY OF LONDON. The following papers are announced as intended to be read at the ordinary meetings of this society.

Saturday, October 15th. W. Coulson, Esq., "On Suppuration of the Joints from Infection of the Blood."

Saturday, October 22nd. F. Sibson, M.D., F.R.S., "On Pericarditis."

Saturday, October 29th. F. W. Mackenzie, M.D., "On the Source of Hæmorrhage in Partial Separation of the Placenta."

Saturday, November 5th. J. R. Cormack, M.D., "On Cholera."

SANITARY EFFORTS IN GLASGOW. At a recent meeting of the Police Board, the following letter was read, and referred to a Committee:—

"TO THE POLICE COMMITTEE OF THE TOWN COUNCIL OF GLASGOW.

"4, Athole Place, Glasgow, Sept. 26, 1853.

"GENTLEMEN,—I beg respectfully to direct your attention to the subjoined resolution of the Medico-Chirurgical Society of Glasgow, passed at their meeting held on the 9th of August, and ordered by them to be submitted respectfully to you, in the hope that it may prove serviceable to their fellow-citizens.—I have the honour to be, gentlemen, with much respect, your most obedient servant,

"ANDREW BUCHANAN, M.D.,

"President of the Medico-Chirurgical Society of Glasgow."

Resolution adopted by the Medico-Chirurgical Society of Glasgow on 9th August, 1853:—

"That the society are of opinion that the practice at present adopted in this city of having permanent depositories of filth, such as dunghills, or subterraneous caverns, is not only disgusting and offensive, but injurious to the health of the inhabitants; and that the practice adopted in many other cities—that of removing, every evening or morning, the impurities which have accumulated during the preceding twenty four hours—appears to the society to be much superior; and the society direct their President respectfully to communicate these views to the Police Committee of Council for the benefit of their fellow-citizens."

"Extracted from Minutes by

"THOS. WATSON, M.D., Sec. Med.-Chir. Society."

THE AZTEC CHILDREN. The *Athenæum* of October 1st quotes from the proceedings of a meeting of the Boston Society of Natural History, held on January 1st, 1851, some observations regarding the Aztec children.

"Dr. J. M. Warren read a paper containing some observations upon two remarkable Indian children, a boy and girl, from Central America, who had lately been exhibited in Boston, known as the 'Aztec children'. He had been led by his examination of them to the following conclusions:—

"1. That these children are possessed of a very low degree of mental and physical organisation, but are not idiots of the lowest grade. 2. That they probably originated from parents belonging to some of the mixed Indian tribes. 3. That they do not belong to a race of dwarfs, because history teaches us the truth of the doctrine stated by Geoffroy St. Hilaire, that dwarfs cannot perpetuate their kind.

"At the conclusion of Dr. Warren's paper, a letter was read by the Secretary, addressed to him by Mr. E. G. Squier, corroborating Dr. Warren's view of the true character of the so-called 'Aztec children', containing the following statement:—

"The Commandant of the Port of La Union, in the State of San Salvador, Central America, informs me that they were born somewhere near the town of Santa Ana, in that State, of parents, one of whom certainly, if not both, was dwarfed or deformed and imbecile. The Indians residing in the vicinity of Santa Ana are civilised, and centuries ago adopted Spanish customs and the Spanish language. So far as I could discover from a few words of their ancient language which came into my possession, they belong to the Choluctecan or Chorotegan stock, which, before the conquest, extended over a part of San Salvador, Honduras, and Nicaragua, but which was chiefly concentrated around the Gulf of Fonseca."

MEDICAL BENEVOLENT COLLEGE. The Council met for the first time on Wednesday last, in their new and spacious offices, 37 Soho Square, on which occasion it was decided that the Second Festival, which is to be under most distinguished patronage, should take place in April next.

MEDICAL ADVERTISING. "There can," says the *Dublin Medical Press*, "be no doubt that medical advertisements display more unblushing rascality than any other class of advertisements whatever. A medical pauper may work in this way to escape starvation, but he has no right to make the title of physician infamous by such use of it as the following:—

"CHEMISTS AND DRUGGISTS. A physician is open to an engagement to practise; would not object to do so at the establishment. He is of mature age and experience, not dependent upon his profession, but wishes to form a home practice. Address M. D., Post-office, Plymouth." From the *Plymouth Journal*, September 6th.

"TO CHEMISTS AND DRUGGISTS. (MEDICAL ADVICE GRATIS.) A physician, of mature age, not for the sake of gaining experience, which he has already acquired, intends commencing in Plymouth, on the same gratuitous system which has proved so lucrative both to physicians and druggists. He is anxious to make an immediate arrangement with a respectable tradesman, and will be satisfied with a smaller per centage on his prescriptions than has hitherto been given. Minor operations in surgery will be performed. Address, Medicus, *Journal Office*." *Id.*

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

FILLITER, William, M.B., appointed Surgeon and Apothecary to the Marylebone Workhouse, in the room of W. Squire, Esq., resigned.

*GAIRDNER, W. T., M.D., appointed Physician to the Royal Infirmary of Edinburgh on the 10th instant. By this appointment, the offices of Pathologist and Assistant Physician, held by Dr. Gairdner, have become vacant.

*MICHAEL, W. H., Esq., appointed Officer of Health for Swansea, by the Board of Health of that burgh, for one year, at a salary of £150.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

ALISON, S. Scott, M.D. CHOLERA: ITS NATURE, TREATMENT, AND SANITARY REQUIREMENTS. Pamphlet, pp. 35. London: 1853.

BENNETT, J. Hughes, M.D., Professor of the Institutes of Medicine in the University of Edinburgh. PATHOLOGY AND TREATMENT OF PULMONARY TUBERCULOSIS. pp. 142. Edinburgh: 1853.

BRINTON, William, M.D. DR. G. VALENTIN'S PHYSIOLOGY. Part II. 8vo. pp. 306. Illustrations on Wood, Copper, and Stone. London: 1853.

CHEAP, NICE, AND NOURISHING COOKERY. 12mo. pp. 60. London: 1853.

*COX, W. I. HOMEOPATHY: ITS GLOBULES [Bubbles] ANALYSED. Second edition. London: 1853.

*DAVEY, James George, M.D. PHYSIOLOGICAL USES OF THE GANGLIONIC NERVOUS SYSTEM. pp. 20. London: 1853.

FINLAY, David L. THE REMITTENT (so-called) AND YELLOW FEVERS OF THE WEST INDIES. pp. 30. Dublin: 1853.

GILLKEST, J., M.D., Inspector General of Army Hospitals. NOTES RELATIVE TO THE CHOLERA. pp. 67. London: 1853.

*HALL, J. C., M.D. PREVENTION OF CHOLERA. Third edition. Pamphlet, pp. 12. London and Sheffield: 1853.

HARTWIG, George, M.D. SEA-BATHING AND SEA AIR. 12mo. pp. 148. London: 1853.

*JENNER, William, M.D. London, Professor of Pathological Anatomy, University College. ACUTE SPECIFIC DISEASES. [Gulstonian Lectures.] 12mo. pp. 125. London: 1853.

MACILWAIN, George. MEMOIRS OF JOHN ABERNETHY. 2 vols. pp. 342 and 376. London: 1853.

*MAYNE, R. G., M.D. EXPOSITORY LEXICON. Part I. pp. 152. London: 1853.

MOFFAT, J. M. POULTRY-KEEPER'S GUIDE. [Sixth edition.] 12mo. pp. 52. London: 1853.

MOSELEY, George. SANDGATE AS A RESIDENCE FOR INVALIDS. pp. 136. London: 1853.

*NOBLE, Daniel, F.R.C.S., Lecturer on Psychological Medicine at the Chatham Street School of Medicine, Manchester. ELEMENTS OF PSYCHOLOGICAL MEDICINE. pp. 340. London: 1853.

*SYMONDS, John Addington, M.D., Consulting Physician to the Bristol General Hospital. HABIT PHYSIOLOGICAL CONSIDERED. pp. 28. London: 1853.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLII.

LONDON: FRIDAY EVENING, OCTOBER 21, 1853.

NEW SERIES.

TO CORRESPONDENTS.

THE ANNUAL SUBSCRIPTION to the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION is £1:1:0. Legally qualified members of the profession are eligible as members. Irregular practitioners are not admitted; and improper members have from time to time been expelled. Gentlemen wishing to join the Association can obtain full information from the General Secretary (J. P. Sheppard, Esq., Worcester), from any of the local Secretaries, or from the Editor of the Journal. Every member is entitled to receive weekly, post free, the ASSOCIATION MEDICAL JOURNAL, which is the organ of the body.

ADVERTISEMENTS for the ASSOCIATION JOURNAL ought to be addressed to Mr. Honeyman, the Publisher, and not to the Editor. They are received at the office, 37, Great Queen Street, Lincoln's Inn Fields.

LETTERS from numerous correspondents have been received regarding the injustice and defects of the Vaccination Act, and on various points in relation to it. We shall insert as many of these communications as possible, endeavouring to represent by our selection all opinions. We are, from the large amount of space occupied by the list of members, obliged to defer letters on Chloroform in Parturition, on Medical Ethics, and a variety of other subjects. For the same reason some important articles in the PERISCOPE REVIEW are also postponed.

THE NUMERICAL STRENGTH OF THE ASSOCIATION.

We have great pleasure in publishing this day a complete List of the Members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION for the present year.

It appears that the total number of members for 1853 is 1926; and that their distribution and percentage to the whole profession is as follows:—

	Medical men.	Members of Assoc.	Per cent. of members.
England - - -	9315	1748	17.8
Wales - - -	315	112	35.5
Scotland - - -	1623	47	2.8
Ireland - - -	2100	4	—
Isle of Man and Channel Islands - - -	62	7	17.7
Foreign Countries - - -	—	8	—
Total - - -		1926	

The percentage of the whole profession belonging to the Association is more minutely exhibited in the following table:—

ENGLAND.	Medical men.	Members of Assoc.	Per cent. of memb.
Bedfordshire - - -	68	9	14.3
Berkshire - - -	93	33	35.5
Buckinghamshire - - -	67	8	12
Cambridge - - -	93	25	26.8
Cheshire - - -	204	40	19.6

Cornwall - - -	145	25	17.2
Cumberland - - -	82	7	8.5
Derbyshire - - -	111	38	34.23
Devon - - -	394	97	24.62
Dorset - - -	92	20	21.75
Durham - - -	191	8	4.2
Essex - - -	185	37	20
Gloucestershire - - -	336	82	24.4
Hampshire - - -	231	45	19.5
Herefordshire - - -	63	10	15.9
Hertfordshire - - -	86	8	9.3
Huntingdonshire - - -	26	13	50
Kent - - -	320	75	23.43
Lancashire - - -	748	201	26.7
Leicestershire - - -	112	44	38.4
Lincolnshire - - -	209	28	13.4
Middlesex - - -	2713	150	5.52
Monmouthshire - - -	60	28	45.6
Norfolk - - -	206	29	14
Northamptonshire - - -	101	34	33.66
Northumberland - - -	169	6	3.5
Nottinghamshire - - -	119	20	21.85
Oxfordshire - - -	113	21	18.6
Rutland - - -	9	1	11
Shropshire - - -	149	48	32.2
Somerset - - -	272	98	36
Staffordshire - - -	208	16	7.7
Suffolk - - -	172	68	39.5
Surrey - - -	137	56	40.8
Sussex - - -	218	53	24.3
Warwickshire - - -	258	45	17.8
Westmoreland - - -	35	2	5.7
Wiltshire - - -	121	21	17.35
Worcestershire - - -	123	54	44
Yorkshire - - -	781	137	17.54

WALES.

Anglesey - - -	17	6	35.3
Brecknockshire - - -	20	4	20
Cardiganshire - - -	15	0	—
Carmarthenshire - - -	37	13	35
Carnarvonshire - - -	24	9	37.5
Denbighshire - - -	36	14	39
Flint - - -	17	12	70.6
Glamorganshire - - -	74	40	54
Merionethshire - - -	14	0	43
Montgomeryshire - - -	24	4	16.6
Pembrokeshire - - -	29	3	10.3
Radnorshire - - -	8	1	12.5

SCOTLAND - - -	1623	47	2.8
IRELAND - - -	2100	4	—
ISLE OF MAN - - -	20	2	10
GUERNSEY - - -	18	4	22
JERSEY - - -	24	0	—
FOREIGN COUNTRIES - - -		8	—

Total members of Association - 1926

The following Table represents the distribution of old and of new members, and of councillors. The Association, it will be seen, is represented in all the 40 counties of England; in all the 12 counties of Wales, except Cardigan; and in 14 of the 33 counties of Scotland. The Channel Islands, the Isle of Man, and Foreign Countries, also acknowledge our fraternity. The names of the counties are arranged alphabetically. In subsequent remarks we shall consider the counties geographically, in their parliamentary relations, and with reference to a consolidation and organisation of the power of our Association. To-day we content ourselves with presenting plain facts for the contemplation and encouragement of those who desire to see the Association embracing every respectable practitioner in the kingdom, and the medical profession enjoying its due influence in the State.

ENGLAND.	No. of members.		Total.	Membs. of Council.	Per cent. of Council. to membs.
	Old.	New.			
Bedfordshire	9	0	9	1	11
Berkshire	15	18	33	3	9
Buckinghamshire	8	0	8	5	62.5
Cambridgeshire	25	0	25	6	24
Cheshire	35	5	40	5	12.5
Cornwall	21	5	26	0	—
Cumberland	4	3	7	1	14.25
Derbyshire	36	2	38	7	18.4
Devonshire	87	10	97	15	15.5
Dorset	19	1	20	2	10
Durham	6	2	8	1	12.5
Essex	30	7	37	5	13.5
Gloucestershire	70	12	82	20	24.4
Hampshire	33	12	45	4	8.9
Herefordshire	10	0	10	5	50
Hertfordshire	2	6	8	0	—
Huntingdonshire	12	1	13	1	7.75
Kent	63	12	75	3	4
Lancashire	142	59	201	35	17.4
Leicestershire	13	31	44	4	9
Lincolnshire	19	0	28	5	18
Middlesex	58	94	150	6	4
Monmouthshire	17	11	28	0	—
Norfolk	28	1	29	8	27.6
Northamptonshire	33	1	34	12	35.3
Northumberland	5	1	6	1	16.6
Nottinghamshire	21	5	26	1	3.8
Oxfordshire	20	1	21	5	24
Rutland	1	0	1	0	—
Shropshire	40	8	48	9	18.75
Somerset	88	10	98	22	22.05
Staffordshire	11	6	17	1	6
Suffolk	56	12	68	24	37
Surrey	29	27	56	6	10.7
Sussex	50	3	53	7	13.2
Warwickshire	42	3	45	9	20
Westmoreland	1	1	2	0	—
Wiltshire	19	2	21	3	14
Worcestershire	53	1	54	11	20.4
Yorkshire	133	4	137	32	23.36

WALES.

Anglesey	4	2	6	2	33.3
Brecknockshire	4	0	4	1	25
Cardiganshire	0	0	0	0	—
Carmarthenshire	7	6	13	0	—
Carnarvonshire	8	1	9	1	11
Denbighshire	13	1	14	2	14
Flintshire	11	1	12	4	33.3

Glamorganshire	34	6	40	3	7.50
Merionethshire	4	2	6	1	16.6
Montgomeryshire	4	0	4	0	—
Pembrokeshire	3	0	3	1	33.3
Radnorshire	1	0	1	0	—

SCOTLAND	3	44	47	0	—
IRELAND	0	4	4	0	—
ISLE OF MAN	2	1	3	0	—
GUERNSEY	0	4	4	0	—
JERSEY	0	0	0	0	—
FOREIGN COUNTRIES	6	2	8	0	—

Total	1466	466	1926	310	16
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The new members of 1853 are distinguished in the subjoined List by *n*: and members of the General Council by *c*. The number of members on the roll at the 31st of December, 1852, was 1466; and since that time there have been added 460, making the total number of members for the year 1853, up to the present date, 1926.

It will be seen that there are 310 members of the General Council; and that all of them belong to the 1466 old members, except Sir J. L. Bardsley and Dr. Lyon, old members, who rejoined the Association during the year.* If the new members had a due share of their number in the Council, it would augment that body (already nearly inert from its inordinate size) to 408.

All gentlemen who have entered the Association since the 31st of December 1852, are marked as new members. Some of them, however, at some previous period belonged to the Association. To have, by a special mark, distinguished all of this class, would have been impossible from the deficiency of documents to which we have access; so that it has appeared simpler to denote by one sign all new members who have entered or re-entered during 1853. About thirty old members have become new members; and among them we can at the moment name Sir James Bardsley and Dr. Lyon, of Manchester; Mr. Halliday, of Seacombe; Mr. C. L. Prince, of Uckfield; Professor Bowman, and Mr. White Cooper, of London. As these gentlemen did not belong to the Association in 1852, they are, along with others similarly situated, embraced in the general catalogue as new members.

To-day we have given in a few pages the results of much labour and irksome calculation. Our object has been to bring forward the facts in as simple a form as possible; knowing that we could not present matter which would be more generally acceptable, and eventually more useful. Commentaries and reflections we reserve for another and an early opportunity.

As new members are every day joining our ranks, we propose to print a supplementary list before the close of the year.

* At the Swansea meeting, the Council was, in accordance with the usual practice at annual meetings, re-elected, with the addition of a few names. The gentlemen so added this year were twelve in number, viz.: Dr. Eves, Cheltenham; E. Ingram, Esq., Boston, Lincolnshire; D. Everett, Esq., Worcester; R. H. M'Keand, Esq., Manchester; Thomas Mellor, Esq., Manchester; John Robertson, Esq., Manchester; William Smith, Esq., Manchester; Sir James L. Bardsley, M.D., Manchester; Dr. Eason Wilkinson, Manchester; Dr. Whitehead, Manchester; Dr. Lyon, Manchester; William Rowland, Esq., Swansea.

LIST OF MEMBERS FOR 1853

OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

[The total number, corrected to the 15th of October, is 1926.]

ENGLAND.

NUMBER OF PRACTITIONERS	9815
NUMBER OF MEMBERS	{ OLD 1362 } 1748
PERCENTAGE OF MEMBERS	{ NEW 386 } 17.8

n. Is prefixed to new Members of 1853.—c. To Members of Council.—* To Members whose new addresses have not been received.

BEDFORDSHIRE.

Number of Practitioners	63
Number of Members	9
Percentage of Members	14.3

Appleton, John G., Esq. Luton
Barker, T. Herbert, M.D. Bedford
Hamilton, Andrew, Esq. Ampthill
cHurst, Isaac, Esq., Surgeon
to the Infirmary .. Bedford
Parker, Thomas, Esq. Woburn
Paxon, George K., Esq. Cranfield, Woburn
Stedman, Rt. Savignac, Esq. Sharnbrook
Veasey, H., Esq. Woburn
Williams, James, M.D. Aspley Guise

BERKSHIRE.

Number of Practitioners	93
Number of Members	33
Percentage of Members	35.5

nBarker, W. R. H., Esq. Wantage
nBellis, Benjamin, Esq. Maidenhead
nBlomfield, T. A., Esq. Reading
nBrown, G. D., Esq. Reading
nBulley, F. A., Esq., Surgeon
to the Hospital .. Reading
cBunney, Joseph, M.D. Newbury
cCowan, Charles, M.D., Physi-
cian to the Hospital .. Reading
Harrison, J., Esq., Surgeon
to the Dispensary .. Reading
nIzod, Freeman, Esq. Reading
nKennard, David, Esq. Lambourne
Kidgell, S. W., Esq. Pangbourne
nLiddell, John, Esq. Kintbury, Hungerford
nLuce, J., Esq. Swallowfield, Reading
Marshall, John H., Esq. Wallingford
nMartin, John, Esq. Abingdon
nMaskelyne, Henry, Esq. Faringdon
nMaurice, T. B., Esq., Surgeon
to the Hospital .. Reading
cMay, George, Esq., Surgeon
to the Hospital .. Reading
nMoxhay, William, Esq. Reading
Palmer, Silas, M.D. Speenhamland
Payne, Edward Henry, Esq. Wallingford
Powis, Henry Samuel, M.D. Cookham, Maidenhd.
nRoyston, Christopher, Esq. Newbury
Smith, Robert, Esq. Whitechurch
nVines, Charles, Esq. Reading
Waldron, Henry, Esq. Theale, Reading
Walford, T. L., Esq. Reading
nWeight, Edward, Esq. Wokingham
Wells, Edward, M.D., Physi-
cian to the Hospital .. Reading
nWiglesworth, Henry, M.D. Newbury
Woodhouse, R., M.D., Physi-
cian to the Hospital .. Reading
Workman, John W., Esq. Reading
nYoung, William B., Esq. Reading

BUCKINGHAMSHIRE.

Number of Practitioners	67
Number of Members	8
Percentage of Members	12

cCeely, Robert, Esq., Surgeon
to the Infirmary .. Aylesbury
cCollison, R., Esq. Newport Pagnell
cCowley, George, Esq. Winslow
cDaniell, Edward, Esq. Newport Pagnell
Heygate, Thomas N., Esq. Handslop, Newport
Rose, William, Esq. High Wycombe
Turner, John, Esq. High Wycombe
cWhitton, Corbett, M.D. Stony Stratford

CAMBRIDGESHIRE.

Number of Practitioners	93
Number of Members	25
Percentage of Members	27

Adams, Dennis, Esq. Cambridge
Bond, H. J. H., M.D., Regius
Professor of Physic .. Cambridge
Calver, Henry, Esq. March
Carter, James, Esq. Cambridge

Deane, J., Esq. Chatteris
cEngland, William, M.D. Wisbeach
cFaircloth, Richard, Esq. Newmarket
cFawsitt, F., Esq. Wisbeach
cFisher, W. W., M.D., Down-
ing Professor of Medicine, Cambridge
cHumphry, G. M., Esq., Surg.
to Addenbrooke's Hospital,
SEC. FOR CAMBRIDGESHIRE
AND HUNTINGDONSHIRE .. Cambridge
Jenkins, Joseph, Esq. Bassingbourne
Johnson, George, Esq. Cambridge
Jones, Thomas Stead, Esq. Ely
Knowles, Edward, Esq. Cambridge
cMuriel, John, Esq. Ely
O'Connor, Thomas, Esq. March
Ogle, W., Esq., M.L. Cambridge
Peck, Floyd M., Esq. Newmarket
Pinchard, Benjamin, Esq. Cottenham
Ramsey, J. Allen, Esq. Great Shelford
*Stedman, John B., Esq., late of Whittlesea: new
address not received
cVale, Robert, Esq. Wisbeach
Wallace, Robert Q., Esq. Wisbeach
Webster, J. H., M.D. Cambridge
Wright, Henry, Esq. March

CHEESHIRE.

Number of Practitioners	204
Number of Members	40
Percentage of Members	19.6

cAshton, James, M.D., Physi-
cian to the Infirmary .. Stockport
Beecroft, Samuel, Esq. Hyde
Birchenall, John, Esq. Macclesfield
Blackshaw, Joseph, Esq. Stockport
Blease, Thomas, Esq. Altrincham
cBroadbent, Richard, Esq. Altrincham
Brooke, Isaac, Esq. Stockport
Brooke, John, Esq. Stockport
Bullock, Joseph, Esq. Congleton
nBury, J., Esq. Chester
Carruthers, William, Esq. Halton, Preston Brook
Cheetham, T., Esq. Stockport
Cumming, Robert, Esq. Malpas
cDavies, Thomas, M.D. Chester
Downes, G., Esq. Stockport
Dunstan, Alfred D., Esq. Holmes Chapel
cFlint, Richard, Esq., Surgeon
to the Infirmary .. Stockport
nGoddin, Joseph, Esq. Oxtord, Birkenhead
nGorst, Robert E., Esq. Rock Ferry, Birkenhead
Harrison, John, Esq., Surgeon
to the Infirmary .. Chester
Howe, John, Esq. Marple, Stockport
nKenderdine, T. B., Esq. Macclesfield
Lowe, Edward W., Esq. Congleton
Massey, Thomas, Esq. Stockport
nMaund, Henry, Esq. Chester
Madd, John, Esq., Surgeon to
the Infirmary .. Stockport
Newbold, Edward, Esq., Sur-
geon to the Dispensary .. Macclesfield
Paterson, Alexander H., Esq. Altrincham
Pigot, Richard M., Esq. Chester
Pownall, J., Esq. Altrincham
Rayner, John, Esq., Surgeon
to the Infirmary .. Stockport
Scott, W., M.D. Congleton
Stevenson, W., Esq., Consult-
ing Surgeon to the Hospital Birkenhead
Thomas, John, Esq. Burnage, Stockport
Tinker, Frederick, Esq. Hyde
cTurner, George, M.D., Physi-
cian to the Infirmary .. Stockport
Vale, J. T., Esq., Surgeon to
the Hospital .. Birkenhead
Vandrey, William C., Esq. Bredbury, Stockport
Waters, Edward, M.D. Chester
Wilson, Henry, Esq. Runcoorn

CORNWALL.

Number of Practitioners	145
Number of Members	26
Percentage of Members	18

Andrew, Henry, Esq. Truro
Arthur, Samuel Pellev, Esq. St. Day, Truro

Barham, C., M.D., Physician
to the Cornwall Infirmary .. Truro
Boase, W. M., M.D., Consult-
ing Physician to Dispensary Falmouth
Boisragon, T., M.D., Medical
Superintendent of the
Cornwall Asylum .. Bodmin
nBrougham, Stephen, Esq. Falmouth
Congdon, William D., Esq. Marazion
Fox, Joseph, Esq. Falmouth
nGuppy, T. Stokes, Esq. Falmouth
Kempthorne, John, Esq. Callington
Kerswill, Robert, Esq. St. Germain's
King, D. H., Esq. Stratton
Lanyon, Edward, Esq. Camborne
Lawrence, J. Hodge, Esq. Liskeard
nLittleton, Thomas, M.B. Penryn
McLeod, Alexander, Esq. Penryn
Mitchell, George A., Esq. Gweinap
Montgomery, Jas., M.D., Phy-
sician to the Dispensary .. Penzance
nMoyle, M. P., Esq. Helston
Quick, Jas. Richard, Esq. St. Just, Penzance
Rendall, Robert, Esq. Wadebridge
Richards, William, Esq. Redruth
nRogers, H. J., Esq. Callington
Tickell, T. S., Esq. Wadebridge
Ward, John, Esq. Bodmin
Wright, John, M.D. Launceston

CUMBERLAND.

Number of Practitioners	32
Number of Members	7
Percentage of Members	8.5

Arnison, Charles, Esq. Alston
cBarnes, T., M.D., Physician
to the Dispensary, etc. Carlisle
nGraham, John, M.D. Brampton
nIrving, William, Esq. Penrith
nNixon, Robert, Esq. Wigton
Page, W. R., Esq., Surgeon to
the Cumberland Infirmary, Carlisle
Stolterforth, S., M.D. Armthwaite, Hesket

DERBYSHIRE.

Number of Practitioners	111
Number of Members	38
Percentage of Members	34.23

Alsop, Anthony, Esq. Bolsover, Chesterfield
Bell, Robert John, Esq. Mickleover
Bent, Thomas, M.D., Physi-
cian to the Infirmary .. Derby
nBlack, Cornelius, M.D. Chesterfield
Boden, Robert, Esq. Smalley
Borough, Charles, Esq. Derby
Cantrell, William, Esq. Wirksworth
nDix, John, Esq., House Sur-
geon to the Infirmary .. Derby
Ellam, J., Esq. Sandiacre, Derby
Evans, David, Esq. Belper
cEvans, Samuel H., Esq. Derby
cFEARN, S. W., Esq., JOINT
SEC. FOR DERBYSHIRE .. Derby
Fentem, Thomas, Esq. Eyam
cFox, D., Esq., Surgeon to the
Derbyshire Gen. Infirmary, Derby
cGisborne, H. F., Esq., Surgeon
to the Derbyshire General
Infirmary .. Derby
GOODE, Henry, M.B., JOINT
SEC. FOR DERBYSHIRE .. Derby
Goodwin, Robert D., Esq. Ashbourne
Gregory, John, Esq. Youlgrove
Harwood, Charles, M.D. Derby
Hewgill, Arthur, M.D. Repton
cHEYGATE, J., M.D., F.R.S.,
Physician to the Derbyshire
Gen. Infirmary, VICE-PRE-
SIDENT .. Derby
cHitchman, John, M.D., Super-
intendent of the Derby-
shire Lunatic Asylum .. Mickleover
Hollis, William, Esq. Alveston, Derby
Howard, William W., Esq. Glossop
Johnson, John, M.D. Derby
Johnson, W., Esq., Surgeon to
the General Infirmary .. Derby

cJones, John, Esq. Derby
 Lee, John, M.D. Ashbourne
 Lomas, Thomas, Esq. Belper
 Norman, George, Esq. Ilk-ston
 Poyser, Thomas, Esq. Wirksworth
 Robertson, W. H., M.D., Physi-
 cian to the Bath Charity. Buxton
 Skevington, John, Esq. Ashbourne
 Smith, William, Esq. Chesterfield
 Tasker, Richard Thos., Esq. Melbourne
 Walker, Charles, Esq. Wirksworth
 Walker, Hugh Eccles, Esq. Chesterfield
 Willis, Charles, Esq. Belper

DEVONSHIRE.

Number of Practitioners 394
 Number of Members 97
 Percentage of Members 24.62

Appleton, Henry, Esq. Marychurch, Torquay
 nBaldan, Thomas, M.D. South Molton
 cBarnes, S., Esq., Consulting
 Surgeon to the Devon and
 Exeter Hospital Exeter
 Bartlett, J. Bickford, Esq. Teignmouth
 nBattersby, R., M.D. Torquay
 nBenefer, Henry, Esq. Swimbridge, Barnstaple
 Bignell, J. B., M.D., Physi-
 cian to the Dispensary Barnstaple
 Black, Glass, M.D. Torquay
 cBlackall, J., M.D., Physician
 to the Devon and Exeter
 Hospital Exeter
 Bowden, William, Esq. Totness
 nBradshaw, William, Esq. Torquay
 Brent, Robert, M.D. Woodbury, Exeter
 Brookings, Charles H., Esq. Brixham
 Budd, S., M.D., Physician to
 the Devon and Exeter Hos-
 pital Exeter
 Burrough, Richard E., Esq. Dartmouth
 cButter, John, M.D., F.R.S. Plymouth
 Caird, William, Esq. Exeter
 Cann, Thomas, Esq. Seaton, Axminster
 Cann, W. Moore, Esq. Dawlish
 Cartwright, William A., Esq. Teignmouth
 Chilcote, W. E., Esq. Broadhempstone, Totness
 cCookworthy, Joseph G., M.D.,
 Physician to the Public
 Dispensary Plymouth
 Cornish, Francis S., Esq. Kingsbridge
 Croker, J. G., M.D. Bovey Tracey
 Crosse, Thomas, Esq. Thorverton
 Cullen, W. H., M.D., Physician
 to the Dispensary Sidmouth
 Deans, William, Esq. Sandford, Crediton
 De la Garde, P. C., Esq., Sur-
 geon to the Devon and Ex-
 eter Hospital Exeter
 De Mierre, Albert, M.D. Sidmouth
 Derry, John, Esq. Totness
 DRAKE, Augustus, M.B., Physi-
 cian to the Dispensary,
 SEC. OF SOUTH-WESTERN
 BRANCH
 Edwards, John, Esq. Bampton
 Elliot, John, Esq. Kingsbridge
 Elliot, Samuel N., Esq. Dartmouth
 Elliot, W. H., M.D., Physician
 to the Exeter Dispensary. Mt. Radford, Exeter
 Empson, Edwin, Esq. Crediton
 Evans, G., Esq. Seaton, Axminster
 nEvans, James, Esq. Torquay
 cFeild, John James, M.D., late of Torquay
 Forman, G. C., Esq. Teignmouth
 Gabriel, William, Esq. Collumpton
 cGillard, W., Esq. Totness
 Gillett, George, Esq. Colyton
 Goodridge, John J., Esq. Paignton
 Haley, P. F., Esq. Witheridge
 cHall, C. Radclyffe, M.D. Torquay
 Hall, Stephen, M.D. Mt. Radford, Exeter
 Hallett, Charles, Esq. Axminster
 Harris, J. W., Esq., Surgeon
 to the Dispensary Exeter
 cHunter, Thomas, Esq. Torquay
 cJAMES, J. H., Esq., Surgeon
 to the Devon and Exeter
 Hospital, VICE-PRESIDENT Exeter
 Kane, William, M.D. Exmouth
 Kendall, Walter, Esq. Budleigh Salterton
 Kerswill, Samuel, Esq. Devonport
 cKingdon, W. Dashwood, M.D.,
 Superintendent of St. Thom-
 as's Hospital for Lunatics Exeter
 Knighton, J. F., Esq. Dawlish
 Lake, W. C., Esq. Teignmouth
 Lamb, Martin B., M.D. Exmouth
 Langworthy, Richard, Esq. Plympton
 Leslie, Andrew, Esq. Newton Abbot
 Ley, Richard, Esq. North Molton
 Lillies, G. W., M.D. Chudleigh
 Mackenzie, Frederick, Esq. Tiverton
 Madden, J. M., Esq. Heavitree
 cMiller, P., M.D., Physician to
 the Devon and Exeter Hos-
 pital Exeter

Nankivell, C. B., M.D. Torquay
 Nosworthy, J. L., Esq. Moreton Hampstead
 Nott, J. S., Esq. Uffulme
 Owen, George, Esq. Sages Dolton, Crediton
 Paterson, George, M.D. Tiverton
 Paul, A., Esq. Torquay
 cPennell, Richard L., M.D. Cheriton Bishop
 nPollard, W. jun., Esq. Torquay
 Price, R. C., Esq. Lynstone
 cPridham, Edward, Esq. Exeter
 Pridham, Thomas, Esq. Hideford
 Roe, E. Thomas, M.D. Plymouth
 nRoper, F. H., Esq. Exeter
 Rutter, Thomas, Esq. Devonport
 cShapter, T., M.D., Physician
 to the Devon and Exeter
 Hospital Exeter
 Southcomb, W. T., Esq. South Molton
 Spettigue, John, Esq. Exmouth
 Square, W. J., Esq., Surgeon
 to the South Devon and
 East Cornwall Hospital. Plymouth
 nStewart, William, Esq. Torquay
 nSwain, Paul William, Esq. Devonport
 Symes, James F., Esq. Axminster
 Tetley, J., M.D., Consulting
 Physician to the Torbay
 Infirmary Torquay
 nToms, Philip, M.D. Wides, Plymouth
 nToms, William, Esq. Kingsbridge [Died 18 Sep.]
 cToooodon, B., Esq., Surgeon
 to the Torbay Infirmary,
 PRES. OF SOUTH-WESTERN
 BRANCH Torquay
 Tracey, Harry, Esq. Dartmouth
 Vidal, Horace, Esq. Ilfracombe
 Walker, D. Grant, Esq. Budleigh Salterton
 Walker, E. D., M.D., Consult.
 Phys. to the Dispensary Teignmouth
 Waters, Allen, Esq. Exmouth
 Webb, Chs. K., Esq., Surgeon
 to the Dispensary Exeter
 Wright, Francis, M.D. Plymouth

DORSETSHIRE.

Number of Practitioners 92
 Number of Members 20
 Percentage of Members 21.72

Allen, Peter, M.D. Bridport
 ARDEN, Henry A., Esq., SEC.
 OF DORSETSHIRE BRANCH Dorchester
 Bennett, Henry, Esq. Shaftesbury
 Clapcott, John, Esq. Evershot
 Coles, William F., Esq. Cerne Abbas
 Cory, Samuel Skinner, Esq. Bridport
 COWDELL, C., M.D., Physician
 to the Dorset County Hos-
 pital, PRES. OF DORSET
 BRANCH Dorchester
 Curme, G., Esq., Surgeon to
 the County Hospital Dorchester
 Emson, Alfred, Esq. Dorchester
 Fookes, Robert, Esq. Stalbridge, Blandford
 Fox, John, Esq. Weymouth
 Good, John, Esq. Sturminster, Blandf.
 Hall, William Henry, M.D. Wareham
 Highmore, Nathaniel, Esq. Sherborne
 Jay, Charles, Esq. Queen Camel, Sherborne
 Nott, Thomas, Esq. Bere Regis
 cSalter, Thomas, Esq. Poole
 cSpooner, Edward Oke, Esq. Blandford
 West, John Wickens, M.D. Poole
 nWilliams, Wm. Henry, Esq. Sherborne

DURHAM.

Number of Practitioners 191
 Number of Members 8
 Percentage of Members 4.3

cBrown, Joseph, M.D., Physi-
 cian to the Infirmary Sunderland
 nClark, Hugh, M.D. Ferry Hill
 Keenlyside, R. H., M.D., Physi-
 cian to the Dispensary. Stockton-on-Tees
 nMacfarlane, Robert, Esq. Bishop Auckland
 Mackie, James, Esq. Heighington, Darlington
 Strother, Arthur, Esq. Darlington
 Thwaites, Thomas B., Esq. Bishop Auckland
 Trotter, Charles, Esq. Stockton-on-Tees

ESSEX.

Number of Practitioners 185
 Number of Members 87
 Percentage of Members 20

nAllison, W. J., Esq. Great Ilford
 nBrown, Thomas, Esq. Saffron Walden
 nCary, William H., Esq. Woodford
 Clarke, G. B., Esq. Colchester
 nCollins, Frederick, Esq. Wanstead
 cCollins, William, Esq. Harlow
 Cremer, R., Esq. Chelmsford
 nDobson, James, Esq. Harlow

Duncan, P. Martin, M.D.,
 Physician to the Hospital Colchester
 Fitch, Frederick N., Esq. Sible-Hedingham
 Gilson, Benjamin, Esq. Halstead
 Growse, Robert, M.D. Brentwood
 Havens, Philip, junr., Esq. Wivenhoe
 Hilliard, Geo. Richard, Esq. Rayleigh
 Hodges, Richard, Esq. Rochford
 Leach, Robert, Esq. Rochford
 McNab, Daniel, Esq. Epping
 Manthorp, Maurice L., Esq. Thorpe
 May, George Parker, M.D. Maldon
 cMiller, Samuel, M.D., Physi-
 cian to the Dispensary. Chelmsford
 nMingaye, Charles, Esq. Dedham
 Nicholson, John A., Esq. Stratford Green
 cNunn, R. S., Esq., Surgeon to
 the Hospital Colchester
 Philbrick, Samuel A., Esq. Colchester
 Rodick, S., Esq. Halstead
 Simmons, B. F., Esq. Bures St. Mary
 Sinclair, Duncan, Esq. Halstead
 Smith, James H., Esq. Manningtree
 Smyth, William, Esq. Tolleshunt D'Arcy
 Spurgin, Thomas, Esq. Saffron Walden
 nTomes, Francis, Esq. Havering atte Bower
 cTomkin, T., Esq. Witham
 Varenne, Ezekiel G., Esq. Kelvedon
 cWaylen, W., Esq., Surgeon to
 the Hospital Colchester
 Welsh, F. F., Esq. Saffron Walden
 Whimper, G., Esq. Tiltingham

GLOUCESTERSHIRE.

Number of Practitioners 336
 Number of Members 82
 Percentage of Members 24.4

Abel, Joseph, Esq. Mitchel Dean
 Alford, Richard, Esq. Tewkesbury
 nAllard, William, Esq. Tewkesbury
 cAllardye, James, M.D. Cheltenham
 Anderson, Frank, Esq. Westbury-on-Trym
 Beadle, William V., M.D. Tewkesbury
 Bleock, Alfred, Esq. Bristol
 cBrookes, W. Philpot, M.D.,
 Surgeon to the Dispensary Cheltenham
 Bryant, Samuel, Esq. Bristol
 cBudd, W., M.D., Physician
 to the Royal Infirmary Bristol
 Burroughs, J. B., Esq. Clifton
 cCannon, Eneas, M.D. Cheltenham
 cCLARK, Henry, Esq., Surgeon
 to the Bristol Royal In-
 firmary, PRES. OF BATH
 AND BRISTOL BRANCH Bristol
 Coe, R. W., Esq., Surgeon to
 the General Hospital Bristol
 Colledge, Thomas R., M.D. Cheltenham
 cColthurst, John, Esq., Surgeon
 to the Clifton Dispensary. Clifton
 cCooke, C. T., Esq. Cheltenham
 Cross, William, Esq. Clifton
 Davey, James G., M.D. Northwoods, Bristol
 cEstlin, J. B., Esq., Surgeon
 to the Eye Dispensary Bristol
 cEves, A., M.D., Surgeon to
 the General Hospital Cheltenham
 cFowler, C., Esq., Surgeon to
 the General Hospital Cheltenham
 Fox, W. C., M.D. Northwoods, Bristol
 Gabb, Alfred W., Esq. Cheltenham
 Godfrey, J., M.D., Surgeon to
 the General Hospital Bristol
 Goodeve, W. J., Esq., Sur-
 geon to the Dispensary. Clifton
 Green, James Lardner, Esq. Bristol
 Green, Thos., M.D., Surgeon
 to the Royal Infirmary Bristol
 nGreig, Charles, Esq. Bristol
 Hamilton, D. Edward, Esq. Clifton
 nHarrison, John, Esq., Surgeon
 to the Royal Infirmary Bristol
 nHawkins, Thomas, Esq. Bristol
 Hay, John, Esq. Hambrook, Bristol
 nHerapath, W. Bird, M.D., Sur-
 geon to St. Peter's Hospital Bristol
 Hiron, William, Esq. Campden
 Hitch, Samuel, M.D. Cheltenham
 Hore, H. A., Esq., House Sur-
 geon to Royal Infirmary Bristol
 nJames, W., M.D. Bristol [Died Oct. 11, 1853]
 Jarman, John, Esq. Cheltenham
 cKay, W., M.D., Physician to
 the Clifton Dispensary. Clifton
 cKelson, Joseph J., Esq. Bristol
 nLancaster, Joseph, Esq. Clifton
 nLawrence, Thomas, Esq. Bristol
 nLEONARD, Crosby, Esq., SEC.
 FOR BRISTOL Bristol
 Logan, David Duncan, M.D. Cheltenham
 nMatthews, John, M.D., late of Stow-in-the-Wold;
 new address not received
 Mayor, E. S., Esq. Bristol
 Moore, George, Esq. Moreton-in-the-Marsh
 cMorgan, W. F., Esq., Surgeon
 to the Infirmary Bristol

O'Brien, J., M.D., Physician
to St. Peter's Hospital Clifton
Ogilvie, G. S., Esq. Redlands Gm., Bristol
Orton, John, Esq., late of Berkeley: new address
not received
Porter, J. H., M.D. Cheltenham
Prichard, A., Esq., Lecturer on
Surgery and Anatomy Bristol
Prior, F., Esq. Tewkesbury
Rogers, G., M.D., Physician
to the General Hospital Clifton
Ruddock, Richard, Esq. Bristol
Runsey, H. W., Esq. Cheltenham
Sawer, Thomas, Esq. Clifton
Sheldon, W. T., M.D., Surgeon
to the Dispensary Cheltenham
Sheppard, W. Yeoman, Esq. Bristol
Sleeman, P., Rowley, Esq. Bristol
Smerdon, Charles, Esq. Clifton
Smith, Nathaniel, Esq., Con-
sulting Surgeon to Bristol
Royal Infirmary Clifton
c Smith, Thomas, M.D. Cheltenham
Smith, Thomas Wade, Esq. Stroudwater
Speer, Stanhope T., M.D. Cheltenham
n Stanton, J., M.D., Physician
to St. Peter's Hospital Clifton
c Surridge, T. L., Esq. Clifton
c Swayne, J. G., M.D., Lecturer
on Midwifery at the Bristol
Medical School Clifton
Swayne, Samuel H., Esq. Bristol
Swete, Edward H., Esq. Hotwells, Bristol
c Symonds, J. A., M.D., Consult-
ing Physician to the Bristol
General Hospital Clifton
Talbot, George, Esq. Bristol
Thomas, Reynolds C., M.D. Cheltenham
Thorp, Disney L., M.D. Prestbury, Cheltenham
c Trotman, W. C., M.D., Physi-
cian to the Dispensary Clifton
Ware, John, Esq. Clifton
Williams, John, Esq. Dursley
n Williams, W. W., M.D., Super-
intendent of the County
Lunatic Asylum Gloucester
c Wilson, John Grant, Esq. Bristol
c Wilton, J. W., Esq., Surgeon
to the Infirmary Gloucester

HAMPSHIRE.

Number of Practitioners 231
Number of Members 45
Percentage of Members 20

Andrews, Edward, Esq. Titchfield
n Ball, Richard D., Esq. Heckfield
Bates, Robert, Esq. Botley, Southampton
Beekingsale, John E., Esq. Newport, I. of Wight
Beddome, J. R., M.D. Romsey
n Bentham, Samuel, Esq. Southsea
Berry, Charles, Esq. Liphook
n Bishop, John, Esq. Monk Sherborne, Basingstoke
Bloxam, John C., Esq. Newport, I. of Wight
Budd, Robert, Esq. Fawley
c Bullar, J., M.D., Physician to
the South Hants Infirmary, Southampton
n Burnett, C. M., M.D. Alton
Butler, Frederick J., Esq. Winchester
Covey, John, Esq. Alresford
c Crawford, Andrew, Esq. Winchester
Cross, Robert S., Esq. Petersfield
Davids, J., Esq. Cowes, I. of Wight
Dayman, Henry, Esq. Milbrook, Southampton.
Dyer, Thomas, Esq. Ringwood [Died 2 April]
n Elliott, J. Henry, Esq. Andover
n Harvey, Alexander, M.D. Southampton
Hemsted, T. R., Esq. Whitechurch
Hoffmeister, W. C., M.D. Cowes, Isle of Wight
n Hill, Robert S., Esq. Basingstoke
n Jackson, Alfred, M.D. Portsea
n McIntyre, John, M.D. Odiham
Mainwaring, E., M.D. Bournemouth
Martin, G., M.D. Ventnor, I. of Wight
Martin, J. B., Esq. Ventnor, I. of Wight
Mayo, C., Esq., Surgeon to
the Hospital Winchester
n Nicholls, J. Osmond, Esq. Basingstoke
Nunn, George, Esq. Lyndhurst
c Oke, W. S., M.D., Physician to
the South Hants Infirmary, Southampton
Phene, Henry, Esq. Ryde, Isle of Wight
Porter, John, M.D. Portsea
Pound, George, Esq. Odiham
Powell, W. H., M.D. Fareham
c Salter, T. Bell, M.D. Ryde, Isle of Wight
n Shorland, J., Esq. Winchester
Smith, John, Esq. Weyhill
c STEDD, G., M.D., Senior Physi-
cian to the South Hants
Infirmary, Vice-Pres. Southampton [Died Feb.]
Ward, Thomas, Esq. Southampton
Webb, Charles, Esq. Basingstoke
Whicher, James, Esq. Petersfield
Woodman, James, M.D. East Leigh, Havant

HEREFORDSHIRE.

Number of Practitioners 63
Number of Members 10
Percentage of Members 15.9

Barrett, Joseph G., M.D. Ross
c Bull, H. G., M.D., Surgeon to
the Dispensary Hereford
Foote, Gustavus, Esq. Kingston
George, John, Esq. Pembridge, Leominster
c Lingen, C., M.D., Surgeon to
the Infirmary Hereford
c Lye, J. Bleack, M.D., Physi-
cian to the Infirmary Hereford
c Marshall, G. H., Esq. Kingston
c Morris, Edward, M.D. Hereford
Rudge, Henry, M.D., Surgeon
to the Dispensary Leominster
Wood, M. A., Esq., Surgeon
to the Dispensary Ledbury

HERTFORDSHIRE.

Number of Practitioners 86
Number of Members 8
Percentage of Members 9.3

n Davies, John, M.D., Physi-
cian to the Infirmary Hertford
n Drage, Charles, Esq. Hatfield
Evans, W. H., Esq. St. Alban's
n Garlike, T. W., Esq. Rickmansworth
n Godson, Charles, Esq. Barnet
M'Nab, William, Esq. Ware
n Philson, William, M.D. Baldock
n Woodhouse, John, Esq., Sur-
geon to the Infirmary Hertford

HUNTINGDONSHIRE.

Number of Practitioners 26
Number of Members 13
Percentage of Members 50

Bates, C. P., Esq. Ramsey
c Evans, John J., Esq. St. Neot's
Few, William, Esq. Ramsey
Foster, Michael, Esq., Sur-
geon to the Infirmary Huntingdon
Girling, George L., Esq. St. Ives
n Hemming, J. H., Esq. Kimbolton
Isaacson, Wootton, Esq. Huntingdon
Newton, Lancelot, Esq. Alconbury
Rix, Joseph, Esq. St. Neot's
Sole, William, Esq. St. Neot's
Sprague, Charles, Esq. Kimbolton
Ward, W., M.D., Physician to
the Infirmary Huntingdon
Woods, Charles John, Esq. Godmanchester

KENT.

Number of Practitioners 320
Number of Members 75
Percentage of Members 23.4

c Addison, W., M.D. F.R.S. Maidstone
c Baird, A. W., M.D., Physician
to the Hospital Dover
Baller, James H., Esq. Penhurst, Tunbridge
Beet, John, Esq. Ashford
c Blackwell, Thomas, Esq. Cranbrook
Boddington, William E., Esq. Biddenden, Cranbrook
c Brown, Frederick J., M.D. Chatham
Colebrook, Henry, M.D. Southborough
Cooke, William Henry, Esq. Tunbridge Wells
Cottingham, Edwin, Esq. Bexley
Crasey, W., Esq. Edenbridge [Died March]
Dulvey, James, Esq. Brompton, Chatham
Duncan, Robert, M.D. Tunbridge Wells
Eastes, Silvester, Esq. Folkstone
Ely, George Ebenezer, M.D. Rochester
Everest, Henry, Esq. Chatham
French, Henry, Esq. Tunbridge
Fry, Frederick, Esq., Surgeon
to the Infirmary Maidstone
n Gilbert, George R., Esq. Sydenham
Giraud, Frederick F., Esq. Faversham
Godfrey, Thomas, Esq. Herne Bay
n Gorham, John, Esq. Tunbridge
Gould, Henry Martin, Esq. Watlington
n Grayling, George, M.D. Sydenham
Gream, Robert R., Esq. Tunbridge Wells
HARGREAVES, L., Esq., Pres.
OF SOUTH-EASTERN BRANCH Tunbridge Wells
Hoar, William, Esq., Surgeon
to the Infirmary Maidstone
Hoare, William Parker, Esq. Faversham
Hunt, Frederick Bell, M.D. Farningham
n Huxley, J. E., M.D., Medical
Superintendent to County
Lunatic Asylum Maidstone
Jenkins, John A., Esq. Woodchurch, Tenterden
Kelson, George, Esq. Sevenoaks
Kent, John Cozens, Esq. Wrotham
Long, Edward, Esq. Barham, Canterbury

Martin, Adam, M.D. Rochester
Moore, George, M.D. Tunbridge Wells
Morgan, Charles, Esq. Bromley
Newington, Samuel W., Esq. Goudhurst, Cranbrook
Parker, James, Esq. Tunbridge
Penkivill, John, Esq. Staplehurst
Pittcocke, Frank, Esq. Sellinger
Plomley, F., M.D., Physician
to the West Kent Infirmary Maidstone
Pout, Henry, Esq. Maidling
Prance, James Connell, Esq. Maidstone
Rathill, Robert M., Esq. Westerham
n Ray, George, Esq. Milton, Sittingbourne
c Reid, J., Esq., Surgeon to the
Hospital Canterbury
n Richardson, William, M.D. Tunbridge Wells
Rigden, George, Esq., Sur-
geon to the Dispensary Canterbury
Roscow, Peter, Esq., Surgeon
to the Dispensary Folkstone
Sankey, F. Harvey, Esq. Wingham
Sankey, William, Esq. Sutton Valence, Maidstone
Sankey, William, Esq. Dover
n Satchell, W. C., Esq. Tunbridge Wells
Saunders, Edwin Dawes, Esq. Tenterden
Secombe, J. Collier, Esq. Greenhithe
c Sibbald, W., M.D., Physician
to the West Kent Infirmary
ary Maidstone [Died 15 Feb.]
Sicard, Amelius, Esq. Bridge, Canterbury
Skinner, David, Esq. Hexton
Smith, Thomas Hextall, Esq. St. Mary Cray
Sopwith, Frederick, Esq. Ightham
Spurrell, Flaxman, Esq. Bexley Heath
Starling, R. J., Esq. Hadlow
Thompson, Charles M., Esq. Westerham
Tippetts, Richard, Esq. Dartford
n Tovey, Charles H., Esq., late of Maidstone: new
address not received
Trustram, Charles, Esq. Tunbridge Wells
n Turner, A. F., Esq. Fort Pitt, Chatham
Turner, Richard, Esq. Tunbridge Wells
Wallis, William, Esq. Hartfield, ditto
Whitfield, Henry, Esq. Ashford
Wilkes, George F., Esq. Ashford
n Wilkinson, —, Esq. Sydenham
Worship, J. Lucas, Esq. Riverhead, Sevenoaks
Young, F. A., Esq. Hawkhurst

LANCASHIRE.

Number of Practitioners 748
Number of Members 201
Percentage of Members 26.7

n Ackerley, Richard Y., Esq. Liverpool
Ainsworth, J., Esq., Consult-
ing Surgeon to the Royal
Infirmary Manchester
n Allen, Richard, Esq. Fishergate, Preston
Anderton, Charles, Esq. Leigh, Manchester
Ashton, Henry, Esq. Walton-le-Dale, Preston
c Bainbridge, W. H., Esq., Sur-
geon to the Northern Hos-
pital Liverpool
c n Bardsley, Sir Jas. L., M.D.,
Consulting Physician to
the Royal Infirmary Manchester
Barker, Daniel, Esq. Staleybridge
n Barnes, Edward, Esq. Leyland, Preston
Barton, S., Esq. Higher Broughton, Manchester
n Bardsley, Amos, Esq. Ulverstone
n Beever, W. W., Esq., Surgeon
to the Royal Infirmary Manchester
Bell, Rev. David, M.D. Bleasdale, Garstang
c Bell, C. W., M.D., Physician
to the Royal Infirmary Manchester
n Bennett, T. W., Esq. Manchester
Bott, James, Esq. Manchester
c Bevan, John, Esq. Aigburth, Liverpool
Bevan, William, Esq. Ardwick Green, Manchester
c Bickersteth, E. R., Esq. Liverpool
c Bickersteth, R., Esq., Consult.
Surgeon to the Infirmary Liverpool
n Billing, John H., Esq. Longsight, Manch.
c BLACK, Jas. M.D., Physician
to the Infirmary, Pres. OF
LANCASHIRE & CHESHIRE
BRANCH Bolton-le-Moors
Blundell, John, Esq. St. Helen's
Bott, Thomas, Esq. Bury
c Boufflower, John, Esq. Strangways, Manchester
Bower, R., Esq., Consulting
Surgeon to the Dispensary Rochdale
Bradley, William, Esq. Preston
c Broughton, H. H., M.D. Preston
c Brown, Robert, Esq. Preston
n Browne, Henry, M.D., Physi-
cian to Royal Infirmary Manchester
Burrows, John, Esq. Liverpool
n Callon, William T., Esq. Liverpool
Chadwick, John, M.D. Bury
n Chadwick, S. T., M.D. Bolton-le-Moors
Chalmers, D., Esq., Surgeon
to the Northern Hospital. Everton, Liverpool
n Chapman, William, Esq. Garstang
n Collins, James, M.D. Liverpool
Cooke, Frederick, Esq. Ashton-under-Lyne

Cort, John, Esq. Blackburn
 *Crighton, Joseph, M.D. Salford, Manchester
 *Crompton, Samuel, Esq. Manchester
 *Daglish, George, Esq. Wigan
 Dandy, Charles, Esq. Rufford, Ormskirk
 *Davis, G. M., Esq., Surgeon
 to the Northern Hospital. Liverpool
 Deane, Robert, Esq. Clitheroe
 Desmond, Lorenzo E., Esq.,
 Surgeon to North Disp. Liverpool
 *Dickinson, J., M.D., F.L.S.,
 Physician to the Infirmary Liverpool
 Dixon, Thomas, Esq. Preston
 Dumville, Arthur W., Esq. Ardwick, Manchester
 *Dunau, William H., M.D. Liverpool
 Dundas, R., M.D., Physician
 to the Northern Hospital. Liverpool
 Dunkerley, E., Esq. Oldham
 Eccleston, T., Esq. Liverpool
 Eden, Thomas, Esq. Liverpool
 Edge, Peter Hulme, Esq. Salford
 Elliott, James, Esq. Lees, Manchester
 Ellison, King, Esq. Liverpool
 *Falloon, Edward L., Esq. Everton, Liverpool
 Fitzpatrick, W. H., Esq. Knotty Ash, Liverpool
 *Fletcher, F. D., Esq. Liverpool
 *Fletcher, J. S., Esq. Manchester
 Franklin, Isaac A., Esq. Manchester
 *Galt, John, Esq. Ashton-under-Lyne
 Gardom, George, Esq., Sur-
 geon to the Dispensary Salford
 *Garstang, James, Esq. Clitheroe
 *Gaskell, Richard A., Esq. St. Helen's
 Gilbertson, Joseph B., Esq. Preston
 *Gill, George, Esq. Liverpool
 Gilpin, Bernard, Esq. Ulverston
 *Glazebrook, N. S., Esq. West Derby, Liverpl.
 Godfrey, Joseph J., Esq. Liverpool
 Green, John, M.D. Newton-le-Willows
 Grime, Henry A., Esq. Blackburn
 *Grindrod, John, M.D. Scaforth
 *Hakes, James, Esq. Liverpool
 *Haldan, Bernard, Esq. Preston
 Halkyard, Henry, Esq. Oldham
 Hall, William, Esq. Lancaster
 *Halliday, John, Esq. Seacombe, Liverpool
 Hancock, J., Esq., Surgeon to
 the Dispens. for Children. Manchester
 *Hardy, G. W., Esq., Surgeon
 to the Infirmary Warrington
 Harland, T., M.D., Cons. Phys.
 to the Royal Dispensary Salford
 Harrison, John G., M.D. Manchester
 Harrison, James B., Esq. Higher Broughton,
 Manchester
 Harrison, George M., Esq. Manchester
 *HATTON, J., Esq., Cons.
 Surgeon to the Chorlton-
 on-Medlock Dispensary,
 SEC. FOR MANCHESTER Manchester
 Hepworth, J., Esq. Stretford, Manchester
 *Hindle, R., M.D. Whalley
 *Hodgson, Thomas, Esq. Liverpool
 Holroyd, E., Esq. Manchester
 *Hopwood, R., Esq. Staleybridge
 Houghton, William, Esq. Lytham
 *Hulme, Henry, Esq. Liverpool
 *Hunt, R. T., Esq., Cons. Surg.
 to the Lying-in Hospital. Manchester
 Hunt, William, M.D. Warrington
 *Imlach, Henry, M.D. Liverpool
 *Inman, T., M.D., Physician to
 the Northern Hospital. Liverpool
 Irving, William, M.D. Blackburn
 Jackson, Thomas D., Esq. Slaidburn, Clitheroe
 *Johnson, James, Esq. Kirkdale, Liverpool
 *Jones, Ellis, Esq., Surgeon
 to the Northern Hospital,
 SEC. FOR LIVERPOOL Liverpool
 *Juckes, Charles, Esq. Manchester
 Kay, Richard, Esq. Liverpool
 Kendrick, J., M.D., Consult.
 Phys. to Lying-in Charity. Warrington
 Kenworthy, John, Esq. Strangways, Manchester
 Kershaw, William, M.D. Royton
 Kirkman, J. M., Esq. Ardwick, Manchester
 *Kirknight, Sir Arnold, J., M.D., late of Liverpool:
 new address not received
 Latham, John, Esq. Wigan
 Lavery, Thomas, Esq. Manchester
 Lawton, John, Esq. Rochdale
 Lax, William, Esq., Surgeon
 to the Dispensary Ormskirk
 *Leach, Abraham, Esq. Waterhead, Manchester
 *Leather, Peter W., Esq., Sur-
 geon to the Workhouse Liverpool
 Lees, Samuel D., M.D. Ashton-under-Lyne
 *Leete, A. O., Esq. Newton-le-Willows
 *Lister, C., Esq., Surgeon to
 the Fever Hospital. West Derby, Liverpool
 Lund, Edward, Esq. Manchester
 Lupton, Bew, Esq. Cheadle
 Lynch, D., Esq., Surgeon to
 the Lying-in Hospital. Manchester
 *Lyon, E., M.D., Consulting
 Physician to the Royal
 Infirmary. Manchester
 Macintyre, Peter, M.D. Liverpool

*Mackarsie, W., Esq., late of Clay Cross: new
 address not received
 *Macrorie, David, M.D. Liverpool
 *McKeand, Robert H., Esq. Manchester
 Mallett, G., Esq. Bolton-le-Moors
 Mansfield, W. Wright, Esq. Liverpool
 Manley, W. E., Esq. Tildesley, Manchester
 Mann, R. M., Esq., Surgeon to
 the Lying-in Hospital. Manchester
 Marshall, John, Esq. Liverpool
 *Martland, R., M.D. Blackburn
 *Masfen, G. B., Esq. Manchester
 Mather, John, Esq. Ashton-le-Willows
 *Mather, Thomas, Esq. Ashton-in-Mackerfield
 *Mellor, Thomas, Esq. Greenheys, Manchester
 Middleton, Thomas, Esq. Salford
 Milne, F., Esq., Surgeon to
 the Chorlton-on-Medlock
 Dispensary. Manchester
 *Murray, James, M.D. Oldham
 *Neill, H., Esq., Surgeon to the
 Ophthalmic Infirmary Liverpool
 *Newcombe, Henry, Esq. Littleborough, Rochdale
 *Noble, Daniel, M.D. Manchester
 *Ogden, James, M.D. Manchester
 Parke, Edward, Esq. West Derby
 Patchett, Richard, Esq. Ribchester, Blackburn
 Paterson, David, Esq. Liverpool
 Pearson, J. A., Esq. Much-Woolton, Liverpool
 *Pendlebury, James, Esq. Bolton
 *Pennington, Thomas, Esq. Liverpool
 Pennington, J. F., Esq. Ashton-in-Mackesfield
 Pickop, Eli, Esq. Blackburn
 Prescott, W., Esq. Cheetham, Manchester
 Pritchard, Henry, Esq. Fairfield, Liverpool
 *Radford, T., M.D., Cons. Surg.
 to the Lying-in Hospital. Manchester
 *Ramsey, Robert A., M.D. Fleetwood
 Ramsay, P., M.D. Liverpool
 Richmond, Thomas G., Esq. Manchester
 Rigge, Robert, Esq. Much-Woolton, Liverpool
 *Rix, Charles James, Esq. Manchester
 *Robertson, John, Esq. Manchester
 *ROBINSON, J. M., Esq., Medical
 Inspector of Factories, SEC.
 FOR BOLTON Bolton-le-Moors
 Scott, R. W., M.D., Physician
 to the Northern Hospital. Liverpool
 Scott, Walter, M.D. Clitheroe
 Scholfeld, James, Esq. Middleton, Manchester
 Sellers, W. B., Esq. Rochdale
 *Seville, J. H., Esq. Mossley, Ashton-under-Lyne
 Sharp, Henry, Esq. Farnworth, Bolton
 *SHARP, John, Esq., Consulting
 Surgeon to the Infirmary,
 SEC. FOR WARRINGTON Warrington
 Skinner, William, Esq. Manchester
 *Slack, Henry W., Esq. Liverpool
 *Smith, W., Esq., Surgeon to
 the Royal Infirmary Manchester
 *Southam, G., Esq., Surgeon
 to the Royal Infirmary Salford, Manchester
 Spencer, Lawrence, Esq. Preston
 *Spinks, C. N., Esq. Warrington
 *Steele, Arthur B., Esq. Liverpool
 Stocks, George, Esq. Blackburn
 *Stokes, Alexander, Esq. Liverpool
 *Swift, Henry, Esq. Liverpool
 *Taylor, James E., Esq. Whitworth, Rochdale
 *Townson, B. W., Esq. Liverpool
 Turnbull, James, M.D., Phy-
 sician to the Infirmary Liverpool
 *Turner, T., Esq., Surgeon to
 the Royal Infirmary Manchester
 Turner, Herod, Esq. Rochdale
 *Turner, William, Esq. Liverpool
 *Vose, James R. W., M.D.,
 Physician to the Infirmary Liverpool
 Walsh, John, Esq. Manchester
 *Whitehead, J., M.D., Surgeon
 to the Lying-in Hospital. Manchester
 Wilding, R., Esq. Blackburn
 *Wilkin, George, M.D. Liverpool
 *Wilkinson, M. A. E., M.D.,
 Physician to the Infirmary Manchester
 Wilkinson, Thomas J., Esq. Manchester
 Williamson, H. M., Esq. Manchester
 *Wilson, W. J., Esq., Surgeon
 to the Royal Infirmary
 (PRESIDENT-ELECT) Manchester
 Windsor, John, Esq., Surgeon
 to the Eye Hospital. Manchester
 Winn, William, Esq. Manchester
 Wolstenholme, G., Esq. Bolton
 *Wood, Abraham, Esq. Rochdale
 Wood, P., M.D., Cons. Phys.
 to Manchester Infirmary. Southport
 Wood, Robert, Esq. Ashton-under-Lyne
 Woodward, J., Esq. Manchester
 *Woollam, George, M.D. Ashton-under-Lyne
 Wraith, Hope S., Esq. Over Darwen

LEICESTERSHIRE.

Number of Practitioners 112
 Number of Members 44
 Percentage of Members 39.3
 *BARCLAY, J., M.D., Physician
 to the Infirmary, SEC. FOR
 LEICESTERSHIRE Leicester
 *Benfield, T. W., Esq., Surgeon
 to the Infirmary Leicester
 Bond, C., M.D. Lutterworth
 Bowmar, C., Esq., Surgeon to
 the Dispensary Leicester
 *Bradshaw, J. B., Esq. Quorndon
 Brown, B. W., Esq. Wymeswold, Loughborough
 Brown, Thomas, Esq. Castle Donnington
 *Buck, John, Esq., Superint.
 of the County Lunatic Asy. Leicester
 *Buszard, Marston, M.D. Lutterworth
 *Cooper, A., Esq., Surgeon to
 the Dispensary Leicester
 *Derington, William, Esq. Leicester
 *Eddowes, J. H., M.D. Loughborough
 *Eddowes, John M., Esq. Great Glen
 Francis, John, Esq. Market Harborough
 Francis, William F., Esq. Billesdon
 *Gatty, Henry, Esq. Market Harborough
 *Gill, John, Esq. Syston
 Heygate, Thomas, Esq. Market Harborough
 *Hudson, Henry, Esq. Somerby
 *Hunt, John, Esq. Thurnby
 *Hunt, Samuel, Esq. Loughborough
 *Irwin, W. C., M.D. Leicester
 *Keal, John, Esq. Melton Mowbray
 *Ludlow, T. S., Esq. Sapcote, Hinckley
 *Macauley, T., Esq., Surgeon
 to the Infirmary Leicester
 *McIlree, Edward, Esq. Claybrook
 *Marriott, J., Esq. Kibworth
 *May, William, Esq. Leicester
 *Nuttall, H., M.D. Syston
 *Ody, John, M.D. Market Harborough
 *Orton, William, Esq. Narborough
 *PAGEET, T., Esq., Surgeon to
 the Infirmary, PRES. OF
 MIDLAND BRANCH. Leicester
 *Palmer, John, Esq. Loughborough
 *Paterson, T. W., Esq. Ibstock
 *Prosser, H. F., Esq. Leicester
 *Robinson, J. P., Esq. Syston
 *Shaw, G., M.D., Physician to
 the Infirmary Leicester
 *Spencer, J. H., Esq. Hallaton
 *Spencer, T., Esq. Earl Shilton, Hinckley
 *Stallard, J. H., Esq., Surgeon
 to the Dispensary Leicester
 *Whitchurch, Nathaniel, Esq. Melton Mowbray
 *Wing, R., Esq. Burrow-on-the-Hill [Died 16 June]
 Wood, C. W., Esq. Woodhouse Eaves, Loughborough
 *Wright, Samuel, Esq. Mount Sorrel

LINCOLNSHIRE.

Number of Practitioners 209
 Number of Members 28
 Percentage of Members 13.4
 *Barber, E., Esq., Surgeon to
 the Infirmary Stamford
 *Barton, Zephaniah, M.D. Market Rasen
 Bell, John, Esq. Grimsby
 Broadbent, E. F., Esq. Lincoln
 *Cammack, T., M.D., Physician
 to the Dispensary Spalding
 Eddie, W. H., Esq. Barton-upon-Humber
 Elsdale, Robinson, Esq. Moulton
 Ewen, Henry, Esq. Long Sutton
 Grantham, T. P. J., Esq. Burgh-le-Marsh, Spilsby
 *Hewitt, John, Esq. Spalding
 Ingram, Edward, Esq. Boston
 *Leppington, H. M., Esq. Great Grimsby
 Metcalfe, Robert I., Esq. Tydd St. Mary's
 *Mitchinson, G., Esq., House
 Surgeon to the Infirmary. Lincoln
 *Morley, John, Esq. Barton-upon-Humber
 *Morris, E., M.D., Surgeon to
 the Dispensary Spalding
 *Moxon, J. B., Esq. Brigg
 Nicholls, George J., Esq. Bourne
 *Sadler, Joseph, Esq. Winterton
 *Sharples, William, Esq. Horncastle
 *Snow, James, Esq., Surgeon
 to the Hospital. Lincoln
 Stiles, Thomas, Esq. Pinchbeck
 SYMPSON, T., Esq., Surgeon
 to the Dispensary, SEC. FOR
 LINCOLNSHIRE Lincoln
 Vise, Charles, Esq., Surgeon
 to the Dispensary Spalding
 Vise, E. B., Esq. Holbeach
 Walker, George J., Esq. Spilsby
 *West, R. Uvedale, Esq. Alford
 Wilkinson, W. C., Esq., Sur-
 geon to the Dispensary Spalding

MIDDLESEX.

Number of Practitioners 2713
 Number of Members 150
 Percentage of Members 5.52

Alkin, Charles, Esq., Southwick Street, Hyde Park
 Allan, John, M.D., Physician to the Islington Dispensary, 23, Milner Square, Islington
 Allan, James B., M.D., Kensington
 Ancell, Henry, Esq., Surgeon to Westminster General Dispensary, 3, Norfolk Crescent, Hyde Park
 Ashley, W. H., M.D., Surgeon to Kensington Dispensary, 8, Boyne Terrace, Notting Hill
 Barlow, W. F., Esq. (Died 24 June)
 Bartlett, W., Esq., Surgeon to Kensington Dispensary, Ladbroke Lodge, Ladbroke Sq., Notting Hill
 Beck, Snow, M.D., Physician to the Farringdon General Dispensary, Langham Place
 Begley, William C., M.D., Hanwell
 Bell, William, M.D., 33, George St., Hanover Sq.
 Bennett, Henry, M.D., 9, Cambridge Sq., Hyde Pk.
 Bennett, J. Rlason, M.D., Physician to St. Thomas's Hospital, 15, Finsbury Square
 Bird, Golding, M.D., Assistant-Physician to Guy's Hospital, 48, Russell Square
 Bird, James, M.D., 27, Hyde Park Square
 Bowling, John, Esq., Hammer Smith
 Bowman, F. B., M.D., Dalston
 Bowman, W., Esq., F.R.S., Professor of Physiology in King's College, 5, Clifford Street, Bond Street
 Bright, J. R., M.D., 12, Cambridge Sq., Hyde Park
 Brown, Isaac B., Esq., Surgeon-Accoucheur to St. Mary's Hospital, Connaught Square
 Bryant, W., Esq., Bathurst Street, Sussex Square
 Burgess, T. H., M.D., Half Moon Street, Piccadilly
 Burrows, George, M.D., Physician to St. Bartholomew's Hospital, 18, Cavendish Square
 Bury, G., Esq., Whetstone
 Butler, Wm., Esq., 10, Lower Islington Terrace, Park Road, Pentonville
 Cane, William H., Esq., Uxbridge
 Carter, Charles Thos., Esq., Hadley Chambers, R. M.D., Physician to Royal Free Hospital, Wimpole Street (Died April 6)
 Charles, T., Esq., 5, Lower Belgrave Pl., Piccadilly
 Chippendale, John, Esq., Surgeon to the Farringdon General Dispensary, 10, New Cavendish St., Portland Place
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 Cooper, George, Esq., Brentford
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 Grainger, Rd. D., Esq., Lecturer on Physiology at St. Thomas's Hospital, Highgate
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 Hodgson, Joseph, Esq., F.R.S., Westbourne Terr.
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 Hood, Peter, Esq., Lower Seymour St., Portland Sq.
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 Hurman, William, Esq., Turnham Green

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 Jones, J. D., M.D., Dalston
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 Lee, Henry, Esq., Assistant-Surgeon to King's College Hospital, 18, Dover Street
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 Lord, Charles F. J., Esq., Hampstead
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 Merriman, J. J., Esq., 44, Kensington Square
 Milroy, Gavin, M.D., 30, Fitzroy Square
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 O'Connor, W., M.D., George St., Portman Square
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 Pollock, Rt. Jas., Esq., 7, Bath Place, Kensington
 Pollock, George, David, Esq., Assistant-Surgeon to St. George's Hospital, 27, Grosvenor Street
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 Reynolds, J. Russell, M.D., 38, Grosvenor Street
 Riddale, George, Esq., 1, Euston Square
 Ringrose, John, Esq., Potter's Bar
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 Scott, John, M.D., Examining Physician to the H.E.I.C., 18, Stratton Street
 Seaton, E. C., M.D., Surgeon to the Chelsea, Brompton, and Belgrave Dispensary, Sloane St.
 Seaton, Joseph, M.D., Sunbury
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 Sheppard, Edgar, Esq., Enfield
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 Smith, Henry, Esq., Seymour St., Portman Sq.
 Smith, Tyler, M.D., Physician-Accoucheur to St. Mary's Hospital, 7, Upper Grosvenor Street
 Snow, John, M.D., 18, Saville Street, Piccadilly
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 Spicer, N.W., Esq., Library, St. Bartholomew's Hosp.
 Squire, W., Esq., Surgeon to Marylebone Infirmary
 Stewart, Alex., Esq., Duncan Terrace, Islington
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 Stilwell, Arthur, M.D., Hillingdon (Died 6 June)
 Stilwell, Jas., Esq., Uxbridge
 Stokes, H. J., M.D., 33, Portland Place, Islington
 Sutton, John, Esq., Shaftesbury Terrace, Pimlico
 Taplin, T., Esq., East India United Service Club, St. James's Square
 Taylor, J., Esq., 64, Queen's Road, Bayswater
 Taylor, Robert, M.D., Guildford St., Russell Sq.
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 Traquair, T. G., M.D., Eccleston Square, Pimlico
 Travers, B., Esq., jun., Dover Street, Piccadilly
 Tucker, John Hodges, Esq., 38, Berners Street
 Tukey, Harrington, M.D., Chiswick
 Ure, A., Esq., Surgeon to St. Mary's Hospital, Upper Seymour Street, Portman Square
 Vinen, Edw. H., M.D., Chepstow Villas, Bayswater
 Waddington, E., Esq., 2, Guildford Pl., Russell Sq.
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 Warder, Alfred, Esq., 1, Sydney Street, Brompton
 Watson, George C., M.D., 12, Palestine Place, Bethnal Green
 Wilkin, Henry, Esq., 39, Connaught Ter., Hyde Pk.
 Williams, C. J. B., M.D., F.R.S., Consulting Physician to the Hospital for Consumption, 49, Grosvenor Street

Williams, Joseph, M.D., 8, Tavistock Square
 Wing, Charles, Esq., North End, Fulham
 Winslow, Forbes, M.D., D.C.L., Hammer Smith
 Wood, William, M.D., Kensington
 Workman, T., Esq., 31, Inverness Rd., Bayswater
 Yearsley, James, Esq., Saville Row

MONMOUTHSHIRE.

Number of Practitioners 60
 Number of Members 28
 Percentage of Members 46.6

Anthony, T. E., Esq., Tredegar
 Audland, John, Esq., Tintern, Chepstow
 Batt, F. C., Esq., Abergavenny
 Bevan, G. P., M.D., Beaufort Works, Newport
 Bradford, B. M., Esq., Chepstow
 Brewer, J., Esq., Newport
 Brewer, A., Esq., Victoria Iron Works, Newport
 Cherry, George, Esq., Caerleon, Newport
 Coats, Nathaniel, Esq., Sirhowy
 Davies, A., Esq., Pentwyn Iron Works, Pontypool
 Essex, James, Esq., Pontypool
 Hinton, J., Esq., Blairston Iron Works, Newport
 James, William, Esq., Newport
 King, Thomas, Esq., Chepstow
 Lawrence, David, Esq., Pontypool
 Morgan, William, Esq., Newport
 Mounts, Trevor, M.D., P.R.S.
 OF SOUTH WALES BRANCH
 Owen, D., Esq., Monmouth
 Robathan, Edward, Esq., Risca, Monmouth
 Scott, R. I., Esq., Newport
 Sloper, C. E., Esq., Tredegar Iron Works
 Stack, R., M.D., Newport
 Steele, E. Y., Esq., Surgeon to the Dispensary, Abergavenny
 Steele, R. J. P., Esq., Blaenau, Abergavenny
 Steele, Samuel H., M.B., Abergavenny
 Watkins, George, Esq., Chepstow
 Williams, John, Esq., Pontypool
 Woollett, R. F., Esq., Surgeon to the Dispensary, Newport

NORFOLK.

Number of Practitioners 208
 Number of Members 29
 Percentage of Members 14

Adecock, John Fleming, Esq., Little Walsingham
 Amyott, Thomas F., Esq., Diss
 Archer, George, Esq., Feltwell
 Bailey, H. W., Esq., Thetford
 Best, Henry, Esq., Thetford
 Clouting, John Revell, Esq., Shipdham
 Cooper, James, Esq., Great Yarmouth
 Copeman, Edward, M.D., Physician to the Hospital, Norwich
 Cotton, Charles, M.D., Surgeon to the Hospital, Lynn Regis
 Evans, Thomas R., Esq., Coltishall, Norwich
 Gillett, George, Esq., Brooke, Norwich
 Harrington, John, Esq., Watton, Thetford
 Harrison, P. L., Esq., Diss
 Mackenzie, G. W., Esq., Thetford
 Mines, Wm., Esq., Diss (Died 14 May)
 Morton, Richard Kay, Esq., Aylsham
 Pirt, J. Ballard, M.D., Surgeon to the Dispensary, Sec. for NORFOLK Norwich
 Priest, Frederick, Esq., Burnham
 Ranking, W. Harcourt, M.D., Physician to the Hospital, Norwich
 Rose, C. B., Esq., Swaffham
 Rump, Hugh, Esq., Wells, Fakenham
 Smith, Frederick, Esq., Aylsham
 Steele, Henry Brown, Esq., Stoke Ferry
 Wales, T. Garneys, Esq., Downham Market
 Weston, Philip K., Esq., East Dereham
 Whitby, George, Esq., Swaffham
 Whiting, J. B., Esq., Lynn Regis
 Whiting, J. M.D., Physician to the Hospital, Lynn Regis
 Young, James, Esq., Wells

NORTHAMPTONSHIRE.

Number of Practitioners 101
 Number of Members 84
 Percentage of Members 83.68

Birdsell, William, Esq., Northampton
 Bryan, J. M., M.D., Northampton
 Clary, Thomas, Esq., Wellingborough
 Collier, Thomas, Esq., Towcester
 Clix, William, M.D., Long Buckley
 Elston, W. A., Esq., Bugbrooke
 Faircloth, J. M. C., M.D., Surgeon to the Dispensary, Northampton
 Gibbon, William, Esq., Kettering
 Haimes, William, Esq., Thrapstone
 McKerr, W. C., M.D., Physician to the Infirmary, Northampton
 Knott, James P., Esq., Blisworth
 Leese, John Griffiths, Esq., Thrapstone
 Marshall, F. H., Esq., Moulton
 Martin, Joseph C., Esq., Oundle

cMash, J. Esq., Surgeon to the Infirmary Northampton
 Nesbitt, P. R., M.D., Superintendent of the Lunatic Asylum Northampton
 Olive, George, Esq. Northampton
 Outlaw, A. M., Esq., Wellingborough [Died 4 June]
 Percival, William, Esq. Northampton
 cPorter, William G. Esq. Peterborough
 ROBERTSON, A. M.D., F.R.S., Physician to the Northampton Infirmary, Vice-Pres. Northampton
 cRoughton, William, Esq. Kettering
 Starling, Thomas J., Esq. Higham Ferrers
 nTerry, George, Esq. Brigstock
 cTerry, H., Esq., Surgeon to the General Infirmary Northampton
 Terry, Henry, jun., Esq. Northampton
 Thompson, Edward, Esq. Daventry
 Walker, T. M.D., Surgeon to the Dispensary Peterborough
 Watkins, Robert W., Esq. Towcester
 Watts, John, M.D. Daventry
 West, Thomas, M.D. Daventry
 cWilliams, Hugh, Esq. Thrapstone
 Williams, W., Esq. Guilsborough
 Wyman, W. S., Esq. Kettering

NORTHUMBERLAND.

Number of Practitioners 169
 Number of Members 6
 Percentage of Members 3.5

Arnison, W. C. Esq. Annandale Town, Heydon Bridge

cCharlton, E. M.D., Lecturer on the Practice of Medicine Newcastle-on-Tyne
 De Mey, William F., M.D. Newcastle-on-Tyne
 Greenhow, T. M., Esq., Surgeon to the Infirmary Newcastle-on-Tyne
 Hawdon, Robert, Esq. Morpeth
 nReid, John C., M.D. Newbiggin, Morpeth

NOTTINGHAMSHIRE.

Number of Practitioners 119
 Number of Members 26
 Percentage of Members 21.85

Allison, William, Esq. East Retford
 Bosquet, Yelverton, Esq. Stapleford
 nBarrows, T. Ash, Esq. Sneinton, Nottingham
 Darby, Augustus, Esq. Nottingham
 Dickinson, John, M.D. Edwinstowe, Ollerton
 Eddison, B., Esq., Surgeon to the General Hospital Nottingham
 nGill, W., M.D., Physician to the General Hospital Nottingham
 Hase, Henry, Esq. Worksop
 Higginbottom, J., Esq., F.R.S., Nottingham
 Higginbottom, M. H., Esq. Nottingham
 Hurt, Samuel, Esq. Mansfield
 Hutchinson, R. S., M.D., Physician to the Gen. Hospital Nottingham
 Lilly, John W., Esq. Ollerton
 Marsh, John C. L., Esq. Nottingham
 Payne, Henry, jun., M.D. Nottingham
 Ransom, W. H., M.D. Nottingham
 Smyth, Luke D., M.D. Bingham, Nottingham
 nStanger, G. E., Esq., Surg. to the Dispensary Nottingham
 nStevenson, F., Esq. Nottingham
 Taylor, H., Esq., Surgeon to the General Dispensary Nottingham
 Thompson, John N., Esq. Nottingham
 nThompson, J., Esq., Surgeon to the Dispensary Nottingham
 WHITE, Jos., Esq., Resident Surg. of General Hospital, SEC. OF NOTTINGHAMSH. Nottingham
 cWilliams, John C., M.D., Visiting Physician to the Lunatic Asylum Nottingham
 Wright, Henry, Esq. East Bridgeford
 Wright, T. M.D., Surgeon to the General Hospital Nottingham

OXFORDSHIRE.

Number of Practitioners 118
 Number of Members 21
 Percentage of Members 18.6

Barrett, Henry, Esq. Watlington
 Batt, Edwin Augustus, Esq., Witney
 Coar, T. T., Esq. Oxford [Resigned Oct.]
 Cooke, William Robert, Esq., Burford
 Freeborn, R. F., jun., Esq. Oxford
 cGiles, R., M.D. Oxford
 Hansard, R. J., Esq., Surgeon to the Radcliffe Infirmary Oxford
 cHester, J. Torry, Esq., Surgeon to the Radcliffe Infirmary Oxford
 nHolmes, Charles, Esq. Chipping Norton
 Jeston, T. W., Esq. Henley-on-Thames
 Laver, J. G., Esq. Culworth, Banbury
 Leapingwell, William, M.D. Oxford
 Lupton, H., Esq. Thame

cMartin, John F., Esq. Oxford
 cOgle, J. Adey, M.D., Regius Professor of Medicine, VICE-PRESIDENT Oxford
 Rusher, William, Esq. Oxford
 Rye, Arthur Brisley, Esq. Banbury
 cSymonds, F., Esq. Oxford
 Wintle, F. T., Esq. Oxford [Died 14 Feb.]
 Wise, Robert S., M.D. Banbury
 Wyatt, George R., Esq. Oxford

BUTLAND.

Number of Practitioners 9
 Number of Members 1
 Percentage of Members 11

Lodge, John, Esq. Uppingham

SHROPSHIRE.

Number of Practitioners 149
 Number of Members 48
 Percentage of Members 32.3

cArrowsmith, J. Y., Esq., Surgeon to the Salop Infirmary Shrewsbury
 nBakewell, S. G., M.D., All Stretton, Church Stretton
 cBanning, Thomas H., M.D., Oswestry
 Bennion, E. D., M.D. Oswestry
 Birch, Scholes B., M.D. Munslow
 Bratton, James, Esq. Shrewsbury
 Brook, H., Esq. Bishop's Castle
 Brookes, W. P., Esq. Much Wenlock
 BROUGHTON, Robert, Esq., PRESIDENT OF SHROPSHIRE BRANCH Ruyton
 nBurd, E., M.B., Physician to the Salop Infirmary Shrewsbury
 cCartwright, Peplow, Esq. Oswestry
 Clarke, C. T. H., Esq. Shrewsbury
 cClement, William J., Esq. Shrewsbury
 cCrawford, David, Esq. Shrewsbury
 nDarlington, J. G., Esq. Westbury
 cDickin, John, Esq., Surgeon to the Salop Infirmary Shrewsbury
 Downes, T. R. C., Esq. Munslow, Ludlow
 cDRURY, T. J., M.D., Physician to the Salop Infirmary, JOINT SEC. OF SHROPSHIRE BRANCH Shrewsbury
 Eddowes, W., Esq. Pontesbury
 Fuller, W., M.D. Oswestry
 Gill, George P., Esq. Shrewsbury
 nGodby, Augustus, M.D. Newport
 nGwynn, S. B., Esq. Wem
 Hartshorn, F. H., Esq. Roseley
 cHickman, Joseph, Esq. Brocton
 HUMPHREYS, J. R., Esq., House Surgeon to the Salop Infirmary, JOINT SEC. OF SHROPSHIRE BRANCH Shrewsbury
 James, W. A., Esq. Wenlock
 Johnson, H., M.D., Physician to the Salop Infirmary Shrewsbury
 Jones, Robert, Esq. Stretford, Shrewsbury
 Jones, W. W., Esq. Cleobury Mortimer
 Moore, Edward, Esq. Halesowen
 Pierce, Richard K., Esq. Madeley
 Pope, Thomas, Esq. Cleobury Mortimer
 Richards, J. W., Esq., Surgeon to the Dispensary Ironbridge
 Rowlands, J. W., Esq. Ironbridge
 nRyder, John, Esq. Wellington
 Sutton, J. H., Esq. Longdon, Pontesbury
 Thurstfield, Richard, Esq. Broseley
 Thurstfield, William, Esq. Bridgnorth
 nWall, C., M.D. Dudmaston, Bridgnorth
 Webb, Fryer, Esq. Wellington
 cWebb, Matthew, Esq. Wellington
 Whitcombe, E. B., Esq. Cleobury Mortimer
 nWhitwell, Francis, Esq. Shrewsbury
 Wilding, Richard, Esq. Church Stretton
 Williams, G. H., M.D. Oswestry
 Wilson, Joseph G., Esq. Wem
 Wood, Samuel, Esq. Shrewsbury

SOMERSETSHIRE.

Number of Practitioners 272
 Number of Members 98
 Percentage of Members 36

cAlford, H., Esq., Surgeon to the Taunton and Somerset Hospital Taunton
 Allen, George, Esq. St. George's
 nBagshawe, E. Lloyd, Esq. Bath
 Bally, William Ford, Esq. Bath
 Barrett, J., Esq., Surgeon to the Western Dispensary Bath
 cBARTRUM, J. S., Esq., SEC. FOR BATH
 Bernard, C. Edward, M.D. Bath
 Boodle, Robert, Esq. Chilcompton
 Brace, W. H., Esq., Surgeon to the Western Dispensary Bath
 cBridge, Stephen F., Esq. Wellington
 Brock, George, M.D. Wellington
 Brown, C. F., Esq. Bathford, Bath
 Buncombe, John, Esq. Wellington
 Burne, John, M.D., Physician to the General Hospital Bath
 cBURRIDGE, R., M.D., Physician to the Taunton and Somerset Hospital, PRES. OF WEST SOMERSET BRANCH Somerset
 Burt, Giles Richard, Esq. Ilminster
 Bush, W., Esq., Surgeon to the Eastern Dispensary Bath
 Bush, W. M., M.D. Weston-super-Mare
 cChurch, William J., Esq. Bath
 Coates, William, Esq. Wrington
 Cockey, Edmund, Esq. Frome
 Collins, C. Howell, Esq. Chew Magna
 Collins, C. Palk, Esq. Dulverton
 Cornish, C. H., Esq., Surgeon to the Taunton and Somerset Hospital Taunton
 Cornwall, John, Esq. Ashcott, Glastonbury
 nCotes, Henry, Esq. Wiveliscombe
 Cowan, Samuel Brice, Esq. Bath
 Crang, Findlater, Esq. Hallatrow, Bristol
 cCrang, James, Esq. Timsbury, Bath
 cDavies, W., M.D., Physician to the United Hospital Bath
 Davis, Theodore, Esq. Tickenham
 Drew, Charles, Esq. Wiveliscombe
 Edkins, Clement, Esq. Somerton
 nEdwards, Charles F., Esq. Bath
 Edwards, Conway, Esq. Bathaston, Bath
 Evans, Evan, Esq. Bath
 cFlower, Farnham, Esq. Chilcompton
 Fox, Francis Kerr, M.D. Brislington
 Fox, Charles Joseph, M.D. Brislington
 Fox, Edwin Fyde, Esq. Brislington
 nGaye, Henry S., Esq., House Surgeon to the Hospital Taunton
 cGeorge, R. F., Esq., Surgeon to the General Hospital Bath
 Gidley, G., M.D., Physician to the Eastern Dispensary Bath
 cGillett, W. E., Esq. Fairwater, Taunton
 Goodridge, H. F. A., M.D., Phys. to the United Hosp. Bath
 nHanham, Frederick, Esq. Bath
 nHarries, Charles A., Esq. Bath
 Haviland, Alfred, Esq. Bridgewater
 Hensley, Henry, Esq. Bath
 cHodges, E., M.D., Physician to the General Hospital Bath
 cKelly, W., Marwood, M.D. Taunton
 Kidgell, George, Esq. Wellington
 Kilvert, John, Esq. Bath
 King, George, Esq. Bath
 Land, William, M.D. Taunton
 nLawrence, J., Esq., Surgeon to the Southern Dispens. Bath
 Ling, Henry Foote, Esq. Stogumber, Taunton
 nLloyd, J., Augustus, Esq. Bath
 Lucas, Rudd, Esq. Long Ashton, Bristol
 MacDermott, E. D., M.D. Bath
 Maey, Henry Joseph, Esq. Westown
 Marchant, Robert, Esq. North Curry
 cMarriott, Peter, Esq. Bath
 Mason, Frederick, Esq. Bath
 Miller, Charles, Esq. Castle Cary
 Mitchell, J. J., Esq., Surgeon to the Western Dispensary Bath
 Munckton, William W., Esq., Curry Rivel
 Nazer, H. L., Esq. Wiveliscombe
 cNORMAN, G., Esq., Surgeon to the United Hospital, VICE-PRESIDENT Bath
 cOrmond, John, Esq. Bath
 Parsley, William H., Esq. Banwell
 Parsons, Joshua, Esq. Beckington
 Pemberton, T. H., M.D. Taunton
 Plowman, Thomas, Esq. North Curry
 Pring, James H., M.D. Weston-super-Mare
 Pyne, W. C., jun., Esq. Wellington
 cRandolph, Henry W., Esq. Milverton
 Reynolds, William, Esq. Wellington
 Sewell, Robert H., M.D. Bridgewater
 Shorland, William, Esq. Yeovil
 Skeate, Edwin, Esq. Bath
 cSoden, John, Esq., Surgeon to the General Hospital Bath
 cSoden, John Smith, Esq. Bath
 nSpender, J. K., Esq., Surgeon to the Western Dispensary Bath
 Stone, R. Nathaniel, Esq. Bath
 Stringfield, Joseph, Esq. Weston-super-Mare
 Tayler, John Milton, Esq. Bath
 Taylor, James, M.D. Castle Cary
 Tomkins, William, M.D. Yeovil
 Toogood, Jonathan, M.D. Taunton
 cTrevor, William, Esq. Dulverton
 cTunstall, J., M.D., Physician to the Eastern Dispensary Bath
 Valentine, John, Esq. Somerton
 Wallis, C. C., Esq. Castle Cary
 cWatson, T. S., M.D., Physician to the General Hospital Bath
 nWeatherley, Frederick, Esq., Portishead

Wills, George F., Esq. Crewkerne
cWOODFORD, F. H., M.D.,
Physician to the Taunton
and Somerset Hospital, Sec.
OF WEST SOMERSET BRANCH. Taunton

STAFFORDSHIRE.

Number of Practitioners 208
Number of Members 17
Percentage of Members 8.17

nBirch, W., Esq. Barton-under-Needwood
Brown, Robert Cave, Esq. Tamworth
Cooper, Richard, Esq. Leek
Cope, Geo. Ambrose, Esq. Etwell, Uttoxeter
Dehane, E. F., M.D., Physician
to the General Hospital. Wolverhampton
cEdwards, G., Esq., Surgeon
to the General Hospital. Wolverhampton
Edwards, Henry, Esq. Tutbury
nHollyoake, Thomas, Esq. Kinver, Stourbridge
Lomax, Henry T., Esq. Stafford
nMasfen, William E., Esq. Stafford
Mason, William, Esq. Burton-on-Trent
Newnham, Chr. A., Esq. Wolverhampton
Rowley, Thomas, M.D., Physi-
cian to the Dispensary. Lichfield
Seddon, Joshua, M.D. Longdon, Rugeley
nSomerville, Charles, Esq. Bloxwich, Walsall
nThomson, Spencer, M.D. Burton-on-Trent
nWebb, Wm., Esq., House Sur-
geon to the Infirmary Stafford

SUFFOLK.

Number of Practitioners 172
Number of Members 68
Percentage of Members 39.5

nAdams, Edward B., Esq. Bungay
Arnott, Charles D., M.D. Gorleston
Barker, W. S., Esq. Barrow
cBartlett, A. H., Esq., Surgeon
to the East Suffolk Hospi-
tal. Ipswich
cBeales, John, Esq. Halesworth
Beck, Henry, Esq. Needham Market
cBeddingfield, J., M.D. Needham Market
cBree, C. R., Esq. Stowmarket
cBullen, G., Esq., Surgeon to
the East Suffolk Hospital. Ipswich
nBullen, George, jun., Esq. Ipswich
cChevallier, B., M.D. Ipswich
Corley, Robert R., Esq. Laxfield
cCrowfoot, W. E., Esq., Sur-
geon to the Dispensary. Beccles
Daniell, J. G., Esq. Nayland
nDarlington, J. P., Esq. Westbury
cDavey, H. W. R., Esq., Sur-
geon to the Dispensary. Beccles
cDurrant, C. M., M.D., Physi-
cian to the East Suffolk
Hospital. Ipswich
Ebdon, W. H., Esq. Hawley
Edwards, G. C., Esq. Ipswich
Fenn, Thomas H., Esq. Nayland
Freeman, Henry L., Esq. Saxmundham
cFreeman, Spencer, Esq. Stowmarket
cGillam, J., Esq. Debenham
Gissing, John S., Esq. Woodbridge
Gorham, R. V., Esq. Aldborough
Grimwood, Thomas, Esq. Walton, Ipswich
Gross, Edward, Esq. Earl Soham
cGrowse, John, Esq. Hadleigh
Growse, Robert, Esq. Bildestone
cHake, T. G., M.D., Physician
to the Bury and Suffolk
General Hospital. Bury St. Edmunds
cHammond, C. C., Esq., Sur-
geon to the East Suffolk
Hospital. Ipswich
nHarling, B. A., Esq. Stowmarket
Harmer, Alfred, Esq. Wrentham
nHarris, Frederick, Esq. Mildenhall
nHeane, William, Esq. Bury St. Edmunds
cInage, W., Esq., Surgeon to
the Bury and Suffolk Gene-
ral Hospital. Bury St. Edmunds
cJeffreson, William, Esq. Framlingham
Jones, R., Esq. Long Melford
cJones, R., Esq. Woodbridge
Kilner, John, Esq. Bury St. Edmunds
King, George, Esq. Hartest, Bury St. Edmunds
cKIRKMAN, J., M.D., Physician
to the Suffolk Lunatic Asy-
lum, SEC. FOR SUFFOLK. Melton
cKirkman, W. P., Esq. Melton
nLing, John M., Esq. Saxmundham
Lock, Edward, Esq. Debenham
Mann, C. P., Esq. Boxford
Manning, F., Esq. East Bergholt
Marshall, Charles, Esq. Woodbridge
nMartin, F., Esq., House Sur-
geon to the Bury and Suffolk
Hospital. Bury St. Edmunds

cMARTIN, Robert, Esq., PRESI-
DENT OF SUFFOLK BRANCH Holbrook
cMayhew, George, Esq. Stradbroke
Miller, W. W., Esq. Eye
Mudd, William, Esq. Hadleigh
Muriel, William, Esq. Wickham Market
Pennington, James, Esq. Needham Market
cProbert, F. G., M.D., Physi-
cian to the Bury and Suffolk
Hospital. Bury St. Edmunds
Rackham, William A., Esq. Wangford
Read, Charles, Esq. Stradbroke
cSampson, G., Esq., Surgeon
to the East Suffolk Hospital Ipswich
nSimpson, E., Esq. Long Melford, Sudbury
cSkrimshire, A. J., M.D. Sudbury
cSmith, C. C., Esq., Surgeon
to the Bury and Suffolk
Hospital. Bury St. Edmunds
nVertue, Henry, Esq. Southwold
cWake, R., M.D., Physician to
the Dispensary. Southwold
Williams, J., Esq., Surgeon to
the Dispensary. Southwold
Wilson, John, Esq. Framlingham
Wing, H., Esq. Bury St. Edmunds
cWorthington, W., Esq., Sur-
geon to the Infirmary Lowestoft

SURREY.

Number of Practitioners 137
Number of Members 68
Percentage of Members 49.6

nAyres, Philip B., M.D. Wandsworth Road
Bacon, Chas. Edward, M.D. Guildford
nBirkett, John, Esq., Surgeon
to Guy's Hospital. Southwark
cBottomley, George, Esq. Croydon
Chaldecott, William, Esq. Dorking
Chapman, George, Esq. Lingfield
Clark, Willington, Esq. Sutton
cCORMACK, John Rose, M.D.
EDITOR OF THE JOURNAL Putney
nCox, Abram, M.D. Kingston-on-Thames
Davies, W., Esq. York Town, Bagshot
nElliott, Robert, M.D. Denmark Hill
nEvans, Edward, Esq. Southwark
Gall, A. C., Esq. Ripley
nGarrett, C. B., Esq. Thames Ditton
Grant, George, M.D. Richmond
nGriffith, S., M.D., Physician-
Accoucheur to St. Tho-
mas's Hospital. Southwark
nGrove, John, Esq. Wandsworth
Harris, Henry, Esq. Reigate
nHarrison, C. H. R., Esq. Lansdowne Rd., Clap-
ham Road
Hart, William, Esq. Dorking
nHassall, Richard, M.D. Richmond
nHolman, Constantine, M.D. Reigate
nJones, John, Esq. Wandsworth Road
nJullius, Frederick G., M.D. Richmond
Lawton, John, Esq. Chiddingfold, Godalming
nLever, J. C. W., M.D., Physi-
cian-Accoucheur to Guy's. Southwark
nLove, Gilbert, Esq. Wimbledon
cMARTIN, Peter, Esq., SEC. TO
SOUTH-EASTERN BRANCH Reigate
Napper, Albert, Esq. Guildford
cNewnham, W., Esq. Farnham
nNicholas, George E., Esq. Clapham
Palmer, Henry S., Esq. Mortlake
Pursell, John, M.D. Kennington
nPaul, J. J., Esq. Putney
Ray, Edward, Esq. Dulwich
Richardson, Benj. W., Esq. Mortlake
nRidge, Benjamin, M.D. Putney
nRobinson, R. R., Esq. Camberwell
nShillito, Charles, Esq. Putney
nShurlock, Mainwaring, Esq. Chertsey
Silvester, T. H., M.D. Clapham
nSinclair, Donald, M.D. Peckham
Sisson, Andrew, Esq. Reigate
Sloman, Samuel O., Esq. Farnham
cSmith, J. Denham, Esq. Putney
cSudman, James, Esq. Guildford
Steele, John, Esq. Reigate
Stowell, George, Esq. Epsom
Street, W., Esq. Norwood
nTilley, Samuel, Esq. Rotherhithe
nWard, Joseph, Esq. Epsom
cWebster, George, M.D. Dulwich
Westall, Edward, Esq. Croydon
nWhiteman, R. H., Esq. Putney
nWillis, Robert, M.D. Barnes
Yate, Frederick, Esq. Godalming

SUSSEX.

Number of Practitioners 218
Number of Members 62
Percentage of Members 28.44

Adamson, J., Esq. Rye
Bayes, William, M.D., Physi-
cian to the Dispensary. Brighton

Blakiston, Peyton, M.D. St. Leonard's-on-Sea
Bull, John Henry, Esq. Lindfield
cBurrows, J. Cordy, Esq. Brighton
Ryass, Thomas S., Esq. Cuckfield
Caffin, William, Esq. Chichester
cCaudle, Robert, Esq., late of Brighton: new
address not received
Chalmers, W., M.D. Brighton
Collet, Henry, Esq. Worthing
Coleman, W. T., M.D. Horsham
Cunningham, J. M., M.D. Hailsham
Davis, R. C., Esq. Winchelsea
Dill, John, Esq. Brighton
nDill, Richard, M.D. Brighton
Dixon, James, Esq. Brighton
Drummond, G., Esq. Brighton
Duke, Allen, Esq., Surgeon
to the Infirmary. Chichester
Elliott, R., Esq., Surgeon to
the Infirmary. Chichester
Faithful, William, Esq. Brighton
Fry, William H., Esq. Brighton
Furner, Edmund J., Esq. Brighton
Gravelly, Richard, Esq. Newick, Uckfield
cGreenhill, W. A., M.D. Hastings
Hackney, John, Esq. Hailsham
Harris, William, Esq. Worthing
Holman, Henry, Esq. East Hothley
Holman, Henry M., M.D. Hurstpierpoint
Horne, Thomas B., Esq. Brighton
Ingram, W., Esq. Midhurst
Irving, George Bell, Esq. Lamberhurst
JENKS, G. S., M.D., Physician
to the Sussex Hospital,
VICE-PRESIDENT. Brighton
cKing, W., M.D., Physician to
the Sussex County Hospital Brighton
Lane, C. H. Butler, M.D. Brighton
Lawrence, J., Esq., Consult-
ing Surgeon to the Sussex
Hospital. Brighton
nLowdell, George, Esq. Brighton
cMcCarogher, Joseph, M.D.,
Physician to the Infirmary Chichester
Martin, Peter John, Esq. Pulborough
Matthews, Arthur, Esq. Robertsbridge
nPrince, C. Leeson, Esq. Uckfield
Rugg, Richard, Esq. Brighton
Smith, Thomas, Esq. Crawley
Stedman, Silas, Esq. Arundel
Taylor, Robert, Esq. Brighton
Terry, John J., Esq. Rye
Trew, R. N., Esq. Steyning
Tyacke, N., M.D., Physician
to the Infirmary. Chichester
Underwood, John, Esq. Battle
cVallance, B., Esq., Surgeon to
the Sussex Hospital. Brighton
Wallis, Frederick, Esq. Bexhill, Battle
Weekes, George, Esq. Hurstpierpoint
Wythe, John, Esq. East Grinstead
cWinter, T. B., Esq. Brighton

WARWICKSHIRE.

Number of Practitioners 218
Number of Members 45
Percentage of Members 17.84

Barker, John, Esq. Coleshill
Berry, S., Esq., Professor in
Queen's College. Birmingham
Bicknell, F., Esq. Coventry
Bindley, S. A., Esq. Birmingham
Blount, John Hillier, M.B. Birmingham
nBuckby, A. G. H., Esq. Pailton Hall, Rugby
cBucknill, Samuel, Esq. Rugby
Burman, Thomas F., Esq. Stratford-upon-Avon
cDavies, J. B., M.D., Physi-
cian to Queen's Hospital. Birmingham
Duke, Abraham, M.D. Rugby
Elkington, F., Esq., Surgeon
to the Lying-in Hospital. Birmingham
cEvans, G. W., Esq. Wellesbourne
cEvans, G. F., M.D., Physician
to the General Hospital. Birmingham
Fletcher, T. B. F., M.D., Physi-
cian to Gen. Dispensary. Birmingham
Foebroke, George H., Esq. Bilford, Stratford
Hill, Alfred, Esq. Birmingham
Jeffreson, S. J., M.B., Physi-
cian to the Hospital. Leamington
nJerdan, John, Esq. Birmingham
cJohnstone, J., M.D., Physician
to the General Hospital. Birmingham
Jones, William, Esq. Henley in Arden
Knowles, G. B., Esq., Surgeon
to the Queen's Hospital. Birmingham
cMiddlemore, H., Esq., Surgeon Birmingham
Morris, Henry, Esq. Studley
Mousley, George, Esq. Atherston
Nason, Edward, Esq. Nuneaton
Nelson, David, M.D. Birmingham
Parker, Langston, Esq. Sur-
geon to the Queen's Hospital Birmingham
Paxton, James, M.D. Rugby
nPemberton, Oliver, Esq., Sur-
geon to the General Hospital Birmingham

Pitt, Richard, Esq. Wellesbourne
Powell, H. M.D., Physician
to the Hospital Coventry
Pritchard, Frederick, Esq. Stratford-upon-Avon
Rice, D., Esq., Surgeon to the
Infirmary Stratford-upon-Avon
Russell, James, jun., M.D. Birmingham
c Ryland, Frederick, Esq. Edgbaston
c Smith, H. L., Esq., Surgeon to
the Eye and Ear Infirmary Southam
Smith, Thomas, Esq. Alcester
Solomon, J. Vose, Esq., Sur-
geon to the Eye Infirmary Birmingham
Swinson, G. Newton, Esq. Birmingham
Taylor, G., Esq. Birmingham
c Thomson, T. M.D., Physician
to the Infirmary Stratford-upon-Avon
Torrance, David, Esq. Rugby
c Wickenden, Joseph, Esq. Birmingham
Williams, T. W., Esq. Birmingham
Wyman, George, Esq. Alcester

WESTMORELAND.

Number of Practitioners 35
Number of Members 2
Percentage of Members 5.7

Bywater, Robert T., Esq. Conistone, Ambleside
Moore, John, Esq. Keatswich, Kirkby Lonsdale

WILTSHIRE.

Number of Practitioners 121
Number of Members 21
Percentage of Members 17.35

c Adye, Arthur, Esq. Bradford
c Bailey, Charles, Esq. Cliffe, Chippenham
Bayliffe, Charles, Esq. Chippenham
c Colborne, William, Esq. Chippenham
c Dyke, G. W., M.D. Chippenham
Flower, Isaac, Esq. Codford
c Gardner, John, Esq. Marlborough
Grubb, Philip, Esq. Warminster
Jennings, Joseph C. S., Esq. Malmesbury
Jeston, A. F. W., Esq. Malmesbury
Kenrick, George, Esq. Melksham
King, George, Esq. Melksham
Nunn, George, Esq. Whiteparish
Plimmer, George, Esq. Melksham
Potter, Charles, Esq. Shipton, Marlborough
Taylor, Thomas, Esq. Cricklade
Thurnham, J. M.D., Superin-
tendent of Lunatic Asylum, Devizes
Vicary, George, Esq. Warminster
Vicary, George Thos., Esq. Warminster
c Warwick, John, Esq. Salisbury
Washbourne, Thomas, Esq. Corsham

WORCESTERSHIRE.

Number of Practitioners 123
Number of Members 54
Percentage of Members 44

Badley, J. Esq. Dudley
Barnett, Samuel, Esq. Gt. Widley, Stourport
Brown, Geo. Gwynne, Esq. Stourport
Busigny, C. F., Esq. Ombersley
c Carden, H. D., Esq., Surgeon
to the Infirmary Worcester
Cartwright, Cornelius, Esq. Dudley
Claridge, John, Esq. Pershore
Coates, Mervin, Esq. Great Malvern
Cole, James, Esq. Bewdley
Cooksey, Walter G., Esq. Worcester
Cooper, Thomas B., M.D. Evesham
Darke, James, Esq. Malvern
Davies, Francis, Esq. Pershore
c Everett, David, Esq. Worcester
c Fryer, James, Esq. Bewdley
Gaunt, John Smith, Esq. Alvechurch
Greensill, John N., Esq. Great Witley
Griffiths, Richard, Esq. Worcester
c Hastings, Sir C., M.D.,
D.C.L., Physician to the In-
firmary, VICE-PRESIDENT,
PRESIDENT OF THE COUN-
CIL, TREASURER, AND
FOUNDER OF THE ASSO-
CIATION Worcester
Haynes, John, Esq. Evesham
Hill, Hilary, Esq. Worcester
c Hill, Richard, Esq. Worcester
c Hobbes, Jonathan L., Esq. Belbroughton
c Horton, George, Esq. Bromsgrove
Jeffery, John D., Esq. Worcester
Jenner, Charles W., Esq. Tenbury
Jotham, G. W., Esq., Surgeon
to the Dispensary Kidderminster
Kempson, P. Tertius, Esq. Brierley Hill, Dudley
Lingen, Thomas, Esq. Stourport
Malden, F. C. F., Esq. Worcester
c Malden, Francis, M.D., Physi-
cian to the Infirmary Worcester
Marsden, James, M.D. Malvern
Marsh, H. Brumling, Esq. Upton-on-Severn
Martin, Anthony, Esq. Evesham
c Naah, Jas., M.D., Physician
to the Infirmary Worcester

New, Oswald, Esq. Evesham
Niven, David G., Esq. Pershore
Pemberton, John, Esq. Droitwich
c Pierpoint, Matthew, Esq., Sur-
geon to the Infirmary Worcester
Ricketts, Martin, Esq. Droitwich
Rusher, James G., Esq. Pershore
Sharpe, A., M.D. Halford Bridge, Shipston-on-Stour
c SHEPPARD, J. P., Esq., Surgeon
to the Infirmary, GENERAL
SECRETARY OF THE ASSO-
CIATION Worcester
Smith, Thomas, Esq. Evesham
Stanton, Peter, Esq. Brierley Hill, Stourbr.
Tearne, Theodore S., Esq. Worcester
Thursfield, Thos., Esq., Sur-
geon to the Infirmary Kidderminster
Wadams, Edward, Esq. Great Malvern
c Walsh, J. H., Esq., Surgeon
to the Eye Infirmary Worcester
West, William Corner, Esq. Malvern
White, William Todd, Esq. Kempsey
Williams, John, Esq. Bewdley
c Williams, P. H., M.D., Physi-
cian to the Dispensary Worcester
Wright, Edward W., M.D. Shipston-on-Stour

YORKSHIRE.

Number of Practitioners 781
Number of Members 137
Percentage of Members 17.54

Allanson, James, Esq. Castleton, Gossomont
c Allen, James, Esq., Lecturer
on Midwifery York
Anderson, Francis Byne, Esq. Hessle, Hull
Bearpark, Geo. E., Esq. Leeds
Beaumont, James, Esq. Wetherby
c Belcombe, H. S., M.D., Physi-
cian to the County Hospital, York
c Bell, John Pearson, M.D. Hull
Bell, Robert, M.D. Wyton, Hull
Bennett, W., M.D., Physician
to the Bath Hospital Harrogate
Berry, G., Esq., Surgeon to
the Hospital Harrogate
Bird, George, Esq. Tollerton, Easingwold
Birtwhistle, William, Esq. Skipton
Blythman, Robert O., Esq. Swinton, Rotherham
Booth, John K., M.D. Sheffield
Botham, William, Esq. Yeadon, Leeds
Boulton, R. G., M.D. Beverley
c Braithwaite, W., Esq., Lec-
turer on Midwifery Leeds
c Branson, Ferguson, M.D., Physi-
cian to the Infirmary Sheffield
Bywater, William, Esq. Knottingley, Ferrybridge
Carr, William, Esq. Gomersall, Leeds
Cass, Wm. Edm., Esq. Gouls
Castle, H., M.D. Leeds
Cautley, Henry, Esq. Hedon, Hull
c Chadwick, C., M.D., Physician
to the House of Recovery Leeds
Clark, George, Esq. York
c Cooper, H., M.D., Physician
to the General Infirmary Hull
Craven, H. M., Esq., Jun. Hull
Crosby, John, Esq. Great Ouseburn, York
Daly, O., M.D., Lecturer on
Materia Medica Hull
c De Bartolomé, M. Martin, M.D. Sheffield
Denton, S. B., M.D. Hornsea
c Dodsworth, B., Esq., Surgeon
to the Dispensary York
Dossan, James, Esq. Hull
Dyson, John, Esq. Henley, Huddersfield
c Elam, John Edward, Esq. Bradford
Ellerton, J. E., Esq. Abertford, Pontefract
Ellias, Edwin, Esq. Silkestone, Barnsley
Ellis, H. W. T., Esq. Bawtry
Favell, W., Esq. Sheffield
Foote, C. Newth, Esq. Coningsborough
Foster, Edwin, M.D. Leeds
Gaggs, Thomas, Esq. Howden
c Garlick, J. P., Esq., Lecturer
on Surgery Leeds
Goodworth, W. Henry, Esq. Hatfield, Doncaster
Greenwood, George, Esq. Ossett, Wakefield
Guy, Tom, M.D. Thorne
Haldenby, Walter, Esq. Redness, Goole
Hall, J. C., M.D., Lecturer on
Anatomy Sheffield
Hammerton, John, Esq. Elland
Harley, Robert, Esq. Hull
Haxworth, John, Esq. Sheffield
Healey, Edward, Esq. Hull
Heaton, J. D., M.D., Physician
to the House of Recovery Leeds
c Hemingway, Henry, Esq. Dewsbury
c Hessegrave, Joseph, Esq. Marsden, Huddersfield
c Hix, Richard, Esq., Surgeon
to the County Hospital,
PRESIDENT OF YORKSHIRE
BRANCH York
Hey, Samuel, Esq. Leeds
c Hey, William, Esq., Surgeon
to the Infirmary Leeds

Hindle, James, Esq. Norton, Doncaster
Hornby, Thomas, Esq. Pocklington
c HORNER, F. R., M.D., Physi-
cian to the Infirmary,
VICE-PRESIDENT Hull
c Husband, W. D., Esq., Lec-
turer on Forensic Medicine, York
Hutchinson, R. E., Esq. Masham, Bedale
Hutton, John, M.D. Thirsk
Ikin, J. Ingham, Esq. Leeds
Illingworth, Thos. M., Esq. Ecclefield, Sheffield
Jackson, Henry, Esq., Sur-
geon to the Infirmary Sheffield
c Jackson, Matthew, Esq. Market-Weighton
Jackson, Thomas, M.D. Hull
c Jackson, W., Esq., Lecturer
on Anatomy and Physiology, Sheffield
Jefferson, Richard, Esq. Market-Weighton
Jenkinson, Henry F., Esq. Doncaster
Kennion, George, M.D. Harrogate
c Kenny, M. S., M.D., Consult.
Phys. to the Infirmary Halifax
c King, K., M.D., Demonstra-
tor of Anatomy Hull
Kirk, William, Esq. Hedon, Hull
Kitching, John, Esq. The Retreat, York
Lambert, William, Esq. Sowerby, Thirsk
Langdale, Henry, Esq. Green Hammerton, York
Locking, J. A., Esq. Hull
Lunn, W. J., M.D., Surgeon to
the General Infirmary Hull
c Marsden, W., Esq. Skipton
Marsden, William, Esq. Thornhill, Dewsbury
c MATTERSON, W., jun., Esq.,
Surgeon to the Dispensary,
SECRETARY TO YORKSHIRE
BRANCH York
Mayne, R. G., M.D. Leeds
Medcalf, Henry, Esq. Howden
Metcalfe, John W., Esq. Acomb House, York
Mithorp, John, Esq. Topcliffe, Thirsk
Morey, J. E., Esq. Doncaster
Morley, George, Esq. Leeds
c Ness, J., Esq. Helmsley
Newton, Isaac, Esq. Knaresborough
c Nunneley, T., Esq., Lecturer
on Anatomy Leeds
Paley, R., M.D., Consulting
Physician to the Dispensary, Ripon
Parry, Thomas, Esq. Harrogate
c Price, W., Esq., Demonstrator
of Anatomy Leeds
c Pullan, Richard, Esq. Leeds
Radcliffe, Samuel, Esq. Leeds
Reedal, G., Esq. Sheffield
c Rhodes, George W., Esq. Huddersfield
Richardson, C., Esq. Skirlaugh, Hull
Robinson, B., M.D., Surgeon
to the Dispensary Rotherham
Robinson, John, Esq. Rippenden, Halifax
Russell, W. C., Esq. Bawtry
Ryott, William Hall, M.D. Thirsk
c Sandwith, H., M.D., Physician
to the Infirmary Hull
c Sandwith, Thomas, M.D. Beverley
c Scholfield, E., M.D., Consult-
ing Surgeon to the Dis-
pensary Doncaster
Shaife, Robert Thos., Esq. Easingwold
Shaw, John G., Esq. Attercliffe, Sheffield
c Simpson, T., M.D., Physician
to the County Hospital, York
Smart, John C., M.D. Scarborough
Smith, G. P., M.D., Lecturer
on Medical Jurisprudence, Leeds
Smith, J. Gregory, Esq. Harwood
c Smith, Samuel, Esq., Surgeon
to the Infirmary Leeds
Sykes, John, M.D., Physician
to the Dispensary Doncaster
Teale, Joseph, Esq. Leeds
c Teale, T. P., Esq., Surgeon to
the General Infirmary Leeds
Teasdale, William, Esq. Easingwold
Thom, Alexander, Esq. Dobcross, Saddleworth
Tronsdale, W. M., Esq. West Butterwick, Bawtry
Tucker, Frederick H., Esq. Halifax
Tutin, Septimus, Esq., Sur-
geon to the Dispensary Ripon
Twining, Edward, Esq. Hull
c Wallis, E., Esq., Lecturer on
Anatomy Hull
Ward, John, Esq. Penistone
Watnough, J., M.D. Pocklington
Watson, Samuel, Esq. Cottingham, Hull
Weddell, T., Esq., Surgeon to
the Sea Bathing Infirmary, Scarborough
c Whytehead, Henry Y., M.D. Crayke, York
Wightman, J., Esq. Cawood, Selby
Wilkinson, Henry, Esq. Rotherham
c Williams, C., Esq., Lecturer on
Materia Medica York
Williams, H. L., M.D., Physi-
cian to the Dispensary Beverley
c Williams, J., M.D., Physician
to the Dispensary Beverley
Wilson, Wm. Murray, Esq. Horsforth, Leeds
Wiseman, W. W., Esq. Ossett, Wakefield

WALES.

NUMBER OF PRACTITIONERS	315
NUMBER OF MEMBERS	{ OLD 91 }
PERCENTAGE OF MEMBERS	{ NEW 22 }
	35.9

ANGLESEY.

Number of Practitioners	17
Number of Members	6
Percentage of Members	35.3

*aDuncan, Henry A., Esq., late of Holyhead: new address not received
 nEvans, William, Esq. Llanerchymedd
 cJones, D. Kent, Esq., Sec.
 TO NORTH WALES BRANCH. Llangefni
 cLloyd, John, Esq. Llangefni
 Redding, Francis H., Esq. Cromlech
 Walthew, William, Esq. Holyhead

BRECKNOCKSHIRE.

Number of Practitioners	20
Number of Members	4
Percentage of Members	20

Davies, S., Esq. Glasbury
 cLyde, J. W. P., Esq. Hay
 North, John, Esq., Surgeon
 to the Infirmary .. Brecon
 Reese, Edward, Esq. Hay

CARMARTHENSHIRE.

Number of Practitioners	37
Number of Members	13
Percentage of Members	35

nCook, John K., Esq. Llanelli
 nDavies, David A., Esq. Llanelli
 Hamilton, Henry, Esq. Laugharne, St. Clears
 nHowell, T. L., Esq. Llanelli
 nHowell, T. S., Esq. Ferry Side
 Jones, J., Esq. Amman Iron Works, Llandilo
 nJones, T. M., Esq. Loughor
 Lawrence, H., M.D., Physi-
 cian to the Infirmary Carmarthen
 Protheroe, D. M.D. Llandilo
 Rowlands, J., Esq., Surgeon
 to the Infirmary Carmarthen
 nThomas, B., Esq. Llanelli
 Thomas, J., Esq. Carmarthen
 Williams, J. L., Esq. Carmarthen

CARNARVONSHIRE.

Number of Practitioners	24
Number of Members	9
Percentage of Members	37.5

Edwards, James, M.D. Benarth, Conway
 Hughes, David, Esq. Bangor
 Jones, Robert, Esq. Carnarvon
 Jones, Robert, Esq. Conway
 Roberts, Hamilton A., Esq. Brynmeurig, Bangor
 cRoberts, J., M.D., Physician
 to the Infirmary Bangor
 Salusbury, John, Esq. Conway
 Williams, Henry, Esq. Llansaintfraild, Conway
 nWilliams, T. Wynne, M.D. Carnarvon

DENBIGHSHIRE.

Number of Practitioners	36
Number of Members	14
Percentage of Members	39

cCumming, George, M.D. Denbigh
 Dobie, William M., M.D. Gresford

cGriffith, T. T., Esq., Surgeon
 to the Infirmary Wrexham
 nHughes, —, sen., Esq. Llanrwst
 Jones, G. T., Esq., Superin-
 tendent of the North Wales
 Lunatic Asylum .. Denbigh
 Morris, Thomas, Esq. Gresford
 Owen, Thomas, Esq. Abergelo
 Pierce, Evan, Esq. Denbigh
 Prytherch, Thomas, Esq. Ruthin
 Roberts, P. N., Esq. Denbigh
 Turnour, A. E., M.D., Surgeon
 to the Infirmary Denbigh
 cWilliams, Edward, M.D.,
 SEC. TO NORTH WALES
 BRANCH .. Wrexham
 nWilliams, Henry, Esq. Llanrwst
 cWilliams, R. L., M.D., Con-
 sulting Physician to the
 Infirmary .. Denbigh

FLINTSHIRE.

Number of Practitioners	17
Number of Members	12
Percentage of Members	70.6

cHughes, Edward T., M.D. Mold
 Hughes, John, M.D. Rhyl
 cJones, William P., Esq. Holywell
 Lodge, Llewellyn, Esq. Rhyl
 nMoffat, Thomas, M.D. Hawarden
 Parry, Henry Ap A., Esq. Llanasa
 Price, Jones, Esq. Rhyl
 cRoberts, Owen, M.D. St. Asaph
 Theed, Frederick, Esq. Rhyl
 Vickers, Thomas, Esq. Holywell
 cWilliams, P., Esq., Surgeon
 to the Infirmary, PRÉS. OF
 NORTH WALES BRANCH .. Holywell
 Williams, William, M.D. Mold

GLAMORGANSHIRE.

Number of Practitioners	74
Number of Members	41
Percentage of Members	55.4

cBird, George Gwynne, M.D.,
 Physician to the Infirmary.
 PRESIDENT .. Swansea
 Burch, Samuel K., Esq. Cyfarthfa
 Cook, J., Esq. Morriston, Swansea
 Davies, Edward, Esq. Merthyr Tydvil
 Dyke, T. J., Esq. Merthyr Tydvil
 Edwards, W. T., M.D., Sur-
 geon to the Infirmary Cardiff
 Essery, T. A., Esq., Surgeon
 to the Infirmary .. Swansea
 Evans, E., Esq., Surgeon to
 the Infirmary Cardiff
 Evans, F. G., Esq. Glyn Neath
 nEvans, Thomas, Esq. Cardiff
 Evans, W. P., Esq. Swansea
 French, James, Esq. Neath
 Hall, J. G., Esq. Swansea
 cHowell, E., M.D., Physician
 to the Infirmary .. Swansea
 nJenkins, J., Esq. Tygwyn, Clydach
 Jones, W. G., Esq. Neath
 Leigh, John, Esq. Llanfabon, Cardiff

Lewis, James, Esq. Cardiff
 Lewis, James, M.D. Maesteg, Bridgend
 Llewellyn, J., Esq. Caerphilly
 nLlewellyn, John, Esq. Cowbridge
 Long, W. Harris, Esq., Surgeon
 to the Infirmary .. Swansea
 MICHAEL, W. H., Esq., SEC.
 SOUTH WALES BRANCH .. Swansea
 nNicol, David, M.D. Swansea
 Payne, H. J., Esq. Cardiff
 Price, William, Esq. Glan Twrch, Swansea
 Prichard, William, Esq. Bridgend
 Prichard, H. L., Esq. Tir Caradoc, Taibach
 Probert, James, Esq. Merthyr Tydvil
 Roberts, J. L., Esq. Aberdare, Merthyr
 Rogers, J., Esq. Ystalyfera, Swansea
 cRowland, W., Esq., Consulting
 Surgeon to the Infirmary, Swansea
 Russell, F. M., Esq. Taibach
 Russell, John, Esq. Merthyr Tydvil
 Sylvester, Charles, Esq. Cowbridge
 Vachell, C., M.D., Physician
 to the Infirmary .. Cardiff
 Wharton, Henry S., Esq. Merthyr Tydvil
 White, J. L., Esq. Dowlais
 nWhitty, J. M.D. Briton Ferry
 nWilliams, O. G., Esq. Swansea
 Williams, Thomas, M.D. Swansea

MERIONETHSHIRE.

Number of Practitioners	14
Number of Members	6
Percentage of Members	43

Edwards, Edward, Esq. Maentwrog
 nGriffith, Griffith, Esq. Taltrenddyn, Barmouth.
 Owen, J. Ap Rhdydderch, Esq. Barmouth
 nOwen, William, Esq. Machynlleth
 Pugh, John, Esq. Aberdovey
 cRichards, Owen, Esq. Bala

MONTGOMERYSHIRE.

Number of Practitioners	24
Number of Members	4
Percentage of Members	16.6

nBarrett, T. B., Esq. Welshpool
 nJones, John, Esq. Llanfaircaereinion
 Mills, Francis, Esq. Welshpool
 Wilding, J. P., Esq. Montgomery

PEMBROKESHIRE.

Number of Practitioners	29
Number of Members	3
Percentage of Members	10.3

Brown, J. D., Esq. Haverfordwest
 cJones, T. C., Esq., Surgeon
 to the Dockyard .. Pembroke
 Lewis, R., Esq. Narbeth

RADNORSHIRE.

Number of Practitioners	8
Number of Members	1
Percentage of Members	12.5

Tearne, E. M., Esq. Presteigne

CHANNEL ISLANDS.

NUMBER OF PRACTITIONERS	42
NUMBER OF MEMBERS	4
PERCENTAGE OF MEMBERS	9.5

nBaines, James, Esq. Guernsey

| nCorbin, M. A. B., Esq. Guernsey
 | nDe Lisle, De Beauvoir, M.D., Guernsey

| nHoakins, S. E., M.D., F.R.S. Guernsey

ISLE OF MAN.

NUMBER OF PRACTITIONERS	20
NUMBER OF MEMBERS	3
PERCENTAGE OF MEMBERS	15

Bennett, Edward, M.D. Castletown

| nCraine, Robert E., Esq. Ramsay

| Oswald, Henry R., Esq. Douglas

SCOTLAND.

NUMBER OF PRACTITIONERS	1628
NUMBER OF MEMBERS	{ OLD 3 } 47
PERCENTAGE OF MEMBERS	{ NEW 44 } 2.77

ABERDEENSHIRE.
 nKilgour, Alexander, M.D. Aberdeen

AYRSHIRE.
 nCaakie, James, Esq. Largs
 nHathorn, Fergus, M.D. Maybole

BANFFSHIRE.
 nManson, A. J., Esq. Inverkeithney
 nTurner, Robert, M.D. Keith

DUMFRIESSHIRE.
 nBarker, W. T., M.D., Physi-
 cian to the Hospital Dumfries
 nBrowne, W. A. F., Resident
 Physician to the Crichton
 Lunatic Institution Dumfries
 nChalmers, Andrew C., M.D. Thornhill

EDINBURGHSHIRE.
 nAlison, W. P., M.D., Professor
 of Medicine in the Univ. Edinburgh
 nBalfour, J. H., M.D., F.R.S.E.,
 Professor of Botany in the
 University Edinburgh
 nBegbie, James, M.D., Physi-
 cian to the Queen for Scotland. Edinburgh
 nBrown, William, Esq. Edinburgh
 nChristison, R. M., M.D., Profes-
 sor of Materia Medica in
 the University Edinburgh
 nCoxe, James, M.D. Edinburgh
 nDuncan, James, M.D. Edinburgh
 nDuncan, J. Matthews, M.D. Edinburgh
 nFairbairn, Peter, M.D. Edinburgh

nGairdner, W. T., M.D., Physi-
 cian to Royal Infirmary. Edinburgh
 nGoodsir, J., Esq., Professor
 of Anat. in the University. Edinburgh
 nMacLagan, A. Douglas, M.D. Edinburgh
 nMalcolm, R. Bowes, M.D. Edinburgh
 nMiller, J., Esq., Professor of
 Surgery in the University. Edinburgh
 nOmond, Robert, M.D. Edinburgh
 nPagan, S. Alexander, M.D. Edinburgh
 nScott, John, M.D., Physician
 to the Queen for Scotland
 Edinburgh [Died May 8]
 Simpson, J. Y., M.D., Profes-
 sor of Midwifery in the
 University Edinburgh
 nSyme, J., Esq., Professor of
 Clinical Surgery in the
 University Edinburgh [Resigned April 22]

FIFE.
 nAdamson, John, M.D. St. Andrew's
 Day, G. E., M.D., Professor of
 Anatomy and Medicine. St. Andrew's
 nLyell, John, M.D. Newburgh
 nNicol, James, M.D. Aberdour

FORFARSHIRE.
 nBell, Robert, M.D. Dundee
 nMurray, David, M.D. Carnoustie

LANARKSHIRE.
 nAnderson, Andrew, M.D., Pro-
 fessor of Medicine in An-
 derson's University Glasgow

nBell, J., M.D., Professor of
 Botany in Anderson's Uni-
 versity Glasgow
 nKing, Alexander, M.D. Glasgow
 nLawrie, J. A., M.D., Professor
 of Surgery in the University. Glasgow
 nMacgregor, R., M.D., Physi-
 cian to Royal Infirmary. Glasgow
 nWatson, Eben, M.D., Profes-
 sor of Institutes of Medi-
 cine in Anderson's Univ. Glasgow
 nWilson, James, M.D. Glasgow

MORAYSHIRE.
 nInnes, John G., Esq. Forres

NAIRN.
 nGrigor, John, M.D. Nairn

PERTHSHIRE.
 nGairdner, Matthew B., M.D. Crieff

RENFREWSHIRE.
 nDavidson, W., M.D. Greenock

ROXBURGHSHIRE.
 nBrown, Wm. Nimmo, M.D. Melrose

STIRLINGSHIRE.
 nLogan, William, Esq. Milngavie
 nMacfarlane, David, M.D. Drymen

IRELAND.

NUMBER OF PRACTITIONERS	2100
NUMBER OF MEMBERS	{ OLD 0 } 4
PERCENTAGE OF MEMBERS	{ NEW 4 } 0.19

nGrier, Alex., M.D. H.M. 92 Highlanders, Galway

nLeslie, James, Esq. Armagh
 nShiel, R. G., M.D. Killeleagh, Co. Down

nWilde, W. R., Esq. Dublin

FOREIGN COUNTRIES.

Fletcher, John Wm., Esq. Calcutta
 nImlach, C., M.D. Bombay
 Jackson, Edward, M.D. Italy

Lund, George, M.D. Madeira
 Ross, Archibald C., M.D. Madeira
 Lynch, M. H., M.D. St. Brieux, Bretagne, France

nMacpherson, E. M., Esq. Port Louis, Mauritius
 nNicholson, T., M.D. Antigua, West Indies

THE PREVALENT TREATMENT OF DISEASE.

It must have been obvious to the most superficial observer of the course of diseases in this country, that in the case of many of them, either their type or their treatment have undergone so great modifications, as entirely to change their aspect, their progress, and their termination. Without being enunciated in learned tomes, gradually impressing itself on the professional mind, the axiom has attained universal credence, and has been most generally acted upon, that acute inflammatory attacks of disease are becoming more and more rare; that in place of acute peritonitis, we have neuralgia and spasmodic abdominal affections; while congestive and subacute chest affections have almost entirely superseded acute pneumonia and pleuritis. The lancet has been replaced by ammonia, and leeches by agents tending rather to derive blood from internal organs, and direct the circulation to the external portions of the body, than to abstract it from the general system.

To our mind, it speaks well for the professional intellect of this country, that while few great and learned authorities have laid down general laws subversive of ancient faith on these points in medical practice, still everywhere we find a just appreciation of their bearing and import; and,

instead of the disease, we find the patient to be the chief object of the medical attendant's care and solicitude. We have with the greatest pleasure noticed abroad in the medical world, a desire to form just conclusions, not so much from the experience and writings of our forefathers in physic, as from the living daily knowledge acquired by each practitioner of the healing art at the bedside of his patient. Bleeding, leeching, and blistering, are not adopted because it is so written in our worthy "Thomas's Practice of Physic"; but arguing logically on the facts within his knowledge, the practitioner draws just conclusions from the state of increased action, of depression, or of congestive action, and directs his remedies accordingly. Holding these views ourselves, we cannot but hail with pleasure the appearance of any work,*—however little it may add to our previous knowledge, and however much it may be but a record of already well recognised facts—which develops these changes in the character of disease, and lays down laws for treatment in accordance with the varieties of etiology and semeiotics everywhere observable.

It is only matter of regret to us that leading professors should be so ignorant of the state of medical practice in the provinces, as to write as if the times still continue when in surgeries twenty persons were collected for

* The Prevalent Treatment of Disease. By F. G. ...

phlebotomy on a Sunday morning, it being considered an absolute necessity to be bled in the "spring and fall." Bleeding is now rarely practised; and when we take into account the more robust health and less impaired condition of the persons who fall under the country surgeon's care, we may venture to say, even with less comparative frequency than in the hospital practice of Professor Skey himself. Active purgatives, as a means of lessening febrile action, are of course resorted to upon proper occasions; but it is almost alone in the cases where a man becomes his own physician that the inordinate use of those measures so deprecated by the professor is to be found.

We cannot but wish that in all medical writings there should be the most careful exclusion of aught tending in the eyes of the public to convey the impression that the majority of the profession were not *au courant* with the state of medical knowledge; and most jealously should every author endeavour to avoid, by inference or assertion, directing attention to himself as the "*fons et origo*", and the only repository of sound practice.

We believe that hospital surgeons, and physicians in great towns, are not the men to whom we must look for the exposition of country practice, the diseases there most prevailing, or the forms those diseases assume. True it is that there are no schools so capable as the metropolitan hospitals of teaching by practical demonstration how a limb should be removed; but for true clinical surgery, where the lessons to be learnt are entirely conservative, we have long inclined to the opinion that it is in the practice of the country surgeon, the attendant on extensive works or manufactories, that the art, if not the science, the practice, if not the principles of surgery are to be learnt by the student. Is it at the heels of professors, and over the heads of surrounding fellow students getting a glimpse of fractures enveloped in the thousand and one appliances which a large hospital affords, that the treatment of surgical diseases can be learned? No. It is in the lonely cottage far from home, with no complicated splints, leg rests, or fracture beds, that the future surgeon must learn his profession, and be called on to treat those serious accidents which the records of London Hospitals point to as almost inevitably causing loss of life or limb.

How little prepared would be the new member of the college, who had learned clinical surgery only at the London or Edinburgh Hospitals, without ever having had the opportunity of trusting to his own resources, or seeing thoroughly the progress of a case of compound fracture, to take upon himself the charge of the every day practice of the country surgeon, who must learn to act promptly and for himself in all emergencies. Rather should our sons have a few months' drilling in the true schools for clinical surgery, which iron and copper works, and large manufactories, railways, and docks afford, than the elaborate disquisitions, (misnamed clinical,) which may fill the mind with learned names, but do little to cultivate the hand, or confer practical information, ready for immediate use in those minutiae that make up the sum of successful surgical practice, where such practice emulates the patient and conservative, rather than the brilliant but destructive; which seeks rather to preserve a shattered limb by perhaps months of attention and watching, than at once by its removal to cut the gordian knot of difficulty. What dare not be attempted in a metropolitan hospital, may with impunity be left to nature's *vis medicatrix* in the poor man's healthful hill-side cottage.

We advisedly affirm that except where the accident is so severe as to cause fatal collapse, deaths from compound fracture are in the country the exception to a general rule; and that Mr. Skey, in condemning in so wholesale a manner the treatment by active bleedings and purgatives, fights with a shadow, and rebuts, with evidence and argument, practices which scarcely exist, and to which there is sufficient answer in the great success which attends the practitioner in the treatment of these severe injuries.

We have often had occasion to regret that country surgeons who might add from their note books so many records of successful cases, illustrative of the curative powers of nature, should from a false fear of ostentatious display, add so little to the medical literature of the day. They are thus equally unjust to themselves as individuals, to the Association, of which they form a part, and to the true and rightful interests of medical science, which can never assume its place, until it has accumulated from such sources stores of information upon many points on which we are still far from certain proof.

As illustrative of the country surgeon's duties, we are reminded of a case where on the first night of this year, a colleague was summoned at midnight to see a woman who had just fallen down stairs. She had no one in the house but her paralytic husband, who was unable to leave his chair by the fireside. Streaming with blood from a compound fracture of the tibia and fibula, these bones protruding many inches from the wound, she succeeded in making herself heard by a neighbour, who ran to procure medical help. Without any assistance, and with no appliances but an apron from which to form bandages, and three or four laths accidentally in the house, and an old pillow, in which to envelope the limb, our friend did what was necessary; and had the pleasure of finding, in a few weeks, the limb entirely restored, without the occurrence of a bad symptom.

Further to exemplify the falsity of the position which the exclusive experience of hospital practice would engender, we can recal many of those accidents of daily occurrence, which the pupil of the country hard-working general practitioner learns to treat for himself, and to treat successfully. On a railway, where 500 or 600 men were employed, we can refer to one accident in which four men were precipitated, (by the breaking of the chain from the skiff in which they were contained,) forty feet down the shaft of a tunnel in course of construction. One of these unfortunates immediately died. Another sustained a fracture (simple) of the thigh, was insensible for some time from wounds of the scalp, and other bruises and injuries, but in five weeks recovered so well as to get drunk, the first day he went out, and again fracture his thigh, which, in another six weeks, was as sound as ever, and as capable of supporting him in his daily work. As though this man were fated to accidents, he subsequently sustained a compound fracture of the leg, which confined him to bed for nine or ten weeks; but, with all these knockings about, he now walks as though his legs had always escaped unscathed from the injuries to which labourers in extensive works are daily liable, and for which the very rudest appliances are of necessity all that are procurable: for it often occurs that the surgeon, in the dead of night, is called on to treat, in coal districts, at the very pit's mouth, the most extensive injuries, with no other apparatus than the cottage of the sufferer affords. The third of these men fractured both legs, had concussion of the brain, and was for many months insane, but became

ultimately so well, that his friends insisted he could not have sustained the injuries.. The fourth fractured the right thigh, dislocated the left ankle, and broke off the outer malleolus, besides sustaining a fracture of four ribs on the left side. These recoveries required much care and time; but they are evidences of the extent to which, in the country, the curative powers of nature in the repair of injury extend, when aided by a scientific use of remedial means.

These cases illustrate the character of every day practice, where fractures, compound and simple, are as plentiful as blackberries; and other surgical misfortunes are equally prevalent. On the line of rail on which they occurred, except those fearful cases where waggons of earth passed over the bodies of the unhappy sufferers, tearing, bruising, and beating the bones to a pulp—only one fatal case occurred during the three years of its construction; and this one, although some days under treatment, was a hopeless one, the pelvis being crushed between two large loaded waggons, and the internal soft parts irretrievably injured.

Erysipelas from injuries in most country places is unknown, and the common occurrences of the surgery, and its merest routine, consist of cases of a character which in a London hospital would endanger life. In the country, such accidents as the tearing of the testicle from its coverings, division of the entire scalp, wounds severing great portions of the soft textures of the face, artificial hair lips, etc., in a list too numerous to mention, hardly occasion to the sufferer the loss of two or three days' work, and fall under the treatment of the pupil or assistant.

We are led to these remarks, not from any wish to make comparisons, to depreciate or deprecate the blessings which flow from the metropolitan and provincial hospitals, but to show that, almost as a matter of course, in the healthy and free air of the country, where there exists no aggregation of the sick, and no concentration of morbid influences, the success attendant on operations, and the favourable results in the way of recovery without loss of members, must be great; and that it is only from the greatest misapprehension that it can be stated that the general practitioner of the present day adopts the bleeding and warm water principles of Dr. Sangrado.

But we must not forget to allude, while upon this subject, to the admirable papers by Mr. Broke Galwey, in the late *Medical Gazette*, on Unhealthy Inflammation; wherein the phases of attack, progress, and treatment of erysipelas, are written of in the manner of the true inductive philosopher,—papers that cannot be too highly commended, and which clearly enunciate all that Professor Skey points out as novel methods of his own in the treatment of disease, and which he untruly considers as opposed to the general practice.

The Lumleian Lectures of Dr. Todd are equally valuable in pointing out the distinction existing in the so-called delirium ferox, and the delirium occurring in the course of those diseases specially marked by blood poisoning. These lessons have not been taught to inattentive ears, for we believe the treatment of fever and diseases of an allied class, is conducted on a more rational and scientific basis at the present than at any former period.

The article by Dr. Risdon Bennett on Pneumonia, in the *ASSOCIATION JOURNAL* of 14th January (p. 29) also recognises in a most instructive manner all that Professor Skey would adduce, as so differing from the ordinary treatment of disease. And if our space would permit, we might

multiply instances and names until we ran the risk of tiring our readers, to prove that what is given as new (although not extensively written on), is generally practised.

We cannot, in this time of cholera specifics, quack nostrums, and catchpenny pamphlets, avoid raising our voice against anything, from whatever quarter, which tends either to disparage our brethren as a body, or as individuals engaged in the practice of medicine. And we would equally oppose the too great advocacy of the stimulating or depressing systems of medicine as applicable to all classes of disease, because we believe that such one-sided teaching has the same evil tendencies as the vulgar puffs of Holloway's ointment or Morrison's pills.

FIRST MEETING OF THE EAST SURREY CHOLERA SOCIETY.

THE meeting for the organisation of this new Society was held at Richmond, on Tuesday the 18th, and is reported in this day's number. The resolutions passed at the meeting must be sought for in the report itself; we need not say that they have our full support. The remarks of Mr. Grainger and Dr. Snow, on the importance of local societies for the observation of epidemic diseases, are, however, very important, and deserve especial notice, as they are well worthy the attention of most of our brethren who practise in rural districts. "The united efforts", says Dr. Snow, "of medical men residing in a district not so densely populated as a large town, nor yet so widely extended as to prevent their meeting together occasionally in a society, may be reasonably expected to furnish a more important contribution to the history of the disease than any which has yet appeared"; and Mr. Grainger, whose knowledge concerning the general principles that should be pursued in observing cholera is second to none, entertains and expressed an opinion precisely similar. It is not by hasty visits to a host of cases by single individuals, and by having those cases reported by individuals independently, that accurate facts concerning cholera can be secured; but it is by obtaining from many practitioners short and correct notes, *taken at the time of observation, and not from memory days afterwards*, of a few cases, and by arranging the whole mass of information thus collected by a society of which all the contributors are members.

A pleasing feature of the meeting to which we refer was the catholic feeling shown by all present. Every member of the Epidemiological Society whose opinions were given on the occasion, seemed as though he were vying with his fellow in affording encouragement to the new society, and in exciting its members to cooperate with the fellows of the Epidemiological Society in their labours.

We cannot conclude without observing that the meetings of the new society are to be confined to no central spot within its boundaries, but are to be held in turn at the principal towns in the district. The next meeting is to be at Wandsworth; and doubtless Rotherhithe, Croydon, Lambeth, etc., will be visited. This system will afford every member an opportunity of attending some of the meetings, and will tend to strengthen the mutual good feeling which was so fully evidenced at Richmond.

ORIGINAL COMMUNICATIONS.

ATMOSPHERIC PHENOMENA IN RELATION
TO THE PREVALENCE OF ASIATIC
CHOLERA.

By J. A. HINGESTON, Esq., Surgeon.

THE Asiatic cholera seems to be associated with a particular state of air, in which it finds its nest for being engendered, fostered, and diffused. This state of the atmosphere is indicated by an overcast sky, a high barometer, a torpid mist, and, for the most part, though not invariably, a high temperature. The mercury in the barometer rises up to thirty inches, although, at the same time, the sky, instead of being Fair, as the instrument denotes, is, on the contrary, shrouded with a veil of clouds—cirro-strati, strati, or indolent cirro-cumuli, of a dull opaque colour. The wind subsides, a calm prevails, and a moisture bedews everything, both in-doors and out. This state of the atmosphere is so unmistakeable, that, when the disease has once broken out, we may be sure of hearing of its increase during the continuance of this sort of weather, and of its diminution the moment a change takes place, and the wind rises, and the barometer sinks, and the mist is dispersed. But the overcast sky and a high temperature are not so requisite to the propagation of the disease as the high barometer, the calm, and the mist. This disagreeable mist is most remarkable: it lies low, rolls off the higher places, descends into the vales and hollows, and settles in corners secluded from thoroughfare and draughts of air. Hence it has been inferred that cholera originates from sinks, sewers, etc.; but, as these offensive recesses are generally set apart by themselves in some enclosed spot, they only afford an undisturbed lodgment for the reception of the poisonous element already afloat in the air, where its malignity becomes condensed and concentrated. Accordingly, in tracing the history of the cholera, we find that it has prevailed chiefly in low, damp, confined localities; that it has appeared at all seasons of the year—midsummer, autumn, and spring, and even in the depth of winter, when the ground has been covered with snow; but that its intensity has been the greatest in the fall of the year, when the weather is moist, or in the middle of the year, when the summer has been wet. It was reported at St. Petersburg, and, I think, at Moscow, during a hard winter; in this country, it broke out in the winter and spring in 1832; in 1849, it prevailed during the summer and the beginning of the autumn; and

this time, 1853, it was first reported in the month of September.

As far back as 1832, Dr. Prout remarked the anomalous elevation of the barometer in connexion with the presence of Asiatic cholera; and at that time, *i. e.*, more than twenty years ago, he attempted to account for it upon the hypothesis of the air being surcharged with a poisonous element of a ponderous nature. There was, he says (*Stomach and Urinary Diseases*, 3rd edition, 1841, p. 22), a positive increase in the weight of the atmospheric air, similar to what might be supposed to be produced by the diffusion of a very heavy gaseous principle through the lower regions of the atmosphere. His conclusion was, that the cause of the phenomenon in question, as well as of the cholera, was a poisonous body analogous to malaria, whose high specific gravity and feeble diffusive powers kept it near the earth's surface, along which it insensibly crept, particularly in low and damp situations. On the 9th of February, 1832, the positive weight of the air suddenly appeared to rise above the usual standard. The apparatus employed was supposed to be out of order, but no error was detected; and the air continued to retain its augmented weight, with more or less obstinacy, for the space of six weeks longer. Now, on that particular day, when the barometer rose so suddenly, and, as it seemed, without a sufficient cause to explain its rise,—on that particular day, the 9th of February, 1832, the first cases of epidemic cholera were reported in England. The wind, which had been previously westerly, veered round to the east, and remained pretty steadily in that quarter till the end of the month. In the summer of that same year, when cholera raged so severely for the first time in Great Britain, the barometer was high, the sky overcast, and the quantity of rain small. A calm prevailed. And, again, in the fatal summer of 1849, I find, in my diary of the weather, that there had been upwards of sixty misty days between the 1st of January and the 31st of August, *i. e.*, one-fourth of the whole period; and that when the mortality was the highest, the weather was dull, thick, and close; the wind from the N.W., with dark masses of clouds, which went out to sea, like the smoke of a large furnace. The elevated position on which I dwell, and my frequent strolls in the surrounding country, gave me ample opportunities of making these remarks with accuracy.

Subjoined is a diagram of the weather during the week that cholera was the worst at Newcastle this year; and what has already been said seems to be borne out, if not demonstrated, by this statistic report.

From August 31st to September 16th, there were 295 fatal cases.

1853.	Wind.	Clouds.	Moisture.	Clear.	Storm, gale, calm.	Temp.	Therm.	Ordinary mortality.	Barometer.	Fatal cases.
September 16..	N.E.S.W.N.	Bright scud.	Moist.	Hazy; clear.	Breeze.	Chilly.	65+57		20. Fair. (below, but rising.)	101
September 17.. (Full moon, 10 A.M.)	W.N.E.	Ditto.	Ditto.	Ditto.	Calm.	Summer-like, but chilly at night.	72+61		20 (rising).	101
September 18.	N.W.S.W.N.	Ditto.	Ditto; drying.	Ditto.	Ditto.	Ditto.	70+57	200 (below average).	30 (above Fair rising.)	93
September 19..	E.N.W.S.W.N.	Ditto; overcast night.	Ditto.	Ditto.	Ditto.	Ditto.	71+57		30½ (above).	94
September 20..	N.W.S.W.N.	Overcast; grey cirro-strati; overcast night.	Ditto.	Thick; dull.	Ditto.	Ditto.	65+56		30 (falling).	109
September 21..	W.N.E.S.W.	Ditto.	Ditto; dew at night.	Ditto.	Breeze; light air.	Chilly.	67—54		20 (falling).	80
September 22..	N.W.S.	Broken scud.	Ditto.	Gloomy; light.	½ gale s.w.	Ditto.	68+55		20½ (below).	59

The reports of the fatal cases, subjoined at the end of this paper, are from the *Times*. The account of atmospheric changes is from my private diary. It has been collated with those of

the daily papers, and the variations are not great. The same weather seems to have prevailed throughout the country. In reporting the thermometer and barometer, the round

numbers alone are stated. The mark + means *above* the average; the mark — *below*.

It has been said, that the velocity of the air is diminished one-half below its usual ratio; there is an upper, but no lower current of air; and the electricity of the air is negative, during the presence of cholera. I have no personal knowledge of the truth of these facts, but report them only as I have read them.

In this diagram, it appears that the cholera was the worst when the barometer was the highest and the atmosphere the calmest. There was on this occasion, as on the former ones, a certain grey mist, which painters express by the word *scumbling*. As the barometer fell, and the wind rose, and the lazy scud broke away into clouds (*cirro-cumuli*), the mortality fell at the same time from 109 to 80 and 59 respectively, in the course of a couple of days. But, what is most singular, is the fact that, on the present, as on the previous accessions of the disease, the mortality from ordinary causes has been diminished; and, according to the Registrar-General's Report, it has been diminished on this particular occasion two-tenths below the average, *i. e.*, 209 in the 1,000, according to the corrected average. Although it is remarkable that the atmosphere is, during the prevalence of cholera, at once both calm and overcast, and the roads dry if not dusty, yet there is a sticky moisture pervading everything. Housekeepers inform us that articles of diet become more quickly mouldy than usual. The appearance of the air is that of a marshy district, such as I have often witnessed on the low lands of Suffolk and Essex, and the neighbourhood of the Marsh Gate, Lambeth. But this miasmatic atmosphere, instead of being peculiar to those quarters where ague resides, seems to spread universally over the whole land assailed by cholera. The affinity of the phenomena subsisting between cholera and ague is, to say the least of them, very striking. Diarrhoea is the distinctive precursor or concomitant of each; and the collapse, so fatal in cholera, together with the rice-water evacuations, most likely of a poisonous quality, are exaggerated features of its congener, marsh fever. Again, both these diseases haunt damp localities, and exhibit themselves most virulently in the foulest corners; while each has the same tendency to degenerate into low typhus, hectic, and death, or a tedious recovery. This is more than similarity—it is a coincident eventuality; but repeated coincidence implies a law of connexion, perhaps identity.

One pathological remark of some importance ought not to be omitted. We are all of us aware that, during the blue stage of cholera, the urine is either suspended or suppressed. But, during a choleraic period, there is also reigning an epidemic diathesis adverse to the healthy action of the kidneys. It is of the low kind, such as is termed *asthenic*: in plain words, it is a weakness of the kidneys. "The first circumstance that attracted my notice," says Dr. Prout, *op. cit.*, "after the prevalence of Asiatic cholera, was the disappearance of these (the common lateritious) sediments from the urine. The absence of these sediments was at first considered to be accidental; but when, day after day, the same occurrence took place, I was induced to inquire attentively into the circumstance, with the view, if possible, of ascertaining the reason. On closer inspection, it was found that the urine of every individual examined, whether in apparent health or otherwise, not only presented the same absence of sediment, but also assumed that peculiar appearance, which I had been accustomed to consider as characteristic of the presence of oxalic acid. I likewise noticed," he continues, "an unusually acid state of the saliva, and of the cutaneous exhalations, such as I had never, indeed, before noticed, except in the last stages of chronic diseases, or in malarious affections."

Nothing can be more correct than these remarks. I should like to learn whether the experience of others, who have paid attention to renal disorders, agrees with mine on the present occasion; which is, that the present renal diathesis is more phosphatic than oxalic? What Dr. Prout says in respect of the condition of the urine being that of

malarious affections, is very just. In agueish districts, the urine of most persons is disposed to be pale, copious, and of a low specific gravity; and the absence of the lateritious sediments is so well known, that their reappearance is hailed as a good sign, and looked upon as a criterion of the ague fits having come to their end. This again is another striking analogy subsisting between ague and cholera.

"THE CHOLERA. (FROM THE BOARD OF HEALTH.)

NEWCASTLE, Sept. 22.

Deaths.	{ Cholera	-	-	-	-	59
	{ Diarrhoea	-	-	-	-	1

"Thus, the total number of deaths from cholera and diarrhoea in Newcastle during the present outbreak has been 995.

"In the same period (*viz.* the first twenty-two days) during the prevalence of epidemic cholera there in 1831-2, the number of deaths was 161.

"NEWCASTLE, Friday Morning.

"The weather is still most favourable, and our people are becoming more reassured. The deaths yesterday were *sixty*. In Gateshead only eight. Our local papers this morning give a fearful middle-class obituary. The *Chronicle* has above three-fourths of a column of deaths in Newcastle, nearly all middle-class people. We have had the cholera among us three weeks and one day, and the deaths have been, in Newcastle and the Gateshead Union, the appalling number of 1,318. The following are the statistics of the progress of the disease in Newcastle, made up from the registrar's returns:—

			Cholera.	Diarrhoea.	Total
" August 31 to Sept. 15	-	-	295	20	315
September 16	-	-	101	4	105
" 17	-	-	101	9	110
" 18	-	-	93	7	100
" 19	-	-	94	6	100
" 20	-	-	109	9	118
" 21	-	-	80	4	84
" 22	-	-	59	1	60
Total	-	-	932	60	992

"The following table shows the amount of mortality from cholera and diarrhoea in the different parishes:—

	All Saints.		St. Nicholas.		St. Andrews.		Westgate.		Byker.	
	Chol.	Diarr.	Chol.	Diarr.	Chol.	Diarr.	Chol.	Diarr.	Chol.	Diarr.
Up to Sep. 15	87	3	88	4	46	5	58	8	16	—
On Sep. 16	22	—	31	1	16	1	26	2	6	—
" Sep. 17	24	2	32	1	18	1	16	3	12	1
" Sep. 18	20	—	14	2	15	—	26	4	9	—
" Sep. 19	27	2	21	3	14	—	17	3	12	1
" Sep. 20	32	—	22	1	17	4	22	6	15	—
" Sep. 21	23	—	17	—	13	—	18	4	9	—
" Sep. 22	15	—	15	1	13	—	12	—	4	—
	260	7	240	13	142	11	195	30	83	2

"We have lost two medical men, Mr. Irons, surgeon, and Dr. Malcolm, the former gentleman falling a martyr to his duty as a union surgeon. The vicar, the Rev. C. Moody, has opened kitchens for the distribution of beef-tea and boiled rice, in the parishes of St. Nicholas, St. John, and All Saints. They are open to persons of all classes and denominations; and the benevolent throughout the country would serve the cause of humanity and the poor by sending subscriptions to the reverend gentleman. The Omnifance tents will be opened on the moor to-day for such of the poor as are inclined to leave the infected districts. There is also a house of refuge on the New-road. ~~100~~ deaths have occurred in the ~~moor~~ in ~~fact~~ ~~no~~ ~~more~~ ~~than~~ ~~the~~ ~~town~~ has escaped. The epidemic has been ~~and~~ ~~the~~ ~~condition~~ of that town is ~~unwholesome~~.

situation is the garden of the north of England. Before the appearance of the cholera, there was a stout fight for the Public Health Act, and the obstructives were beaten. Some of the medical men opposed the introduction of the act. Mr. Fairbridge, surgeon, has died at Hexham. There are thirteen deaths in that town. The cholera has visited nearly all the villages by the side of the Tyne. There have been four deaths at Howdon and Willington; four at Walker; two at Carville; and several at the Felling. A very interesting and reassuring fact was related to me this morning by a gentleman from Jarrow, a considerable manufacturing village by the side of the Tyne. An old woman who had been to Newcastle and got rather tipsy, on reaching the village ate some half-cooked herring, was attacked, and died after a short illness. Her husband died a few days after. A board of health was immediately formed, under the presidency of the resident clergyman, a "house to house" visitation was instituted, nuisances were removed, etc.; and though there have been between two and three hundred cases of diarrhoea (promptly attended to by the medical officers), there has not been a single death, except those of the two old persons mentioned.

"The epidemic has been very fatal in a village named Whorlton, near Morpeth. Morpeth seems to have escaped." (From the *Times*.)

Brighton, October 1853.

CASE OF POISONING BY CREASOTE; WITH REMARKS.

By J. D. JEFFERY, Esq., Surgeon.

CASE. August 29, 1853, I was called up in the night to see Mrs. B., her husband informing me that "she was in a very strange way, and he thought she was dying."

I found a young woman about twenty-four years of age, in bed. She was insensible; her countenance very pale; frothing at the mouth; pupil quite dilated; pulse regular, rather full, about 80; the circulation seemed undisturbed. Every few minutes there was violent urging, nothing but saliva resulting. The stomach had been emptied by vomiting before I came. She had apparently severe paroxysms of pain on the right side of the face, to which she violently applied her hand; then again became prostrate. Her breath smelt strongly of creasote. A molar tooth on the right side of the lower jaw had a large cavity in it.

I endeavoured to rouse her by washing the face and temples with cold vinegar and water; and, as the paroxysms of pain seemed referrible to the diseased tooth, I fetched an instrument and removed it. She seemed scarcely to feel the operation; but the pain, after a short time, appeared to have left her. In the course of an hour she improved, and became partially sensible.

I administered nothing but a mixture of sesquicarbonate of soda and water. The next morning I found her better, but pale and weak; the pupils of the eyes were still much dilated, and vision was imperfect, which continued for several days.

The patient's own account of the matter and of her sensations, which I took down on her recovery, perhaps may not be uninteresting:—

"Whilst in the act of putting a piece of lint saturated with creasote into my tooth, it slipped, and I accidentally swallowed it. In a few minutes (much less than a quarter of an hour), I felt myself going very low. My eyesight went from me; giddiness came on; and everything looked of a dark blue, even the candles, my husband, and everything. I felt a dreadful burning at my chest. I wanted water to quench the burning at my lungs. I vomited, and brought up the piece of lint with some food. I had great pain at the front of my head, and felt numbed all over. The pain at my chest continued, and my eyesight was imperfect for three or four days. I did not see plain until Friday (Sept. 2nd). I did not know my tooth had been taken out."

I think it right to place this case on record. I am not acquainted with a similar one. I should think there could not have been more than five or six drops of creasote on the lint.

I mentioned this case to Dr. Cormack soon after its occurrence, when he observed that the case was remarkable from the characteristic effects of poisoning by creasote having been produced by a dose not much larger than he was in the habit of prescribing with great advantage in cases of choleraic serous purging. I find upon referring to Dr. Cormack's account of experiments which he performed on animals in 1836, with creasote, the following remarks by that gentleman:—

"From all these experiments, the poisonous effects of creasote appear to bear a very striking resemblance to those of prussic acid. Like the latter, creasote acts toxicologically, either by stopping the heart, or by directly affecting the brain alone—just as the dose may be larger or smaller, or according to the manner in which the substances are introduced into the system. Another very striking point of resemblance between prussic acid and creasote, is the remarkable and almost specific power which they both possess of arresting vomiting, especially if it be unconnected with organic disease." (*Cormack on Creasote*, p. 79.)

In another part of the same work, Dr. Cormack remarks: "In medicine, creasote may be used with great advantage as a sedative or anodyne. To produce such effects, it is given in diseases of the heart, pulmonary complaints, vomiting, and to allay the pain of cancer, etc. A patient under Dr. Shortt, in the Royal Infirmary of Edinburgh, afflicted with cancer of the stomach, derived relief from pain in ten minutes after taking a dose of fifteen drops. When its sedative or anodyne action is wished speedily, the object is best attained by inhaling its vapours." (p. 93.)

From the above extracts, and from the fact of my patient not knowing when her tooth was taken out, clear evidence is afforded of the anæsthetic powers of creasote. It may be remarked that chloroform, the popular anæsthetic agent of the day, is, like creasote and prussic acid, one of the most efficient remedies for vomiting: and that the medicinal as well as the poisonous effects of these three agents possess many striking resemblances.

Lowesmore House, Worcester, Oct. 17, 1853.

ANOTHER SINGULAR CASE OF ALOPECIA.

By GEORGE SELWYN MORRIS, Esq.

It may be interesting to Dr. Barclay's readers in the last number of the *ASSOCIATION JOURNAL* (p. 902), to hear of another singular instance of complete alopecia; and as I have a case of precisely the same nature, I subjoin the following notes.

S. A. W. is a young woman aged 20, residing in this place. Her parents, so far as I can discover, were free from syphilis and scrofula, and were in all respects perfectly healthy people. S. A. W. has not a particle of hair on any part of her body. I have examined her all over; and have only been able to find a slight appearance of down on certain parts of her skin. She began to lose her hair, without any assignable cause, when between eight and nine years of age. She tells me that her sister, a child between six and seven years old, is in exactly the same predicament.

I have not yet commenced the treatment; but my present intention is to follow the plan which Dr. Barclay adopted in his case.

Sydenham, Kent, October 17, 1853.

[Another case of complete alopecia reached us as we were going to press. Ed.]

PERISCOPIC REVIEW.

MIDWIFERY AND DISEASES OF WOMEN.

THE INTERNAL SURFACE OF THE UTERUS AFTER DELIVERY.

In the *British and Foreign Medico-Chirurgical Review* for October 1853, we find an original communication by Dr. MATTHEWS DUNCAN, of Edinburgh, on the state of the internal surface of the uterus after delivery.

This surface, the author says, may be divided into three principal parts: 1. The inner surface of the cervix; 2. The site of the insertion of the placenta; 3. The rest of the inner surface of the body of the organ.

The first of these parts is excluded from discussion at present; for the cervix uteri differs so materially from the body, that it may with propriety be described as almost a separate organ; and the researches of M. Stoltz and others show that the cervix does not become developed so as to form part of the cavity of the uterus.

Dr. Duncan alludes to the opinion entertained by obstetricians, that the entire decidua passes away after parturition, leaving the muscular tissue bare, and that a new mucous membrane is formed by an inflammatory process. This view he regards as paradoxical.

He describes the mucous membrane of the cavity of the uterus in early pregnancy as "very highly developed, forming a rich, soft lining to its inner surface, and contributing greatly to the increased thickness of the parietes of the organ at this time. When the walls of the uterus are examined in advanced pregnancy, the thickness of this structure is found to be greatly diminished, even when the whole structures between the chorion and the muscular tissue of the organ—that is, the proper mucous membrane, or decidua vera, and in addition, the decidua reflexa—are included in the measurement. If, in a woman who has died in advanced pregnancy, the membranes are separated from the uterus, the mucous membrane is left adhering to the walls of the womb; only its surface is lacerated and irregular.*

"In parturition a similar process takes place, with this difference, that after the removal or expulsion of the ovum, the uterus is reduced by its contractions to dimensions very small compared to those it had whilst expanded. The result of this contraction, upon the mucous membrane, resembles its effect on the muscular tissue of the organ. In both, the diminution of superficial extent is the result partly of the expulsion of the large mass of blood contained in their very large vessels, but chiefly of the assumption of a greatly increased thickness of wall. After parturition, the mucous membrane of the uterus is rough and irregular on the surface, and covered over with blood and adherent coagula. As the uterus diminishes in size, its thickness increases."

Dr. Duncan describes the appearance of the uterus after delivery in several cases in which he had an opportunity of examining the organ. The result of these examinations shows that "after delivery the muscular fibres of the uterus are not laid bare, but are covered with a mucous membrane, which is undoubtedly the remains of the uterine decidua." The mucous membrane is found thicker at the insertion of the placenta than elsewhere: it is there marked by elevations and depressions, and by the open mouths of the uterine veins.

In the cow, and many other quadrupeds, the foetal portion alone of the placenta is discharged; while the afterbirth of the human female consists of both the foetal and the maternal portion, the latter including a development of the uterine vessels, and the layer of decidua covering them. But even in women, the anatomical imitation of the process which occurs in the cow is possible: William Hunter performed this operation in a fetus of four months.

"The membrane", Dr. Duncan writes with regard to that

* "These facts I have verified by means of several dissections preserved in the late Dr. Campbell's museum. Albinus, in his *Atlas of Anatomical Plates*, describes the same results of a similar dissection. See *Uteri Gravid, Tab. vii.* His words of description are: 'Ovum exentum. Uteri pars interior, mollis, tenera, veluti spongiosa, canosaque: cui ovum molliter adheret, involucro suo membranaceo.' See also W. Hunter, *Anatomical Description of the Gravid Uterus*, ed. 1843. With his admirable accuracy, W. Hunter describes (p. 47) the adhesion of the decidua to the muscular fibres of the uterus as being 'rather stronger than the adhesion between its external (decidua vera) and internal stratum (decidua reflexa), which we may presume is the reason that in labour it so commonly leaves a stratum upon the inside of the uterus.' And he elsewhere makes the general statement, that 'one stratum of the decidua is always left upon the uterus after delivery.' See also J. F. Meckel, *Descriptive Anatomy* (Eng. trans.), vol. ii, p. 596."

which lines the inner surface of the uterus after delivery, "is easily distinguished from the muscular tissue of the uterus by its softness, and by difference of colour in a cross section. It is in some cases so soft that its surface can with facility be almost completely rubbed off or brushed off the subjacent tissue. And if this manipulation be practised upon it, the investigator will assuredly find no difficulty in discovering the fibrous tissue to be bare, like the muscles in an amputated stump. This softness and friability is undoubtedly one of its characters which has given rise to the erroneous opinions of authors; for we frequently find them speaking of removing a soft membranous or flaky structure, in order, as they imagined, to display the real internal surface or the womb. For example, W. Hunter, in describing a dissection of the uterus of a woman who died at the end of the ninth month without being in labour, states that, finding the internal surface of the uterus everywhere covered with a thin stratum of decidua, he rubbed off the tender membrane with a cloth, in order to expose the subjacent muscular structure. But numerous later investigators have not so correctly appreciated, as W. Hunter did, the nature of the structure they removed in a like manner, and which they believed to be effused lymph, false membrane, bloody coagula, or patches of decidua having no necessary existence there, and ready to be discharged or rubbed off in order to expose the muscular fibres, which they erroneously believed came to be exposed after parturition. We thus find that here, as elsewhere, W. Hunter's accounts of his dissections are still in our day true in almost every particular. But whilst there can be no doubt of the truth of W. Hunter's anatomical description of this part, exception may very justly be taken to the opinion he expresses as to this residuary decidua. He states his belief that 'most of it dissolves, and comes away with the lochia.' Now there is every probability that this takes place in a very different way. The residuary decidua forms the mucous lining of the uterus, and may pass away from the uterus, not in mass, but in the regular insensible exfoliation of such structures, or be removed by the vessels in its substance in the ordinary course of nutrition and absorption. Moreover, when we inquire into the real nature of the discharges from the uterus after delivery, we shall find that they are of a nature and character quite antagonistic to the notions entertained as to the denudation of the muscular fibres, and the formation of a new mucous membrane after the deposition of a false membrane over the supposed wound, and under the influence of an inflammatory process."

The lochia in the healthy female have no resemblance to purulent discharge. They have been frequently and correctly described as presenting three different conditions, in correspondence with as many stages—*lochia cruenta*, *lochia serosa*, and *lochia alba, vel mucosa, vel lactea*: the last is sometimes also called *pyrulenta*; but this is more from theoretical notions than from any resemblance to purulent discharge. Pus sometimes may be observed in the lochia as a result of local inflammation, or from healing lacerations: but it is not a constituent of healthy lochia; it does not appear in them under the microscope; and, when present, it is readily discovered by its characters.

Dr. Duncan then goes on to criticise the custom, general in late years, of "comparing the internal surface of the body of the uterus after delivery to a great wound, or solution of continuity." This analogy originated in modern times with Van Swieten; who, however, seems to have not gone nearly so far as some of his followers. He "points out that after the separation of the chorion and placenta, the inside of the uterus is left covered with the remains of the *tunica cellulosa*, or *substantia cellulosa*, which separates the chorion from the proper tissue of the uterus. He does not describe the uterine muscular fibres as being laid bare, but states that, in addition to the rupture of numerous large vessels, there is—in his own words—*soluta cohesio, recens, cruenta, partis mollis; id est vulnus*; and then he goes on to point out the particulars in which this solution of continuity differs from an ordinary wound. In a subsequent paragraph he states his belief that the fever commonly called *febris lactea* does not arise from the afflux of milk to the mammae, so much as from the superficial suppuration which he describes as taking place on the internal uterine surfaces."

M. Cruveilhier has been most explicit in asserting the denudation of the muscular structure of the uterus: and his words are quoted with approval by Drs. Fergusson, Rigby, and many others. Dr. Duncan points out that John Hunter, Cruveilhier, and others, have fallen into error in assuming the occurrence of inflammation during the natural processes of pregnancy and parturition.

To M. Cruveilhier's assertion that the "muscular structure

the uterus are everywhere exposed" after delivery, the dissections described by himself, Fergusson, and others, form a marked contradiction; for there is found and mentioned an inner membrane of the uterus covering its muscular fibres.

"Finally", Dr. Duncan writes, "did there exist after every delivery a wound of the enormous dimensions of the internal surface of the uterus—dimensions not inferior to those of the wound produced in amputation of the thigh, it is difficult to conceive how parturient females should escape the frightful mortality succeeding that operation, or the like. It would be difficult or impossible to explain why, instead of one in every three or four dying as after amputation of the thigh, there should be only one in every two or three hundred. It can scarcely be asserted that the shock produced, and the circumstances of the supposed uterine wound, are a whit more favourable to recovery in the obstetric than in the surgical patient. The explanation lies in the fact that the chief analogy of the internal uterine surface after delivery, is not with a stump, so far as it consists of incised and denuded tissues, but only in both surfaces presenting numerous open veins liable to become inflamed, or to absorb the obnoxious materials which may be brought into contact with them. And it is to this anatomical circumstance that are traceable most of the cases of death in childbed."

FÆTUS IN UTERO SUPPOSED TO BE KILLED BY LIGHTNING.

Dr. CARITHERS, of Hendricksville, relates a case in a medical periodical of the United States (*Southern Med. and Surg. Journal*), in which he avers that a fetus *in utero* was killed by lightning. He states that Mrs. F., aged about 40, in good health, and eight months advanced in pregnancy, received on the 10th of June, 1852, a severe shock from a streak of lightning, from which she recovered in a few hours, when she was attacked with labour pains. On the doctor's arrival, he found her suffering with sharp pains. On examination, *per vaginam*, no dilation of the os uteri had taken place. He bled her freely, and ordered her an enema of a gill of starch, with a teaspoonful of laudanum, and to take a quarter of a grain of sulphate of morphia every half hour, until she was relieved from pain. After taking the fourth dose the pain subsided. He ordered her to take on the following morning an ounce of castor oil. At two P.M., it had acted freely, and at four P.M., she was resting well. She was delivered on the tenth day after she complained of being very unwell. The child was dead, and from its appearance had been so from the time the mother felt the shock.

ARREST OF DEVELOPMENT IN ONE FOOT ASCRIBED BY THE MOTHER TO A FRIGHT.

The following case is reported (in the *American Journal of Medical Science* of April), by Dr. STORRER of Boston. A lady, three or four months after her marriage, was much affected at seeing a hen injured by a stone thrown by a boy. The stone broke one of the hen's legs, and injured its lower portion. She continually dwelt upon the subject, insisting that her child, when born, would be deformed. In due course she was confined; and it was found that one foot of the child presented evidence of arrested development. The child, perfectly well formed in other respects, exhibited upon one of the lower extremities simply a heel, and the rudiments of the five toes, at the extremities of which were placed minute nails. Dr. Storrer said to the Medical Society of Boston that the striking points in this case were, that the woman had dwelt during the whole time which intervened between the scene with the hen and her delivery upon the certainty of her child being deformed, and that upon its birth she had insisted upon minutely examining it. We really do not see anything remarkable in all this: for women are constantly fancying that they are to give birth to monsters, and also insisting on minutely inspecting what is born, when there is no blemish of any kind discoverable upon their offspring. The case of Dr. Storrer and many others related by those who heard it read, and which with his were attributed to the mental influence of the mother upon the fetus, are certainly, from the vastness of every day negative evidence, rendered of small scientific value as evidence in favour of the theory of mental influence. A long discussion on Dr. Storrer's case was therefore very appropriately closed by Dr. Gould mentioning a "set-off" case. He said that "on last Monday he had attended a woman, who, at the birth of her child was very anxious that its palate should be examined, she having early in her pregnancy seen a person with very disagreeable countenance from deformity of the palate. She had been very unpleasantly affected by the sight: but notwithstanding her very strong apprehension, no effects were visible on the child."

INABILITY TO SWALLOW IN AN INFANT.

In the *American Journal of Medical Science* for July 1853, Dr. J. L. PIERCE, of Bucks county, Pennsylvania, describes the following case.

On the 18th of December, 1839, he was sent for to Mrs. James, in labour of her eighth child. At 11 A.M. she was delivered of a fine large infant, weighing ten pounds. He discovered at birth a tumour on the right epigastrium, extending about a quarter of an inch to the left side of the ensiform cartilage, and its upper edge just below the cartilage of the ribs. It was about one and a half inches in diameter, and nearly circular. No other extraordinary appearance was noticed. On visiting the patient next morning, Dr. Pierce was informed that the child had not taken the breast; and on the succeeding morning the same observation was repeated, with the addition that he did not swallow. The tumour had the same appearance as at first: it was evidently not connected with the internal parts, and was taken for a wen. The child moaned constantly, which the mother stated had succeeded to an incessant crying. There was a constant frothing at the mouth; which Dr. Pierce regarded as produced by the saliva which ought to have been swallowed. With a teaspoon, attempts were in vain made to cause him to swallow some water. On the afternoon of the third day, Professor Hodge saw the child in consultation with Dr. Pierce. He regarded the inability to swallow as connected with the nervous system; founding his opinion chiefly upon a fullness of the brain at the anterior fontanelle. The treatment resolved on was to clear out the bowels with warm water enemata; and then to administer lamb broth injections every three or four hours. After the second warm water injection the child was applied to the breast, and was found able to swallow. It took the breast freely, and experienced no further inconvenience.

CONGENITAL DISPLACEMENT OF THE HEAD OF THE FEMUR ON BOTH SIDES.

In the *Monthly Journal of Medical Science* for May 1853, it is stated that Dr. MERCER ADAMS exhibited to the Physiological Society of Edinburgh, a dissection displaying congenital displacement of the head of the femur on both sides. The head of the femur was displaced from a well-formed cotyloid cavity, and lay on the dorsum of the ilium, where it had formed for itself a new cartilaginous acetabulum. The muscles of the thigh and gluteal region were very much atrophied and contracted. Owing to the contraction of the rectus femoris, the patella and head of the tibia were drawn up over the condyles of the femur, and the knee-joint in consequence could not be flexed. The axis of the neck of the femur was abnormal, being placed nearly horizontally in relation to the shaft of the bone, instead of its natural oblique diameter. The ligamentum teres was elongated, thicker and stronger than is usual in fetal life. This seemed to confirm the view that its function is purely suspensory, and evidenced in a remarkable manner the provision made by nature to counterbalance the malformation; for had this child lived, the whole weight of the body must necessarily have been supported by this ligament, which was formed of unusual strength for this end. From the immobility of the knee-joint, the fetus had been unable to assume its normal ovoid form while *in utero*, and accordingly a false joint had been formed in the lumbar region of the vertebral column, to enable the child to adapt itself to the cavity of the uterus. Mr. Adams considered that the displacement had been caused by the abnormal retraction exercised on the head of the bone by the contracted condition of the muscles attached to it. The position of the fetus *in utero*, as it lies with the legs flexed on the abdomen, was of all others the position which would predispose the head of the femur to slip out of the acetabulum, and to mount upwards and backwards, as in this case, on the dorsum of the ilium.

PRACTICE OF MEDICINE AND PATHOLOGY.

THE EXTERNAL USE OF OIL IN THE TREATMENT OF SCROFULA AND PHTHISIS.

Dr. SIMPSON, of Edinburgh, has elaborately shown in the *Monthly Journal of Medical Science* for October 1853, that the popular belief that the greasy workers in cloth factories are a healthy class, and remarkably exempt from scrofulous disease, is well founded on many facts. We do not know of any treatment more useful for puny scrofulous children than a thorough nightly inunction after a tepid bath. The system never disagrees, and is compatible with the internal use of cod-liver oil, iodide of iron, or any other suitable medicine. The inunction never disagrees; but from its soiling the linen, it is not easy to get mothers and nurses to carry it out.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, OCTOBER 15TH, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

PARACENTESIS IN AN INFANT. BY J. M. WINN, M.D.

Dr. WINN related the case of an infant nine weeks old, in whom he had performed paracentesis abdominis on account of ascites. At the first operation, he removed a quart of milky fluid; at the second, he drew off rather less. On this occasion, oozing of blood occurred from the wound of a small vessel, and the child died. On *post mortem* examination, the liver was found diseased, probably congenitally. Dr. Winn believed this was the first time the operation had been performed in so young a subject.

PYROLIGNEOUS OIL OF JUNIPER. BY C. H. F. ROUTH, M.D.

Dr. ROUTH exhibited a specimen of the pyroligneous oil of juniper, or juniper-tar soap—a preparation in extensive use in Germany. He had found it very successful in the treatment of eczema rubrum.

IMPERFORATE ANUS. BY HENRY SMITH, ESQ.

Mr. H. SMITH exhibited the rectum and bladder of an infant, who died with imperforate anus. A communication existed between the bladder and the distended *cul-de-sac* of the rectum.

SUPPURATION OF THE JOINTS FROM INFECTION OF THE BLOOD.

BY WILLIAM COULSON, ESQ.

After referring to the obscurity which has commonly prevailed among writers with regard to the suppurative affection of the joints following puerperal fever, amputations, operations on the genito-urinary organs, etc., and having described some illustrative cases, Mr. COULSON observed that the origin, course, symptoms, and morbid anatomy of this articular disease are of a peculiar kind, and such as altogether to contradict the supposition of its being of a merely local character. The main features of the disease are always the same; any symptoms which would appear to indicate a variety of origin being accidental. The joints affected during life are found to contain more or less pus, but not in evident relation to the intensity or duration of the local complaint. The synovial membrane generally presents traces, though slight, of recent inflammation; and in some cases it has been found free from vascularity. Mr. Coulson did not regard this as a proof of the non-inflammatory nature of the disease, but considered that the injection of the vessels had disappeared after the secretion of pus. The cartilages and other articular tissues are usually healthy; but, in many cases, the cartilages are more or less eroded or absorbed; and, in a very few cases, the bone has been affected. The tissues round the joints are often the seat of sero-purulent infiltration or circumscribed abscesses, which are also found in the muscles of the limb.

Suppurative disease of the joints in puerperal females has been confounded with puerperal fever; but, according to Mr. Coulson, puerperal women are often attacked by purulent disease of the joints without any of the symptoms of puerperal fever; while puerperal fever may be complicated with purulent inflammation of the veins, in which cases there may be secondary articular disease. That purulent inflammation of the joints does not essentially depend on puerperal fever, is shown by its occurrence in certain cases of abortion in the early months of pregnancy.

The author then insisted on the necessity of not confining attention, in the *post mortem* examination, to the joints, but examining other parts of the body. Pus is almost always found in some one or more of the internal organs.

The symptoms of the disease were then examined, under the head of shivering, fever, and affection of the respiratory organs, and those connected with the seat of the original injury. Having described the symptoms of an uncomplicated attack in puerperal females, Mr. Coulson observed that the disease is much more fatal in such subjects than in males, probably from its being frequently complicated in females with puerperal fever.

The author believed the contamination of the blood to arise from admixture of pus. He referred to the occurrence of suppurative disease of the eye in puerperal females—an affection not understood until it was shown that it occurs in other cases of purulent infection.

Those cases in which purulent disease of the joints has occurred in puerperal fever without apparent morbid alteration in

the uterine veins, do not, according to the author, negative the theory of purulent infection; for inflammation of the mammary veins or of the rectum is capable of exciting purulent infection.

The paper concluded with some remarks on the treatment, which should be directed towards counteracting the poisonous condition of the blood.

An interesting discussion ensued, in which Drs. Copland, Winn, James Bird, and Hare, and Messrs. Harrison and Henry Lee, took part; but which, from the great demands on our space this week, we are compelled to omit.

EAST SURREY CHOLERA SOCIETY.

TUESDAY, OCTOBER 18, 1853.

ROBERT WILLIS, M.D., in the Chair.

The first meeting of the East Surrey Cholera Society was held at Richmond, on Tuesday evening, Oct. 18th. Dr. WILLIS, of Barnes, was called to the chair.

THE CHAIRMAN read the following circular calling the meeting:—

"MY DEAR SIR,—I am requested to inform you that, at a meeting of the Provisional Committee of the East Surrey Cholera Society, held to-day at the Reading Room in Mortlake, it was moved by Dr. CORMACK of Putney, seconded by Mr. PALMER of Mortlake, and unanimously agreed—

'That all qualified members of the medical profession residing in East Surrey should be invited to meet at W. Ethrington's Music Hall, Hill Street, Richmond, on Monday, the 18th of October, at seven o'clock p.m. precisely, for the purpose of constituting and organising the above-named society.'

"Your presence on this occasion is earnestly desired; and if that is impossible, you will oblige by communicating, in a letter to me, for the information of the meeting, your opinion in reference to this movement. I have the honour to be, sir,

Yours faithfully,

"BENJAMIN W. RICHARDSON.

"Hon. Sec. to Provisional Committee.

"Mortlake, October 11th, 1853."

Dr. Willis read letters from the following gentlemen, who had been invited to attend as visitors: Dr. Babington; Thomas Hunt, Esq.; Dr. Gavin Milroy; Dr. E. C. Seaton; Dr. Snow; Spencer Wells, Esq.; and Dr. J. A. Wilson. We insert the letters of Drs. Babington, Milroy, and Snow.

"31 George Street, Hanover Square, October 16th, 1853.

"MY DEAR SIR,—I feel much honoured by your invitation to the meeting of the Provisional Committee of the East Surrey Cholera Society, to be held at Richmond, on Tuesday evening, the 18th instant. Fully approving as I do of the object implied in the name of the society in question, and highly respecting as I do the gentlemen of the Provisional Committee, and their Honorary Secretary, it would have been to me very gratifying to be present on the occasion of the formation of this society. Unfortunately, however, on the evening of the 18th, the Pathological Society of London holds its first meeting for the season; and, as I have the honour to be its President, I cannot with propriety absent myself on the occasion.

"As President of the Epidemiological Society, I venture to express a hope that your society and ours may be able mutually to assist each other. I am quite sure I may say for ourselves, that we shall be most willing to co-operate with you.

"I have the honour to be, my dear sir, yours very truly,

"To B. W. RICHARDSON, Esq."

"B. G. BABINGTON.

30, Fitzroy Square, 17th October 1853.

"MY DEAR SIR,—It would give me much pleasure to be present at the intended meeting to-morrow evening at Richmond; but I much fear that it will be quite out of my power to be so, in consequence of business which will detain me in town until very late in the afternoon. There can be but one opinion, I should suppose, as to the extreme usefulness of local associations devoting themselves to the investigation of cholera in their own immediate districts more especially. It is an epidemic whose history is alike so remarkable and so instructive, that it well deserves our studious attention in every point of view, scientific and practical.

"As Chairman of the Cholera Committee of the Epidemiological Society, I may mention that we have been busily engaged for some time past in drawing up a series of queries, which we hope to be able to issue very soon to the medical profession, not only in this country, but also abroad, with the

view of obtaining accurate data from various parts of the world. It will give me much pleasure to forward a copy to you as soon as they are printed. Let me also say that if there are any documents issued by the General Board of Health which the East Surrey Society may wish to be provided with, I shall be happy to endeavour to procure them for the use of the members.

"I remain, dear sir, very truly yours,

"B. W. RICHARDSON, Esq."

"G. MILROY.

"18 Sackville Street, October 17th, 1853.

"MY DEAR SIR,—I feel much honoured by the invitation to attend the meeting of the Provisional Committee of the East Surrey Cholera Society, to be held to-morrow evening; and I regret very much that I shall not be able to be present to witness the organising of the society.

"I am very much pleased to hear of the formation of your society. I feel sure that much valuable experience of the two former epidemics of cholera has remained in a great measure useless, for want of some means by which it might have been collected and made generally known to the profession.

"Should the epidemic with which we are threatened unfortunately occur, the united efforts of the medical men residing in a district not so densely populated as a large town, nor yet so widely extended as to prevent their meeting together occasionally in a society, may be reasonably expected to furnish a more important contribution to the history of the disease than any which has yet appeared.

"I remain yours very truly,

"B. W. RICHARDSON, Esq."

"JOHN SNOW.

After making a few remarks upon the origin of the Society, the Chairman stated Mr. Richardson had been requested by the Provisional Committee to prepare a paper explaining the objects of the Society, which he (the Chairman) would now call for.

Mr. RICHARDSON then read the following address:—

GENTLEMEN,—You have heard from the Chairman that the Provisional Committee of the Society we have now met to organise, has requested of me to draw up a report or address, explanatory of the objects, the value, and the constitution of the proposed Society.

Let me enter upon the point at once. There is at this moment in the land a fearful disease, the causes of which are utterly unknown, and concerning the treatment of which the wisest amongst us are almost as little informed as are the poorest and most uneducated of our fellow men.

It is known also to all of us, that in the two previous epidemics of the disease, the untiring and noble labours of the medical profession met with but little success or reward; that professional men themselves felt and still feel distrust in their efforts to understand and meet the disease; and that the knowledge of the profession in this case does not stand so high above the knowledge of the people as is requisite for securing to our body that degree of veneration and confidence, which we honestly claim, and should in honesty receive.

In tracing out the causes of our failures it has occurred to many, and it may be to everyone, that at least one cause of failure lies in the fact that as yet the disease in question has only been observed in its isolated character, that no great and general observations have been made upon it, and that it has ever been seen and described by man the individual, never by man the universal.

There are some grand phenomena in nature which are always present, such as the rolling of a planet; and there are others which are fleeting, such as the advent of an epidemic. If we would unravel the mysteries of these phenomena, we must do so by the agency of a multitude of minds. The process of observation is, however, different in each case. In the investigation of the permanent phenomenon, time is allowed; and one single individual in one age may work usefully and progressively, since he may start on the last footmark of him who preceded, and may have the problem for solution always before him. In the investigation of the fleeting phenomenon, the single individual is a nullity: and the difficulty of discovering its nature can only be overcome by bringing the whole competent mental strength of the time to bear upon it.

To attempt in a small way what might indeed be attempted in a much larger way, to form, in a few square miles of the earth's surface, a nucleus of concentrated observation, that might in the end, and with more ease than some other things, be extended to the whole earth, is the first and the most important object contemplated in the present movement.

There is of course no plan or thought of the Provisional Committee which is not open to amendment, modification, or re-

moval, by this meeting. With this remark, I may venture to explain freely the intentions of the committee. These are—

1. To establish in the district called East Surrey, the parliamentary division being understood, a society, to be named the East Surrey Society for the Observation of Cholera. The society to consist of a President, Vice-Presidents, Secretary or Secretaries, a Treasurer, Councillors, Honorary Members, and Members.

2. To have monthly meetings of this society, held at various towns in the district, so selected as to suit the convenience of all members.

3. To originate and encourage the formation of local committees of the society, which should meet weekly during the period of the epidemic, and frame brief reports of all the cases of cholera that have occurred in their special localities.

4. To arrange that, at the general meetings of the society, these local reports should be read and received, and that at each meeting some particular point connected with cholera should be set apart for discussion; a committee selected from the members of the whole society having been previously appointed to prepare a report on the subject to be discussed. The report to be read previous to the discussion.

5. To make provision that the Council of the Society, after each general meeting, shall prepare a full report of all the labours of the society since the previous meeting. These reports to be printed in one or more of the medical periodicals.

6. To fix on a small subscription to be paid by each member, to defray the expenses incurred by correspondence and other matters.

These, gentlemen, are the propositions submitted to you by the members of the Provisional Committee. One or two other matters, of a general and suggestive character, deserve attention.

It is proper especially to point out the necessity of making this society mutually honourable to its members, and of taking care that the utmost liberality should enter into the spirit of its laws.

In answer to some gentlemen, who have objected to join the society because they may be unable to attend its meetings, I would respectfully but earnestly observe, that, although the meetings of the society will be an interesting and essential part of its proceedings, the non-attendance of a member at these meetings will by no means prevent him from being an useful and indeed a necessary member of the society: inasmuch as each one may send to the nearest local committee, or to the Council of the Society, particulars of all the cases of cholera that have occurred under his observation, and may thus supply that information which it will be the chief object of the society to collect and digest.

An idea has been expressed by a few persons, that the cholera seems to be on the decline, and that this society is therefore unrequired. But were this opinion really correct (which is not the case), there is no reason why this movement should be suspended; for the society, being once formed, could remain, ready at any moment to commence or resume its labours; while in no instance is the value of the old proverb, "Seize time by the forelock," so applicable as it is in reference to the investigation of cholera.

Again, if positive action is necessary for the life of the society,—and it is possible that such is the fact,—then I would point out that there is ample scope for the development of that action in the absence of the alarming plague now in our homes. There are many other epidemic diseases, which, in their familiar and constant manner, bring more death and misery into this world than this cholera, which does but attract our particular attention because it wakes like a demon, and after doing a day of demoniac work, sinks again into such profound quiet, that its breathing can scarcely be heard. These other diseases, the society under a modified name might, with great advantage, make the subject of special observation.

The matters which ought at this moment to receive the attention of the society now proposed, have reference only to cholera: and first, the treatment of the disorder should claim immediate regard. There is something so monstrously extravagant in all our doings in this matter, up to the present time, that it is no wonder the world should sneer at our incompetency. The proverb *quot homines, tot sententiae*, might, in reference to the treatment of cholera, be most appropriately turned into *quot medici, tot remedia*. Nor can we hope to escape from such censure while every man is jumping up with lo here, and lo there is a remedy. The world knows, and we know that amongst all this wild hubbub there is not one remedy in which absolute confidence can be placed. But if we can unite our intellects, if we can

look at the characters of the disease as though it had nothing to do with life, fix upon some decided plan of action, carry out that plan right heartily, and then pronounce our success honestly, we shall surely save as many lives as if we went individually to work; and, be our results affirmative or negative, we shall certainly have some great facts to show at the end of our labours.

A wide field is opened to our united efforts in the discovery of the causes of cholera; and in this inquiry we may all do something. In the matter of meteorological observation alone, everything admits of being observed. And the man who, on going to bed and on getting up, will put down six letters to indicate the state of the barometer and thermometer, or will watch a bit of paper for indications of ozone, is doing valuable service.

Those gentlemen who have time and taste to pursue the subject in a physiological manner, have likewise ample room for their experimental researches. Indeed, we know now, though many may object to admit the fact, that the practice of medicine in general only progresses in proportion as the physiologist steps forward and rends the veil that conceals from our sight the working of the laws by which we live, move, and have our being.

I beg, moreover, to show that the combination now anticipated, must, if carried out, prove instructive and pleasant to ourselves. It will tend to increase personal acquaintance, to soothe down many of those asperities which arise in the distant conflicts of life, and will afford us all the satisfaction of feeling that when a dreaded pestilence made the face of the world grow pale, we rose in brotherly phalanx, to advise the suffering, support the timid, meet the enemy, and compose a history of our labours for the instruction of those who shall follow us.

If, indeed, the society now contemplated could be carried out as fully as its promoters would wish, I believe that, however severe an epidemic of cholera may visit the East Surrey district, the disease would be so well policed, that when it has passed away, it might be said, Here is a piece of country in which not a single case of cholera has been allowed to occur, without having some part of its history written, preserved, and made use of, in the reports issued by the council of the society. The value of reports made out of such materials, in affording information on the causes, mode of progression, and the treatment of cholera, are too obvious to require comment.

Gentlemen, I have now conveyed to you as clearly as I am able, the motives that induced the committee, of which I am the secretary, to call you together.

It would be out of place, and presumptuous in me, to endeavour by words of my own to stimulate to interesting and great exertions, men so earnest as you all are in every good and useful work. But, should anyone feel doubts as to the possibility of realising the scheme now proposed, I trust I may without offence remind him of the truth bequeathed to us by the world's poet philosopher—

"Our doubts are traitors,
And make us lose the good we oft might win
By fearing to attempt." (Applause.)

Mr. RICHARDSON having been requested to act as Secretary to the meeting, it was moved by Dr. JULIUS of Richmond, seconded by Mr. RAY of Dulwich, and unanimously carried—

"That Mr. Richardson's excellent statement now read be entered on the minutes; and that the gentlemen present do form themselves into a society, under the name of the EAST SURREY CHOLERA SOCIETY, with power to add to their number qualified medical practitioners residing within East Surrey."

After some conversation, it was then agreed that the medical gentlemen residing within the bounds of East Surrey, who had responded approvingly to Mr. Richardson's circular, should be enrolled, along with those present, as original members of the society.

It was moved by Mr. GROVE of Wandsworth, seconded, and unanimously carried:

"That the society consist of honorary and ordinary members; and that the Council consist of a President, six Vice-Presidents, a Treasurer, a Secretary, and six other members."

It was moved by Dr. GRANT of Richmond, and seconded by Mr. PALMER of Mortlake:

"That Dr. Willis of Barnes be requested to accept of the office of President for the next twelve months."

Dr. WILLIS said that, for every reason, including seniority, he would rather see Dr. Grant himself in the chair; but, upon Dr. GRANT stating that he contemplated being from home for some time at an early period, and that he could not therefore with propriety accept an office which ought to be one of activity and diligence, Dr. Willis agreed to accept the proffered honour. The motion was then put, and carried unanimously.

It was moved, seconded, and unanimously agreed:

"That the following gentlemen be requested to accept of the office of Vice-President for the next twelve months:—Dr. Cormack of Putney, Dr. Cox of Kingston-on-Thames, Mr. Bottomley of Croydon, Dr. Grant of Richmond, Mr. Grove of Wandsworth, and Mr. P. Martin of Reigate."

It was moved, seconded, and unanimously agreed:

"That the following gentlemen be requested to act as Members of Council for the next twelve months:—Mr. Chapman of Richmond, Mr. Fennell of Wimbledon, Mr. Palmer of Mortlake, Dr. Paul of Putney; Mr. Ray of Dulwich, and Mr. Shillito of Putney."

It was moved, seconded, and unanimously agreed:

"That Mr. James Smith of Richmond be requested to act as Treasurer, and Mr. B. W. Richardson of Mortlake as Secretary, to the society."

In moving the above resolution, Dr. CORMACK mentioned that the merit of having originated the idea of a Society for the Observation of Cholera in East Surrey belonged exclusively to Mr. Richardson. To secure that unity and celerity of action which were of the utmost importance, and from the want of which so many societies failed, he urged upon the meeting the advantages of the society having only one general secretary; it being understood that, in each locality, members might appoint local secretaries, if necessary.

It was moved, seconded, and unanimously agreed:

"That the Council be requested to prepare a draught code of laws, to be submitted to the next meeting of the society."

Dr. CORMACK moved the two following resolutions:—

"That the Council be instructed to prepare a report of the proceedings of this meeting to be sent to every qualified practitioner in East Surrey; and to forward along with this report a series of queries, and printed schedules for the record of observations on cholera, choleraic diarrhoea, and the prevailing character of all diseases.

"That the Council be requested to prepare with the least possible delay a report upon the treatment of cholera, to be read and discussed at the next meeting of the Society."

He (Dr. C.) considered that the resolutions which he had moved in accordance with the wishes of the provisional committee, demanded attention as well as approval. It was, he thought, most important for the Society not to lie dormant till the pestilence was rife. There was at this time already good work waiting to be done by observing the peculiar character which was impressed on all diseases. Again, the cases of serous diarrhoea so abundant (and of which he had had several within the last few days), were well deserving of the most careful study: for what were the cramps and collapse of cholera but the secondary results of a loss of the serum of the blood? As regarded the second of the two resolutions which he had proposed, it might be said that it was reversing the right order of things for the Society first to discuss the *treatment*; but he did not think so. There was undoubtedly much known on this subject. That knowledge, however, was not widely diffused; and was sadly overlaid by empirical writings of the most worthless description. It was, therefore, he thought, for the sake of humanity, the first duty of the Society to direct its attention to the subject of treatment; and he thought that there were abundant materials for a most instructive report and discussion upon that subject.

Dr. GRANT, of Richmond, seconded the resolutions. At a future meeting of the Society he would express his peculiar views regarding cholera; but at present he would wish to urge attention to the recent leading articles in the ASSOCIATION JOURNAL upon medical meteorology, from the study of which science as promoted by that JOURNAL, and as now being widely cultivated, he anticipated great results. He thought that it would soon be proved that cholera did not spring from an inscrutable morbid agent residing in ditches and drains. Its origin and its mode of extension would be found to obey certain laws connected with meteorological changes, however much other local causes might predispose persons to its influence.

Both resolutions were then put from the Chair and carried unanimously.

The time and place of the next meeting then formed the subject of discussion. It was at last understood that the President should summon the next meeting by circulars, for Tuesday, the 15th November, at Wandsworth, provided the business assigned to the Council could be accomplished by that date.

A vote of thanks was then passed to Dr. James Bird, Dr. Sibson, and Mr. Grainger for their presence: and that there made honorary members of the society.

Mr. GRAINGER returned thanks in a very interesting manner.

He said that the practitioners of East Surrey had that evening most honourably distinguished themselves by the way in which they came forward in the sacred cause of science and of humanity. He then glanced at the value of meteorological observations, and at the importance of noting the quantity of ozone in the atmosphere. It would be well for the society to investigate *reasonable modes of treatment*, by making observations carefully and scrupulously in accordance with the exact recommendations of those by whom the plans were suggested or recommended. The precise stage in which a remedy was used, and every minute particular regarding its employment ought to be noted at the time and on the spot. This was the only way to get useful data: and it was from a society such as had been that night constituted that such information was most likely to be obtained. From a multiplicity of imperfectly observed cases no lessons could be derived. He (Mr. Grainger) was anxious, however, to say that in his opinion it was *preventive medicine* which had been and was destined to be most enriched by the scientific cultivation of epidemiology. This was a field which promised a rich harvest. The East Surrey Cholera Society, and other societies which might be formed upon its model, might, he felt assured, be made powerful instruments of public good. They might issue suitable instructions to the public, and they might beneficially influence public authorities, and even the Government of the country. He might with all confidence reiterate the sentiments of Dr. Babington's letter; and say that it would at all times be a source of pleasure to the members of the Epidemiological Society as individuals, and in their collective capacity, to cooperate with the East Surrey Cholera Society, and to assist them as much as they could in their researches and discussions.

Dr. STANON said that, as a member of the Epidemiological Society, he heartily concurred in Mr. Grainger's expression of fraternity. There was need of cholera societies. In 1832, when studying at Edinburgh, he had been baptised into the profession by taking charge of a cholera hospital. He well remembered the consternation and dismay at the mortality which then prevailed. The disease was then looked upon as an exotic. It came and went, they knew not how. With the pestilence, the panic also passed away. Cholera, however, had returned again and again; in fact, it now dwelt among us. It was no longer an exotic; and it remained to be seen whether it could not be rooted up, as had been the plague.

Dr. JAMES BRID, in an animated address, approved of the objects of the society. The career of action which was before it was a noble one, and, by following it, the medical profession could not fail to be elevated in the public estimation, as the public would be thereby taught that our highest ambition was to prevent disease; and that the old system of mere drugging and dosing was no longer to be tolerated.

The various gentlemen who had been invited to attend as visitors were unanimously elected honorary members of the society. The annual subscription of members was fixed at five shillings. All present contributed this amount, and one or two made additional donations. On the motion of Mr. PALMER, a vote of thanks was passed to Mr. Richardson; and, on the motion of Dr. GRANT, a similar compliment was bestowed on Dr. Willis. The meeting then adjourned, between nine and ten o'clock.

ASSOCIATION INTELLIGENCE.

MEDICO-ETHICAL COMMITTEE.

The MEDICO-ETHICAL COMMITTEE of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION will meet at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Thursday, November 3rd, at 3 P.M. precisely.

W. H. MICHAEL, *Hon. Secretary.*

METROPOLITAN COUNTIES BRANCH:—COMMITTEE ON GRATUITOUS ADVICE.

The Gratuitous Advice Committee of the Metropolitan Counties Branch will meet at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, on Thursday, November 3rd, at 3 P.M. precisely.

THOMAS CHARLES, *Hon. Secretary.*

[We have been requested to state that arrangements have been made by the Secretaries of the above Committees for holding the meetings at the same time and Tavern, in order that, if a conference should be considered necessary, it may be at once obtained. EDITOR.]

EDITOR'S LETTER BOX.

CURE OF STRABISMUS BY PRISMATIC SPECTACLES.

LETTER FROM SPENCER WELLS, ESQ., TO THE EDITOR.

SIR,—In your paper of yesterday, you do me the honour of noticing a paper of mine on the cure of squinting, by the use of prismatic spectacles. As, at the same time, you add one or two remarks which are calculated, I think, to discredit what I am convinced will prove a valuable addition to surgical therapeutics, perhaps you will allow me to offer a few words in explanation.

You state, "We scarcely understand the principle on which such an apparatus is to act in altering the direction of the squinting eye." The principle is very simple. The prism is placed before the squinting eye. The light passing through it is refracted in various degrees, according to the angle of the prism. Accordingly, the rays are thrown on to the retina, and form the picture of any object which is looked at, at a spot which does not correspond with that on which the picture is formed on the opposite eye. Diplopia is the necessary consequence; and to obviate this, involuntary contraction of one of the straight muscles takes place. It is this increased contraction called for from a weakened muscle which explains the curative power of the prismatic glasses.

You also imply that the glasses must be inferior to the old plan of binding up one eye. This is, no doubt, correct in some cases, as in one which I noticed in my paper. But in cases of slight squinting in young persons, where there is no great difference in the power of the two eyes, as tested by reading distance, the glasses are much more rapid in their efforts. Six weeks is about the time required to effect a cure in such cases; while the bandage must be worn from six months to a year. The experience I have had myself, and what I have seen in the practice of Dr. von Gräfe, in Berlin, enables me to recommend the prismatic spectacles very strongly in those cases of slight strabismus in young persons, which, though disfiguring, are not sufficiently so to lead to a ready consent to, or desire for, an operation; and in those cases where, after operation, improvement is attained without a perfectly accurate corresponding position of the two eyes.

I am, etc.,

T. SPENCER WELLS.

30, Brook Street, Grosvenor Square, Oct. 8th, 1853.

ON DIVISION OF THE PORTIO DURA IN TIC.

LETTER FROM CHARLES TAYLOR, ESQ., TO THE EDITOR.

SIR,—In the volume of the *Transactions of the Provincial Medical and Surgical Association*, I find in a monograph by Dr. Morris, "On Neuralgia", a recommendation by that gentleman to divide, in certain cases of tic douloureux, the trunk of the "portio dura" or facial nerve.

As that nerve is one of *motion* and not of *sensation*, I am at a loss to understand what good effect he can expect from such division, and certainly cannot suppose that paralysis of the whole of the muscles of *expression* of one side of the face (the necessary result of the operation) is what he would willingly inflict on a patient merely suffering from facial tic; more especially as the original affection would, in all probability, remain unaltered in intensity. I would humbly suggest in those cases where tic apparently affects the portio dura that it may be owing to neuralgia of ascending branches of the "cervical plexus", or to the anastomoses of branches of the fifth pair with some rami of the facial.

Perhaps Dr. Morris may throw some light on this matter. In the meantime, I can only trust that surgeons will "think twice" ere they entail the results of a paralytic stroke or fit of apoplexy on a patient seeking relief merely from a neuralgic affection.

I am, etc.,

CHARLES TAYLOR.

Ilkeston, Derbyshire, Oct. 9th, 1853.

[Dr. Morris thus describes the operation. Page 34, vol. 10. "Division of the portio dura or facial nerve." "An incision of about one inch and a half in length must be made from behind the ear downwards, anterior to the mastoid process, a little dissection will expose the edge of the parotid gland, and the edge of the mastoid muscle, after a few more incisions between the parotid gland and the mastoid process, the facial nerve will be seen, which must, by means of a probe, be lifted up—and a portion of it cut out!"]

TOPICAL TREATMENT OF HOOPING-COUGH.

LETTER FROM WILLIAM BAYES, M.D., TO THE EDITOR.

SIR,—I have read with equal attention and pleasure the excellent paper "On the Topical Treatment of Hooping-Cough", by Dr. Eben Watson, which appeared in our JOURNAL of the 20th of August.

Dr. Watson complains, and with some show of reason, of the want of consideration which has been shown to his views on the subject. I believe this has arisen from the heroic nature of his proposed treatment. The public opinion will never allow its universal adoption. Children will resist to the utmost rather than allow the introduction of the "probang", and their struggles will render the application, even by a determined man, a matter of very great difficulty and uncertainty.

I should wish to inquire, through the medium of your JOURNAL, whether Dr. Eben Watson has tried the less formidable application of the solution to the soft palate and tonsils?

I have never tried its effects in hooping-cough, having always been satisfied with the effects of alum, combined with the daily use of emetics or aperients; but in cases of catarrhal cough, and in cases of bronchitis, accompanied by profuse expectoration, I have long found the most remarkable effects produced in allaying the cough by the use of a solution of nitrate of silver, varying from eight to twenty grains to the ounce, and applied twice or thrice a day by means of a camel's hair brush. Even in cases of phthisis I have never been disappointed in finding it produce a marked diminution of the strength and frequency of the cough, when steadily persevered in.

It may be objected, that it is contrary to the pathology of these diseases to expect any good effect from topical applications to the fauces or soft palate. I know from experience that it diminishes cough, and thus it removes one of the most frequent causes of congestion and inflammation; for cough, though often the sequel, may also be the cause of these, and always tends to increase them when present.

I am etc., WILLIAM BAYES.

Brighton, September 8th, 1853.

NEWS AND TOPICS OF THE DAY.

ROYAL COLLEGE OF PHYSICIANS:—CHOLERA. The following circular was issued on October 15th, by the Cholera Committee of the College of Physicians:—

"The Cholera Committee of the Royal College of Physicians have received from various quarters applications for some plain directions calculated to be of service to the public during the prevalence of epidemic cholera, when medical advice may not be immediately at hand, and before such advice can possibly be obtained.

"For this reason the committee deem it right to offer to the public some instructions, which, on account of an extended 'Notification' having been issued by the General Board of Health, on the 20th of September 1853, may be brief; and are in no case intended either to supersede the necessity of having recourse, as speedily as possible, to further medical assistance, or to impose any authoritative restriction on medical practitioners.

"During the Prevalence of Cholera:—1. No degree of looseness of the bowels should be neglected for a single hour. Medical advice should be at once sought when the looseness begins; and, previous to the arrival of a medical attendant, some of the medicines, at other times used for checking diarrhoea, should be taken; for example—the chalk mixture; the compound cinnamon powder; or the compound chalk powder with opium, in doses of from 20 to 40 grains for an adult.

"2. No saline aperients or drastic purgatives should be taken without the advice of a medical man.

"3. Intemperance in eating or drinking is highly dangerous. But the moderate use of vegetable as well as animal food may be recommended; and, in general, such a plan of diet as each individual has found by experience to be most conducive to his health; for any considerable change in the diet to which a person has been accustomed is seldom advisable during the prevalence of an epidemic.

"4. Debility, exhaustion, and exposure to damp, render the poor especially subject to the violence of the disease. The committee urge upon the rich the necessity of supplying those in need with food, fuel, and clothing.

"5. The extreme importance of removing or counteracting all impurities, whether in the air, water, or soil, as by ventilation, cleanliness, and the free use of the chloride of lime or chloride of zinc, cannot be too strongly insisted upon.

"Lastly. Since the reports made to the College of Physicians shew, that of the persons who were engaged about the sick in the last epidemic, the number of those who were attacked by the disease was, in proportion, exceedingly small, the fear of infection may be practically disregarded.

"The committee forbear to dwell upon the extreme importance of providing medical attendants at dispensaries for the treatment of diarrhoea among the poor: of organising in every district affected by cholera what is called the system of 'house to house visitation'; and of establishing temporary hospitals for the reception of patients who cannot be properly treated at their own homes; because these measures have been strongly and properly enforced in the 'Notification' published by the General Board of Health."

METHOD OF DETERMINING THE INTENSITY OF LIGHT. The *Athenæum* of October 1st quotes the following remarks from a letter lately received from Berlin:—

"It is well known that the paper prepared for photography, grows more or less black by rays of light falling on it. One of our young painters, M. Schall, has just taken advantage of this property in photographic paper to determine the intensity of the sun's light. After more than 1,500 experiments, M. Schall has succeeded in establishing a scale of all the shades of black which the action of the solar light produces on the photographic paper: so that, by comparing the shade obtained at any given moment on a certain paper with that indicated on the scale, the exact force of the sun's light may be ascertained. Baron Alexander von Humboldt, M. de Littrow, M. Dove, and M. Pongendorff, have congratulated M. Schall on this invention; which will be of the highest utility, not only for scientific labours, but also in many operations of domestic and rural economy."

QUACK DOCTORS THRIVE IN ENGLAND. The census of 1841 showed 21,435 persons practising one or more departments of medicine without qualification. The youth and sex of some of the practitioners was also remarkable. In Birmingham, there was one "herbalist" under 20 years of age; two "keepers of lunatic asylums" under 20: fourteen female "leech-bleeders"; and one female "physician". One female "dentist" in Taunton; a "physician" in Norwich under 20; two "medicine vendors" in the Tower Hamlets under 20; one "midwife" in Preston under 20; one "physician" in Canterbury under 20; and two "physicians" in Bristol under 20.

MARRIED COUPLES IN WORKHOUSES. Information is given in a return to the House of Commons, procured at the instance of Mr. Pellatt, M.P., of the number of married couples, above sixty years of age, living together and separate in workhouses on the 1st of January last. In England the number who were inmates of workhouses, and living together, on the 1st of January, was 298, and in Wales 1, making 299. The number of married couples above sixty, who were inmates of workhouses, and living separate, on the same day, was in England 575, and in Wales 3, making 578. The return does not comprehend the single parishes under the 43d of Elizabeth.

ZOOLOGICAL GARDENS, REGENT'S PARK. The Zoological Society are now exhibiting, for the first time, an adult living example of the great South American anteater (*myrmecophaga jubata*), by far the most remarkable animal which they have acquired since the hippopotamus. The extreme singularity of its form, the marked character of its colouring, and its very considerable size, will, in all probability, render this acquisition as interesting to the public in general, as it cannot fail to be to the scientific world. The great difficulty of transporting an animal whose food has hitherto been supposed to consist entirely of insects from the forests of South America to an artificial home in the Regent's Park has, up to this time, prevented the society from filling up the important desiderata of their series, which they have now had the good fortune to acquire.

[News and Topics continued at page 937.]

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. III.—WEEK ENDING 15TH OCTOBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Degree of Humidity for the Day.	Wind.		Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Hall, Snow, Fog, Frost, Thunder, and Lightning, Aurora, Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.	
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Direction.		Mean Force for the Day.								
9 Oct. S.	29.561	29.639	57.	51.5	53.2	62.5	45.7	51.5	0.934	a.m.	p.m.	0—6	am pm	0 — 10				
10 — M.	29.762	29.761	56.5	46.5	50.5	59.	40.2	49.8	0.930	NE.	NE.	1		8				
11 — Tu.	29.692	29.668	57.	46.	50.5	59.	39.	48.4	0.914	N.	E.N.E.	1.5		10, s.				
12 — W.	29.693	29.684	54.7			61.	45.	49.5	0.936	N.	NE.	1.5		10				
13 — Th.	29.703	29.693	56.7	38.7	46.7	65.	31.	47.4	0.931	N.N.E.	NE.	2		9.5				
14 — F.	29.754	29.645	57.2	41.	48.1	64.5	31.5	45.1	0.876	N.N.E.	E.S.E.	1		9				
15 — S.	29.399	29.303	55.5	43.7	48.6	57.5	38.	46.	0.842	S.S.E.	S.S.W.	2.5		8				
Column ..	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MORFAT, M.D.

9 Oct. S.	29.392	29.465	56.0	48.0	52.0	70.0	50.2	0.947	0	0	0	0	10		0.00	Toothache, Di.	
10 — M.	29.614	29.570	54.0	47.0	50.5	58.5	51.0	1.000	0	0	0	0	10		0.00	Toothache.	
11 — Tu.	29.541	29.509	55.0	48.5	51.7	72.0	48.5	0.934	N.E.	0	1	0	0		0.20	Diarrhoea.	
12 — W.	29.584	29.610	55.0	48.0	51.5	59.0	46.5	0.903	0	N.E.	1	0	0		0.05	Diarrhoea.	
13 — Th.	29.568	29.566	56.0	48.0	52.0	61.0	43.0	0.875	N.E.	N.E.	1.5	0	0		0.05	Diarrhoea 2.	
14 — F.	29.592	29.645	52.5	48.5	50.5	63.0	46.4	0.965	0	N.W.	1	0	0		0.00	Diarrhoea 2.	
15 — S.	29.192	29.141	54.5	44.0	49.2	57.0	35.0	0.873	S.S.W.	S.S.W.	3	2	0		0.00	Diarrhoea.	

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 100 ft. Observer: J. W. JEANS, Esq.

9 Oct. S.	29.479		57.2	49.0	53.1		49.0	47.8	0.936	E.	E.	0	0	10, ci.-s. ci.-cu. s.	Mist.	0.030	[irritation. Cere. cong. fr. age & chr. br. Exh. from old Intersusceptn. Ulc. of bowels and di. Apoplexy.
10 — M.	29.664		56.2	49.0	52.6		49.0	51.5	0.944	E.	N.E.	0	0	10, ci.-s. ci.-cu. s.	Misty.	0.015	
11 — Tu.	29.590		53.6	48.7	51.1		48.1	48.4	0.946	N.N.E.	N.E.	0	0	10, ci.-cu. s.	Slight	0.016	
12 — W.	29.573		56.1	46.7	51.4		44.5	50.4	0.939	N.E.	N.E.	1	0	10, ci.-cu. s.	[mist.	0.240	
13 — Th.	29.639		56.5	50.6	53.5		49.8	50.8	0.939	E.	Ebn.	0	0	9, ci.-cu. s.		0.017	
14 — F.	29.639		55.1	48.7	51.9		46.0	48.6	0.908	Ebn.	S.	0	0	8, ci.-s. ci. ci.-cu.		0.050	
15 — S.	29.402		54.9	43.4	49.7		39.5	44.6	0.856	S.	S.S.W.	1	0	9, ci.-cu. s. ci. s.			

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

9 Oct. S.	29.527	29.589	60.5	46.5	53.5	74.0	47.0	0.852	N.E.	E.	0.5	0	0	7, cu. ci.-cu.	0.04	[nia. Hemop.	Conv.
10 — M.	29.714	29.696	56.0	43.0	49.5	66.0	44.0	0.862	N.E.	N.E.	0.5	0	0	7, cu.	0.00	Diarrhoea, Gastro-	
11 — Tu.	29.659	29.637	57.0	48.0	52.5	71.5	49.5	0.859	N.E.	N.E.	0.5	0	0	6, cu.	0.00	Tic. Dol. Rh. Ac.	Conv. Decay.
12 — W.	29.637	29.630	60.0	48.0	54.0	70.5	49.5	0.888	N.E.	N.E.	1	0	0	8, cu.	0.00	Col. — Vom. 2.	Conv. Fever.
13 — Th.	29.667	29.654	60.0	49.0	54.5	71.0	50.5	0.874	N.E.	N.E.	1	0	0	6, cu.	0.07		Phthisis. Di.
14 — F.	29.679	29.654	58.5	49.5	54.0	66.0	52.0	0.888	N.E.	N.E.	1	0	0	6, cu.	0.11	T.	Con. De. Hap.
15 — S.	29.547	29.477	57.5	42.0	49.7	62.0	44.0	0.815	SW.	SW.	2	0	0	6, ci.-cu.	0.00		Marasmus.

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

9 Oct. S.	29.68		65.	48.	55.	75.	42.	0.890	N.W.	W.	0	0	0	5, cu. cu.-s. n. ci.	10	T. Neuralgia.	
10 — M.	29.63		64.	38.	51.	71.	38.	0.930	N.W.	N.E.	0	0	0	10, ci.-s.	10	Di. Pu. Fe.	Phth. et. 63.
11 — Tu.	29.81		59.	49.	54.	60.	46.	0.932	N.E.	N.E.	1	0	0	10, ci.-s. n.	14	Hysteria, Oph.	Scrofu. et. 29.
12 — W.	29.73		60.	48.	54.	62.	44.	0.944	E.	E.	1	0	0	10, ci.-s. n.	14	Enteritis. T. Di. 2.	Phren. et. 24.
13 — Th.	29.76		62.	47.	54.5	71.	44.	0.934	E.	N.E.	0	0	0	10, ci.-s. n.	30	Hep. 2. Neu. Conv.	
14 — F.	29.80		68.	47.	55.	70.	41.	0.826	W.	S.	1	0	0	4, cu. cu.-s. n.	30	Cholera 2. Hep.	
15 — S.	29.77		59.	40.	49.5	63.	34.	0.798	N.W.	SW.	2	0	0	7, ci.-s. n.		Di. 3. T. Pneumonia.	

EXETER. Lat., 50.45.0 N.; Lon., 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPER, M.D.

9 Oct. S.	29.573	29.614	62.	48.	55.	67.5	44.	0.960	N.W.	E.	1	0	0	3, cu.		Asthma.	
10 — M.	29.635	29.601	60.	46.7	53.3	64.2	44.	0.934	N.W.	N.E.	1	0	0	3, cu.		Bilious vomiting	
11 — Tu.	29.715	29.673	59.	48.8	53.9	64.	45.6	0.980	E.	E.	1	0	0	4, cu.	.05		
12 — W.	29.659	29.637	59.	48.9	53.9	60.2	44.	0.980	E.	E.	2	4	0	7, cu.	.01		
13 — Th.	29.669	29.661	58.3	51.2	54.7	60.3	48.9	0.850	E.	N.E.	2	2	0	8, cu. n.	.18	[Enteritis.	
14 — F.	29.730	29.747	57.5	42.2	49.8	59.2	37.2	0.934	N.E.	N.	2	1	0	6, cu.	.01	Hysterical collapse,	
15 — S.	29.633	29.552	57.7	46.2	51.9	58.5	45.2	0.873	SW.	SW.	2	1	0	8, cu. n.	.26		

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

9 Oct. S.	29.547		62.0	43.9	52.9	69.0	51.0	0.934	E.		0.5			8		0.02	
10 — M.	29.747		64.0	41.4	51.8	72.0	48.0	0.952	W.		0.5			9			
11 — Tu.	29.648		62.0	45.5	53.6	70.5	49.0	0.873	E.		0.5			10			
12 — W.	29.595		58.5	54.4	54.5	63.0	52.5	0.934	N.E.		1.0			9			
13 — Th.	29.600		55.0	47.4	51.6	68.0	52.5	1.000	N.E.		2.0			9			
14 — F.	29.677		63.9	50.4	55.8	65.0	55.0	0.944	SE.		0.5			10			
15 — S.	29.633		54.0	42.4	49.6	64.0	50.0	0.934	SW.		0.5			10			

[Up to our going to press Dr. Hoskins' Report had not arrived.

NEWS AND TOPICS OF THE DAY.

[Continued from page 936.]

ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON: 1853-54. Meets at half-past eight o'clock precisely. In 1853: Tuesdays, November 8 and 22; December 13. In 1854: January 10, 24; February 14, 28; March 14, 28; April 11, 25; May 9, 23; June 13, 27. Anniversary Meeting, Wednesday, March 1, at four precisely.

MEDICAL SOCIETY OF LONDON. The following papers are announced as intended to be read at the ordinary meetings of this society.

Saturday, October 22nd. F. Sibson, M.D., F.R.S., "On Pericarditis."

Saturday, October 20th. Robert Barnes, M.D., "On the Various Means of Inducing Contraction of the Uterus".

Saturday, November 5th. J. R. Cormack, M.D., "On Cholera".

Dr. MARSHALL HALL AT MONTREAL. We copy the following paragraphical *éloge* from the September number of the *Montreal Medical Chronicle*, edited by Drs. Wright and MacCullum.

"This distinguished physician, who has during the last six months visited many of the cities of the American Union, arrived in this city on the 11th ultimo, and left it again on the 17th. He had previously spent some days with his professional friends in Toronto and Quebec. During his residence here, all the leading practitioners of the place, and a few from the vicinity, called upon him, and were much pleased with his urbanity of manner, easy address, and readiness to communicate on subjects which have engaged his attention during a long and active life. On the evening of the 15th, he performed a number of experiments, which will be published in our October number, in the rooms of the Natural History Society, before a highly respectable audience; and, on the succeeding evening, delivered a lecture at a conversazione held in the same rooms. At the close of the lecture, Professor Holmes, who was deputed by the members of the medical profession present, addressed Dr. Hall as follows:—'In my own name, and on behalf of my professional brethren now present, I would express to you, sir, the gratification we all feel by the presence amongst us of one who has earned for himself, by his painstaking researches and successful investigations into the physiology of the nervous system, an enduring place in the annals of our noble profession. For the opportunity to make your acquaintance, which you have afforded us in this visit; for the interesting experiments which you have performed in our presence; and for the highly instructive lecture delivered this evening; you have our sincere thanks. We shall ever recall the circumstances of your visit with feelings of pleasure; and we trust, that in the reminiscences of your tour through America, that of your sojourn in Montreal may not be among the least pleasing.'

"Major Lachlan, President of the Natural History Society, then came forward, and, presenting Dr. Hall with the honorary degree of the society, said:—'I have much pleasure in being deputed by the members of the Natural History Society of Montreal, to present you with the diploma of honorary member of that society (voted by acclamation at their last meeting), as a mark of their estimation of your well-earned high professional character, as well as of your valuable contributions to science generally, and in the hope that that document will occasionally serve as an additional agreeable memorandum of your visit to Montreal.'

"Dr. Marshall Hall replied:—'I thank you, Professor Holmes, and the gentlemen here present, and especially the gallant President of the Natural History Society of Montreal, for the kindness and the honour done me this day. My chief desire is to deserve well of my profession, and to live in the esteem of my professional brethren; and every proof that that desire has been attained, is a source of extreme gratification to me. I may well, therefore, be pleased with the events of this evening. I thank you sincerely, gentlemen, for the cordial manner in which you have welcomed my presence amongst you, and beg to assure you, that when the ocean again divides us, my visit to Montreal will be remembered with peculiar pleasure and pride.'

"The company then separated into groups, and animated conversations on various subjects of professional and literary interest, were kept up until a late hour."

THE FEMALE DOCTORS OF PENNSYLVANIA. The "Female Medical College of Pennsylvania" opened its winter session on the 1st of October. Its faculty consists of five male and two female professors; all of whom, male and female, are medical graduates. The demonstrator of anatomy is a woman, a disgusting fact which it is painful to relate. Miss (?) Charlotte Adams, of Boston, and eight other ladies (?), have received, about six weeks ago, the degree of M.D. from the Female Medical College of Pennsylvania.

STONEMASONS WITH MOUSTACHES. Numbers of masons throughout the country now allow the hair to cover the upper lip, to arrest the dust which flies off in the working of the stone, before it reaches the lungs. This, it seems, has created quite a *furor* amongst the softer sex; the masons are at present decidedly the most popular beaux.—*Caledonian Mercury*.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. The following gentlemen have been elected officers for the year 1853-54:—Matthew Wylie, Esq., M.D., President; W. E. C. Clark, Esq., Vice-President; J. Donald, Esq., Treasurer; J. McCarron, Esq., Secretary; Thomas Christie, Esq., Librarian; James Miller, Esq., Seal-Keeper; Alexander Morton, Esq., Vaccinator; James Scanlan, Esq., William Black, Esq., James Kirk, Esq., M.D., George Lade, Esq., M.D., David Walker, Esq., and Robert Adam, Esq., Directors; John Dick, Esq., Factor; James Dougall, Janitor.

ROYAL COLLEGE OF PHYSICIANS. At the usual Quarterly Meeting of the Comitia Majora, held on Friday, September 30, the following gentlemen having undergone the necessary examination for Diploma, were admitted members of the College:—Dr. Callaway, London; Dr. Coote, Oxford; Dr. Ballard, London.

APOTHECARIES' HALL:—PASS LIST. Thursday, Sept. 22nd, 1853:—Thomas Brown, Bromley, Lancashire; Wm. Hitchin Pendlebury, Bolton-le-Moors, Lancashire.

Thursday, Sept. 29th, 1853:—Edward Vaughan, Keynsham, Somerset; William Steventon, Cheadle, Staffordshire; John Bishop King, Brighton; Stephen John Bunt, London.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

ARAGO, M. François, at Paris, on October 2.

BLAKE, Robert, Esq., Surgeon, R.N., at Park Place, Mile End Road, Stepney, aged 84, on October 7.

ELKINGTON, James Goodall, Esq., Surgeon, formerly of the 17th Lancers, at Dublin, on the 3rd instant, aged 70. He had been in the service forty-seven years, and had served through the Peninsula war and at Waterloo.

IRONS, George Robert, Esq., Surgeon, at Newcastle-upon-Tyne, of cholera, contracted in his zealous attendance on cases of that disease, aged 37, lately.

*JAMES, William, M.D., at Bristol, on October 11.

MALCOMBE, —, M.D., at Newcastle-upon-Tyne, of cholera, lately.

MERRSH, Thomas, M.D., at Brentwood, Essex, aged 47, on September 27.

MATTHEW, Joseph F., Esq., Staff Assistant Surgeon Royal Army, by the upsetting of a boat at Auckland, New Zealand, on May 13.

M'CULLOCH, John, Esq. at his residence, Liverpool, aged 96, on October 2.

MERRYWEATHER, John G. Loy, M.D., eldest son of George Merryweather, M.D., after two years of lingering illness, aged 23, on October 9.

SWAYNE, Stephen Jennings, M.D., Deputy-Inspector of Hospitals and Fleets, and Justice of the Peace for the county of Kent, at Rochester, aged 71, on September 28.

WHITTLE, Edward John, Esq., at his residence, Lamberhurst, after a few days illness, aged 71, on October 6. Mr. Whittle had been for thirty-nine years in practice at Lamberhurst; he had also been in the army, and for six years House-Surgeon to Winchester Hospital.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention, and revised proofs ought invariably to be sent to Putney.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLIII.

LONDON: FRIDAY EVENING, OCTOBER 28, 1853.

NEW SERIES.

TO CORRESPONDENTS.

SCHÖNBEIN'S OZONOMETER may be obtained in about a fortnight from this date, by applying to Mr. John Cox, Peckham. Dr. DREW, of Southampton, is intrusted with the transmission of observations to Dr. Schönbein, as is stated in a letter from Dr. Drew, which we shall publish next week.

THE METEOROLOGICAL PAGE of the Association Journal has induced so many zealous observers in important localities to offer us their services, that we have at present under consideration the propriety of devoting next year an additional half page or perhaps even an additional page weekly, to meteorological observations. We shall be glad to receive for our private use and guidance expressions of opinion on this subject. Tabular matter is both troublesome and expensive; and unless an extension of the space devoted to meteorology be generally called for, we shall not make it.

METEOROLOGICAL INSTRUMENTS. Dr. Barker, of Bedford, has kindly undertaken to furnish, for insertion in an early number, information regarding the instruments used by himself and his fellow-contributors.

CLIMATE OF MADEIRA. The letter of Dr. Burgess has been in type for some time, and shall appear in our next number.

THE ETHICS OF THE MEDICAL PROFESSION.

THE letters in this day's number upon Medical Ethics, show that the subject is engaging attention: and the announcements of the intended meetings of the Committees on Medical Ethics and Gratuitous Advice, encourage us to hope that a new and a better order of things will ere long be instituted.

It is at least something to have recognised the necessity for amendment; and in this recognition we hail the first advance to many necessary changes and reforms, though they do not involve aught that is new in principle or action. Medical ethics are really the carrying out of the principles of self preservation and self interest. They involve no constraints but those of right feeling, and ask for no concessions but those which experience has taught to be eminently and equally conducive to the well being of society and of the individuals of which it is composed. There is little to fear in opposition—much in apathy and indifference. These are the things that bear upon the young and struggling practitioner, not on the experienced and successful physician; not on the man, whose balance at his banker's and stock invested place him beyond care, but on the country doctor, and the town general practitioner, suffering all from a competition placed beyond limit, and producing the inevitable consequence of depreciated value. In the law, no such practices are tolerated, and no such hardships exist: the public have learned, and have been taught to respect the code which governs the internal regulations of the bar; there is an acknowledged tribunal of public professional opinion against which it is in vain to war. It is not arbitrary, but is the mere generalisation of facts, deduced from experience, showing how and in what manner various contingencies can be best met, to conduce to the good of the profession and the public. This is all we have ever sought for in the medical profession, and most blind are its members

to their own interests so long as they neglect to follow a plain path leading to the correction of abuses, the sustaining of public opinion, and a more just appreciation of the rights and claims of a profession less recognised and more unworthily treated than any other body in the state. Why is this? Is it not because we have not been true to ourselves?

When the man, riding on his ass and pursued by banditti, urged him to greater speed to escape the enemy—No, was the animal's reply, the worst enemy I have ever had is the one now on my back. The worst enemy the medical profession has ever had has been found in the ranks of the profession itself; and all true reform must be from within. Jealousies and bickerings, want of union and unanimity, pride in supplanting a brother practitioner, the struggle for preference and advantage, the mere name of large attendances on the sick, irrespective of proper remuneration—these have been and are weapons daily used by the public against the profession.

Our Association has power to arrange and settle the various points of difference existing, such as no Medical organisation has ever before possessed. It has the power to make its membership a test of honour and respectability; it can create a tribunal to prevent and adjust those unseemly differences existing often for years to the entire exclusion of intercourse between fellow workers for the good of suffering humanity; it can elevate the whole status of the profession by making it more worthy to be universally esteemed and respected; and it can by its own unity show to each little knot of town-dwelling medical practitioners how they can increase their usefulness, win more extended respect, and remove the stigma of disunion and division to which they are now too often subjected.

These are great advantages which are intra-professional, and which, by regulating the conduct of each member of the Association, must tend to benefit the whole mass of the profession, and by degrees to draw all within its influence. But there are correlative advantages, in having fixed regulations for our guidance, as the public are thus made aware of what we expect and of what we shall do on all occasions. United, we are as the herd of bulls which the waiting lion could never attack; quarrelling among ourselves, we singly fall an easy prey. Boards of Guardians would in vain offer their scanty pittances for the life blood of our younger brethren, or insurance offices insult us by their subterfuges to escape a just fee, did they not feel assured that our refusal would not prevent a ready acquiescence, nay, a humble canvass for the proffered work from some medical aspirant. We again repeat it, we are not true to ourselves, or we should be more fairly and more truly used.

Our leading men who have risen over the billows and breakers of fortune's sea, and have safely landed on the shore of success, should, in justice to their younger brethren, whose hope deferred leads often onward to the grave, remember their own days of struggling and painful despondency. They should hesitate before dispensing indiscriminately gratuitous medical advice. They should pause

before they aid the prescribing druggist, and ruin the general practitioner. They should demand some guarantee that the applicants are in reality proper objects of their beneficence, and be prepared in doing to others to illustrate the golden rule, however much it might detract from the splendid levee they can afford without pay to maintain, and almost each member of which is a fee filched from the poor man's income. How many times have we had proofs of the impudent deception practised on consulting physicians in their chambers? How many, who as out-patients have procured gratuitous advice at a London hospital, have been found able to pay, when they could no longer avoid medical attendance at home? We know of cases in which such persons have given their fee of £20 or £30, for the attendance of the very surgeon under whose care they had meanly placed themselves to obtain gratuitous hospital advice!

THE AMALGAMATION OF SOCIETIES.

We are glad to observe that the *Lancet*, in a leader of last week, advocates the great principle for which we have so earnestly contended; viz., the establishment of a Medical Institute in the metropolis, from which shall branch out sections for pathology, physiology, and other departments of science.

That many obstacles lie in the way to retard such a combination is very evident; but there are none that might not be overcome by judicious management, mutual concession, and friendly feeling. Indeed, the divisions that now exist are but divisions in appearance. The man who belongs to all the leading London societies feels as though he were a member of one only; except when he grudgingly pays to each the subscription, the aggregate making a sum which he well knows would be only one half in amount, and paid with much less trouble, if the divisions did not exist.

There are some who think that the honour of a separate society would be diminished by its being reduced to a section, and that its influence would be in some degree lessened. This is a most grievous mistake. If one great central body was formed out of the sections, and on the representative principle, the highest medical honours in the land would be opened for competition; while the separate honours pertaining to each section would remain just as important as those now open to the members of the several societies. The presidency of the pathological section, for example, of the London Academy of Medicine would surely be as honourable an office as is the presidency of the Pathological Society.

If anything can add force to our arguments, it is the fact that the plan we advocate has already been found eminently successful in the management of the British Association for the Advancement of Science. Indeed, the plan is so simple and so obviously necessary that we wonder it should have been left untried by the members of medical societies until so late a day as the present.

However, it is not now so incumbent on us to criticise the past, as to point out a line of action for the future, by which the combination so much to be desired may be obtained. This we shall continue steadily to do; and if our contemporaries will also persevere in advocating the same principles, we are certain that the reform hinted at will soon be accomplished, despite all the class interests and dogged prejudices that threaten to rise in snarling opposition.

THE MEDICAL PROFESSION AND THE BRITISH CONSTITUTION.

TO-DAY we publish a few of the many letters which we have recently received regarding the Vaccination Act, selecting chiefly those which refer to its details. It would serve no useful purpose to print pages of complaints against Government for allowing this measure to pass through Parliament; for the *ASSOCIATION JOURNAL* has already contained ample exposures of the unconstitutional character of the Act, as well as of the glaring deficiencies of its machinery for accomplishing an extension of *efficient vaccination*, the object for which it was said to be framed. It seems, moreover, to us, that as writing and petitioning have done us no good in the past they need not now be relied on in the future. Unless the zeal of our complaining colleagues can achieve something more than petitions and "letters to the editor", we confess that we despair of seeing the medical profession included within the pale of the British constitution. The apathy, if not the treason of our colleges, and the consequent want of organisation of the general body of the profession, have rendered us an easy prey to crude and pragmatical statesmen. The medical press with united energy craved delay, and denounced the injustice and showed the uselessness of the Act; but, as medical men can command no votes in the House of Commons, and take no part in politics, just and temperate remonstrances were disregarded. Nay, in return for our deeds of true philanthropy we have been singled out for insult and oppression; we have been selected from among our fellow citizens as a body to whom alone is inapplicable the maxim, that "the labourer is worthy of his hire". An Act of Parliament has been passed by which it is declared that the failing to render to the State, gratuitously, certain most important professional services is "a misdemeanour", a crime subjecting us to fine and imprisonment! We appeal to the expounders of British constitutional law if we are not correct in saying that Parliament had no right to pass an enactment so monstrously tyrannical? We appeal to the gentlemen of the House of Commons themselves, if they would have dared to enforce, or even suggest the idea of enforcing gratuitous work upon lawyers, clergymen, or any body of men possessed of political influence? In conclusion, we advisedly, and without hesitation, concur with Mr. Bloxam in saying that the Vaccination Act of 1853, as regards the medical profession, interferes more oppressively with private business than any law which has been attempted to be enforced since the year 1688.

The only way in which this grievance can be removed, and the just rights of the medical profession defended from farther aggressions, is by a combination of unselfish, zealous men determined to introduce into the House of Commons a number of medical members, apt in business, and true to their profession. This object, if rightly sought after, might ere long be attained; and the attempt, even though abortive, would do good, inasmuch as it would call forth on our behalf the generous sympathies of enlightened portions of the community. At all events, a resolute trial in this direction ought to be made, for the past has abundantly shown that our claims cannot get fair hearing in high places, in virtue of letters, leaders, petitions, and deputations.

ORIGINAL COMMUNICATIONS.

ON THE CAUSES AND TREATMENT OF DIARRHŒA.

By THOMAS HUNT, F.R.C.S., etc.

THE frequency with which diarrhœa degenerates into malignant cholera invests the treatment of the former with an unusual interest and importance at the present time; and reflective practitioners may not feel altogether satisfied with the directions which have issued from medical or sanitary boards, or other pseudo-professional authorities. Nor can we claim more respect for the somewhat dogmatic and earnest style in which the zealous scribblers in our periodicals have urged us to adopt respectively their own favourite mode of treatment of choleraic diarrhœa, or cholera itself, in *all* cases. Yet these proposals for an exclusive line of practice are so numerous, and at the same time so contradictory, and often proceeding from sources so respectable, that I have thought a temperate and considerate discussion of the subject, on the part of those members of the Association (if such can be found) who have no *panacea* to propose, might be useful to the cause of science, and might serve to check that unhappy tendency to routine and empiricism which has of late so much damaged the profession in the eyes of the public.

Although I have nothing to propose which is absolutely new, I believe that, if I can induce my brethren, one and all, to recur to first principles, to listen to the suggestions of anatomy and physiology, and to reflect upon the general economy of the alimentary canal, instead of being carried away by the wild theories of disease which modern clamour has thrust so importunately upon us, I shall have accomplished more in reforming the treatment of diarrhœa than by anything I have myself to propound.

In the first place, it must be remembered that a periodical discharge from the bowels is natural and necessary, and that, when this discharge becomes excessive, it constitutes not a disease, but a symptom only, and not always a *symptom of disease*. In a healthy condition of the system, the alvine evacuations are proportioned, *ceteris paribus*, to the quantity of effete matter contained in the bowels. If this quantity is excessive, either from gluttony or any other cause, there is, or ought to be, as a natural consequence, a discharge proportionably excessive. If the bowels become loaded with indigestible matter, with acrid poisons, or with irritating secretions, their discharge is effected by a more energetic alvine action, by increased peristaltic contraction, and, generally, by augmented serous effusion, whereby the injurious matters are washed away; but, of all things, the most useful occurrences in these cases are the spasmodic muscular movements of the intestines, which are naturally excited, in order, preëmporarily to get rid of the enemy. This was well understood by Cullen; who, nevertheless, feeling it necessary to class diarrhœa amongst actual diseases, placed it in the class *neuroses*, order *spasmi*.

It is not to be denied that griping pains and diarrhœa may both exist, as idiopathic affections derived from irritation in the nervous centres, rather than in the extreme filaments; but with such cases of diarrhœa we are seldom called upon to deal—never, perhaps, as epidemic disorders; and, therefore, for the present, our attention may be confined to cases in which there is or has been manifestly, in one form or another, a *poison in the bowels*. This poison, whether it be a specific poison, or simply effete, indigestible, or acrimonious matter, is, in simple diarrhœa, always found creating the disturbance first and chiefly, if not exclusively, in the small intestines. This requires no proof. It must be plain to all who reflect on the structure and functions of the small intestines, in contrast with those of the larger bowels, that bilious or serous diarrhœa always commences in the upper portion of the canal; while dysentery, or mucous diarrhœa, affects the lower and larger portion. Moreover, it must be borne in mind that the small intestines are

much more easily excited by the presence of acrimonious matters than the large. This accounts for the sudden cessation of diarrhœa which often attends the administration of a single dose of calomel, rhubarb, or other purgative, the action of which on the liver, stomach, or duodenum, removes the *materies morbi* from the upper to the less sentient lower bowels, which then remain for hours inactive, because unexcited; the smaller intestines being meanwhile relieved from their distress. Now, if, in such a state of things, the disordered action of the bowels should be erroneously attributed to a relaxed condition of the exhalents, and the patient be treated accordingly with astringents, absorbents, opiates, and stimulants, one of two things must happen—either the disorder proceeds, in spite of these remedies, which often happens; or, the escape of the poison being prevented by the medicines employed, it is either absorbed into the blood, to damage the whole system, or it is retained in the intestines, to excite future irritation there. Without doubt, opiates and astringents are sometimes useful in diarrhœa: it is against their indiscriminate administration that I protest. Some rule should be observed as regards the remedies required, or we shall often do mischief, and always be guilty of empiricism; and the design of this paper is chiefly to propose a few rules for adoption or rejection, by which the Association shall agree to be guided in their treatment of diarrhœa, more especially in choleraic times.

The first practical question arising in every case is, Is the diarrhœa complicated with frequent vomiting? This must determine our practice in the first instance; because, in such a state of the stomach, it is almost certain that every medicine intended to check the action of the bowels will be immediately rejected; and thus, in country practice, many valuable hours will often be lost, and no arrest of the disease will have been effected. The vomiting must first be stopped. How is this to be done? Practitioners vary a good deal in their practice; but it may be laid down as an excellent rule, that, unless we are sure the vomiting is useful, it cannot be too soon arrested. If the natural contents of the stomach have been first ejected, followed by bile, first yellow, afterwards brownish green, the patient will be liable to sink from the vomiting alone, which can generally be effectually checked by a simple effervescing draught containing a small excess of alkali, and from half a drachm to a drachm of compound tincture of cardamoms, every two or three hours. If this fail, which it rarely does, a drop of creasote, mixed with twenty drops of the tincture of cardamoms, and given in about a teaspoonful of water, will have great control over the stomach, and prove a good accompaniment of calomel and opium, or any other remedy designed to reach and act upon the bowels.

The vomiting being stopped, the next inquiry will be directed to the cause of the diarrhœa. If it should prove to be bilious, the case is one of English cholera, and is liable to run on into the "spasmodic" form, without becoming either "Asiatic" or "malignant". Severe gripings and occasional cramps in the gastrocnemii and other muscles, with rapid prostration of strength, are symptoms which have always accompanied severe attacks of the old fashioned English cholera morbus; and in former times, a dose or two of magnesia and rhubarb, with copious libations of weak broth, were all that were required (with the addition sometimes of a moderate dose of laudanum), to put the patient into a state of convalescence. One does not see why the same principle of treatment should not now be adopted for bilious diarrhœa. The rhubarb and magnesia were designed to remove the offending material from the stomach and duodenum into the colon and rectum; the broth to dilute the bile and shield the mucous membrane from its acrimony, and to afford support and nourishment, when solid food cannot be taken; the laudanum (which was the least important), to moderate the cramps.

But it should be borne in mind that there are many other causes of diarrhœa, besides this excess of the hepatic secretion; and several, or all of these causes may be in operation, as well in choleraic seasons, as at other times; and nothing can be more unphilosophical or practically unwise, than to

assume that every case of diarrhoea which occurs during the prevalence of malignant cholera, is necessarily choleraic in its character, much less that it ought to be treated *specifically*. A general survey of a few only of the causes of diarrhoea in their ordinary manifestations, will show the absurdity and danger of the routine practice, especially when that practice consists of the indiscriminate exhibition of opiates and astringents, as in some degree sanctioned by the Board of Health in 1849.

Diarrhoea may arise,

i. From the presence of irritating substances in the small intestines, which may consist of or arise from,

1. Excessive quantities of their natural contents:

- a. Bile.
- b. Pancreatic juice.
- c. Intestinal secretions.

2. Deficiency of one of them, rendering the others offensive: *e. g.*, when the bile is deficient the other sections become irritating from their excess of acid.

3. Food transmitted through the pylorus in an undigested condition.

- a. From excess or indiscretion in eating or drinking.
- b. From disease or debility of the digestive organs.
- c. From sudden arrest of the digestive process, arising from mental emotion or accident.

4. Acid secretions, the result of impaired or imperfect digestion.

- a. Acid in excess.
- b. Alkali in excess.

ii. From the presence of a poison in the blood, which may have been conveyed thither by the stomach, the lungs, or the skin.

1. Animal poison.

- a. Specific.
- b. Putrid animal matter.
- c. Effete human secretions or excretions whether putrid or otherwise.

2. Vegetable poisons, specific or putrid.

3. Mineral poisons, used as medicines, or otherwise conveyed into the blood.

iii. From suppressed evacuations, or from congestion or irritation in some distant organ.

iv. From actual inflammation of the mucous membrane of the small intestines. (The discharge produced by inflammation of the large intestines constitutes dysentery.)

v. From atony or relaxation in the exhalents of the bowels, generally chronic, but occasionally the result of acute diarrhoea in an advanced stage.

1. Arising from senile debility.

2. ——— disease.

- a. Typhus.
- b. Phthisis, etc., etc.

The above are by no means all the causes of diarrhoea met with in practice, but they constitute its more frequent causes. Now, what is the pathology of diarrhoea? In four out of the five divisions in this simple table, it is obvious that in every case the diarrhoea is remedial and protective to the system; it is simply natural defecation regulated by the more or less pressing necessities of the case; a salutary discharge, which if prematurely checked, is liable to poison the blood, or to arrest altogether the digestive process, if not to produce organic inflammation or fatal disease. He, therefore, who would treat this disorder *indiscriminately* with acetate of lead, sulphuric acid, or any other astringent, or with confection of opium, or any other sedative, is, to say the least, a very incompetent and indiscreet practitioner, and no authority under which he can shelter himself can either bear him harmless or afford a plea to palliate his conduct. Equally censurable is the man who would treat every case with purgatives, calomel, sulphur, or any other specific; inasmuch as it is impossible that any one mode of treatment can be applicable to the many causes and conditions which may be concerned in augmenting the alvine secretions.

It is requisite to bear in mind, likewise, that there is, in different individuals, a very great variety in the frequency with which the bowels act in health. Some persons are never well unless the bowels act twice, thrice, or even oftener in the twenty-four hours; others are in excellent health although the alvine evacuation occurs only once, twice, or thrice in a week. When the latter are seized with cholera there is generally no premonitory diarrhoea; whereas those whose bowels are naturally loose are not unfrequently forewarned, or even protected from cholera by a smart attack of diarrhoea, the poison being eliminated by the bowels. I will not assert that it is *always* dangerous to check by opiates and astringents a diarrhoea, which, for any thing we can tell, may tend to dislodge an otherwise fatal poison; but current notions run so much the other way, unchallenged, that it may be as well to consider and reflect before adopting and acting upon a merely popular theory.

In considering the causes of diarrhoea as above sketched, and regarding it, as a general rule, as a salutary effort of nature, it would appear that the best practice would be to a certain extent to encourage it, or else to let it run its course. With regard to the latter alternative, in ordinary seasons it seldom happens that neglected diarrhoea in adults comes to any serious harm, but the experiment is seldom tried to any extent. When, however, diarrhoea is epidemic, and in many cases fatal, it is manifest that the expectant treatment may turn out to be little better than manslaughter. With regard to the purgative treatment of diarrhoea, with a view to dislodging more peremptorily and effectually the offensive material, when such exists, it cannot be doubted that there is much sound philosophy and good reason in the proposition; and when the cause of the disease is correctly diagnosed, and the purgative properly selected and given in a suitable dose, there is certainly no treatment which so suddenly and effectually puts a stop to the disease. And here I should be guilty of great disrespect to our intelligent and zealous associate, Mr. Conway Edwards, of Batheaston, if I omitted to notice a short but pithy tract, *On the Purgative Treatment of Spasmodic Cholera*, published by him (at Bath) during the cholera epidemic of 1849. He uses calomel, jalap, scammony, and sulphate of magnesia, not only fearlessly, but, as he tells us, successfully. The cases which he has published would be now generally called choleraic diarrhoea, and therefore belong to the category under review. Mr. Edwards found the purgative system always effectual; but he combined with it small doses of laudanum, and other reasonable adjuvants, as the case might require. It is not consistent with my object to hold out any special plan of treatment; but if there is reason to suspect the case to be one in which the diarrhoea is excited by the presence of something irritating the small intestines, the question is, What is the most ready method of carrying the offending matter into the large intestines, where it will probably remain for a time in a quiescent state, and the bowels will be no more disturbed? There are some medicines which act on the lower bowels only, as aloes and colocynth; others, as rhubarb, calomel, and perhaps magnesia, act on the small intestines only. Rhubarb seems to have a specific action on the stomach and duodenum; and calomel, by stimulating the liver and pancreas, supplies the duodenum with a purgative dose of bile diluted by the pancreatic juice. A dose of calomel and rhubarb, therefore, consisting of about three grains of the former and five of the latter, will at once stop a diarrhoea of this kind. I have tried it in a thousand instances, in many of which stimulants, opiates, and astringents had failed; and it almost invariably stops the discharge, either immediately or in a few hours. Other practitioners use magnesia and rhubarb, castor oil, &c., and with so much success, that they are tempted to conclude that purgatives are the right medicines for diarrhoea, when they are, when the cause is removable, removable only then. Is the choleraic diarrhoea of this kind? If so, why does it yield frequently to check?

have a tendency to lock up in the bowels the supposed source of irritation?

This is the precise question to which I would earnestly direct attention. The premonitory diarrhoea which rages in cholera-smitten districts is *not* a diarrhoea *sui generis*: it depends on various causes in different individuals; and, although it may generally be treated successfully, no treatment can be trusted, which does not proceed upon an intelligent perception of the cause existing in the individual case.

1. In a large majority of these cases, the chief cause is *panic*. Neither men nor women will confess it; but the family and friends observe it, and know it. Among the weak-headed and idle, who always abound where cholera rages, a large proportion are absolutely horror-smitten at the cholera when once it invades their dwellings or their immediate neighbourhood. And who does not know that both the bowels and the bladder are more readily excited by fear to discharge their contents, than by any other stimulus? Then, sympathy with the attacked directs the attention of those around (unconsciously, it may be) to their own abdominal movements and sensations, and thus excites over action. Anxiety and fatigue, night watching and nursing, all lend their aid to relax the bowels; and bowels so relaxed are easily quieted by taking almost any medicine whatever, which the patient expects will control the complaint; and those which, besides acting on the mind, give a sensible glow to the stomach, are still more certain. Hence, brandy, tincture of rhubarb, laudanum, chalk, cinnamon, cardamoms, *et hoc genus omne*, will often cure the "premonitory" symptoms, and thus, *as we are told*, prevent cholera in a whole neighbourhood.

2. Dyspepsia, from intemperance or other causes, may have irritated the bowels, and some offensive matter requires to be removed. In this case, astringents, opiates, and stimulants, all do harm. Here the calomel and rhubarb plan will succeed best.

3. Exposure to cold, want, or wet, may have excited mucous inflammation. Here the hot sand, salt, or flannels, the mustard cataplasms and fomentations, the warm bath, castor-oil and Dover's powder, are the remedies. And there are cases in which fear, dyspepsia, and cold, have each their share in relaxing the bowels; and these are cases which are liable to run on to cholera. The neglect of any part of this treatment may then be wrong. *In the first instance*, it is very important that any offending material should be removed; and in practice it is almost certain that a dose of calomel and rhubarb will more or less check the disease; but this should be speedily followed up by the external application of heat to the whole abdomen, spine, and extremities; by effervescing drinks mingled with aromatics, if sickness supervene; and ultimately, if the diarrhoea persist, by chalk, opiates, and astringents. Some practitioners prefer the mineral acids, which exercise an immense control over the diarrhoea, which results in mere relaxation of the vessels, or in an excessive effort of nature to expel the enemy.

But, 4. The choleraic poison itself may have taken up its abode in the blood or bowels of the patient, producing, in the first instance, a severe diarrhoea of the bilious character, and then, in a very few hours, a frightful discharge of serous fluid, without, *as yet*, any other symptoms of epidemic cholera. What will stop *this* "premonitory" diarrhoea? Will chalk or opium, lead or catechu, calomel or rhubarb, sulphuric acid or sulphur, brandy or salt, baths or bleeding, hot air or hot sand, or any other plans or appliances which ingenious practitioners have invented, and sanguine practitioners publicly vaunted—will any of these "prevent" the cholera, and save the patient? I doubt it much; but I would try them all, not blindly, but in obedience to the movements and dictates of nature. Supposing there is no vomiting, I would administer *first* a full dose of calomel and rhubarb; for it cannot be doubted that *here* there is a poison to be discharged, or the patient must die. Next, I would follow the instincts of the patient as to diet. Let him drink any quantity he likes of any fluid he prefers:

cold water, salt and water, and cider, are generally the drinks he looks for; and, to the application of external heat, friction should be added. When the purgative has had an hour or two to perform its work, astringents and opiates may be given. But of opiates I would be very shy; the cramps of the limbs are but efforts of nature to accelerate the venous circulation, and to hurry along the treacherous stream towards the right ventricle of the heart, where it is less likely to stagnate than in the veins; and opiates are apt to check these salutary efforts. But I am now trenching on the treatment of cholera itself, on which more has already been written than I have had time to read.

Alfred Place, Bedford Square, Oct. 8, 1853.

MADEIRA AS A RESIDENCE FOR INVALIDS:

WITH A SERIES OF METEOROLOGICAL OBSERVATIONS
MADE IN THE ISLAND.

By F. D. DYSTER, M.D.

I HAVE read with great interest the paper on the "Climate of Madeira", in the *ASSOCIATION JOURNAL* of September 2nd; and, if I now publish a few remarks on the same subject, it is not that either the facts are doubtful, or Dr. Lund's paper incomplete, but that I desire to add, if possible, to the weight of his testimony, and to diminish the probability of any phthisical patient, to whom this wonderful climate of Madeira is likely to prove useful, being intimidated or misled by the assertions of Dr. Burgess.

The table of meteorological observations which I append applies to the year 1844; and the observations were *all* made by me.

The means for the year, excepting the latter part of June, all July, August, September, and October, were obtained at Funchal, in a house about 250 feet above the sea level. The barometer was *within* the house, at a south window, always open; the instrument a mountain one of Bate's. The register thermometer and the hygrometer (Mason's) were placed at a north exposure, and, as nearly as can be, free from foreign influences. The tables were kept for my own amusement, little expecting that any one would ever be found hardy enough to assert that the climate of Madeira was damp and variable. I possess in perfection the tendency of John Bull to grumble at climate, and therefore all my bias was to grumble when I could. The opportunities were rare enough.

During the months of June (the latter part), July, August, September, and October, I and my meteorology removed into the mountains, about 2,500 feet above the sea; but even there Dr. Burgess would be a long time before he collected enough dew to wash his face with.

The tables speak for themselves; and the only comment I will offer is a comparison between the absolute mean dryness of England and of Madeira in 1844. The number of days on which rain fell was eighty-four: I believe five above the average. Out of these eighty-four, on twelve the rain occurred at night, and invalids ought to have had nothing to do with it. During the seven years I was in Madeira, I once, and once only, saw 42° registered on my minimum thermometer; and my lamented friend Dr. Renton told me that, in his previous experience, he had only once seen the same.

My own history tells a favourable tale as regards Madeira. In 1838, I had pneumonia, being at the time suffering from disease of the antrum, which destroyed the greater part of the upper maxillary bone. The pneumonia terminated in gangrene. The winters of that year and of 1839 were spent in two rooms. I was worse in the autumn of 1840, and resolved to go to Madeira. Some of my kind medical friends advised it; others (one especially of the most eminent in London) recommended me to stay at home. I should die in three months any where, he said; and I should debase more comfortably in England. His dia-

gnosis was wrong; but his prognosis was perfectly fair, on a single examination. My left lung was as solid as a board, excepting a cavity as big as an orange, which the sphacelated lung had left. The upper part of the right was deeply congested, and did little or no work. I was in the last stage of emaciation, spat half a pint of pus a day, had hæmorrhage about every fortnight or three weeks, with bits of necrosed bone coming away from my jaw continually. But I had a capital stewpan to set against these things, which never failed in its duty; and a great indisposition to sympathise constitutionally with local irritations.

My first year in Madeira enabled me to "hold my own". At the commencement of the second, I made a great and sudden stride towards health. My third found me free from all symptoms, and able to live and do as other people. In 1847-48, I went to Pau; and since that time I have remained in England, and find myself able to do as much as most, and more than many. It is true, I believe, that I had no tubercles; but my lungs required, after the rough assaults they had sustained, entire repose, and the removal of all atmospheric causes of irritation; and in Madeira they found it. During my first winter there, I was only kept in doors by weather on *three days*. What is said in Dr. Burgess's book about dew, is a ludicrous blunder. I do not think I saw dew twenty times in my *town* garden, in seven years, and a comparison of the range of temperature with the dew points will explain this.

With regard to the frequency of phthisis among the Portuguese, I am disposed to believe it to be greater than Dr. Renton supposed. But this is easily accounted for without my attempting to impugn the correctness of that accurate observer and skilful physician. The poverty of the

people has progressively increased, and tuberculosis with it. Hard work, scanty food, insufficient clothing, damp windowless houses in the mountains, dark dirty ones in the towns, are all powerful allies of phthisis, and the frequency or rarity of its occurrence among the Portuguese does not apply to the question on which Dr. Burgess brings it to bear. It only proves that climate *alone* will not prevent tubercular disease, which no sane man ever supposed to be the case.

Some returns sent to Mr. Robertson, of Manchester (*Edinburgh Med. and Surg. Journal*, Oct. 1846), on the period of menstruation among the lower classes of Portuguese, point to the existence of the same condition which favours the development of phthisis. The average age at which 144 girls first menstruated, was (if memory serves me) fifteen and a half. If these had been well nourished, well lodged, and well clothed, there is no doubt that puberty would have been accelerated, as it is among the easy class both of Portuguese and English residents.

The fatal event of many phthisical cases sent to Madeira is to be accounted for on the grounds indicated by Dr. Lund; namely, an exaggerated opinion of the power of climate, in looking upon it not as a therapeutical agent, but an anti-pathological one, leading invalids to neglect all hygienic precautions, which are as needful in Madeira as in England, and in the fact that cases are sent out when advanced into the third stage. But in the latter case, though cure may not be reasonably expected, the descent to the grave may be greatly smoothed. A brother-in-law of my own who died in my house, spent some hours of the day preceding his decease in my garden, and that, at a period of the year, when exposure to the external air would have been out of the question in England.

METEOROLOGICAL REGISTER KEPT AT MADEIRA, 1844.

Month.	Barometer, 9 A.M.	Attach- ed ther- mome- ter.	Barometer, 9 P.M.	Attach- ed ther- mome- ter.	Register thermometer.			Hygrometer, 9 A.M.		Hygrometer, 9 P.M.		Days on which rain fell.	Madeira.		England.	
					Max.	Min.	Range.	Dry bulb.	Dew point.	Dry bulb.	Dew point.		Range.	Dry- ness.	Rge.	Dry- ness.
January . . .	29.982	63.5	29.988	63	65.5	56.5	9	61.5	47.5	59.5	48	9	9	14	41	1.8
February . . .	30.010	62.5	30.045	61	64	54	10	60	48	58	47	5	10	12	32	3.1
March . . .	29.908	62.5	29.900	62	66.5	55.5	11	63	45	59.7	45	3	11	18	32	4.9
April . . .	29.803	63	29.872	62.3	67.3	57	10.3	65.7	51	60	51	9	10.3	14	35	6.4
May . . .	29.821	64	29.829	64	69	59	10	66	53	62	53.3	6	10	15	37	7.9
June . . .	29.942	66	29.939	66	71	60.3	10.7	69	52.5	63	53	1	10.7	17	53	8
June* (latter part of) . . .	27.736	60.5	27.749	62	64.5	56	8.5	62	56	57	55	3				
July* . . .	27.800	65	27.806	67	72	64.3	7.7	68.5	56	63.5	53.5	0	7.7	12	34	6.5
August* . . .	27.757	64	27.747	66	69.8	62.5	7.3	64	58	61	56.5	4	7.3	6	41	6.3
September* . .	27.764	62.7	27.771	64	67	61	6	63	55	60	53	7	6	8	40	5.5
October* . . .	27.732	60.5	27.798	62	63	57.3	5.7	60	53.5	57.5	53.5	13	5.7	7	41	4.1
November . . .	29.880	68	29.823	67.5	70.5	61	9.5	69.5	61	64.5	53.5	12	9.5	8	39	2.4
December . . .	29.878	63.5	29.790	63	66.5	56.5	10	62	61	60.5	52	12	10	11	38	1.7

During the months marked thus (*), the observations were made at about 2,500 feet above the sea level. The others were made at Funchal at about 280 feet above the sea level. None of them are corrected. The instruments were a mountain barometer, and double register thermometer by Bate, and a Mason's hygrometer.

Tenby, South Wales, October 17th, 1853.

PERISCOPIC REVIEW.

CHEMISTRY.

MILK AND ITS CONSTITUENTS.

This secretion has not met with that amount of attention, lately, that its importance, and the means for investigation now at the command of the physiological chemist, would seem to invite. Before noting, however, what has recently been done in this division of organic chemistry, it may not be amiss to detail a few of the accepted facts respecting this liquid, since these may lead to a readier comprehension of what will follow.

First, then, as to colostrum, and the distinction between it and milk: in colostrum there is not merely an increase in the amount of the saline constituents to twice or thrice of that existing in healthy milk, nor a general augmentation of the solid constituents only, in the ratio of about 17½ to 11, and which is, according to Simon, principally due to the increased quantity of sugar, although this point is not absolutely determined; but the difference mainly depends on the presence of granular masses, termed *colostrum corpuscles*, which are invariably present in the colostrum, but disappear, as a rule, in three or four days after delivery, being apt to reappear on the supervention of any acute disease. These colostrum corpuscles are much larger than the true fatty milk globules, and consist of small fat globules imbedded in an albuminous substance; whilst, as they

exist in larger quantity in the colostrum, than the milk globules do in healthy milk, the former secretion is really richer, than milk is, in fat.

In healthy milk the amount of butter varies according to circumstances, but appears to average nearly $3\frac{1}{4}$ per cent.; this butter is considered to be richer in olein than the butter from cow's milk. The valuable observation of Simon may be remembered by some, that the butter undergoes no appreciable change in amount during suckling, but that the milk-sugar diminishes with the growth of the child; whilst the proportion both of the casein and the saline constituents are augmented. L'Heritier formerly detailed some singular analyses of the milk from two women, both twenty-two years old, one dark, the other fair, from which it appears that not only the quantity of butter, but of almost all the other constituents also, was nearly doubled in the milk of the *brunette*; this assertion is well worthy of a further investigation to support or confute so singular a statement. In ordinary cases, milk contains about $3\frac{1}{4}$ per cent. of casein, and 4 to 6 per cent. of sugar; one peculiarity about the casein being, that it is less readily coagulated by acids than that from cow's milk. The above remarks apply especially to human milk.

The existence of albumen, or an analogous form of free casein coagulable by heat, in healthy milk, is disputed by M. LIEBERKUH, who has recently investigated this subject, as well as the relations of casein and albumen to potash. He finds that when albuminate of potash is gently evaporated on a water bath, it gradually decomposes into potash, and albumen in an insoluble state; and that the corresponding potash compound from milk, by a similar treatment, undergoes a similar decomposition, separating into alkali and an insoluble skin of casein. With perfectly fresh milk the results are precisely similar, the coagulum being insoluble in boiling water. The substance noticed by Scherer, existing in milk, susceptible of coagulation and having an albuminous reaction, is not only obtained by adding excess of lactic or acetic acids to milk, and heating the filtrate, but also from the filtered liquor of boiled milk similarly acidified. Boiled milk, when evaporated, as well as fresh milk, when concentrated at a temperature of 104° F., and the residuum treated with cold water in both cases, yields a liquid which coagulates on boiling. From these conditions M. Lieberkuhn contends that milk contains neither albumen, nor free casein analogous to it, coagulable by heat. This chemist further observes that the nitrogenous substance contained in fresh milk exists under three distinct forms: one corresponding to albuminate of potash, another coagulable by heat, and a third separable from the serum by filtration. He also points to the probable identity of albumen and casein, but abstains from the avowal of any decided opinion on this point.

In addition to the chlorides of sodium and potassium, the alkaline and earthy phosphates (bone earth), and the alkali combined with the casein in milk, Dr. G. Wilson, pursuing the track of some experiments of Mr. Middleton on the constant presence of fluorine in bones, recognised some two or three years since the existence of this element in cow's milk, cheese, and whey, existing probably as fluoride of calcium. We do not know that it is present in human milk, nor are we aware that experiment has yet shown that this, although most probable, is an actual and ascertained fact. Fibrin, hæmatin, urea, etc., have been recognised in milk; but these are the products of disease, and cannot be reckoned among its constituents.

PARALBUMEN.

As if still further to complicate the question of the identity of albumen and casein, above noticed, Dr. J. SCHERER describes an albuminous substance exhibiting marked differences from ordinary albumen; and which, be it really a distinct animal principle, or simply modified albumen, he has designated by the term *paralbumen*. It is met with in the fluid contained in the cysts in ovarian dropsy; these, on operating, yielded a slightly alkaline frothy liquid, capable of being drawn into threads, and which, when mixed with water and allowed to stand, deposited a little sedimentary matter.

This aqueous solution gave a copious precipitate with nitric acid, insoluble in excess of the reagent; with a little hydrochloric acid, no alteration was observed, but in large excess the liquid became turbid. Acetic acid exerted no action on it, but when ferrocyanate of potash was added to this mixture, a copious precipitate fell. When the diluted liquid was boiled, it turned somewhat milky, and then on the addition of acetic acid it yielded a flocculent coagulum, but without the liquid clearing and readily filtering as is the case with albumen; on the contrary, it remained quite turbid. With alcohol, the liquid yields

an abundant precipitate, which, after washing with alcohol, is almost wholly soluble in water at about 95° F., which aqueous solution exhibits characters identical with those described as belonging to the original liquid. It affords evidence of the presence of sulphur by the usual tests.

It would therefore appear that the contents of the cysts in ovarian disease contain a substance, differing from ordinary albumen by the solubility in water of the alcoholic precipitate, and by its imperfect coagulation when boiled with acetic acid; in its other proportions it resembles the albumen of eggs, serum, etc.

Dr. Scherer mentions that it somewhat resembles an albuminous substance observed by Bernard in the pancreas, but which coagulated by heat.

PROPYL, PROPYLAMIN.

COD-LIVER OIL. M. WINCKLER has submitted this valuable medicine to a careful examination, which has resulted in up-setting the notions propounded by some iatro-chemists, that the efficiency of this remedy depended on minute traces of iodine and bromine compounds, or such substances as the Gaduin of Dr. Jongh, by pointing out that cod-liver oil is constituted with a specific base differing from that of most oily and fatty bodies.

According to M. Winckler, in cod-liver oil the ordinary basis or radical of oils and fats, glyceryl ($C^6 H^9$), is replaced by propyl ($C^3 H^7$). When saponified by potash, this oil furnishes oleic and margaric acids. A mixture of twenty-four parts of cod-liver oil, twenty-four parts of water, and six parts of caustic potash digested together for several days and then distilled, after adding twenty-four parts of water, afforded oxide of propyl. With oxide of lead, margaric and oleic acids were obtained, but no glycerin, in lieu of which a new acid, propylic acid, was produced.

This chemist finds that whale-oil soap, when distilled with quick-lime and muriate of ammonia, yields *propylamin*. Fresh urine distilled with lime affords this ammoniacal base; which is also obtained when ergotin is distilled with potash, existing in the diseased grain, in his opinion, as a formate of propylamin. Dessaignes has recognised propylamin in *chenopodium vulvaria*, in which it occurs with a protein compound.

INOSITE, OR FLESH-SUGAR.

To procure this substance, Dr. J. SCHERER, who first noticed its presence in the muscular fluids, directs that the mother liquor from which kreatin has been obtained, and which, in the usual mode of preparing that constituent of flesh, contains an excess of barytes, should be treated with sulphuric acid so as to separate this earth, taking care that there shall be a little barytic salt undecomposed, rather than an excess of sulphuric acid. The soluble compounds of barytes with the fatty acids are thus decomposed; and these acids must be removed by digesting the liquor with ether. When the ether comes away colourless, alcohol is added to the liquor, and the mixture allowed to repose, when large crystals are gradually deposited, which may be purified by solution in water and slow re-crystallisation, when the *inosite* is obtained usually in stellar or mammillated groups of crystals.

In dry air or in *vacuo*, inosite effloresces, losing about seventeen per cent. of water; in this state, it may be gradually heated till it fuses into a transparent liquid, which by rapid cooling forms a crystalline mass, but by slow cooling remains amorphous. Crystals similar to those at first employed may be procured by solution of the fused inosite in water; showing that it has simply been subjected to dehydration. Inosite is readily soluble in water, less so in weak spirits, but insoluble in ether and alcohol. Sulphuric acid decomposes it, but not if diluted. The alkalis and alkaline-earths exert no action upon it. With sulphate of copper and potash, the usual characteristics of the presence of starch-sugar are manifested. Its peculiar and characteristic reaction, however, appears when heated on platinum foil with nitric acid almost to dryness, to which chloride of calcium and ammonia are to be added, and the mixture evaporated to dryness, when a *rose-red tint* will be manifested. If the nitric acid solution be slowly evaporated in the water-bath and the residuum dissolved in water and set aside in a stopped bottle, it gradually becomes mouldy, when, instead of the rose colour above described, under similar conditions it gives rise to a violet brown.

When strongly heated, inosite is decomposed with evolution of inflammable gases, leaving a carbonaceous residue, which readily consumes when exposed to a red heat in air. On analysis, anhydrous inosite was found to consist of C^{12} , H^{12} , O^{12} —a formula precisely identical with that of anhydrous grape-sugar, or glucose, from which, however, it is distinguished by the amount

of water of crystallisation with which it combines; the formula of crystallised inosite being $C^{12}, H^{12}, O^{12}, + 4 HO$; that of glucose being $C^{12}, H^{12}, O^{12}, + 2 HO$; the latter also representing diabetic sugar.

This inosite furnishes us with another example of the wretched state of the existing arbitrary nomenclature of organic chemistry; for who is there but would think that inosic acid, a nitro-genous compound, was derived from inosite? Their having a common source, the flesh juices, only makes the matter worse.

NEW ANIMAL ACID.

M. VERDEIL describes an acid which he has extracted from the pulmonary parenchyma: it crystallises in acicular crystals of a very brilliant aspect, and possessing strong refractive powers. This acid forms crystallisable salts with bases, and expels carbonic acid from the carbonates. It is composed of carbon, nitrogen, hydrogen, oxygen, and sulphur. The discoverer attributes an important physiological action to the presence of this acid in the parenchyma of the lungs; holding that it is secreted in contact with the carbonate of soda of the blood conveyed by the capillary vessels, and decomposes that salt, combining with the alkali, whilst the liberated carbonic acid is given off by respiration. The presence of a portion of the acid in a free state in the lungs shows it is formed there, and not in the blood, which is alkaline.

ANIMAL ELECTRICITY.

ELECTRICAL FORCE DEVELOPED DURING THE ORGANIC PROCESS OF SECRETION IN LIVING ANIMALS. In our review of DU BOIS REYMOND's work on "Animal Electricity" (p. 63), we endeavoured to sketch the progress already made in this recondite branch of physiology, and showed that good standing ground had been won, as we had attained to some clear and definite ideas with respect to the electrical currents existing in the nerves and muscles of animals, through the researches of that philosopher and his fellow-labourers.

Another step in advance has been made by Mr. H. F. BAXTER, who, in a communication to the Royal Society, details several experiments made with the object of determining whether the changes which take place during the process of secretion in animals are attended with the manifestation of electrical force: This inquiry he answers affirmatively, upon the following grounds:—

When the electrodes of a galvanometer are brought into contact both with the secreted substance and the venous blood of the secreting organ, such as the liver, the kidneys, or the mammary gland, the needle is affected in the direction which indicates the *venous blood to be positive*. The experimenter argues that this effect cannot be referred to the dissimilarity of the fluids, unless we assume that the blood was acid and combined with the secreted product; nor can it be entirely attributed to thermoelectricity, since the current varied in each organ, and was capable of passing through a liquid conductor. It may be admitted that the effects are partly due to catalytic actions on the combining power of platinum:—an idea somewhat supported by the opinion long since entertained by Wollaston, that the changes occurring during secretion are analogous to those which take place in the *decomposing cell* of a voltaic pile.

Another fact elicited was that, when one electrode was in contact with the mucous surface of the lungs, and the other with the blood in the pulmonary veins, the needle indicated the blood (arterial) to be in this case also *positive*. Mr. Baxter does not absolutely conclude from this that the lungs perform the office of a secreting organ, but observes that it accounts for his own failures, and those of Müller and Pouillet, in former experiments instituted to obtain evidence of manifestation of electrical force when a circuit was formed between an artery and a vein of the living animal, since he finds that both venous and arterial blood are positive.

Another branch of this enquiry was to determine whether any and what signs of current force are manifested during the organic process of absorption (lacteal) in living animals. It appears from Mr. Baxter's experiments, that when the two electrodes or poles of a galvanometer are respectively placed in contact with the mucous membrane of the intestine, and the chyle flowing from the lacteal of the same point, the deflection of the needle shows the *chyle to be positive*. Now, although this may be partly attributable to the changes which occur during secretion, the mesentery acting as the conducting body, it does not negative the conclusion that this manifestation of a current force is in some measure due to the changes occurring during lacteal absorption.

The results of some further experiments with respect to the

existence of current force in the muscular tissues, particularly with respect to the process of assimilation in the muscular and nervous tissues, have induced this investigator to conclude that the *muscular tissue* and *venous blood* are in opposite electrical conditions; and that the results are confirmatory of Matteucci's views respecting the origin of the muscular current. The preceding experiments of Matteucci, Du Bois Reymond, and others, show that the blood flowing from the internal jugular vein is *positive* to the substance of the brain; which, Mr. Baxter states, is also the case when the electrode is placed in contact with the muscles, or other portions of the animal, instead of the blood. From these evidences of the existence of currents in the muscular and nervous tissues of living animals, this writer contends that their manifestation is due to the changes which take place during the process of assimilation, or nutrition.

TOXICOLOGY.

DETECTION OF THE ORGANIC ALKALOIDS IN CASES OF POISONING.

At a time when the knowledge of chemistry is widely extending amongst large classes of the people, however superficial that knowledge must necessarily be, still some of the most striking facts will remain imprinted on the memory; and amongst them we may expect to find the marvellous deadly power exerted by minute doses of the alkaloids; whilst a little research would point out the many difficulties in the way of the chemist who should endeavour to determine their presence in suspected liquids. The terrible tragedy which occurred in France two or three years since, when nicotina was the agent employed, to the study of the properties and mode of preparation of which the murderer had devoted himself long previously to the completion of his crime, will recur to many of our readers. Hence there are good grounds for believing we are not combating an imaginary danger, but one which sooner or later will arise from a popular knowledge of the properties of the alkaloids; so true is it that

"Of the sight of means to do ill deeds, makes ill deeds done";

and hence arises the necessity of being prepared beforehand, so as to enable us, if possible, to trace these virulent poisons with the same certainty and accuracy with which the most minute portions of the inorganic poisons may be detected. This subject formed one of the latest occupations of M. Orfila before his decease, nicotina being the specialty—a path which has been more completely opened up by his fellow-labourer in this department of chemistry, Professor STAS, of Brussels.

It is not to be expected that medical practitioners would be competent to examine for themselves any suspicious cases; for numerous are the instances in which a skilful analyst would fail, unless, by previous special training, he had made himself thoroughly acquainted with the numerous minute precautions required in such an investigation, and the peculiar reactions and properties characteristic of each alkaloid; but the knowledge that these terrible poisons can be detected, and of the general method of analysis, is that kind of information in which none of us should be wanting.

M. Stas asserts his conviction that every chemist who has studied the vegetable alkaloids, and kept up his analytical knowledge, will not only succeed in detecting their presence in cases where they have been used as poisons, but even of the determining the nature of the alkaloid he may have isolated, provided its characteristics are sufficiently known. Amongst these he enumerates conia, nicotina, morphia, codeia, strychnia, brucia, veratrin, colchicina, delphia, emetina, aconitina, solania, atropia, and others less known, and whose claims to be classed as alkaloids are doubtful.

The method employed by M. Stas for detecting an alkaloid in a suspected substance does not materially differ from the processes usually followed, at least on the continent, to extract it from the vegetables containing these principles. He, however, cautions us, and on good grounds, against the employment either of the basic acetate of lead, or of animal charcoal; the latter is especially objectionable, for it has been clearly proved, by the experiments of Warrington and others, that animal charcoal possesses not only the property of extracting the colouring matters and smell from a solution, but also of absorbing and fixing the salts of the alkaloids, and of most other salts; so that its employment in such investigations must be always prohibited.

It appears that all the solid and fluid

mentioned above are taken up by ether, when used in sufficient quantity, from any liquid in which they may exist dissolved or suspended, and in a free or uncombined state. On this common character of this class of bodies the mode of detecting their presence depends; the conditions being, to abstract as much as possible, and by simple means, all foreign bodies; and then to add such a base to the suspected liquid as will set the alkaloid free, so that it may be taken up by the ether. Let us now suppose that we wish to examine the contents of a stomach or intestines, under the suspicion that death has been caused by a vegetable alkaloid. To these matters we must add twice their weight of highly rectified and pure spirits of wine, together with from ten grains to thirty grains of oxalic or tartaric acid, according to the quantity and nature of the substance under examination, using preferentially tartaric acid, and heat this mixture in a retort, flask, or other convenient vessel, to 160° to 170° Fahr. When cold, filter and wash the insoluble residue with more spirit, and evaporate the filtered liquid *in vacuo*, or in a strong current of air, never suffering the alcoholic solution to rise above 90° Fahr. Any fatty or insoluble substances deposited during evaporation must be separated by filtration, and the clear liquor evaporated to dryness under the air-pump. A good substitute for an air-pump is a large dish covered with a bell-glass, the external air being excluded by some oil or mercury poured into the dish; in this dish, a vessel containing oil of vitriol, or powdered chloride of calcium, must be placed, and over either of these the liquid, in a shallow glass or porcelain vessel. When the residue is thus thoroughly dried, it must be exhausted with cold and anhydrous alcohol, and again evaporated to dryness *in vacuo*. This residuum is again to be dissolved in the least possible quantity of water, and pure carbonate of potash or soda gradually added to it, until the solution is markedly alkaline, when from four to five times its bulk of ether is to be mixed with it in a stoppered bottle, and the whole well shaken together, after which it must be left to settle and clear. When the supernatant ethereal solution is quite bright, pour it into a shallow glass or porcelain vessel, and place it in a very dry place to evaporate spontaneously. In that residue, the alkaloid, if present, will be found. Should it be desired to examine the stomach itself, the liver, heart, or any other organ, we must of course chop the organ fine, treat it with rectified spirit, and proceed as above indicated.

We will now assume that one of the liquid or volatile alkaloids was present in the organ or its contents, when, on merely holding the glass or porcelain vessel, which will be marked interiorly with small oleaginous *striae*, in the hand, the warmth will cause the contents to exhale an offensive pungent odour, more or less so according to the nature of the alkaloid, and similar to that of a disagreeable ammoniacal animal scent. The alkaloid, whatever it may be, is to be redissolved in a small quantity of ether, and from one to two fluid drachms of strong solution of potash added to it, when the mixture is to be well shaken. Decant the ethereal solution, and wash the aqueous residue with a little more ether; mix with these 100 grains of water, acidulated with 20 grains of sulphuric acid; and, after shaking up the mixture thoroughly, let it subside; after which, decant the ethereal solution, and wash the residue with a little more ether. Since the sulphates of the volatile alkaloids, excepting that of conia, are insoluble in ether, this menstruum will only abstract the animal matters; the salts of the alkaloids, and even that of conia for the most part, remaining in the aqueous and acid solution. To isolate the alkaloid from this acid solution, a second treatment of this solution is required—first, with a strong solution of caustic potash or soda; and secondly, with ether again, which dissolves any ammonia which may still be present, as well as the alkaloid. The ethereal solution, spontaneously evaporated at a very low temperature, permits the ammonia to pass off with the ether; after exposing the residue to the absorbent powers of sulphuric acid, to eliminate the last traces of ammonia, the alkaloid will at length be obtained in a state of such purity, that those acquainted with the special physical and chemical characteristics of these bodies will not fail to recognise its nature.

Professor Stas speaks of having determined the presence of nicotina in the clearest manner by this process, in the blood of a dog poisoned by introducing three quarters of a cubic inch of this poison into the œsophagus. Not only were the smell, taste, and alkalinity, most strongly marked, but the chloroplatinate of the base was also obtained in its characteristic crystals. Conia was also readily detected in some very old tincture of hemlock; but of this alkaloid, ether carries off a large amount during the requisite process of spontaneous evaporation.

Should the alkaloid belong to the fixed and crystalline class, much the same method as above is at first to be followed, viz., treat the residue contained in the capsule with a little strong solution of a fixed alkali, and exhaust by rapid agitation with ether; when, if a solid alkaloid be present, litmus paper will be tinged of a full permanent blue by the ethereal solution. To isolate the alkaloid, and to procure it in a crystalline state, wash the residue left by the spontaneous evaporation of the ethereal solution with a few drops of water slightly acidulated with sulphuric acid, which dissolves both the alkaloid and any alkali which might exist, but leaves the fatty matters, etc., untouched. The acid solution thus obtained is to be evaporated *in vacuo* to about one-fourth of its original bulk, when a concentrated solution of carbonate of potash is to be added to it, and the mixture treated with absolute alcohol, which takes up the alkaloid only, and deposits it again in a crystalline form by slow spontaneous evaporation. Its nature can then be determined by means of the numerous and distinctive tests now at the command of the chemist.

These processes and results have been sanctioned by the highest authority we possessed, the late Professor Orfila, who, whilst reviewing the distinctive tests of the two volatile alkaloids which somewhat resemble each other, viz., conia and nicotina, took occasion to eulogise the labours of Professor Stas, and to state his belief that these two alkaloids may be distinguished and characterised as decisively as a mineral poison; that if present, even to the extent of a few drops, in the digestive canal, their existence may be positively demonstrated; and that, even if absorbed by the liver or other organ, still their presence may be determined.

The great beauty of these methods for isolating small quantities of the alkaloids when mixed with foreign matters, is the employment of but two reagents, alcohol and ether, in the earlier stages of the process, neither of which exert any chemical action on the alkaloids; so that the danger of the conversion of these principles into secondary products, in that primary stage (the one most likely for them to suffer decomposition), is completely obviated. It is, however, but too evident, from a consideration of the amount of these costly reagents inevitably expended in such researches, that to have originated such a method in this country, or even to follow it, unless under special circumstances, is denied to our medico-legal analysts; simply on account of the heavy cost incurred for these reagents, arising from the heavy duties to which alcoholic liquids, to whatever purpose applied, are subjected in this kingdom, and fully justifying a remark we felt called upon to make when considering the bearing of the spirit duty on medicine: "Thus British chemistry is paralysed by the pressure of this excise, and forced to occupy a rearward position in the progress of science." (ASSOCIATION JOURNAL, May 6th, 1853.)

Whilst considering these methods of detecting the alkaloids, especially the volatile ones, we may be permitted to state that Dr. F. Winckler finds a volatile alkaloid resembling, if not identical with conia, in ergotin obtained by treating the aqueous extract of ergot of rye with alcohol, etc., to which alkaloid he ascribes the effectiveness of this medicine, and not to the amorphous substance termed ergotin. Further particulars of this alleged new alkaloid would be interesting in connexion with many branches of medical science.

DISTINCTIVE CHARACTERS OF ARSENIC AND ANTIMONY.

Marsh's apparatus, in its improved modifications, enables the analyst to detect with certainty the presence of the minutest portion of the poison still most in vogue, provided due care be expended in the investigation; leaving but one question to be determined, should metallic spots be obtained from the combustion of the hydrogen, viz.: Are these spots arsenic or antimony?

To distinguish these from each other, when in very minute quantities, has, on account of the importance of the point in a forensic view, engaged the attention of many chemists. Mr. SLATER, of Manchester, a short time since, showed that when a metallic spot, deposited on porcelain from hydrogen, is exposed to the fumes of bromine, if it be arsenic, it will quickly acquire a bright lemon-yellow tinge; if antimony, it will almost instantly turn of an orange-red. A strong solution of iodate of potash turns arsenical spots fawn red and then dissolves them; whilst it has no visible action on antimonial spots until after the lapse of hours. The chlorides (hypochlorites) of soda and lime, as well as solution of chlorine, instantly dissolve arsenical spots, leaving those of antimony. This last mode Wackenroder has adopted with a view to detect arsenic in spots containing a mixture of the

metals; the spots produced by arsenic being rapidly dissolved in solution of chloride of soda, but remaining unchanged in dilute muriatic acid. Antimonial spots are soluble in neither menstruum separately, but disappear when the alkaline chloride and muriatic acid are mixed together. Small quantities of antimony in the arsenical spots render them darker and most brilliant, but do not prevent their solution in the hypochlorites, whilst in larger proportion the mixed spots of arsenic and antimony dissolve less readily, and are often eaten away only round the edges.

We quote these tests because we feel that in matters "touching life" it is wise to be armed at all points, and to be able to heap proofs upon proofs for guilt or innocence; but, for our own satisfaction, we regard the oxidation of the spots by heating them in a tube, the crystalline form of the white sublimate, and the action of heat on this sublimate, driving it up or down the tube at our pleasure, and its invariable deposition in octohedrons, as incontrovertible proofs of the spots being or containing arsenic; and, as tests, far superior to any reaction in which colour is relied upon, being free from the possibility of error arising from colour-blindness, which late investigations have shown to be a prevalent affection.

ANTIDOTES TO COPPER, ARSENIC, AND STRYCHNIA.

COPPER. M. ROUCHA asserts that calcined magnesia, in great excess, completely arrests the symptoms of poisoning, where sulphate of copper has been administered for this purpose; deducing from the similarity of the action of magnesia on all other cupreous salts, that this earth will prove an antidote in all cases of poisoning by the salts of this metal. Without controverting the truth of this assertion, we could not recommend this antidote as in anywise trustworthy on chemical grounds, and should hold it dangerous to trust to its preventive powers, till we have more conclusive authority adduced in favour of this remedy.

ARSENIC. In cases of arsenical poisoning, the hydrated peroxide of iron has now for some years been proposed as an efficient antidote, and apparently on trustworthy evidence, provided the oxide be freshly prepared and washed free from its alkaline precipitant. These two requirements sadly militate against its practical use; since much time, in such cases the most valuable of all the means at our disposal, must be expended before this preparation can be extemporaneously obtained; whilst, if kept in a pasty gelatinous state for use, its efficiency is greatly impaired, if not so seriously affected as to make the utility of the administration of hydrated oxide of iron which has been long kept, in the highest degree questionable.

To obviate these grave objections, magnesia has been recommended as a precipitant of the persalt of iron. Thus either the persulphate, or the perchloride of iron, which latter salt is to be met with everywhere in *tinct. ferri sesquichloridi*, is to be diluted and mixed with excess of calcined magnesia, the whole thrown on a cloth, and the mixture of oxide of iron and magnesia, which by this plan may be obtained in five minutes, is stated to be as efficient as the pure hydrated oxide of iron in precipitating arsenious acid and rendering this poison innocuous. We think far better of this than of the preceding suggestion respecting copper salts.

STRYCHNIA. A dilute solution of chlorine, containing about two per cent. of the gas, alternated with moderate doses of tartarised antimony, two doses of each to be administered; subsequently promoting vomiting by warm water, is the treatment advised by M. BARDER, a French pharmacist, in cases of poisoning by strychnia. He details many instances of its successful employment with dogs which had been poisoned with nux vomica. For the treatment of man, to us, who have known what it is to take a full inspiration of chlorine mixed with a large amount of atmospheric air, the remedy appears to be of an heroic nature.

ASSOCIATION INTELLIGENCE.

MEDICO-ETHICAL COMMITTEE.

The MEDICO-ETHICAL COMMITTEE of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION will meet at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Thursday, November 3rd, at 3 P.M. precisely.

W. H. MICHAEL, *Hon. Secretary.*

MEMBERS OF COMMITTEE.

ARDEN, Henry Alban, Esq., Secretary of Dorset Branch: Dorchester.

BARTTRUM, John S., Esq., Joint Local Secretary of Bath and Bristol Branch: Bath.

CONOLLY, John, M.D., D.C.L.: Hanwell.

DRAKE, Augustus, M.B., Secretary to South Western Branch: Exeter.

DRURY, T. J., M.D., Joint Secretary of the Shropshire Branch: Shrewsbury.

FEARN, T. W., Esq., Joint Local Secretary of the Midland Branch: Derby.

FLINT, Richard, Esq.: Stockport, Cheshire.

GOODE, Henry, M.B., Joint Local Secretary of the Midland Branch: Derby.

GREENHILL, William A., M.D.: Hastings.

HATTON, John, Esq., Secretary of the Lancashire and Cheshire Branch: Manchester.

HUMPHREYS, J. R., Esq., Joint Secretary of the Shropshire Branch: Shrewsbury.

HUMPHRY, George M., Esq., Local Secretary for Cambridgeshire and Huntingdonshire: Cambridge.

JONES, D. Kent, Esq., Joint Secretary of the North Wales Branch: Llangefni, Anglesey.

JONES, Ellis, Esq., Joint Local Secretary of the Lancashire and Cheshire Branch: Liverpool.

KIRKMAN, John, M.D., Secretary of the Suffolk Branch: Melton, Suffolk.

LEONARD, Crosby, Esq., Joint Local Secretary of Bath and Bristol Branch: Bristol.

MARTIN, Peter, Esq., Secretary to South Eastern Branch: Reigate, Surrey.

MATTERSON, William, Esq., Secretary to the Yorkshire Branch: York.

MICHAEL, W. H., Esq., Secretary to Monmouthshire and South Wales Branch: Swansea.

PITT, J. Ballard, M.D., Local Secretary for Norfolk: Norwich.

ROBERTSON, Archibald, M.D., F.R.S.: Northampton.

ROBINSON, J. M., Esq., Joint Local Secretary of the Lancashire and Cheshire Branch: Bolton.

SHARP, John, Esq., Joint Local Secretary of the Lancashire and Cheshire Branch: Warrington.

SYMPSON, T., Esq., Joint Local Secretary of the Midland Branch: Lincoln.

WARD, T. Ogier, M.D., Secretary of Metropolitan Counties Branch: Kensington, London.

WHITE, Joseph, Esq., Joint Local Secretary of the Midland Branch: Nottingham.

WILLIAMS, E., M.D., Joint Secretary of the North Wales Branch: Wrexham.

WOODFORDE, F. H., M.D., Secretary to West Somerset Branch: Taunton.

METROPOLITAN COUNTIES BRANCH:—COMMITTEE ON GRATUITOUS ADVICE.

The Gratuitous Advice Committee of the Metropolitan Counties Branch will meet at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, on Thursday, November 3rd, at 3 P.M. precisely.

THOMAS CHARLES, *Hon. Secretary.*

MEMBERS OF COMMITTEE.

ANCELL, Henry, Esq., Norfolk Crescent, Hyde Park.

BOWLING, John, Esq., Hammersmith.

BRYANT, Walter J., Esq., Bathurst Street, Sussex Square.

CARTER, Charles T., Esq., Hadley.

CHARLES, Thomas, Esq., Lower Belgrave Place, Pimlico.

CORMACK, John Rose, M.D., Putney.

COTTON, R. Payne, M.D., Clarges Street, Piccadilly.

FRASER, Patrick, M.D., Guildford Street, Russell Square.

HAILEY, Alex., M.D., Queen Anne Street, Cavendish Square.

LEE, Henry, Dover Street, Piccadilly.

LORD, Charles F. J., Esq., Hampstead.

O'CONNOR, William, M.D., George Street, Portman Square.

ROBINSON, Richard R., Esq., Camberwell.

ROUTH, C. H. F., M.D., Montague Square.

STEWART, Alexander P., M.D., Grosvenor Street.

TOYNBEE, Joseph, Esq., Savile Row.

WARD, T. Ogier, M.D., Kensington.

WEBSTER, George, M.D., Dulwich.

[We have been requested to state that arrangements have been made by the Secretaries of the above Committees for the meetings at the same time and Tavern, in order that a conference should be considered necessary, if deemed so. It has also been proposed that the committees dine together at six o'clock.—Ed.]

EDITOR'S LETTER BOX.

THE VACCINATION ACT.

LETTER FROM R. U. WEST, ESQ., TO THE EDITOR.

SIR,—Your facetious contemporary, Mr. Punch, has in his last number some severe remarks on a journalist who said that the reported act of the Prince of Wales at the Dublin Exhibition, in taking advantage of the hasty answer of an exhibitor, and pocketing for one shilling an article actually worth fifteen, was "worthy of the future ruler of a great commercial nation". I fear Mr. Punch has been too hasty himself in assuming that the recognised national code is a whit better than that held up to our admiration: nay, I would even maintain that the following correspondence will prove that it is not so good.

Copy of a letter addressed by the Chief Clerk of the General Register Office, in reply to a private medical practitioner, who had intimated that the profession would decline to give the required certificate:

"General Register Office, Oct. 6th, 1853.

"SIR,—I am directed by the Registrar-General to acknowledge the receipt of your letter of the 4th inst., in reference to the duties imposed upon the medical profession under the provisions of the Compulsory Vaccination Act of 16th and 17th Vict., c. 100.

"In reply to your remarks upon this subject, I beg you, in the first place, distinctly to understand that, in furnishing medical practitioners throughout the kingdom with vaccination books and forms, as directed by the eleventh section of the statute, the Registrar-General has had to perform a purely ministerial duty; and that, in his official capacity, he is not required to express any opinion as to the legal obligation of medical men in private practice to perform gratuitously the duties imposed upon them. At the same time, he has no objection to state, for your information, and that of other medical men, that, according to his reading of the act, the remuneration provided by the sixth section is payable only to those medical officers and practitioners who may hold vaccination contracts (see clause 1); and that, therefore, medical men who, in the course of private practice, undertake the vaccination of children, must (unless they do it gratuitously) necessarily look for payment to the persons who employ them. Should they, however, altogether refuse to vaccinate, the Registrar-General apprehends that this result must follow; namely, that the parents will in all such cases be driven to adopt the only course then open to them, that of taking their children to be operated upon by the public vaccinator; for the act is unquestionably binding upon the parent of every child born in England after the 1st of August last (section 2); and those parents who, after having received notices from the Registrar according to section 9, shall neglect to have their children vaccinated, either by their own medical attendant or by the public vaccinator, will incur the penalty of 20s. imposed by that clause.

"The Registrar-General considers moreover that, under the act, it is the bounden duty of every medical practitioner who, in the course of private practice, performs successfully the operation of vaccination upon any child, to deliver a certificate thereof to the parent or person in charge of the child, and a duplicate of it to the Registrar; and that, if he neglect or refuse to do so, although he will not incur a pecuniary penalty, he will render himself liable to an indictment for misdemeanour; it being a well recognised rule of law, 'that, if a statute enjoin an act to be done, without pointing out any mode of punishment [for non-compliance], an indictment will lie for disobeying the injunction of the legislature.'

"I have the honour to remain, sir, your obedient servant,
(Signed) "THOMAS MANN,
"Chief Clerk."

On reading this letter in one of the journals, I immediately addressed an inquiry to the Registrar-General, in the following words:

"TO THE REGISTRAR-GENERAL.

"Alford, Lincolnshire, Oct. 20, 1853.

"SIR,—I have just read with some dismay a copy of a letter addressed from your office to a private medical practitioner, stating that, if medical men refuse to give gratuitously to the registrars duplicate certificates of vaccination in the case of private patients, they will be 'liable to an indictment for a misdemeanour'. Your letter also states that medical men who are not contracted with 'must (unless they do it gratuitously) look for payment to the persons who employ them'.

"Exactly so. And we are all, I conceive, perfectly contented to do this. But do these private patients who employ us to vaccinate their children, employ us also to give these certificates to the registrars? Certainly not. We are employed by the government to give them: and I wish to ask you most respectfully, whether, applying your own rule to the transaction, we are not entitled in this case also 'to look for payment to those who employ us', namely, to the government?

"I have the honour to be, sir,

"Your most obedient servant,

"R. U. WEST."

To this letter I received, by return of post, the following answer:

"General Register Office, Oct. 21, 1853.

"SIR,—In reply to your letter of 20th inst., I am directed by the Registrar-General to inform you that the fourth section of the Compulsory Vaccination Act imposes a duty upon the medical profession, for the performance of which, he is of opinion, they have no legal claim upon the 'government' for payment.

"I am, sir, your obedient servant,

"THOMAS MANN,

"Chief Clerk."

"R. U. WEST, Esq., Alford."

Now, this letter of the Chief Clerk fails entirely to convince me that we have no claim for payment on the government which "employs" us to give these certificates. Nay, I am pretty sure he is himself conscious that we have; for, in his letter, I find he was about to write "they have no claim", and then, as if another idea had struck him, he altered the half-written word "claim" into "legal", and wrote "claim" after it. He feels, no doubt, that we have a moral claim, and he only thinks ("he is of opinion") that we have not a legal one.

May I respectfully suggest to the profession, that we should try this question with the government? It may be done in this way. We may vaccinate, and give the certificate to the parent for his protection; and then, when the registrar applies for the duplicate, offer it to him on his payment of a small fee, say eighteen-pence, and refuse absolutely to give it without. Surely this most artful and disgraceful attempt to make us work for nothing may be defeated in some way. A licensed victualler is liable to penalties if he refuse to entertain a guest; but he can demand payment. The fact is, we have submitted quietly to this system of giving gratuitously all sorts of certificates and other helps to the registrars, until it is now attempted to "impose" upon us this gigantic scheme, by which we are to be compelled to work for nothing for the good of the public at large. "Impose" is the right word; it is an imposition, and a contemptible dodge.

I am, etc,

R. U. WEST.

Alford, Lincolnshire, Oct. 22nd, 1853.

THE VACCINATION ACT.

LETTER FROM JOHN C. BLOXAM, ESQ., TO THE EDITOR.

SIR,—The provisions of the new Vaccination Act seem to me to be intolerably oppressive. I should easily make up my mind to discontinue vaccinating, if I had only to consider the direct loss to myself; but this would, of course, be at the same time annoying to others, and also, indirectly, extensively injurious to myself. I feel inclined at present to put the government books in the fire, and vaccinate whenever desired to do so, with the understanding that I shall give no certificates; and I must then submit to the penalty, as often as it shall be imposed upon me, for contravening the terms of the act. The party vaccinated may, at any time after the vaccination, be exhibited to the public vaccinator, from whom the necessary certificates may be obtained. It may be said, perhaps, that this would be making a sacrifice without any attendant benefit; and this must be the case, I think, with any course of action that is not adopted by the leading members of the profession, and more particularly those practising in the metropolis.* No alteration will ever be made in the act, unless other parties feel the inconvenience of it as well as the medical profession.

May not, however, this grievance have resulted from our own negligence? I fancy few surgeons have been in the habit of making any returns to the National Vaccine Institution, as to the results of using the matter sent thence. I must plead guilty myself; and I do not believe any one in this neighbourhood ever makes such returns. I think, however, if the request for information had been more definite, instead of being expressed in such general terms, it would have been more attended to. I

* The pecuniary interests of the leading members of the profession in London are not involved. EDITOR.

had myself no unwillingness to report, and sometimes kept notes for the purpose; but I never knew when the "results" were complete; and, in the end, I sometimes lost, and sometimes forgot my notes.

The impression upon my mind is, that such an oppressive interference in the private business of private individuals has never been attempted to be enforced since the year 1688, as the New Vaccination Act.

I am, etc.,
JOHN C. BLOXAM.

Newport, Isle of Wight, Oct. 14th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—Has this question occurred to your mind:—If children "are incapable of receiving the vaccine disease", does the act forbid the operator from then charging for a certificate? (Section 7.) I rather think not.

Again:—Will the new code of prices apply to all vaccinated after this date, no matter what their age? The act says, "For the vaccination of persons" (sect. 6).

I am, etc.,
A VACCINATOR.

October 10th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—As a member of the ASSOCIATION, and a private practitioner, I should feel obliged by your answering me a few questions touching this odious, imperfect, and blundering Vaccination Bill, which will, I feel perfectly assured, give general dissatisfaction to all parties, medical and non-medical.

My first question is, Who is to remunerate the vaccinators for that class of patients who have hitherto paid them from five shillings to a guinea for the operation?—the Poor Law Board, or the patients themselves, or both?

The second question is, Is it necessary that a legal general practitioner should place after his name his titles, or will it be sufficient to sign himself surgeon, etc., as has been the custom in all cases where a certificate has been required?

An answer to these queries will greatly oblige.

I am, etc., A CONSTANT READER.

October 14th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—The general dissatisfaction on the part of the profession at large, which has been manifested with reference to the new Vaccination Act, naturally prompts to the adoption of any modes of procedure whereby the "powers that be" might be made to estimate duly the state of opinion on the subject. I should suggest the refusal, on the part of the profession, to fill up the duplicate certificate, ordered to be sent to the registrar, whilst the parents of the child are furnished with the one which the law requires. The only question as to the practicability of this plan, comprises the desirableness of subjecting one's private patients to the intrusions of the registrar, and to the trouble of substantiating the legal vaccination of their child. This objection being removed, or void, the measure would have its due effect in impressing upon the legislature the legitimate claims of the medical profession, and their due recognition, in case of an amendment of the present ill-contrived enactment.

I am, etc., M. B.

October 22nd, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—In common, I suppose, with all my professional brethren, I have received a copy of the new Vaccination Act, and four books of forms of certificates requisite for carrying it into effect.

The act fixes the fee of the public vaccinator, who will, I presume, in most, if not all cases, be the union surgeon of the district, at one shilling and sixpence for each case within two miles of his residence, and at two shillings and sixpence if more than two miles. Fees are also to be paid to the registrar of one shilling "for searching the registry", of "sixpence for each certificate" he may grant (clause 8), and of "three pence for each child vaccinated" (clause 10); but I have looked in vain for any

fee to be paid to the private practitioner for filling up, in all ordinary cases, two certificates; and when the child is not in a fit state for vaccination within the prescribed period, three, four, or it may be half a dozen, or even more! On the contrary, clause 5 enacts that "he shall immediately deliver, without fee or reward", a certificate, etc.; and in clause 4 it is very coolly ordered that "he shall transmit a duplicate of said certificate to the registrar". In other words, he shall send his servant to the nearest post-office, in many cases half a mile or more, three or four times a week.

During the time when the bill was before Parliament, your readers will remember that petitions were presented from various branches of the Provincial Association, containing, among other allegations, complaints that, though it would throw a considerable amount of additional labour on the private practitioner, it made no provision for his remuneration. These petitions were, as might be expected, entirely disregarded; for it seems to be a settled principle in legislation, where the profession is concerned, that its claims should never be attended to—a natural result of our inattention to our own interests, and a proper reward for our readiness on all occasions to give our gratuitous services.

An obvious mode of dealing with the unjust and unreasonable requirements of the act would be simply to return the books "to the place whence they came". As the parents, however, are liable to prosecution and penalties under the act for not possessing a certificate, I purpose, as a protection to them, to give the certificates and schedules A, B, and D, to the parents, but to withhold the one schedule A, which is directed to be delivered to the registrar, till I am paid in each case a fee of one shilling. And I am glad to find that a number of my professional friends, impressed like myself with the extreme injustice of requiring us to make a sacrifice of time and trouble of no small amount without any remuneration, are quite disposed to follow my example. I am not lawyer enough to know whether, by so doing, the law would regard us as contravening the statute, and hence render us liable to proceedings for a misdemeanour; but perhaps you, Mr. Editor, or some of your intelligent correspondents, will have the goodness to enlighten me on this point.

In your last number, there are some very judicious remarks by "A Private Practitioner" on the effect which the act will have in compelling us to draw our supplies of vaccine virus from deteriorated and unhealthy sources, which I commend to the serious consideration of your readers. We may add to what he has so ably pointed out, the disadvantages under which the public vaccinator must necessarily lie, from his ignorance of the habits and history of the parents of the children from whom he takes fresh lymph. It is not possible for any man, however great his natural sagacity, however delicate his tact and discrimination, and however sincere his conscientiousness and anxiety to do right, to escape falling into errors which would be easily avoided by the ordinary medical attendant, conversant as he would be with all that he required to know. With our present pathological opinions of scrofula and syphilis, for instance, more especially on their mode of propagation through the secretions, who, be his care what it may, if he be unacquainted with the mother's history (which the public vaccinator must be in a great majority of cases), can have any security that he is not conveying the poison of one or both these diseases to a healthy child? I conceive that during lactation especially this risk is imminent; and in nine cases out of ten the operation will be performed while the child is at the mother's breast.

Your correspondent also points out a plan by which justice might have been done to all parties. "It was this: to furnish every duly qualified medical practitioner with a case-book; to require him to make quarterly returns to the guardians of each district; and that the guardians should pay each and every practitioner furnishing such returns." Nothing could be more simple, nothing more just in a remunerative sense; and nothing could be more effectual in obviating the danger of unhealthy vaccination.

With this clear appreciation of the evils which must inevitably result if the law remain as it is, and with so effectual a remedy for those evils, patent and easy of application, will the profession tamely submit to be made the instruments for carrying out the provisions of this most iniquitous law? Why can we not once meet in every city, town, and village, and send a memorial to the noble Home Secretary, who, I think, will be particularly dislike to see rescinded the blundering

year, as you have so well designated it.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—The clerk of — Union having required the qualifications of the medical men of this district (under the new Vaccination Act), one has returned himself as a M.R.C.S., and in practice before 1815. On referring to his register, I find he was baptised in June 1797; presuming him to have been only 18. Is he intitled to the double qualification?

I am, etc., R. R.

[He is as much entitled as others in the same position. The Registration recently accomplished for the purposes of the Vaccination Act, presents many fallacies. In some towns the general practitioners return themselves as consulting surgeons, whereas others in similar practice in other places call themselves "accoucheurs", or "surgeon-accoucheurs", or "physician-accoucheurs", or simply "surgeons". From this, it appears that one of the columns might with advantage be suppressed. EDITOR.]

THE VACCINATION ACT.

LETTER FROM HENRY TERRY, JUN., ESQ., TO THE EDITOR.

SIR,—It seems to me that the sentiments expressed in your leading article of the 7th instant, and also in the letters of two correspondents in the same number, on the subject of the Vaccination Bill and its effects on private practice, are somewhat overdrawn. The chief fault in my mind is that of requiring medical men to give the various certificates there mentioned "without fee or reward". I do not see anything in the act to warrant me as an union surgeon and vaccinator to interfere with the private patients of another medical man, or *vice versa*—indeed, the very first clause states that the act is "for the purpose of affording increased facilities for the vaccination of the poor"; and although the same clause provides that due notice is to be given of the times and places when the medical officer is to attend and "vaccinate all persons who may attend there", I do not think this is intended to apply to the children of the rich, and certainly it does not seem probable that patients in the higher classes of life would at all relish the idea of attending at the "place" named (however "convenient" it may be), and mix with the motley groups generally assembled on such occasions. I know not if the fact is generally known, but, I believe, under the *old act*, and therefore, perhaps, equally under the new one, all persons had a right, if they chose to avail themselves of it, to gratuitous vaccination; but, as far as my experience goes, this "slice off the general practitioner's loaf" which the "parish doctor" enjoyed was so small as not to be worthy of consideration. I believe that a certain number of parents who were unable to pay the fee to private practitioners, and, perhaps, too proud to come to the parish for anything, have taken their children to druggists and other unqualified persons for vaccination, and that vaccination has thus suffered from the inefficient manner in which it has been performed. This will obviously be prevented under the new act. One of your correspondents speaks of a "bad feeling" as likely to be "engendered between the union surgeon and private practitioner". I really cannot see at present any cause for such a presumption; neither do I think his argument against the bill is much improved by the old story of a "public vaccinator (*an union surgeon, of course*) employing some unprofessional person to act for him, and giving him threepence per case for his trouble". The case is said to have taken place "a few years back"; and I think the experience of most union surgeons of the present day will say that boards of guardians look rather too strictly after their medical officers to allow of such a proceeding.

Your correspondent H. P. quotes the case of an appointed vaccinator in his village who has "no fixed place for vaccination, except his own residence; neither are any days appointed". This, I think, shows the necessity for "compulsory vaccination", as, in all probability, there existed some absurd prejudices amongst the poor, which the vaccinator had either no time or inclination to conquer. I myself know a gentleman who resorts to the expedient of tempting the children in his district to be vaccinated by parading the village with a handful of *sweetmeats*, which proves generally successful. In most unions, it has been customary to appoint certain places and days for vaccinating the poor; but in my own case, and perhaps in others, this was seldom carried into effect, as it was impossible always to ensure a supply of *fresh lymph* at the proper time;

and, to vaccinate any number of children at one time, it is practically necessary to secure two or three healthy children at the eighth day of vaccination.

In conclusion, I would express an opinion that both classes of medical men will be benefited by the act: the *private practitioner*, because, from various reasons, the necessity of pressing on his patients the importance of vaccination will now be needless; and the *union surgeon*, because all the children of paupers, *i. e.*, those who are unable to pay for medical advice, will come under his notice more thoroughly than they did before.

On the question of the *bad feeling* likely to be engendered between private practitioners and union surgeons, I believe this has always existed to a certain extent, and possibly always will, independently of the Vaccination Act; but I do not see that the union surgeon is necessarily to be blamed for this. Perhaps a circumstance that occurred to two friends of mine may strengthen this opinion. A surgeon was attending some important case of long standing, during which time the friends in their anxiety requested a consultation with Mr. —, the union surgeon. What was the reply? "You must have some one else. I had rather not meet Mr. —; he is only the parish doctor!" This I know to be the fact, as I have the anecdote from both medical men, who, as I said before, are friends of mine. I am, etc.,

HENRY TERRY, JUN.

Northampton, October 10th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—I take the liberty of craving a small space in your Journal for briefly replying to the uncalled for as well as unjust remarks against Union Surgeons, by "A Private Practitioner", in last week's Journal. I quite agree with your correspondent that the Vaccination Extension Act is a monster injustice to the profession, as well to union surgeons as to private practitioners; unless "A Private Practitioner" considers 1s. 6d. per successful case ample remuneration for a *Parish Doctor*. I would ask "A Private Practitioner", Has he not heretofore, as well as other private practitioners, vaccinated numbers gratuitously, although it was not done to prevent the parish doctor from interfering with his or their patients, but simply because there are and ever will be a class of patients who pay for their confinements fifteen shillings or a guinea, and whose child is vaccinated into the bargain. What loss can "A Private Practitioner" now sustain by the same practice? unless, perhaps, he attends none but the middle or upper classes of patients, who will still pay as before for vaccination; or, at least, "A Private Practitioner" will charge it in his bill if he is not a greater fool than I take him to be. So much for the injustice of the Act to private practitioners in general, and "A Private Practitioner" in particular.

Under this Act, there is less necessity for *parish doctors* interfering with private practitioners' patients (if indeed they ever did so) than before; as instead of the surgeon calling at the houses of patients, the latter *must* call at the place and time appointed by the former, notice of which time and place will be given, as well as warning by the registrar of the district. So much for the *parish doctor's* intrusion.

The final statement of "A Private Practitioner" is so untenable by facts, that I shall not trouble myself with a refutation. I would merely ask "A Private Practitioner", From what class does he supply his middle and upper class of patients, who from scrofula or some other constitutional taint, are unable to nurse their equally scrofulous offspring without nurses? I would likewise ask him, Does he keep a cow on his premises to supply the same class of patients with genuine vaccine lymph.

Had the even handed justice been carried out which "A Private Practitioner" says might have been followed—*viz.*, that of furnishing a case book to each practitioner (private I presume) so that he might make quarterly returns of the numbers vaccinated, and of course draw the amount in cash, we should not have had the pleasure of perusing his insolent tirade against union surgeons. I greatly fear "A Private Practitioner" has been a defeated candidate for union or vaccination honours, and hence the attempt to malign parish doctors.

I, sir, have had the honour of holding a union appointment for the last four years, and also that of vaccinator of the district; and I know hundreds holding similar appointments. I assert without fear of contradiction even from "A Private Practitioner", that amongst our ranks are to be found men of the highest professional attainments, honour, and integrity, and who would spurn

the mean acts which "A Private Practitioner" attributes to us, even before an opportunity has been afforded to us of so acting (if capable). For, remember, although the Act is in force, it has not yet been acted upon. In conclusion, I would say to "A Private Practitioner" as our Saviour said to the Pharisees of old, "First cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote out of thy brother's eye".

I am, etc.,

A UNION SURGEON AND A PRIVATE PRACTITIONER.

October 10th, 1853.

EVILS OF THE VACCINATION ACT MUST BE ALLOWED TO WORK THEIR OWN CURE.

LETTER TO THE EDITOR.

SIR,—In regard to the Vaccination Act, nothing now remains to be done but to let those who have been so torpid of late feel the inconvenience of the act: that may, *perhaps*, arouse them. But I fear a vast number of the union vaccinators are well pleased with the slight addition to the miserable stipend for so important a duty. I have no patience with them, and no hope of them, and little for the profession at present. Lord Palmerston has completely deceived and betrayed us. I am, etc.,

R. C.

October 10th, 1853.

THE NEW VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—A deep sense of the great injustice done to me individually, and to the profession generally, by the new Act, prompts me to let you know what I have personally seen of its working here. I live in a large city which is divided for vaccination purposes into four or five districts, each having its publicly appointed and publicly paid vaccinator. Immediately the Act came into operation, I was surprised to find the walls in every direction covered with large placards having the names of these vaccinators in conspicuous characters, together with their addresses. They purported to have been issued by public authority of the parochial body of the city, informing every citizen that the law now required every child to be vaccinated; that *all* might avail themselves of the perfectly gratuitous services of the public vaccinators, who would vaccinate the children of *all classes*, either at the public places appointed for that purpose, or at any reasonable time at the private residences of these gentlemen. Now, what is the effect upon the private practitioner? It will inevitably make him vaccinate without any fee in nearly all cases, and be obliged moreover to give certificates for each case "without fee or reward". The case was hard enough before the new act came into operation. I have, years back, been able to earn a few fees by vaccination; but now nearly all ask whether I charge anything for vaccination, as their neighbours have been to Mr. So-and-so, the public vaccinator, who kindly did it for nothing; so, not to lose my patient, I also do the same. Now this has occurred not only amongst the poor and the needy, but amongst those who could well afford to pay a fee. Thus a patient of mine, who pays £200 per annum for the rent of his shop, used to pay his 10s. fee for the vaccination of his child; but the last time I could get nothing, and all this when our poor rates are increased to pay those who vaccinate gratuitously. In plain words, we are obliged, under pain of fine and imprisonment, to pay poor rates, which go with the national rates, including the iniquitous income-tax, to enable our professional and privileged neighbours to take away our patients or at least a fee we should otherwise fairly have earned. I hesitate not to say, that the new Act is a most unmitigated blunder in legislation. Whether intended or not to be so, in practice it induces spoliation and monopoly. A medical man's time is his bread, and no power has ever been delegated to the State to demand services from anyone without a corresponding reward or privilege. What are our politicians about? Here we have an act in operation, which, so far as medical services are concerned, is essentially *communitistic*. A rate is raised from all, including medical men, for the purpose of doing something for all *gratuitously*; and to enable a few of our number to deprive us of our former fees and a risk of taking away our patients and family connexions; whilst the private practitioner is obliged to do this for nothing and also to give certificates in each case, which must be "without fee or reward".

Now I have to vaccinate nearly all my private patients' children gratuitously, or nearly so; I also find it necessary to vaccinate numbers of other poor patients' children who wish me

to vaccinate them, and in all these cases I am obliged to give certificates without "fee or reward".

But, what are we to do? Let us never cease to protest against this measure of *spoliation and communism*; we must act unitedly and petition Parliament immediately it meets upon the subject. But what I deem of far more importance, let us *individually* petition the legislature. Thousands of these petitions sent, must and will tell upon the House of Commons and upon public opinion. Each person has an undoubted right to petition the House upon any subject by which he deems himself aggrieved. I shall, as soon as the House sits, forward my own individual petition to the leading member of our city; now, if all my injured brethren of the profession will only, each in his case, act in a similar way, there can be no doubt of the issue. An Englishman's sense of fair play will never allow this act to go unrepealed, and which could never have passed had it not been unfairly hurried through Parliament. What are we to petition for? Perhaps, all things considered, a compulsory Vaccination Act will be advisable; the State has an undoubted right to say, this child must be vaccinated by a regularly qualified practitioner; but free trade and fair play says it shall not do so by paying certain monopolists to do that for all who choose to accept gratuitous services. Let pauper children, *i.e.*, the children of persons receiving parochial relief, be vaccinated at the expense of the parish; and perhaps other poor children, by the parents bringing a certificate from two householders to the effect that the parents are too poor to pay any fee for vaccination. Thus we should get rid of the scourge of the small-pox, without at the same time victimising the majority of the members of that profession of which Jenner was a bright ornament in giving to the world his never to be forgotten discovery. I am, etc.,

ADEPT.

CHOLERA.

LETTER TO THE EDITOR.

SIR,—When you take it into your editorial consideration to review the swarm of choleraic literature which now infests our professional atmosphere, permit me to suggest the following as an appropriate heading for your article:

"Ambubiarum collegia, pharmacopole,
Mendici, mime, balatrone; hoc genus omne."

Of such are the popular writers on cholera.

The advent of an unmanageable epidemic is generally made an excuse for the publication of all sorts of crude and ill considered notions from the pen of the sciolist; it is not enough that we have to wade through ponderous blue books and the authoritative documents of our superiors and elders, but our little great men pour in upon us the ephemeral spawn of their brains, in the shape of *Cholera for Sixpence*; *Thoughts for a Shilling*; *Cholera and all Epidemics nothing more or less than Galvanic Batteries*. By M. B., F. O. O. L., etc. Also, by the same author, *Cholera treated by Vulcanised India Rubber and Small Doses of Chatnee Sauce*. Now, sir, if, instead of troubling our heads about the treatment, concerning which the wisest among us are not agreed, we address ourselves to the prevention of this disease, much good, I am persuaded, may be done: but then comes the question—*What is cholera?*

All sanitary measures appear to be based on the zymotic theory of cholera. There are to be found in the voluminous reports which have been officially issued, and elsewhere, many striking and sensible passages in support of this doctrine: indeed, it seems to be the only one at present capable of answering the searching questions which are every day put to us. I am not acquainted with any writer who has given so accurate a definition of the zymotic theory as Dr. Carpenter. This distinguished physiologist has gone deeply into the matter; and with great logical acumen has advanced far towards establishing the immutable truth of the hypothesis. At present, I have no intention of meddling with the theory in question further than to show that in order to prevent cholera, we must realise in our own minds a correct idea of its cause. To adopt, then, Dr. Carpenter's own words, we may say that the cause of cholera is "a certain general condition of the human body *plus* the specific poison." These two being the unconditional and variable antecedents, or, in other words, the sum of the necessary conditions, being included in these antecedents, they *must* be considered the cause. Now, it is well known that contingencies are absolutely required to produce the disease cannot be developed when one is present, and then whether the same law of causation holds in other diseases, and if so, whether we can make clearer by an illustration.

What is the cause of hydrophobia? Do we not here also observe two antecedents; namely, a person to be bitten, and a mad dog to bite; the latter representing the specific poison? Now, how has Government dealt with hydrophobia, so as to remove one of the antecedents, and therefore the cause? I think, wisely. The Government could not remove the first antecedent by shutting up the people during the dog days, and therefore it took cognizance of the second, and put the dogs into quarantine. The result is, that hydrophobia from having been a disease of frequent occurrence in London, has become exceedingly rare. And now, what is the case with cholera? Can we shut up the specific poison of cholera, as we do the dogs? I fear not: the quarantine laws have hitherto been inadequate to keep the enemy at bay: but, fortunately, we have considerable command over the other antecedent, the "certain general condition of the human body"; for it has been found that by taking care to prevent the accumulation of disintegrated azotized material within the system, the leaven of the disease finds no appropriate pabulum to maintain its existence.

I believe, sir, that all comprehensive and rational schemes for the prevention of cholera must be founded on the principles which Dr. Carpenter has laid down; and I now quit the subject with an urgent recommendation to your readers to make themselves acquainted with the doctrines of the zymotic theory, as that learned physiologist has explained it in the *Med. Chir. Review* for January 1853.

I am, etc., COSMOPOLITE.

October 1853.

CHOLERA.

LETTER FROM J. PAXTON, M.D., TO THE EDITOR.

SIR,—The cholera, like many other evils of this life, has a reaction tending to work out some important beneficial results, so that ultimately we learn wisdom from the things we suffer. Thus inestimable benefits will follow those sanitary measures which are being carried out, and which probably would not have been thought of had the cholera not appeared in our towns. And yet cleanliness, wholesome nourishment, and abundance of fresh air and good water, are no less essentially protective against epidemics and many other diseases which are fatal, or, at least, keep the health below par.

Without intending to compliment any one, let me observe that the detection of certain deadly agents which have surrounded us, and of which we were formerly unconscious, has been owing to the progress of the physical sciences. The exhortations given to the boards of guardians and other public bodies, on the necessity of the removal of deadly agents for the wellbeing of all classes, is mainly owing to the labours and penetration of scientific medical men. We acknowledge that very much is due to the echo of the daily papers for the impressive and often brilliant articles on public hygiene. Without the aid of the *Times* and other journals, all the medical exposures and warnings would avail but little with people in general. Your last leading articles, the republication of the circular of the College of Physicians, and the *questions* of the Council of the Association, are excellent, and calculated to bring the subject of cholera very systematically under the serious consideration of the profession. Still, however, more is required. The records of ten thousand cases, and charts of the course it has pursued, drawn out with the most accurate details, might illustrate the natural history of the epidemic, but it would give no clear insight into the real character of the disease. We require pathological memoranda to be collected by those who are quite competent to the task, who would be willing to undertake a more than statistical and medical description of the disease. We require an extended investigation of the more intimate changes which the organisms of the human frame undergo stage by stage while the choleraic struggles last, and the conditions an inspection exhibits when the struggle is ended.

I now come to a consideration of the point I am aiming at; viz., whether it is not desirable that a PATHOLOGICAL COMMISSION should be appointed, under the General Board of Health, for the further investigation of the morbid phenomena of cholera; that two or more of the commissioners be sent into the district where there may be an outbreak of the disease, there (without interfering in the management of the cases) to examine and report on all circumstances specially relating to organic changes produced in the subjects of cholera? Such inquiry should particularly embrace a most critical view of *post mortem* anatomical appearances.

Thus, assuming cholera to be a disease of the blood, they should note: 1, the colour in the arteries and veins; 2, the specific gravity;

3, per centage of serum and crassamentum; 4, solid contents; 5, measurement of red and white corpuscles, their relative proportion, and any departure from their normal forms; 6, proportion of water; 7, albumen; 8, fibrin; 9, extractive matters; 10, chloride of sodium; 11, carbonate of sodium; 12, chloride of potassium; 13, phosphate of lime; 14, phosphate of soda; 15, phosphate of magnesia; 16, lactate of soda; 17, lactate of ammonia; 18, protoxide of iron; 19, phosphate of iron; 20, any addition of foreign substances, or any abstraction of normal substances from the blood. To these points may be added the examination of the contents of the thoracic duct and receptaculum chyli, the liquor chyli, and its globules, in order to ascertain any deficiencies, increase, or other deviations from health in the preparatory materials of the blood.

I need not say, that the noting of these items forms only part of the duty of the observer. The chemical and microscopical states of fluids ejected from the stomach and bowels might be regarded as deserving equal attention.

I am, etc.,

J. PAXTON.

Rugby, October, 1853.

[The *post mortem* anatomical appearances in cholera have been ably described by Dr. W. G. Gairdner, of Edinburgh, and also by Dr. Raikem, and by M.M. Lévy and Tholozan. An account of these researches is given in the *London Journal of Medicine* for 1840.—EDITOR.]

CHOLERA.

LETTER FROM E. GREENHOW, M.D., TO THE EDITOR.

SIR,—Asiatic cholera having again visited our shores, it may not be uninteresting to some of your readers to hear the reminiscences of those who on former occasions have been actively engaged in its treatment, and although little progress has been made in elucidating its nature or in effecting its cure, still something may be gleaned from the experience of others.

It is now generally admitted that heroic remedies are not such as are calculated to be useful in the treatment of cholera; and it is only by the steady perseverance of mild treatment of such a nature as is likely to obviate the symptoms of the disease that good can be accomplished. How far the suspension of the functions of the liver and kidneys are concerned in the production of the disease, we cannot tell, although the non-excretion of the substances eliminated by these organs from the blood may have much to do in producing some of the symptoms; and in treating the disease, the restoring these functions should not be lost sight of.

It is with some diffidence that I now bring forward the plan I pursued during the last visitation of cholera, because it was adopted after the disease had prevailed some time; and it is well known that towards the close of an epidemic there is a greater tendency to recovery than at its commencement. Nevertheless, had my infirm state of health not now prevented me from personally engaging in its treatment, I should most undoubtedly have pursued the same plan in preference to all others. The medicine, remedy I dare not call it, is the following,

R Pulv. hyd. cum cretâ, et pulv. ipecac. comp., aa gr. i.
Conf. rosæ q. s. ut fiat pil.

These pills are equally applicable both to diarrhœa and to cholera. In case of diarrhœa the patient may take one pill every half hour if the case is urgent, at the same time keeping warm and quiet, or what is better still, keeping in bed; the diet should consist of sago, or arrowroot and brandy; tea also may be taken. Where cholera has decidedly supervened, one pill should be taken every ten minutes or quarter of an hour, and no other medicine should be administered. The first indication of reaction is apparent in the skin, which has hitherto been bathed in a cold acetic moisture, which now changes its character, assuming a warm natural feeling, and this often occurs before the pulse is distinct at the wrist.

I am, etc.,

EDWARD GREENHOW, M.D., F.R.C.P. Edin.

Fulford, York, Sept. 15th, 1853.

MEDICAL ETHICS: THE PROFESSION IN THE COLONIES.

LETTER TO THE EDITOR FROM THOMAS NICHOLSON, M.D., OF ANTIGUA.

SIR,—I am glad to see it announced in the ASSOCIATION JOURNAL for July 29th, that Mr. Michael intends to move, at the annual meeting of the Association at Swansea, "That, in the opinion of the meeting, it is desirable that a code of laws,

for the guidance of the members in all matters appertaining to professional ethics, should be adopted;" etc. No respectable member of the profession can have any doubt of the desirableness of this resolution; and, therefore, it is to be hoped that it will meet with unanimous support. The Medical Reform Bill proposed to be enacted by Parliament may protect the profession and the public from the practices of unqualified pretenders; but how are we to be protected from the practice of quackery by the unprincipled but qualified members of the profession? This, I take it, must be done by the profession itself; and, if all the licensing bodies would lay aside their jealousies, and enter into combination for this very desirable end, it might be very easily accomplished. Let every licensing body publish annually an alphabetical list of its members, with their place of residence; and when any of these has been convicted of dishonourable conduct, or a breach of the laws of medical ethics, let his name be struck off the list for one or more years, according to the degree or enormity of his offence. Some measure of this kind will be found to be a necessary adjunct to any reform bill that contemplates the support of the dignity and respectability of the medical profession.

We have in this colony a very simple law for regulating the practice of physic, which, although it was passed so far back as 1812, might be advantageously imitated by the Imperial Parliament.

No one is permitted, under a penalty of two hundred pounds currency, to practise medicine or surgery without a license from the Governor, or person administering the government. The Governor is not authorised to grant such a license to any one who cannot produce a diploma from certain universities and colleges named in the act, or a certificate of his qualification from a Board of Examiners in this colony. The examiners are the three senior medical practitioners, or, in case of their inability to attend, any other medical practitioners whom the Governor may appoint; and these examiners take an oath, in the presence of the candidate, to act justly and conscientiously, without favour or affection.

The universities specified in the act are Oxford, Cambridge, Edinburgh, Glasgow, and Dublin, and the Royal College of Surgeons of London. In 1822, the Royal College of Surgeons of Edinburgh was added, and, by a subsequent act, the recognition was extended to all the corporate bodies in Great Britain and Ireland who are legally authorised to grant diplomas in medicine and surgery; but, for some reason or other, the Royal assent was not given to this last bill.

This act has been found to work well, so far as it protects the community from unqualified practitioners; and, until recently, the greatest harmony prevailed amongst the members of the profession: and, notwithstanding the limited field of practice, and the small number of her population, Antigua records in her history the names of many medical men who were ornaments to society as well as their profession. Whatever their university distinctions may have been, it was at first necessary, and is even now customary, for every one to practise as a general practitioner, and dispense his own prescriptions; and, whenever the circumstances of the patient could afford the expense, consultations were held without exciting the slightest jealousy or ill feeling.

In 1843, all the medical men then engaged in practice formed themselves into an association for protecting the interests and respectability of the profession, and promoting unanimity and kindly feelings towards each other. But, alas! of twelve who assembled for this purpose on the 18th November of that year, in the prime of life, seven have gone to their eternal rest! Such is the wear and tear of life in tropical practice.

One of the first subjects which was forced upon the attention of the society, by the change in our social system, was the regulation of the rate of remuneration. The legislature, to encourage habits of steady and continuous labour amongst the newly emancipated, had very wisely made it imperative on the employer to provide medical attendance for his contract labourer, such as he had been accustomed to in the time of slavery; but many of the proprietors, particularly some who had formed their notions of the value of medical services at the Poor-law Board in England, were disposed to reduce the remuneration to a degree which was derogatory to the respectability, and would have threatened the annihilation, of the profession in the colony. To protect themselves from this attempt required the united efforts of the association.

The mode of charging in private practice likewise underwent revision. The old system of including remuneration for advice and attendance in the charge for medicines was very properly abolished, and a table of fees established, in which a charge for

visits, not exceeding two in the same day, was agreed upon; and the price of medicines dispensed was reduced to their real value. Together with these equitable changes, the fees for operations in surgery and midwifery were also in many cases reduced; nevertheless, great dissatisfaction was excited in the community, and murmurs were heard of threats to introduce other medical men. At this time, we had imported an assistant from England, who was bound by a contract entered into in London to serve us for three years, and likewise not to practise in Antigua without our permission. He had not been more than five weeks in our service when he refused to fulfil his engagement, and denied the validity of the instrument by which he had bound himself, because it was not on stamped paper. He was a Graduate of Glasgow, and a Member of the College of Surgeons of England; and, from his family connexions, better things were expected of him. But *virtus est optima nobilitas*. The contract was sent to England to be stamped; an action was brought against him in the Court of Common Pleas, and a verdict in our favour to the amount of £300 currency was awarded. The agreement not to practise in Antigua without our consent was set aside, as contrary to the public interests.

In consequence of this dishonourable conduct, all the members of the Association resolved that they would hold no fellowship with him, nor recognise him as a member of the profession. On the other hand, he threatened to fill the island with his countrymen, Irish Doctors; but his brother-in-law was the only one that obeyed his invitation. Another relation soon followed, as a druggist; and by their combined energies, and the sale of Holloway's pills, soda water, and perfumery, they appear to be driving a flourishing trade.

Thus was the Medical Association virtually annihilated, the community had no sympathy with us: contracts for attendance on families, estates, and friendly societies were entered into with the recusant doctors on the most degrading terms; and all harmony and good feeling amongst the members of the profession were destroyed. But time smooths many asperities, death had been busy amongst the older members of the profession, and the reign of peace and harmony was apparently about to be re-established; when, lo and behold, these renegades, forgetting the circumstances connected with their introduction amongst us, set themselves up as the self appointed defenders of what they term the rights and privileges of the profession. Because the medical attendance on this infirmary has been for the last nine years restricted by the managers to one medical establishment, which for years had attended and supplied the patients with medicine gratuitously, one of these free trade doctors has, in a series of anonymous letters in the island newspapers, inveighed against monopolies, and attacked the medical officers with low, scurrilous abuse, most dishonourable to any member of a learned profession. But I must reserve the remainder of their history for another letter.

During the earlier periods of slavery, the charge for attendance on estates was four shillings for each slave, payable in the produce of the island: latterly, it was commuted for cash payments at 2s. 8d. a head, and 10d. each for surgery, making 3s. 6d. When the general emancipation took place, the planter was compelled by law to find medical attendance for his contract labourer only; but most of the proprietors entered into an agreement with the medical attendant to visit all that were resident on the estate, both adults and children, and two thirds of the average amount paid during slavery was generally the salary fixed upon. The duty to be performed comprised one weekly visit at least, the supply of medicines, surgery, midwifery, and attendance on the overseer.

Mr. Tollemache, a wealthy English proprietor, who admitted that he had received in an average of ten years an annual profit from his estates in Antigua of £3,073, when examined before a committee of the House of Commons, stated that during that time the doctors were *extravagantly paid*, and he reduced their salaries more than one-third. This *extravagant* payment was 2s. 6d. sterling a head, supposing that the same number resided on the estates as during slavery, and he reduced it to 1s. 7½d.!! We formerly attended two of his estates, but we would not submit to the reduction, unless that he could show us that there was a proportionate reduction in the number of persons to be attended. This was not complied with, and we gave up the attendance, but it was readily accepted by the Irish doctors.

Mr. Tollemache stated to the committee, that, if he had the power, he would abolish the contract law and discontinue medical attendance on the labourer. By this proceeding he would save, according to his own estimate of the amount, in the expense of producing each hundredweight of sugar, when he was paying the doctors *extravagantly* for their services.

The evil consequences of neglecting to make provision for the medical care of the labouring class, may be seen in the present state of Jamaica, as represented in the reports of Dr. Gavin Milroy and of the General Board of Health of that island.

In St. Kitts, also, where no contract law exists, the Board of Health, being convinced that the decrease of the labouring population is in some measure attributable to great mortality among their children, has recently recommended to the legislature the enactment of some law for providing, at the public expense, medical attendance on all children under nine years of age. To carry out any measure of this kind, a rate must be levied on the estates, and I would ask whether this or the Antigua plan is likely to be most burdensome to the planter?

In Montserrat, where the profession met with the same neglect and discouragement, there was no medical man in the island when yellow fever broke out about a month ago, and the president administering the Government died without the benefit of that science which the meanest pauper in England enjoys.

I am, etc.,

THOMAS NICHOLSON, M.D.

Antigua, Sept. 12th, 1853.

P.S. Since the above was written, I have read the debate at Swansea on Mr. Michael's motion. While I rejoice at its having been carried, I cannot help expressing my extreme disappointment at the lukewarmness with which the subject of medical ethics was received. When the battle of life has been successfully fought and the pinnacle of ambition attained, it is not kind to look down with unconcern upon the struggles of the multitude below. The Americans are taking the lead of us in medical ethics.

T.N.

Antigua, Sept. 28th, 1850.

MEDICAL ETHICS AND ASSOCIATION REFORM.

LETTER FROM H. L. SMITH, ESQ., TO THE EDITOR.

SIR,—Fully concurring in the necessity of medical reform, both as regards medical attendance on the sick poor, and the conduct of medical men towards each other, I rejoice that the "Hopeful Member" of our Association has drawn me out, and challenged me to appear before the ethical branch of the Association, for the offence of advertising periodically my attendance on the out-patients of the Southam Infirmary, at Northampton, and, he might have added, other places. I rejoice, because it will enable me in my defence before that council, to explain to them more fully (than I have hitherto had an opportunity of doing), the true principles on which they ought to act, and the economy of time and labour, with the more extensive usefulness of the profession to the working classes, in building them up into the social fabric, as they only can do. These principles, it has been my highest ambition to make general, ever since the time I had an oath imposed upon me by the Royal College of Surgeons (now upwards of forty years since); and that oath and that inquiry shall justify me, for all delinquencies irregular or defective, which our "hopeful member", or any other man, can bring against me. A passionate regard for the progress and practical application of science, an enthusiastic devotion to the welfare of man—man in the aggregate—man in the universal—the more intense, as it is manifest that his original dominion over all created things is being progressively, in this "evening of light", restored to him. These feelings should at this time be the characteristic of the medical profession; and I crave for nothing so much as the inquiry of which "Hopeful" has created the necessity. Let him supply me at once with the names of the jurors, and of the offences, medical or social, with which he has accused me, and I will meet him gladly, in no unfriendly spirit, either in London, or any of the midland county towns, as may be most convenient to the inquirer.

I am, etc., H. L. SMITH.

Southam, October 14th, 1853.

[We thank Mr. Smith for his letter. The subject of newspaper advertising by professional men well merits investigation. It is but fair to Mr. Smith, to state that his advertisements have appeared for the last thirty years in the Northampton papers; and that similar announcements are quite usual in that town. The duty of the Ethical Committee is simply to collect information and make suggestions.—EDITOR.]

MEDICAL ETHICS AND ASSOCIATION REFORM.

LETTER FROM DR. FAIRCLOTH TO THE EDITOR.

SIR,—The invidious manner in which my name appears in the ASSOCIATION JOURNAL of this day, in a letter on Medical Ethics, under the signature of "a Hopeful Member", is most

unwarrantable and most unjust. I had no choice permitted me. I simply wished to announce to my friends at a distance, that I had made an important change in my mode of practice. In the offence imputed to me, I merely followed out a custom, which is, in this town, hallowed by long usage.

I am, etc., JOHN FAIRCLOTH.

Northampton, October 14th, 1853.

[We had no right and we had no wish to impute blame to Dr. Faircloth. We did not do so. In following out a custom, he cannot with justice be censured for what might *prima facie* appear questionable.—EDITOR.]

DR. MAYNE'S LEXICON AND ITS PRICE.

LETTER FROM THE AUTHOR TO THE EDITOR.

SIR,—Having been from home since the 1st instant, in the hope of improving my state of health, I have only now seen the letter of "A Subscriber", in the JOURNAL of the 4th, directing my attention to what he considers a glaring defect in the commercial arrangements of my Expository Lexicon; namely, that the price is not less to subscribers than to ordinary purchasers; and suggesting to me to reduce the price of subscribers' copies from thirty shillings to twenty-four, or twenty-five shillings. I confess, that this suggestion fell unpleasantly on my mind, as evincing, at least in one gentleman, a non-appreciation of the toil and anxiety inseparable from the production of such a work.

I was led to adopt the mode of publishing by subscription, simply, with the view of thereby being relieved of the inconvenience of a very heavy expenditure; and I accordingly appealed to my professional brethren, under a feeling not over-presumptuous, I trust, that having laboured long to accomplish what hundreds in their first ranks have testified to be a useful and much required work, I had a claim to support. To all who have recognised that claim, by honouring me with their subscriptions, I am sincerely grateful.

On most of the subscriber's copies I already sacrifice above ten per cent., as the cost of arrangements, for its delivery, etc.; and to reduce the price to twenty-four or twenty-five shillings, would entail a total loss to me, upon these, of thirty per cent.—a benefit arising out of a subscription list, which, surely, "a subscriber" did not contemplate in his singular suggestion.

I have no controul over the present usages of the trade; neither, in fairness, may I attempt to undersell its members by the course pointed out.

Thanking "A Subscriber" for his suggestion and good wishes.

I am, etc.,

R. G. MAYNE.

Leeds, October 17th, 1853.

[As we understood the letter of "A Subscriber", no objection was raised to the plan of publishing by subscription. What was objected to was, that the price to subscribers was not less than that to non-subscribers. By charging a lower price to subscribers, an obvious advantage is gained by them; and no less advantage should be gained by the author, as there would then be no inducement for individuals to hold back from subscribing, in order that they might obtain the work at a much lower price from the publisher. We take this opportunity of expressing our high admiration of Dr. Mayne's work.—EDITOR.]

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

LETTER FROM THE REGISTRAR TO THE EDITOR.

SIR,—Permit me to call your attention to an error, evidently unintentional on your part, in the last number of the ASSOCIATION JOURNAL, XLII, p. 938, second column, in which you have named Faculty of Physicians and Surgeons of Glasgow, which should have been Faculty of Medicine of Glasgow, a modern, self constituted body; while the Faculty of Physicians and Surgeons of Glasgow, was constituted in the year 1509, by Royal Charter, ratified by an Act of the Scottish Parliament, and having the privileges of the said Faculty better regulated and defined by xiii Victoria Regiæ, cap. xx.

Please to receive (as herewith inclosed), the annual list of our registry for the past year for your use; also our office bearers names for the year from October 1st, 1853, till October 1st, 1854.

I am, etc.,

JOHN AITKEN

Registrar of Fac. of Phys. and Surg. of Glasgow.

21, Blythwood Square, Glasgow, Oct. 22nd, 1853.

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MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. IV.—WEEK ENDING 22ND OCTOBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.

Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Wind.		Amount of Ozone for the Day.	Amount and Class for the Day.	Hail, Snow, Fog, Frost, Thunder, Lightning, Aurora, Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.		
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.							Mean Force for the Day.	
16 Oct. S.	in.	in.	°	°		°	°	°		a.m.	p.m.	0—6		0 — 10		in.		
17 — M.	29.919	29.938	55.0	30.7	42.8	62.5	25.0	40.8	0.863	WSW.	W.	1.5		5.5, cl.-cu.				
18 — Tu.	29.122	29.985	47.8	32.5	40.1	57.7	23.5	38.7	0.892	E.	ENE.	1.5		9, ci.-cu. s.				
19 — W.	29.338	29.361	54.3	30.8	42.4	60.5	25.0	36.6	0.859	WNW.	ESE.	1		3, cu.				
20 — Th.	29.179	29.069	50.8	45.0	47.9	51.5	37.5	45.1	0.911	ESE.	ESE.	2.5		10, cu.-s.	Fr. f. 11 [p.m. 0.433			
21 — F.	29.374	29.517	54.8	40.5	47.6	59.5	32.0	42.3	0.865	WNW.	SW.	2.5		0.5, cl.-cu.	0.009			
22 — S.	29.517	29.414	60.0	45.7	52.8	65.7	40.5	48.7	0.856	ESE.	SSW.	2.5		10, s.	0.007			
22 — S.	29.548	29.606	63.3	50.5	56.9	68.7	42.	49.7	0.828	SSE.	SSW.	2.5		1, cl.-cu.				
Column ..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	

NOTE.—S. Phth. Pul. M. Old age, et. 86, Pneu. R. Lung, Disease of Heart. Th. Effusion on the Brain. W. Conv. Phthisis, Stricture of Œsophagus. Th. Phthisis, Senile Gangrene, et. 61. F. Phthisis, Premature Birth, Suicide by Hanging.

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MOFFAT, M.D.

16	Oct.	S.	29.158	29.117	52.0	43.0	47.5	65.0	34.0	41.7	0.835	W.S.W.	W.S.W.	1.5	0	1	6.5, ci.-cu.	0.20	Diarrhoea 2.
17	—	M.	28.910	28.838	47.5	38.6	42.7	53.0	30.0	41.8	0.929	S.S.E. 0	N.E.	1	0	0	10	0.00	Diarrhoea 2.
18	—	Tu.	29.208	29.170	52.0	38.0	45.0	67.0	27.5	42.7	0.807	0	S.W.	1	0	0	2.5, ci. cl.-s.	0.00	Diarrhoea, T.
19	—	W.		28.890	48.5	40.0	44.2	50.5	32.5	43.9	0.981	E.	E.N.E.	2	0	0	10	0.00	Diarrhoea 3.
20	—	Th.	29.314	29.432	58.0	44.0	48.5	65.5	42.0	43.0	0.760	N.W.	W.N.W.	3	1	2	4, cu.-s. ci. cl.-s.	0.15	Diarrhoea 3.
21	—	F.	29.298	29.108	60.0	41.0	52.0	63.5	35.0	52.0	0.931	S.S.E.	S.S.W.	4	3	6	9, ci.-cu.	0.00	[Stomach.
22	—	S.	29.340	29.445	61.5	49.0	55.2	67.5	39.5	50.8	0.774	S.S.W.	S.W. & E.R.	3.5	4	2	1	0.10	Cancer of the

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

16 Oct. S.	29.217		50.2	47.9	48.7	46.5	46.3	0.958	SSW.	W.	0					7, ci.-s. ci.-cu.	Mist.	0.335
17 — M.	29.057		46.4	37.4	41.9	33.9	39.5	0.915	S.	N.	1					10, ci.-s. sc.	H. fr.	0.011
18 — Tu.	29.272		50.8	31.9	42.9	31.1	38.3	0.900	NW.	S.	0					4, ci.-cu. hazy	Heavy	0.380
19 — W.	29.070		50.6	39.4	45.0	33.3	41.1	0.891	E.	E.	2					10, ci.-cu. ci.-s.	[dew]	0.760
20 — Th.	29.259		53.4	47.0	50.2	46.0	44.7	0.884	N.W.	SW.	1					6, ci.-cu. cu.-s. ci.		0.013
21 — F.	29.356		57.7	41.0	49.3	35.9	46.8	0.939	SW.	SW.	4					10, ci.-s. ci.-cu. s.		0.110
22 — S.	29.558		60.8	52.8	56.8	49.0	50.7	0.849	SW.	SW.	4					5, ci.-cu.		

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

16 Oct. S.	29.237	29.290	48.0	46.0	47.0	52.0	49.0	45.1	0.887	SW.	NW.	1	1	1	7, ci.-cu.	0.20	Epilepsy, Di.	Hydroceph.
17 — M.	29.151	28.926	52.0	35.0	43.5	58.0	33.0	43.9	0.886	SE.	SW.	2	2	1	10	0.19		
18 — Tu.	29.340	29.378	55.5	37.0	46.2	64.5	38.0	40.7	0.771	NW.	NW.	0.5	0	0	3, cu.	0.21		Hydrothorax.
19 — W.	29.108	28.928	49.0	33.0	43.5	40.5	40.5	46.7	0.901	NE.	NE.	1	0	0	10	0.02	Di.	
20 — Th.	29.335	29.511	54.5	46.5	50.5	60.5	44.5	44.0	0.761	NW.	NW.	1	0	0	3, ci.-cu.	0.38	Di. Epilepsy, Inf.	Fever.
21 — F.	29.716	29.650	56.0	38.5	47.2	55.5	40.0	50.0	0.880	SW.	SW.	3	0	0	9	0.01	Catarrh. Di. Inf.	
22 — S.	29.680	29.731	62.5	55.0	58.7	69.0	51.1	53.2	0.797	SW.	SW.	2	1	1	4, ci.-cu.	0.04	Di.	

UCKFIELD. Lat. 50.58.50 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

16 Oct. S.	29.50		60.	47.	53.5	66.	41.	49.9	0.843	SW.	W.	1	0	0	3, cu.-s. ci.-s. n.	0.00	Di. T. Pneu. Ery.	[7 months]
17 — M.	29.25		58.	39.	45.5	62.	39.	48.	0.932	SW.	W.	3	0	0	7, ci.-s. n.	0.20	Ophth. Di. Fa. Pneu.	Marasmus et.
18 — Tu.	29.440		60.	39.	49.5	68.	34.	39.6	0.748	NW.	NW.	1	0	0	6, ci.-s. n. cu.-s.	0.50	Di. 2, Pneu. Hep.	Hydro. et. 66.
19 — W.	29.21		57.	38.	47.5	59.	34.	47.9	0.905	SE.	SW.	3	0	0	10, various.	0.15	Ap. Gas. Inf. [Conv.	Ap. et. 79, lived
20 — Th.	29.43		57.	48.	52.5	61.	46.	46.9	0.937	NW.	W.	1	1	0	5, ci.-s. n.	1.14	Pneu. Ery. 2, Inf.	[only 1 hour]
21 — F.	29.92		58.	35.1	46.5	58.	29.	43.1	0.865	SW.	SW.	2	0	0	10, ci.-s. n.	0.20	Di. T.	Phth. et. 27.
22 — S.	29.93		62.	54.1	58.	64.	59.	51.0	0.888	SW.	SW.	2	0	0	10, ci.-s. n.			

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTE, M.D.

16 Oct. S.	29.437	29.448	55.7	41.2	48.4	59.4	36.	48.	0.932	NW.	W.	2	4		5, cu.	0.27	Dysentery.	
17 — M.	29.130	29.134	55.5	40.2	47.5	59.	35.8	46.	0.871	W.	W.	4	0		7, cu.	0.53		
18 — Tu.	29.488	29.455	56.4	45.7	51.0	69.5	41.5	43.9	0.931	N.	SE.	4	3		2, cu.	0.30		
19 — W.	28.885	28.855	52.3	48.9	50.0	55.	43.9	52.	1.000	SE.	E.	4	8		3, n.	0.10		
20 — Th.	29.602	29.761	55.6	42.2	48.9	58.9	36.2	53.7	0.893	N.	N.	2	6		9, cu. n.	0.12		
21 — F.	29.758	29.645	59.2	53.3	56.2	59.2	47.5	54.2	0.980	SW.	SW.	3	7		8, cu.	0.00	Bilious Diarrhoea.	
22 — S.	29.815	29.867	63.	55.	59.	65.	50.2	53.6	0.891	SW.	W.	3	8					

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

16 Oct. S.	29.320		53.0	48.4	50.8	57.0	49.0	1.000	S.		0.5				10	1.0		
17 — M.	29.122		48.0	39.4	46.1	57.0	49.0	1.000	SE.		1.0				10	0.60	Hæmop. Phthisis.	Hæmop. Phth.
18 — Tu.	29.404		55.0	39.9	46.3	61.0	39.4	0.858	NW.		0.5					0.08		
19 — W.	29.959		53.0	40.4	48.5	61.0	56.0	1.000	SE.		2.0				10	0.15		
20 — Th.	29.412		56.0	47.4	51.5	61.0	46.0	0.814	N.		2.0				1	1.08		
21 — F.	29.810		58.0	50.4	54.5	68.5	50.5	0.842	SW.		1.0				10	0.03		
22 — S.	29.867		60.0	56.4	57.8	63.0	55.2	0.946	SW.		1.0				9	0.31		

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

16 Oct. S.	29.860	29.343	58.5	52.5	54.5		48.2	0.793	SW.	WNW.	1				6, cu.-s. n. ci.-s.		Simple Fever.	
17 — M.	29.177	29.180	56.	49.	52.5		46.	0.787	WNW.	SW.	4				7, cu.-s. ci.-cu.	.501		
18 — Tu.	29.419	29.397	58.5	47.	50.2		43.	0.735	SE.	SE.	2.5				6, ci.-cu. ci.-s.	.206	Br. Hematur.	
19 — W.	28.813	28.786	55.	49.	52.		40.	0.843	SE.	NW.	3.5	0	0		8, cu. ci. n.	.088		
20 — Th.	29.500	29.736	55.	51.5	53.2		46.	0.787	NW.	NW.	3.5	0	0		8, cu. ci.-s.	.473		
21 — F.	29.798	29.784	58.5	49.5	54.		52.6	0.890	SE.	SE.	2.5	0	0		8, cu.-s.			
22 — S.	29.848	29.892	59.5	54.	56.7		56.4	0.918	SE.	SW.	2	0	0		6, cu. ci.-s.	.403	Br.	

NEWS AND TOPICS OF THE DAY.

[Continued from page 956.]

cover as conductors the names of Dr. Christison, Dr. Simpson, Dr. Bennett, Dr. MacLagan, Dr. Robertson, and Mr. Syme; but, with the exception of the name of Dr. Robertson, they have, for some unexplained cause, been withdrawn. It is understood that the *Monthly Journal* is to be henceforth conducted by Dr. Bennett, with the co-operation of a part of the former staff.

Some of the leading members of the profession in Edinburgh desire a fusion of parties in favour of one efficient journal; but, till the meeting of the 10th, the exact position of affairs is not likely to transpire. We wish peace and prosperity to all concerned.

MEDICAL SOCIETY OF LONDON. The following papers are announced as intended to be read at the ordinary meetings of this society.

Saturday, October 20th. Robert Barnes, M.D., "On the Treatment of Labour marked by Defective Uterine Action, and the Comparative Value of Ergot of Rye and Galvanism in Obstetric Practice."

Saturday, November 5th. J. R. Cormack, M.D., "On Cholera."

Saturday, November 12th. R. H. Semple, M.D., "On the Pathology and Treatment of Cerebral Diseases."

Monday, November 14th, in the Physiological Section. Edwards Crisp, M.D., "On the Form and Weight of the Heart, the Diameter of the Aorta, and the Size of the Blood-Corpuscles, in the various classes of Vertebrate Animals."

Saturday, November 19th. Haynes Walton, Esq., "On Inflammation of the Eye-Ball, especially that form of it usually called Iritis."

Saturday, November 26th. E. J. Tilt, M.D., "On Internal Metritis."

CHAIR OF NATURAL HISTORY IN THE UNIVERSITY OF EDINBURGH. Professor Jameson, in consequence of his advanced age and the present state of his health, has intimated to the Government his intention to resign the chair of Natural History in the University of Edinburgh, on certain conditions. The College Committee of the Town-Council consider the conditions to be very reasonable, especially when the career of the venerable professor, and the services he has rendered to science are considered, and they have urged Government to deal with the professor in the most liberal manner. The Lord Provost has accordingly transmitted a letter in support of the conditions upon which the resignation takes place. No answer has yet been received to the professor's letter, intimating his willingness to resign. The appointment of a successor lies with the Crown; but the appointment to the curatorship of the museum, which is generally united to the professorship, belongs to the Town-Council. Professor Edward Forbes, of King's College, London, is mentioned as the probable successor to Professor Jameson.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. Office Bearers for 1853-4: Alexander Dunlop Anderson, M.D., President; Robert Gray Maxwell, Surgeon, Vice-President; Robert Hunter, M.D., Treasurer. Councillors: James Watson, M.D.; Andrew Buchanan, M.D.; William Weir, M.D. John Aitken, M.D., Registrar.

PASS LIST. Fellows admitted since Oct. 1st, 1852:—Joshua Paterson, Glasgow; William Eadie, Fifeshire; John Black Cowan, Glasgow; Edward Gylles Crooke, Leyland, Lancashire; Julius Bernhard Klingner, Portsoy, Banffshire.

LICENTIATES admitted:—Thomas McGill, Glasgow; Christopher Deighton, Scotland; Gustavus Evans, Wales; William Edward Crook, London; Thomas Eastwood, Salford; William Fleming Cullen, Scotland; Archibald Campbell, Scotland; James Wilson, Scotland; Joseph Blick Atherley, England; William Parker, Glasgow; George Husband Baird McLeod, Glasgow; Richard Cleve Heighway, England; Robert Denn Christmas, England; Andrew McIntyre, Scotland; John Silvester Wright, England; Angus McIndoe, Scotland; Alexander John Stewart, Ireland; Robert Fleetwood Andrews, Ireland; Robert Hewer, England; John Jones, Wales; John Spence, England; James George Wilson, Glasgow; Alexander Angus McDowall, Glasgow; William Graham, Glasgow; William Henry Ludlow, England; William Henry Valpy, England; Alexander Wilson Marshall, Scotland; Edmund Braithwaite, England; Paul Maylor, Cork; James Weaver, England; Samuel Paul Barnsdale, England; Samuel Russell Conolly, Ireland; Francis Bowen, Quebec, Canada; William James Sandels, Ireland.

ROYAL COLLEGE OF SURGEONS:—PASS LISTS. Members admitted at the meeting of the Court of Examiners on the 7th inst.:—Henry Chambers, South Australia; Theodore Duka, Calcutta; James Hester, Oxford; Robert Car Brackenbury Holland, Bristol; Edward Gregg Noott, Gosport; George Whitfield Sparke, North Buildings, Finsbury; John Swift Walker, Sheerness; Charles Yarwood, Birmingham.

At the same meeting of the Court, Mr. John Felix Johnson passed his examination for Naval Surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date July 14th, 1848.

Oct. 14th:—George Augustus Fulcher, Finchley, Middlesex; James Hadaway, St. Nicholas, Isle of Thanet; James Kearney, Calcutta; Frank Powell, Chichester, Sussex; George Edmund Smale, Plymouth; St. John Stanley, Shifnal, Shropshire; Chas. Sturges, Sidney Square, Mile End; Richard Henry Thomas, Ibstock, Leicestershire.

FELLOWS elected at a meeting of the Council on the 13th inst.:—Messrs. Francis Bennett, Gateshead, diploma of membership, dated Feb. 3, 1832; Henry Bickersteth, Cape Town, South Africa, Jan. 5, 1838; Samuel William Brown, Lewisham, June 1, 1827; William Henry Brown, Lewisham, Aug. 26, 1836; Thomas Burlton, Leominster, Nov. 20, 1835; John Strange Chapman, Army, Dec. 9, 1825; Oscar Moore Passey Clayton, Percy Street, May 11, 1838; Thomas Coe, Bury St. Edmunds, July 4, 1838; John Crouch, Bruton, Somerset, Nov. 15, 1833; George Daglish, Wigan, Lancashire, April 20, 1827; John Dickenson, Wrexham, March 20, 1835; Benjamin Dulley, Wellingborough, Jan. 28, 1829; Charles Edwards, Cheltenham, Aug. 24, 1838; Edward Evans, Cardiff, March 21, 1834; Frederick Fry, Maidstone, July 2, 1830; Benjamin Hands, Hornsey, Middlesex, Sept. 3, 1819; Thomas Haslehurst, Claverley, Salop, Aug. 18, 1826; Henry Hayward, Aylesbury, May 8, 1835; Thomas Howitt, Lancaster, April 29, 1831; William Howitt, Preston, April 3, 1833; Mark Wilson Jackson, Stamford-Baron, May 26, 1826; William Jackson, Penrith, Dec. 2, 1814; Robert Jones, Long Melford, Dec. 1, 1820; Thomas Lewis, Gosport, Aug. 20, 1813; William Major, Camberwell, Oct. 4, 1833; Stephen Edward Piper, Darlington, June 22, 1838; Arnold Rogers, Hanover Square, April 16, 1830; Thomas Siddoley, Leigh, Lancashire, Dec. 15, 1820; Henry Lindsell Sopwith, Tonbridge Wells, April 28, 1835; George Southam, Salford, Manchester, July 20, 1838; Warrick Walter Wells, Bengal Army, May 8, 1835; and William H. Blewitt Winchester, Westbourne Terrace Road, Feb. 16, 1838.

LICENTIATES IN MIDWIFERY admitted at a meeting of the Board of Examiners in Midwifery on the 12th inst.:—Messrs. John Samuel Beale, Harrow Road, diploma of membership, dated Dec. 11, 1846; Theodore Duka, India, Oct. 7, 1853; James Hester, Oxford, Oct. 7, 1853; Benjamin Kerr, Cowes, Isle of Wight, Nov. 5, 1852; Robert Knaggs, Swindon, July 19, 1852; Henry Frederick Marley, Padstow, April 29, 1853; Thomas Peete, Cannon Street Road, July 17, 1851; George Whitefield Sparke, Finsbury, Oct. 7, 1853; Thomas Tomlinson, Maldon, July 11, 1853; and Thomas Wiglesworth, Coleford, June 18, 1852.

BOOKS RECEIVED.

*[*An asterisk is prefixed to the names of Members of the Association.]*

BARWELL, Richard. *ASIATIC CHOLERA: its Symptoms, Pathology, and Treatment.* pp. 219. London: 1853.

ERICSEN, John, Professor of Surgery in University College.

THE SCIENCE AND ART OF SURGERY. pp. 951. London: 1853.

HEARNE, E., M.B. *THOUGHTS ON CHOLERA.* pp. 56. London: 1853.

HOFMANN, A. W., Ph.D. *LIEBIG'S HANDBOOK OF ORGANIC ANALYSIS.* pp. 135. London: 1853.

*LANE, Butler, M.D. *THE HEALTH GUIDE; a Popular Handbook of Medicine and Surgery.* pp. 539. London: 1853.

*MILLER, James, F.R.S.E., Professor of Surgery in the University of Edinburgh. *PRINCIPLES OF SURGERY.* Third edition. pp. 760. Edinburgh: 1853.

PARKIN, John, M.D. *STATISTICAL REPORT OF THE EPIDEMIC CHOLERA IN JAMAICA.* Pamphlet, pp. 61. London: 1853.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London; or to the offices of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent by post.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLIV.

LONDON: FRIDAY EVENING, NOVEMBER 4, 1858.

NEW SERIES.

TO CORRESPONDENTS.

SPACE DEVOTED TO METEOROLOGY. We have to thank the numerous correspondents who have replied to our appeal on this point; and to intimate, that in consequence of the preponderance of opinion being decidedly opposed to the occupation weekly of more than one page of daily meteorological tables, we have resolved not to exceed that space in our new volume.

OZONE OBSERVATIONS. After the 1st January, these columns will be regularly filled.

MR. JEANS' REPORT. We are requested to state that the reason why the maximum is left blank in the 6th column, is that the observations are made in a town where the sun's rays are so interfered with in the winter by the surrounding houses, that they cannot be depended upon. For this reason, Mr. Jeans proposes to omit these observations from the end of September to the beginning of April.

ABERDEEN DEGREES. We cannot answer the letters which we are constantly receiving on this subject.

LETTERS FOR THE JOURNAL must invariably be accompanied by the name and address of the writer.

PRIVATE LETTERS, without a signature, are very objectionable; and we beg to say, that we never act upon information so supplied. If there are homeopaths and advertising quacks upon the roll of members, we shall be glad to assist in securing their expulsion; but we cannot make charges of the kind which have been forwarded to us by several anonymous correspondents within the last fortnight. We advise our correspondents to lay the facts before the Medico-Ethical Committee for their advice and aid. We can speak of ethical principles and laws; but it is not the Editor's province to enforce laws, or censure members by name, for their delinquencies.

THE LATE ACCIDENTS FROM CHLOROFORM.

IN another part of the present number, we have given the details of some deaths from chloroform, which have occurred since we previously made a report on the subject. Three of these deaths have taken place in this kingdom, within a short time of each other. Like nearly all the accidents from chloroform, they have happened just preparatory to, or during surgical operations. In the cases which occurred in University College Hospital, there was fatty degeneration of the right ventricle of the heart, which, however, was not known or suspected beforehand. The other patients were strong and tolerably sound in organisation. These accidents cast a gloom over the otherwise brilliant discovery of anæsthesia in surgery; and, although they are few in comparison with the thousands of instances in which the patient is saved from intense suffering with no ill effects whatever, yet they do not fail to cause a certain amount of apprehension, both in the patient who resolves to take chloroform, and the surgeon who has to administer it, or operate during its use. We fear that, unless the effects of chloroform become better understood, or unless

precautions be adopted which are not in general use at present, accidents will continue to happen now and then in surgical operations.

With the history of these accidents before us, it is right to draw attention to the circumstance that no case has been recorded in which death has been caused by the exhibition of chloroform in midwifery. It is our opinion that no such case has occurred; and this we consider to be due to the very moderate chloroformisation which suffices in obstetric practice, in comparison with what is required in surgical operations. The only case we have heard of in which even danger was incurred by the administration of chloroform in labour, was one in which all the most ordinary precautions were utterly disregarded. It happened in France, and is related in the *Bulletin Général de Thérapeutique* of August 15th. M. Boinet, the practitioner, having to apply the forceps, gave the handkerchief, on which about 3ij of chloroform had been poured, to the patient's husband, telling him to remove it when his wife became insensible; but the husband, being engrossed with the operation, left the handkerchief on his wife's face. She was reduced to a state of suspended animation, but was fortunately resuscitated by means of insufflation performed from mouth to mouth.

To conclude, nothing has occurred, either in our practice or reading, but what confirms the opinion we expressed in this Journal of May 27th, "that the cautious inhalation of the vapour of chloroform during labour is entirely free from danger, and calculated to afford merciful relief from pain in one of the most agonising trials of humanity."

THE CITY RECORDER'S OPINION ON ADVERTISING QUACK SCOUNDRELS.

THE City Recorder, like many other of our high and mighty ones, seems to have determined not to let the opportunity slip of bestowing a patronising wink on the charlatans who pollute the press with vile and indecent advertisements, or of showing that he considers the honourable members of the medical profession as one and the same with the impostors on whom he bestows his benevolent smiles.

In passing sentence on a person calling himself Hamilton (whose execrable bills have more than once been thrust into our hands in the streets of London), for an indecent assault on a young woman, the Recorder made the following remarks:

"It was a most gross and serious matter; for a woman, when she placed herself in the hands of a medical man under such circumstances, was in a manner defenceless. It was of the utmost importance that women, who were compelled to seek advice and expose the maladies under which they laboured, should not be in any way deterred from so doing by the fear that their position would be abused and taken advantage of. He should not deal harshly with him (Hamilton), because he was not a regular practitioner, nor because he was an advertising doctor, but for the reason stated."

Such is the language of the Recorder of the City of

London! They contain nice food for bitter laughter; but let us think of them seriously. A man, who lives by a nefarious practice, commits an occasional crime, which is very virtue compared with the iniquitous business hourly practised by him as a means of existence. For the occasional crime he is brought before the London judge. The judge has a fair opportunity of showing his abhorrence of *all* the prisoner's evil deeds, and, in some degree, of punishing them all; but, instead of doing so, he punishes the man for the most doubtful of his offences, and takes especial pains to be merciful to—we had almost said, to applaud those that are most heinous and perpetual.

What hope can there be for the reformation of the world from the grossest of sins, while these opinions stream from the bench of justice? They are the pabulum of quackery and imposture, however innocently delivered. They soothe the public feeling into quiet submission to what it knows to be wrong. They rouse the impudence of quackery to its utmost, and fill it with new life. When Dr. Hamilton escapes from his temporary retirement, the world may again find itself in the hands of the law-defended impostor. The delicate visual sense of Oxford Street may once more take in, and convey to the delicate mind, marvellous truths of "cures extraordinary", and glorious obscenities, that claim the brothel for a birth-place. There, too, the worthy Recorder, witnessing all this, may have great cause to rejoice that he drew in the reins of justice mercifully, and subjected to such gentle and brief punishment the man who pursues a calling so useful to the public, and so honourable to humanity.

HOMŒOPATHIC MEMBERS OF THE ASSOCIATION.

From information which has been communicated to us, we suspect that the names of two persons practising the homœopathic form of quackery are contained in the list of members published at p. 915 of our number for Oct. 21st. In these circumstances, we think it right to publish certain laws of the Association by which such persons can be got rid of.

The following laws were adopted at the anniversary meeting of the Association held at Oxford in 1852:—

"1. Candidates for admission to the Provincial Medical and Surgical Association, shall be required to state, in writing, to the members proposing them, that they neither are, nor intend to become, professors or practitioners of Homœopathy.

"2. When any member is convicted by the Central Council, or by any of the Local Councils, of publicly professing Homœopathy, of practising Homœopathy, or of holding professional intercourse with a Homœopathic professor or practitioner, this conviction, along with the necessary proofs of its justice, shall be officially reported by the Secretary of the Central Council, or by the Secretary of any of the Local Councils, to the next ensuing anniversary meeting of the Association; that it shall then be competent for the meeting, provided there be a concurring majority of two-thirds of those present, to direct the president in the chair to erase the name of such convicted member at once from the roll of members; but that it shall likewise be competent for the meeting, by a simple majority, either honourably to acquit the accused, or to accept from him, in entire satisfaction for his conduct, an expression of regret, and a promise not to repeat it; or to postpone final judgment till the next anniversary meeting."

NEWS AND TOPICS OF THE DAY.

ROYAL COLLEGE OF SURGEONS:—PASS LISTS. The following gentlemen were admitted members of the College at the meeting of the Court of Examiners on the 18th ult.:—Messrs. Thos. Prior Hall; John Wright, Mount Sorrell, Leicestershire; John Major Coleman, Wolverhampton; Wm. Williams Thomas, Fishguard, Pembrokeshire; Richard Eustace, Royal Navy; Joseph Packard, Yoxford, Suffolk; Thomas Duncan, Chelsea; Frederick Trestrail Bond, Hon. East India Company's Service, Bombay; and Thomas Joseph Cookson Powell, Bristol. At the same meeting of the Court, Mr. Charles Harper passed his examination for naval surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date July 2, 1849.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BARRETT, Thomas, Esq., elected Surgeon to St. Catherine's Hospital, Bath.
BEGBIE, J. W., M.D., appointed Physician to the Cholera Hospital, Edinburgh.
BEVAN, Philip, M.D., appointed Professor of Descriptive Anatomy in the Royal College of Surgeons in Ireland, in the room of Dr. Hart, resigned.
DE MÉRIC, Victor, M.D., elected Surgeon to the German Hospital, Dalston.
MAXWELL, Dr., appointed Physician to the Worcester Dispensary.
SIMPSON, George, Esq., elected Resident Medical Officer of Queen Adelaide's General Dispensary, St. Luke's.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

*BATT, Edwin Augustine, Esq., Surgeon, at Witney, Oxfordshire, aged 52, on October 22.
KEMBALL, V. C., Esq., late of the H.E.I.C. Med. Service (Bombay Establishment), at his residence, 6, Chester Place, Hyde Park, aged 73, on October 20.
KRAMER, Professor, the eminent Aurist, last week.
THOMSON, Sir James, K.C.B., Physician General of the Bengal army, at Calcutta, on August 25. He was seized with a fit of apoplexy at a meeting of the Medical Board, at 11 A.M., and died at half-past 10 P.M.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

BASCOME, Edward, M.D. CHOLERA; ITS NATURE AND TREATMENT. Pamphlet, pp. 28. London: 1853.
GREGORY, William, M.D., Professor of Chemistry in the University of Edinburgh. A HANDBOOK OF INORGANIC CHEMISTRY. Third edition, corrected and enlarged. London: 1853.
PARKIN, John, M.D. THE REMOTE CAUSE OF EPIDEMIC DISEASES. pp. 108. London: 1841. Part II of the same work, pp. 16. London: 1853.
PARKIN, John, M.D. THE CAUSE OF BLIGHT AND PESTILENCE IN THE VEGETABLE CREATION. Pamphlet, pp. 15. London: 1846.
PARKIN, John, M.D. THE PREVENTION AND TREATMENT OF DISEASE IN THE POTATO AND OTHER CROPS. pp. 64. London: 1847.
SCHACHT, Hermann. THE MICROSCOPE: in its special application to Vegetable Anatomy and Physiology. Translated by F. CURREY, Esq. Woodcuts. pp. 131. London: 1853.
TRANSACTIONS OF THE PATHOLOGICAL SOCIETY OF LONDON. Vol. iv. Woodcuts. pp. 286. London: 1853.
WITTSTEIN, Dr. G. C. PRACTICAL PHARMACEUTICAL CHEMISTRY. Translated by STEPHEN DARBY. pp. 624. London: 1853.

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[News and Topics continued at page 963]

ORIGINAL COMMUNICATIONS.

THE IATRO-METEOROLOGY OF
HIPPOCRATES.

By ALFRED HAVILAND, Esq.

It will be interesting to those engaged in making observations in that branch of medical science, which may with propriety be termed *iatro-meteorology*, to know that the great Hippocrates anticipated them in their appreciation of its value, as one of the helpmates of medicine. They will find in his writings, especially in his "Epidemics", "Aphorisms", and "Airs, Waters, and Places", very many minute meteorological observations in connexion with disease; and when we consider how deficient he was in those appliances, which modern science has given to us to facilitate our pursuits, we cannot but acknowledge the consummate wisdom and foresight of one, who saw the relation between atmospheric changes and disease more than two thousand years ago, and who was nearly, if not quite, as advanced in this department of medical knowledge as the learned of the present day.

Hippocrates says, in the opening paragraph of his treatise *Περὶ αἰέων, ὁδῶν, τόπων*, "Whoever desires properly to investigate the art of medicine, must do thus: First take into

consideration the seasons of the year, and how each is capable of operating (on the system); for they not only do not resemble each other, but differ widely from one the other in the changes (they bring about). Then the cold and hot winds (must be noted), especially those that are common to all nations, and then those that are peculiar to any particular district."*

His mode of observation, which will be found in the first and third books "*Περὶ ἐπιδημιῶν*", was very simple: in these instances he gave a description of the season of *three* different years, particularised the peculiarities of each season, and then concluded with an account of the most remarkable diseases that prevailed during each. The assemblage of the meteoric phenomena observed during the year, he comprised under the term *κατάστασις*, which is equivalent to "the state" or "constitution" of the seasons, for instance "*τῶν ὁρέων*."

We will proceed at once to a short detail of these observations, and for the sake of easy reference will place them in a tabular form.

* "*Ἱπποκρίτης δὲ οὕτως βούλεται ὁρᾶν ζητεῖν, τὰδε χρὴ ποιεῖν—πρῶτον μὲν ἐνθυμέσθαι τὰς ἑσας τοῦ ἔτους, ὅτι δύναται ἀπεργάζεσθαι ἐκάστη· οὐ γὰρ ὅμοια οὐδὲν, ἀλλὰ πολλὰ διαφέρουσιν αὐτὰς· τὰ ἐκαστῶν καὶ ἐν τῇσι μεταβολῇσιν· ἔπειτα δὲ τὰ πνεύματα τὰ θερμὰ καὶ τὰ ψυχρά· μάλιστα μὲν τὰ κοινὰ πᾶσι ἀνθρώποις, ἔπειτα δὲ καὶ τὰ ἐν ἐκάστῃ χώρῃ ἐπιχωρία ὄντα.*"

FIRST CONSTITUTION. (*Κατάστασις πρώτη*).—Observations made at Thasos. (Ἐν Θάσῳ.)

Season.	Rain.	Wind.	Temperature.	Cloud.	Snow, etc.	Name of Diseases.	Remarks, etc.
<i>Autumn.</i> (ἑθιμοκρατοῦ περι- σημερινῇ καὶ ὑπο- πληθῶν.) About the autumnalequi- nox and under the Pleiades.	A great deal of rain, which was constant and soft. ὁδῶν πολλὰ ζυνεκέ- μαλθακά.	Southerly. ἐν νοτίοις.				Cynanche paro- tidea. Inflammation and pain of the testicles. Dry coughs.	ἐπάρματα δὲ παρὰ τὰ ἄτα. φλεγμοναὶ μετ' ὀδύνης ἐς ὄρχιν.
<i>Winter.</i> Χειμῶν. τὸ ἔξολον ἐς γὰρ χειμῶνα ὁκοῖεν ἢ γίγνεται. The win- ter was on the whole very like spring.	Droughts. ἀέχμοι.	Southerly. Slight north winds. χειμῶν νότιος, σμηκρὰ πνεύματα βόρεια.				Hoarseness. Cynanche, etc.	πολλοὶσι δὲ βήχες ξηραὶ- βήσσουσι καὶ οὐδὲν ἀνάγουσι. φωναὶ βραγχώδεις.
<i>Spring.</i> ἦρ.	Slight rain. σμηκρὰ ὁσμῶν.	Spring south- erly. ἦρ νότιος.	Cool. ψυχρὸν.			Fevers.	καῖσοι. Moderate, however, and unat- tended by any hæ- morrhage. Never fatal.
<i>Summer.</i> Θέρος.	No rain. ἀνυδρία.	Etesian winds, rare, small, and irregular. Ἑττοῖαι, ὀλίγα, σμηκρὰ διεσπαρ- μένως ἐπνεύ- σαν.		Very cloudy. πολλὰ ἐπι- νεφέλων.		Phthisis (acute). Phthisis (chronic). Fevers.	Those who had a predisposit. to phthi- sis took to their bed. φθινώδεις κατα- κλιθῆσαν. (Remittent type of Munro?) πυρετοὶ πολλοὶ ξυνεχῆς.
<i>Autumn.</i>						Phthisis and fevers.	Phthisis fatal. The fevers were not so.

GENERAL REMARKS. He seems to hint that the fevers were dependent upon the droughts, etc., in the spring, which he intimates arose from a former opposite and northerly state of the weather, ἐκ τῆς πρόσθεν καταστάσεως ὑπεραντίης καὶ βορείου. Hippocrates also remarks that the cases of phthisis were the only fatal ones.

SECOND CONSTITUTION. (Κατάστασις θυνέρεα.)—Observations made at Thasos. (Ἐν Θάσῳ.)

Season.	Rain.	Wind.	Temperature.	Cloud.	Snow, etc.	Name of Disease.	Remarks, etc.
Autumn. Commencement. Πρὸς τοῦ φθινο- πάρου. During the Pleiades and until their setting.	Stormy and rainy. ὕγριοι καὶ προεπληγνύμενοι.	Strong north- erly and south- erly. ἐν βορείοις καὶ νοτίοις πολ- λοῖσιν.					
Winter. Χεῖμων.	Much rain and great torrents. ὕδατα πολλὰ, λαύρα, μεγάλαι.	Northerly. χειμῶν δε βόρειος.	Not unsea- sonably cold. οὐ λίην δε ἀκαίρως τὰ τῶν ψυχρόν.	Occasion- ally fair. μικαῖθρια τὰ πλείστα.	Snow. χιόνες.		
After the <i>Winter</i> <i>Solstice.</i> Μεθ' ἡλίου τροπῆς χειμερινῆς.	Much rain. ὕδατα ξυνεχίως πολλὰ.	Winterly storms and north, in- stead of Ζεφύρου (west). ὀπισθο- χέιμῶνες μεγά- λοι βορέαι πολλὰ.		Tempest- uous and cloudy. οὐρανὸς λαί- λαπῶδης καὶ ἐπινέφε- λος.	Snow. χιόν.		"The whole season having been generally wet, cold, and subject to a north wind, people were for the most part healthy during the winter, but early in the spring many required medical assistance." N.B. All the later meteoric phenomena continued until the equinox.
Spring. Ἑρ.	Rainy. ὕδατῶδες.	Northerly. βόρειον.	Cold. ἥρδὲ ψυχρόν.	Cloudy. ἐπινέφελον.		Ophthalmia (purulent?)	ὀφθαλμία ῥεώδης. This ophthalmia was painful, and the dis- charge unconcreted. It lasted in some in- stances until the au- tumn.
Summer. Θέρμς.		The Etesian winds blew constantly. Ἑτησίαι συνέ- χες ἐπνευσαν.	Not un- usually sultry. οὐ λίην καὶ ματῶδες.			Dysenteric affec- tions. Tenesmus. Lientery. Diarrhoea (bili- ous), with thin, copious, and un- digested dejec- tions.	Many of these affec- tions followed the fe- ver that prevailed, on which dropsy some- times supervened, and then a fatal result was generally the sequel.
Autumn. Περὶ ἀρκτούρου.	Much rain. πολλὰ καὶ ὕδατα.	Wind in the north. Ἐν βορείοις.				Watery stools. Strangury. Bilious vomiting. Fevers of various sorts. Convulsions. Small rashes. Swellings about the ears. Strangury. Abscesses. Sweatings.	<i>Semitertian.</i> There were many deaths from fevers. Those swellings did not suppurate, but were often determined to the joints. These supervening were considered crit- ical.

(a) Thasos, now Tasso, N. lat. 40° 30', E. long. 24° 28', is a small island in the north of the Grecian Archipelago (the Aegean Sea), on the coast of Thracia, now Roumelia, in the south of Turkey. It was remarkable for its fertility, insomuch that it became proverbial. Geologically considered, the island is composed of pure white marble, and has mines of gold and silver; and, with regard to its meteorological position, according to A. Petermann, it is situated about the isothermal line of 58° Fahr. average mean annual temperature. This author also encloses it within the region of south-west winds, and places it in a central position in relation to the northern and southern limits of the cultivation of the vine. Galen says of Thasos (vol. xvii, A., p. 36, ed. Kühn), "that this island, being situated just opposite the coast of Thrace, is exposed to cold northerly winds."

The first part of the third section of the *Aphorisms* of

Hippocrates is devoted to meteorology in its relation to disease; and the observations display the wonted sound judgment and acumen of this celebrated author. He says, in his *General Observations*,—

"That the changes of the seasons are especially concerned in the production of disease, and that the great alternations from heat to cold, and so forth, have also their due effect." (Aph. i.) "In well established (regular) seasons, if they bring forth their various products in proper time, the diseases are regular, and easily brought to a crisis; but, in changeable seasons, the diseases are variable, and determine with difficulty." (Aph. viii.) "In those seasons wherein there may occur on the same day both heat and cold, autumnal diseases may be expected." (Aph. iv.) "Every disease may occur at all times of the year, but some take place, and are more acute, at certain seasons." (Aph. xix.)

THIRD CONSTITUTION. (*Kardavasis* πρώτη).—Observations made at Thasos. (Ἐν Θάσῳ.)

Season.	Rain.	Wind.	Temperature.	Cloud.	Snow, etc.	Name of Disease.	Remarks, etc.
Autumn. Ἐπὶ ἀρκετοῖς ὡδαίνον, καὶ ἐν ἀρ- κετοῖς. About the equi- nox. ἐπὶ δὲ ὁση- ρῶν καὶ μέγχι πλε- ύθος.	Much rain. ὡδαίνον πολλά. Southerly rains. νότια βροχὴ ὡδαίνον.	Northerly. ἐν βορρῆσιν. Southerly? ἐν νότιῳ?					
Winter. Χεῖμα. Χεῖμα.	Droughts. ἀνίχμοι.	Winter northy. High winds. χ. βόρρειος. (πρὸς πύματα με- γάλα.)	Cold. ψύχρα.		Snow. χιόες.	Paraplegia. (Apoplexy.) Hæmorrhage. Disorders of bowels.	παρωληγία. It was fatal in some instances (καὶ τινες αὐ- τῶν ἐθνησκότων), espe- cially in elderly per- sons.
Spring. About the equi- nox. Ἐπὶ δὲ ὁση- ρῶν.	Slight rains. Droughts. βαρὺντα ὡδαίνον. ἀνίχμοι.	Northerly. Violent storms. ἐν βορρῆσιν καὶ μέγχι μεγίστα.	Cold. ψύχρα.			Ardent fevers. Difficult parturi- tion. Abortions. Eruption of measles during fevers.	Accompanied in fa- vourable cases by epi- staxis and other kinds of hæmorrhages. Fever subsequent to parturition (puerpe- ral?)
Summer. (α) Solstice. Ἐπὶ δὲ ἡλίου τροπῆς θερινῆς. (β) From Dog Days to Autumn. Μέτα δὲ κύνων μέχρις ἀρκτοῦρου.	Slight rain. ὡδαίνον ὡδαίνον. No rain, great and continued droughts. ὡδαίνον οὐκ ἔχον- τες, καθάρματα, κ.τ.λ. Southerly rains. νότια βροχὴ.	Etesian winds blew. ἐν βορρῆσιν καὶ μέγχι μεγίστα.	Great cold until dog days. με- γάλα ψύχρα. Summer. ἥλιος.			Dysentery. Ardent fevers and phrenitis. Hæmorrhage.	Epidemic during the summer. From which there were many deaths. These continued un- til the approach of winter.
Autumn. Ἐπὶ ἀρκετοῖς μέγχι ὁσηρῶν.						Swellings about the ears.	About the season of Arcturus many had a crisis on the eleventh day. Children be- came comatose.

Dry Seasons. "With regard to the constitutions of the year, on the whole, the dry are healthier than the wet, and less fatal." (Aph. xv.) The diseases, he remarks, of a dry season are "consumption, ophthalmias, pains in the joints, strangury, and dysentery." (Aph. xvi.) He further on observes, "that fevers are acute in droughts; and, if they prevail throughout the year, such will be its constitution, and such will be the diseases that we ought to expect." (Aph. vii.)

Wet Seasons. "The diseases that for the most part prevail in rainy seasons are lingering fevers, belly-flux, gangrene, epileptic and apoplectic attacks, and quinsies." (Aph. xvi.)

Winds. North. "As to the daily state of the weather, a northerly one braces up the body, makes it full of tone, active, and of a healthy hue, constricts the bowels, nips the eyes, and rather reproduces thoracic pains, if any have previously existed." (Aph. xvii.) "If the north wind prevail, coughs, affections of the throat, constipation, dysuria with rigors, pains in the sides and chest; and, when this wind prevails, we must expect such symptoms in the diseases that then occur." (Aph. v.)

South Wind. "A southerly (state of the atmosphere) relaxes and renders the body humid (perspiry), produces dulness of hearing, heaviness in the head, sluggishness of the movements of the eyes and the body generally, and relaxes the bowels" (Aph. xvii); also "dimness of sight, dulness (mental), inangur; and, when such winds prevail,

similar symptoms obtain in the diseases (that then occur)." (Aph. v.)

Temperament and Age. "With respect to the systems (of persons), some are either well or ill constituted for summer, whilst others are the same with regard to winter." (Aph. ii.) "Certain diseases and certain ages are either well or ill disposed for such and such seasons, places, or diet." (Aph. iii.) "As regards the seasons, children, and those who rank next them as to age, best enjoy, and are particularly healthy in, the spring and beginning of summer; old people (enjoy, etc.), the summer and a certain part of the autumn; and middle-aged persons, the remainder of the autumn and the winter."

Seasons. Spring. "The spring is most healthy, and least mortal." (Aph. ix.) In its relation to the age of persons, see above, under *Temperament and Age*. "The diseases of spring are the maniacal, melancholic, and epileptic, blood-fluxes, quinsies, coryza, hoarseness, coughs, leprosy, lichen, alphas, many kinds of ulcerating exanthemata, pustules, and arthritic diseases." (Aph. xx.) "If the winter have been southerly, rainy, and calm, and the spring dry and northerly, women, whose accouchments are expected in the spring, miscarry from slight causes; and if they be delivered at the full time, they bring forth weakly and diseased children, so that they either die at once, or live in an attenuated and diseased state. Among other mortals, there are dysenteries, dry diseases of the eyes, and, in elderly persons, catarrhs, that quickly carry them off." (Aph. xii.)

Summer. "Whenever the *summer* is like the *spring*, we ought to expect profuse perspirations in fevers." (Aph. vi.) "If the *winter* have been dry and northerly, and the spring rainy and southerly, of necessity there will be acute fevers, diseases of the eyes and dysentery in the *summer*, especially in the persons of women and men who are of a humid nature (sebaceous complexioned)." (Aph. xii.) "In summer, some of these diseases (referring to those mentioned under *Spring*), as well as continued fevers, ardent and tertian, much vomiting, diarrhoea, ophthalmus, gangrene (*σφρηδὸνες*) of the genitals, and sudamina (*ἱδρωσὶς* or *ἰδρωσάδια*)." (Aph. xxi.)

Autumn. "Autumn is obnoxious to consumptive persons." (Aph. x.) "In autumn, diseases are most acute, and altogether most fatal." (Aph. ix.) "If it (the autumn) be northerly and dry, it is favourable to persons whose systems are of a moist character, as well as to women; but, in other instances, there will be diseases of the eyes, unattended with discharge, acute fevers, chronic coryza, and, in some instances, hypochondriacism." (Aph. xiv.) "As to the diseases of autumn (among them there are many summer ones), there are also quartan and irregular fevers, affections of the spleen, dropsies, phthisis, strangury, lientery, dysentery, sciatic pains, quinsy, asthma, ileus, epilepsy, maniacal and hypochondriacal affections." (Aph. xx.)

Winter. "If the summer be dry and northerly, and the autumn wet and southerly, during the winter there will be headaches, coughs, hoarseness, coryza, and, in some instances, consumption." (Aph. xiv.) The diseases of winter, according to our author, are "pleurisy, peripneumonia, lethargy, coryza, hoarseness, pains in the chest, sides, and loins, headaches, vertigo, and apoplexy." (Aph. xxiii.)

I have thus attempted to give an outline of the views of Hippocrates on iatro-meteorology, by quoting verbatim the most remarkable passages in his works alluding to this most interesting subject; and shortly I hope to be able to compare these opinions with those prevalent before and after the period in which this great physician flourished. Many and valuable are the observations scattered through the ancient medical classics; and their perusal cannot fail to arouse in the minds of truly scientific men, not only a deep veneration for the ancestors of the medical profession, but a wholesome desire to emulate them in their patient and ever watchful study of the phenomena of disease.

Bridgewater, Oct. 25th, 1858.

ON THE USE OF NITRO-SULPHURIC ACID IN CHOLERA AND DIARRHŒA.

By W. J. ANDERSON, F.R.C.S., Accoucheur to the St. George's and St. James's Dispensary.

THAT oxygen is given off most rapidly from the blood in cholera, may be observed, even during life, by the speedy oxydation of the tissues, giving rise to that horrible emaciation so characteristic of the complaint; again, the cold and blue-coloured surface at a later period shows too plainly the large amount of oxygen which has been expended, and the fearful quantity of carbon which is now circulating in the slowly flowing blood. The patient has now a fluid passing through his blood-vessels, somewhat similar to that which exists in cyanosis, insufficiently stimulating to the nervous system, and consequently blunting the mental faculties (though not by any means obliterating them); and thence arises that strange and terrible apathy about their condition, which choleraic patients commonly exhibit.

Can a remedy then be found, which will readily yield up its oxygen and supply that element to the impure blood; and at the same time, by its astringent properties, tend to check the enormous exudation which takes place from the mucous surface of the intestinal canal? In our present state of knowledge, some of the mineral acids appear to be the best adapted to this purpose; and for certain reasons

about to be explained, a combination of nitric with sulphuric acid seems to me to be preferable to any other. The acid should be administered in tolerably full doses, and repeated at intervals, varying according to the nature and urgency of the case: for an adult we may give, acid sulphurici diluti f. 3 ij, acid nitrici diluti f. 3 j, in a six-ounce mixture, an ounce being the dose; but of course, in younger patients, this quantity must vary according to their age. We know that the blood contains an oxydised compound of iron, and that oxygen is readily taken up by compounds of the protoxide of iron from other oxydised compounds, while on the other hand compounds of the peroxide give up oxygen with the greatest facility. Hydrated peroxide of iron, in contact with organic matters destitute of sulphur, is converted into carbonate of the protoxide. The sulphur contained in the sulphuric acid will most probably restrain this action to a certain extent, and prevent such an excessive formation of carbonate of the protoxide of iron. Carbonate of the protoxide of iron, in contact with water and oxygen, gives off carbonic acid, absorbs oxygen, and is converted into the hydrated peroxide, which may again be changed into a compound of the protoxide.

	Atoms.	Equiv.	Per cent.
Iron - - -	1	28	77.8
Oxygen - - -	1	8	22.2
Protoxide of iron - -	1	36	100.0
Iron - - -	1	28	70
Oxygen - - -	1½	12	30
Peroxide of iron - -	1	40	100
Protoxide of iron - -	1	36	62
Carbonic acid - - -	1	22	38
Protocarbonate or carbonate of the protoxide of iron - - -	1	58	100
Carbon - - -	1	6	27.27
Oxygen - - -	2	16	72.73
Carbonic acid - - -	1	22	100.00

The large amount of oxygen contained in the nitro-sulphuric acid will then be called into play. It will enter into combination with the carbonate of the protoxide of iron, which will become decomposed, carbonic acid will be given off, oxygen will be absorbed, and the hydrated peroxide of iron will be the result.

	Atoms.	Equiv.	Per cent.
Nitrogen - - -	1	14	26
Oxygen - - -	5	40	74
Nitric acid - - -	1	54	100
Sulphur - - -	1	16	40
Oxygen - - -	3	24	60
Sulphuric acid - - -	1	40	100

We have then one atom of nitrogen and one atom of sulphur, combining with eight atoms of oxygen, to form nitro-sulphuric acid.

This plan of treatment, apparently so different from the saline system, is not in reality so much opposed to it as we might at first sight imagine. The same theory will here also hold good, as in both plans oxygen is the important agent which must be called into play to produce a beneficial effect. I do not believe that chlorine has any effect in this complaint; and I am therefore of opinion, that hydrochloric acid in the acid system (excepting as a mere astringent), and chloride of sodium in the saline, are both useless, as neither of them contain oxygen. In the saline treatment, oxygen is derived from other sources; and in the other case, is the important element.

			Atoms.		Equiv.		Per cent.
Potassium	-	-	1	....	40	....	83.34
Oxygen	-	-	1	....	8	....	16.66
Potassa	-	-	1	....	48	....	100.00
Sodium	-	-	1	....	24	....	75
Oxygen	-	-	1	....	8	....	25
Soda	-	-	1	....	32	....	100
Potassa	-	-	1	....	48	....	48.7
Chloric acid	-	-	1	....	76	....	61.3
Chlorate of potassa	-	-	1	....	124	....	110.0

Then, as chloric acid consists of one atom of chlorine and five atoms of oxygen, we must necessarily have six atoms of oxygen, combining with one atom of potassium and one atom of chlorine, to form chlorate of potassa.

			Atoms.		Equiv.		Per cent.
Carbon	-	-	4	....	24	....	35.8
Hydrogen	-	-	3	....	3	....	4.5
Oxygen	-	-	5	....	40	....	59.7
Citric acid	-	-	1	....	67	..	100.0
Carbon	-	-	4	....	24	....	47.06
Hydrogen	-	-	3	....	3	....	5.88
Oxygen	-	-	3	....	24	....	47.06
Acetic acid	-	-	1	....	51	....	100.00
Carbon	-	-	4	....	24	....	36.4
Hydrogen	-	-	2	....	2	....	8.0
Oxygen	-	-	5	....	40	....	60.6
Tartaric acid	-	-	1	....	66	....	100.0

The combination of any of these acids with potassa or soda forms a neutral salt, containing a large amount of oxygen, which doubtless acts upon the blood in a similar manner to that which has been explained; but these salts do not part with their oxygen as readily as the mineral acids, and are of no service in the premonitory diarrhoea.

This leads us to the "mechanical effect", as the astringent action of the nitro-sulphuric acid has been termed, and which differs merely in degree from that which is produced by the vegetable astringents. In all these latter substances, tannic acid is the active principle; and this being rich in oxygen, readily enters into combination with the various tissues, or more particularly with the albumen and fibrin contained in them—the same process taking place to a limited extent in the living body as occurs during the conversion of an animal's skin into leather. Albumen being an alkaline body, it is necessary that its alkali should be neutralised before any change of this nature can take place: the tannic acid then combines with the albumen as a base, and tannate of albumen is the result. It is, however, certain, that the oxygen plays an important part during this process; or why should this body (i.e., tannic acid, the very best adapted to its purpose) contain such a large proportion of this element?

Whether the theory here propounded be correct or not, it is quite certain that practice, both in this country and on the continent, has shown the utility of the mineral acids; and although, like all other remedies, they are unfortunately not infallible, nevertheless, they are about the best we can employ. In a large number of casual cases of diarrhoea, lately applying for relief, as well as many others which have occurred under my own treatment at the St. George's and St. James's Dispensary, this remedy has proved speedily effective with some very few exceptions; the diarrhoea and vomiting have ceased, and griping and cramps, when present, have been almost immediately removed. Emboldened by the success of this treatment in the adult, I have tried the same plan with children, and found it answer beyond my warmest expectation: it does not, however, act beneficially upon children at the breast; I suppose, on account of its decomposing the milk in the

stomach, and thus tending to keep up irritation; but, providing the child is not sucking, it matters not how young it is, the remedy has just the same effect as in the adult, relieving the griping, and stopping the purging and sickness.

16, Welbeck Street, Cavendish Square, Oct. 25th, 1853.

THE CONDITION OF THE FETAL HEAD AT THE FULL PERIOD OF GESTATION, AND ITS EFFECTS ON PARTURITION.

By GEORGE KING, Esq.

[Read at the Meeting of the Bath and Bristol Branch, September 29, 1853.]

THE state of the foetal head *in utero* may be considered rather an uninteresting and obscure subject for discussion; but it is one that may cause us much anxiety and trouble, as well as difficulty in practice. It is a subject, it seems to me, that has not been noticed, or has not attracted that attention among the professors in midwifery that it ought, and which I consider its importance deserves.

As there are various distortions and different dimensions of the female pelvis, so there may be, and often is, a great diversity as to the character and condition, as well as disposition in the size, of the foetal skull; and it is to this unusual development and altered state of the foetal cranium that I wish to direct the attention of the meeting, as I consider it to be a matter of much interest to us all. But to the obstetric practitioner it is of vital importance; and it has often appeared to me strange that it should have been so little noticed by authors and lecturers. It is this apparent neglect that has induced me to bring the subject before the members of the Association. I think that it is Smellie who says: "That difficult labours may proceed from circumstances belonging to the child that is to be born, from the extraordinary size of the body, or any part of it, from its being unable to facilitate the birth."

On trying a pain at the commencement of labour, if the membranes are ruptured we generally expect to find the foetal head presenting, giving the sensation of a smooth conical body, more cartilaginous or osseo-cartilaginous, and yielding, but not bony. It is also sometimes found to be hard, compact, firm, and highly ossified, and unyielding; and it is to this unusual state or texture, and want of uniformity in the cranium bones of the foetus, and its influence in connexion with parturition that I am anxious to draw attention. To the accoucheur, the condition of the foetal head at the commencement of labour is of the first importance, as it enables him to judge of the progress, and to form some idea as to the result of the labour.

In the cases to which I would now draw attention, the head will still be found within the cavity of the uterus, and the vertex generally presenting; and, from its hard and firm state, however strong the pains may be, its full rotundity would be retained, and the effect would be the expansion of the neck of the uterus, not the expulsion of the child. Such a head may also be found without the cavity of the uterus, resting on the brim of the pelvis; and if the action of the uterus has been frequent and strong, and suffered to go on until its expulsive powers are exhausted and the patient restless and irritable, we may expect to find on examination, some puffing or a pouch of the scalp presenting; but this long and continued uterine action we shall find has made no impression on the foetal cranium. Having made ourselves acquainted with the condition of the head, we ought never to allow such a waste of time and labour, and such annoying symptoms to be produced, while we have the means of preventing it by removing the cause. This ineffectual action of the uterus is the cause of those laborious and lingering labours which tend to that depression of the mental energy, and exhaustion of the physical powers of the patient, which often are so trying and annoying to the medical attendant, while the head of the child is endeavouring to adapt itself to the superior outlet of the

pelvis. This high degree of ossification of the cranial bones of the fetus, I believe, more frequently renders the operation of craniotomy and destruction of the child necessary, than does contraction or deformity of the pelvis; and with such a condition of the child's head, no natural uterine action, with all the auxiliary assisting muscular power of the abdominal muscles, could ever force it into the cavity of the pelvis, even if there were no contraction nor deformity; there would, therefore, be every moral certainty that the child could not be born alive, and that some assistance must be rendered to effect the delivery. To allow such an ineffectual sacrifice of the natural powers to continue without interference, would be risking the mother's life. In such a case, the forceps would be of no use, for it would be utterly impossible to compress such a head within their grasp, even if the head could be reached.

Turning, in cases of deformity of the pelvis, when it is considered impossible for the head to pass, has lately been recommended. This practice, I fear, would only be adding to the difficulty and render the case more complicated. If this mode of treatment is ever successful, it will be in consequence of the easy yielding and adaptability of the foetal head to the contracted outlet, and if the delivery could not be completed in this way, the opening of the foetal head above the brim of the pelvis, while the body is lying in the vaginal passage, would be, I believe, impossible, without doing some serious injury to the mother. With the vaginal passage thus blocked up, I have yet to learn how the hand and arm of the operator are to be introduced to the superior outlet of the pelvis to direct the perforating and bringing down the foetal head. And surely no man would have the hardihood to perform such an operation without such a guide and director.

The only remedy then, and, I believe, the only practice to be adopted is *embryotomy*; and, however revolting and painful to our feelings it may be to perform such an operation, it must be done, and quickly too, or the mother's life would be lost. In natural labours, passiveness and patience should be our motto; in preternatural ones, it should be promptness and performance. Most of the untoward circumstances and serious consequences that follow preternatural labours, arise from delaying, too long, what ought to have been done at once. In this condition of the child's head, it is very clear that craniotomy is our only resource; but it is not so easy a matter to perform this operation under the circumstances as some would imagine, for, instead of the foetal head being found fixed or resting on the brim of the pelvis, as is to be found in all illustrated representations of this operation, we should find it moveable, and the moment we touch it with a perforator it recedes, and we should have literally to bore through the *calvarium*, with no fixed or antagonistic power; and there would be no projections, chasms, or sutures to guide and direct us where to make the opening, but we should have to contend with the hard thick layers of bony deposit, which could only be controlled by an assistant keeping firm pressure above the umbilical region of the mother's abdomen. After making this opening, we shall require what Dr. Davies calls his osteotomist, a powerful and most useful instrument for breaking down cranial bones. In perforating the foetal head, we should endeavour to direct the point of the perforator to the base of the brain, in order to ensure the destruction of vitality. I have never heard the child cry *in utero*; but I have heard one make a most frightful noise after the head has been broken down and the brain smashed by the operation of craniotomy, while the body was still lying in the passage. Fortunately, the bedclothes drowned the sound, but it produced such a very peculiar sensation on the tympanum of my ears, and the gentleman that was with me, that neither of us will ever forget it.

When we have opened the head, some authors tell us that we should leave the natural pains to complete the labour. But this, in my opinion, would, in these cases, be bad practice. Having begun to interfere, we should complete the labour: to wait, would only be prolonging the patient's misery. For, after such highly ossified skulls are perforated,

it does not follow that they collapse or become lessened in size, like an hydrocephalic head, or one less firm in texture. Those who recommend such a practice must have forgotten that long distension, and an unusually high degree of tension, will have the effect of weakening the expulsive power of such a muscular organ, and is likely to produce an atonic condition of the uterus. This is well known by those who have often been called on to perform this trying and mutilating operation; for we have to break it down and bring it away by piecemeal. All writers on operative midwifery have given us ample directions and admonitions, for our guidance as to the dimensions of the outlet of the pelvis, and the size of the foetal head, but no allusion to its texture. I fear, were we to attend to all their advice, and directions as to measurement, it would involve a certain amount of delay, which would most certainly be incurring risk, as well as jeopardising the life of the mother. If ever a woman dies from the operation of embryotomy or craniotomy having been performed on the fetus in utero, it must be entirely in consequence of the effects produced on her constitution, from the head being impacted in the superior outlet of the pelvis, and by delaying the operation too long. If this operation be timely and properly performed, the practised accoucheur would never have any serious apprehensions for the safety of the mother, or his own reputation.

I believe it has been recommended by a professor of midwifery that we should wait for the death of the child before we make up our mind to operate; but this would be a painful and useless exercise of patience and forbearance. The stethoscope and auscultation are recommended, to enable us to ascertain the fact. This would be, in my opinion, awful practice, and trifling with the valuable life intrusted to our care. In cases of a high degree of ossification of the foetal head, and it is to this altered state of the head our energies must be all applied, we must pay no attention to the size of the pelvis, nor to the stethoscopic diagnosis. All our attention is to be directed to the condition of the head of the child; for here is an unusual large bony conformation of unyielding matter, incapable of adapting itself to the outlet of the pelvis: and all the natural uterine expulsive efforts of the mother to give birth to the child must be fruitless and impracticable; and those continued efforts of the mother to mould and adapt the child's head to the outlet may go on for hours, and even days, without causing death, or injury to the child. But the continued pressure and bumping on the soft parts of the brim of the pelvis would very soon produce inflammation and fatal consequences to the mother; therefore, to wait for the death of the child before we attempt to deliver, would be being accessory to the death of the mother; such practice, then, cannot be countenanced, and ought never to be adopted.

To enable us to be cognisable of auscultatory sounds, requires the greatest nicety of ear, and adroitness in examination, as well as patience in renewing the examination. But this is, certainly, not the time for the exercise of patience, nor practising the ear to sounds, or preparing us to become stethoscopists. All men do not possess delicacy of hearing, nor have they musical ears; they would, consequently, be as much puzzled by these stethoscopic observations as to the pulsatory sounds of the foetal heart, as they would be to decide what was harmony and what was discord in music. To adopt such a practice, except by practised auscultators, would be deceiving themselves and the patient.

The child, *in utero*, would retain the vital spark longer than the maternal constitution would hold out; while the long continued uterine expulsive efforts of the mother would have no serious effect on the child. The great secret is to know how and when to act: could we judge with certainty of the death of the child *in utero*, it would be, indeed, a happy circumstance.

The late Mr. Brookes, in his lectures to his pupils on operative surgery, used to tell them, when operating on the dead body, they were to fancy it a living subject. In this case, the reverse would be my advice. We are not, in these cases, merely to decide which would be the most appropriate mode, or what operation would be the safest for us to have

recourse to, in order to meet or overcome those protracted or difficult labours; but it is one of far higher importance and of much greater consideration. We have to muster all our moral courage to make up our minds to coolly and deliberately take away the life of a human being. This is a most trying and painful position to be placed in, and it is a cruel and deplorable case of professional expediency; but duty compels us, and we must act, as our vocation imposes on us this peculiar and distressing duty. Much has been written and said about the moral obligation and the responsibility of our situation in reference to this operation. I do not see why medical men should be suspected of want of feeling, or indifference, in those cases of duty and trial, when our skill and judgment are to be tested and called into action. I trust that none of us ever forget our moral or religious obligations, and that, on those occasions, we are only instruments in the hands of Him who is the giver as well as the preserver of life, in our responsibility to our patients; but must, more or less, be deeply impressed by the circumstances and the situation in which we are placed, as the medical attendant, having intrusted to our care and attention, by, perhaps, an affectionate and attached husband, a most beloved wife, and an endeared mother, whose children, though they may be unconscious of her situation and danger, are waiting for her recovery and anxiously expecting her return to her domestic duties. Surely, such a mother's life and such a family demand all our attention and sympathy. We are not only bound by our professional duty, but humanity would prompt us to aid and relieve such an endearing object; and such a life, surely, must be infinitely of more value than that of an unborn child. To save such a life must be all our anxiety and sole aim; this can only be done, when there is a large ossified cranium, by an early reduction of its size, and we have no other remedy. I am quite sure that no respectable accoucheur would rashly have recourse to such a fatal operation, unless driven to it by the strongest and most painful necessity; nor would it be justifiable in him until all hope shall have been extinguished of the competency of the natural powers to effect the delivery, and the condition of the cranial bones being fully and completely ascertained; the latter is of great importance, and this can only be known by the touch, or taking, and trying a pain as it is called. Although this mode of determining the state and situation of the parts is designated by the French *le toucher*, we have no term by which to express this but the one I have used, which is understood and familiar both to nurse and patient. The touch may be considered a very obscure sense compared to the sight; but it is the eye of the accoucheur, and it may, by use, be made to equal it. In operative midwifery it is our sheet anchor; and it is this index and a small hand that enable us to distinguish the state and condition of the presenting parts, and by the exercise of this sense we can only ascertain and judge of what is going on. When, on examination, we discover that there is a large head, and a high degree of ossification, we must also expect to find the uterus high up above the brim of the pelvis, and the neck distended over the whole head, like a thin membrane, presenting to the finger a hard smooth surface, which, on pressure being applied, recedes; the os uteri is also thin, and scarcely to be distinguished, and generally dilated about the size of a shilling, and there may be a slight discharge of liquor amnii; the membranes being so much distended, they may have given way, but the quantity of water that escapes would be very trifling, the head acting as a plug. This keeping back of the waters tends to keep the uterus in a buoyant state, and likewise supports the fœtus, and this, I consider, is the cause of the child being generally found alive; as the head of the child, in those cases, cannot, from its ossified condition, effect an entry into the pelvis. This natural instrument of dilatation, viz., the fœtal head, cannot exert its usual, and properly dilating powers upon the os uteri, however long we may defer or delay the operation. The obstetric practitioner has generally much faith, and calculates greatly on time and nature, and often relies on it to accomplish the delivery; but here time would be lost, and,

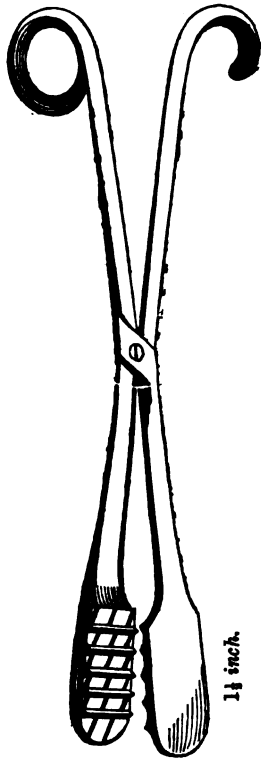
without manual assistance, nature would be soon exhausted.

Having ascertained the condition of the fœtal head, and being fully satisfied of the improbability and impossibility of its adapting itself to the outlet of the pelvis, by the natural efforts of the mother; we have no other resource but to reduce the size of the head. After duly investigating all the circumstances, and every point connected with it, we have only to determine on the operation; so that upon reflection, afterwards, we may feel quite free from compunction or self reproach. All that will be required is a certain amount of self command and moral courage, with a thorough knowledge of the vaginal passage, the pelvic cavity, and the situation of the uterus. A timid and nervous practitioner may be unnerved and terrified at the thought of the operation. Such a man should not attempt it; most certainly not by himself. I have operated frequently myself, with only the nurse and a female friend being present as a general rule. I should say that such an operation ought never to be performed alone, unless the operator had some practice, and had the entire confidence of the patient and her relatives; for, to be placed in a position to decide on the preservation or sacrifice of a life, without the benefit of advice or assistance, is a very serious and responsible situation to be in, and must test both our feelings, skill, and courage. I believe there is no operation that a surgeon is called on to perform which involves such serious effects and awful consequences as embryotomy. Our surgical operative abilities are generally called into action to preserve or to prolong life; but here our only solace is, that, if we do not destroy one life, both would be sacrificed: therefore, we can condole ourselves, and derive much comfort from the assurance, that the life sacrificed was unconscious, and no doubt void of feeling, perception, idea, pleasure, or pain.

Having, I fear, occupied too much time in describing the presentation of an unusually large ossified fœtal head, and its consequences, I will only spend a few moments in describing some of the circumstances in connexion with the operation of reducing the head. As I have said in a former part of this paper, the operation of craniotomy is, in a general way, a simple one; but in the case before us it is more complicated, and somewhat difficult; for here, instead of finding the head of the fœtus resting on the brim, or being impacted within the outlet of the pelvis, as the illustrated works on operative midwifery show us when describing this operation, we shall find it still within the uterus; and the perforating and breaking down of the head must be performed within the uterus itself, before we can get the neck of the uterus over it. The operation is hence rendered one of great nicety and care; for, when we have made an opening into the fœtal skull, we have not lessened its diameter; and when we introduce the craniotomy forceps within the uterus, we must take care that we do not mistake the hole we have made through the scalp for the lip of the os uteri, and include it within the teeth of the forceps; for we shall still find the neck of the uterus firmly attached to the head, and very thin; the scalp will also be found unusually thin.

In applying the forceps, one part or blade should be introduced into the opening made in the cranium by the perforator, and the finger directed to the other part; and, before the blade or teeth are brought together, if by the handle a slight push is given, the head will recede sufficiently to admit of their closing between the scalp and the neck of the uterus, without injury or entangling the parts; and enable us to break down the bones. Having done this, we shall have but very little difficulty in completing the delivery. Old writers tell us that, before we deliver, we must scoop out the brains; and, amongst the instruments necessary for the operation of craniotomy, recommended by Dr. Osmond, is a table spoon, which, I suppose, is to be used for this purpose. It is strange that any man, who must have had some practice, could ever suppose this process should be necessary, or that such a soft mass as the brain could interfere with the labour after the head had been

opened. I have never found this scooping to be necessary or advisable. Dr. Blundell tells us that we must convert the brain into a pulp, or, as he terms it, it must be pulped. I should say that the brains the Doctor met with were something like the cranial bones I am speaking about, rather harder than usual. After the head is broken down, I immediately proceed to bring away the mutilated body; and, I believe, the quicker this is done after the head has been opened, the greater the chance of the patient's recovery. There is nothing to be gained by delay. The blunt hook is the most useful instrument for this purpose. In performing this, I have often felt the want of an instrument with which I could hold fast a portion of the scalp, as well as pieces of bone, without cutting or breaking either; and with both included there would be less risk of lacerating the vagina with the sharp points, or spicula of bones; and also with such an holdfast we could greatly assist the uterine action. I have, therefore, had one made after my own fashion, which I call the operator's assistant.



The teeth of those I have seen are in the way, and are apt to get entangled in the membranes; and it is no easy task to disengage them when we wish to withdraw them. This is obviated in the instrument represented above, by having grooves in place of teeth. The hook handle gives greater freedom and liberty to the fingers and hand than the round one. Those who have had much to do with operative midwifery, and particularly craniotomy or embryotomy, must, I am sure, have felt the want of some such instrument. Much is to be done with the hands and fingers in those cases; but they become almost candled by the heat and moisture of the parts, and often, by the length of time employed, become almost useless, and we are obliged to delay the operation in consequence.

We must always bear in mind that the great object that we have in view in performing this operation is to save the patient much useless pain and misery, both of body and mind. And, in rendering this artificial assistance in labours, we must also not forget that nature is in an ordinary way rather slow in her movements, and we should endeavour to follow the ordinary and natural process in our movements, and not be in too much hurry; but, having begun, we

should never leave off until the delivery is completed. I have had, during my practice, to attend several times three women with contracted pelvis, with foetal heads not disposed to adapt themselves to the superior outlet: and two of these women had also been attended by other accoucheurs, who had also been obliged to destroy the children. These women, from not having had living children, generally require our services the oftener. This is to be regretted; but it is useless for us to moralise, or to remonstrate with them on the impropriety of their pursuing a course, the certain result and consequence of which must be a murderous operation upon an innocent child, and hazardous to their own lives. And this is not all. It will cause the surgical attendant much extra and anxious labour, as well as painful anxiety for the safety of the patient: and, with a perfect certainty of all these circumstances, and a foreknowledge of such painful and melancholy consequences, it seems to have no subduing influence over the passions of the *partes criminales*. Notwithstanding the general condition of the foetal head, and great deformity of the pelvis, each of the women has given birth to living and well formed children, at the full period of gestation. One of these patients I prevailed on to allow me to bring on labour between the seventh and eighth months, which I did successfully, and the child is now a fine little girl, near three years old; and in January last I confined the same woman with another living child, after a natural labour of about five hours' duration. She had had four children destroyed by the operation of craniotomy since her marriage. The other woman died after the birth of her fifth child. She was a powerful woman, and her labour pains were always very strong and frequent. I was not sent for till some hours after labour began. Knowing the sort of labours she had before, she thought the time had not come for my interference. On my arrival, I found the head presenting, the os uteri slightly dilated; and there had been a little discharge of liquor amnii. The uterus rested on the pelvic outlet. There was nothing to create alarm or anxiety; and, as was usually the case with her, she had plenty of energy and power. I left her, and promised to call again in three or four hours, which I did, when I was informed that her pains had left her for near two hours; and she complained of pains in her left side, just above the hip. I was surprised at her prostrate appearance, and gave 3ss tinct. opii in brandy and water. As the pains had left, and there was no advancement in the labour, I saw no chance of her being able to give birth to the child. I returned for my instruments, and reduced the size of the head, and delivered her. There was no hæmorrhage either before or after the delivery, and, in fact, nothing to account for the sudden suppression of the pains, and the other alarming symptoms. The removing the child did not improve her condition, although she bore the operation very well, and at first seemed to revive; but she did not rally, and died about fifteen hours after the delivery. A *post mortem* examination, the following day, explained the whole matter. We found a rent in the uterus, about two inches long, between the broad ligament and the neck, and externally to it there was a large clot of blood lying in the superior cavity of the pelvis. This rupture or giving way of the uterus was, I have no doubt, the consequence of the unyielding and ossified condition of the foetal head, and the very strong expulsive pains. She was seen before death by two of my medical friends, and I was assisted in the *post mortem* examination by Dr. Edwards, who was then residing in Bath. There was nothing remarkable in the appearance of either of these women; they were both what would be termed fine grown women. No visible sign of any deformity; and I should class their pelvis among the contracted, not the deformed. In both cases, the foetal head was at fault more than the pelvis.

Since I gave notice that I should bring the subject forward, I have attended a poor little emaciated deformed woman, with a remarkably contracted pelvic outlet, with her second child. With the first, embryotomy was performed. Her case had produced such a sensation in the

neighbourhood, that she had some difficulty in getting a surgeon to attend her. She had spoken to two, but both shrank from the responsibility. This I did not know until I was engaged; but, to their mortification and my surprise, I delivered her of a tolerable sized living child, at the full period of gestation. This, I believe, was entirely in consequence of its being a breech presentation and a yielding cranium. She was in strong labour about fourteen hours.

This ossified condition of the foetal head, I should state, is not of frequent occurrence; and it is very possible that a gentleman of a tolerable share of midwifery practice might have never met with such a case. I should say, from my own observation, that the average number would be about one in 500. In my own practice, I have had to perform the operation of craniotomy about fifteen times in upwards of 3,000 cases; but all of them were not in consequence of the ossified condition of the head of the child. Although these cases are rarely met with in practice, that is no reason why they should be entirely overlooked, and passed over unnoticed when they do occur in connexion with deformity of the pelvis and the operation of craniotomy.

I ought not to close this paper without stating that there may be small ossified foetal heads as well as large ones. As a proof of this, there are cases on record of children's heads having been fractured at the birth; the child having been expelled with the violent and rapid labour pains, while the woman was standing, or leaning on a chair, and the child dropping on the floor. Such an accident as this could never have occurred unless the cranial bones were highly ossified; an osseous cartilaginous cranium would never crack, even were the umbilical cord to give way.

This is a subject of interest and of immense importance in medical jurisprudence; and we, as medical men, when examined in cases of infanticide, should be able to explain and state that this state, condition, and texture of the foetal head, at the time of birth, is sometimes to be met with. It is well known that osseous matter may be deposited, and that ossification may go on within the cavity of the uterus; and the uterus itself has been found ossified. There is also a case recorded of an ossified foetus and uterus being found in a woman sixty years old. According to Professor Rokitsky of Vienna, it seems there is a larger proportion of osseous matter in breeding women than others. He says, "that a calcareous deposit has been almost constantly found in the internal surface of the skulls of women in the pregnant and puerperal state; and that the skulls become permanently thickened by frequent pregnancies." May not this superabundance of calcareous matter in the mother's system be conveyed to the foetus *in utero*, and be deposited in the skull, and be the cause of the remarkable degree of firmness I have noticed?

Bath, October 1853.

BIBLIOGRAPHICAL NOTICES.

EXPOSITORY LEXICON OF THE TERMS, ANCIENT AND MODERN, IN MEDICAL AND GENERAL SCIENCE; including a complete Medical and Medico-Legal Vocabulary. By R. G. MAYNE, M.D. Part I. pp. 152. London: 1853.

WE have very carefully examined the first part of Dr. MAYNE's Lexicon; and we have great pleasure in expressing our high and unqualified admiration of the manner in which it is executed. From the comprehensive character of the plan which the author has adopted, this Lexicon is suited to the requirements of every educated gentleman. It embraces "the correct pronunciation, derivation, definition, and application of the names, analogues, synonyms, and phrases (in English, Latin, Greek, French, and German,) connected with medicine, and employed in anatomy, astronomy, botany, chemistry, comparative anatomy, conchology, crystallography, entomology, geography, geology, geometry, ichthyology, materia medica, medical jurisprudence, microscopy, mineralogy, history, natural philosophy,

nosology, obstetrics, ornithology, pathology, pharmacy, physiology, surgery, trigonometry, and zoology."

We hope that the extraordinary industry and erudition displayed in this work may be rewarded by an extensive sale. While it is peculiarly adapted to the medical profession, it must prove equally useful to all scientific men, as well as to lawyers and coroners.

PRINCIPLES OF SURGERY. By JAMES MILLER, F.R.S.E.; Surgeon in Ordinary to the Queen for Scotland; and Professor of Surgery in the University of Edinburgh. Third edition: illustrated by 240 engravings on wood. 8vo. pp. 760. Edinburgh: 1853.

THIS new edition of Professor MILLER's classical work presents itself in an improved form. As its merits are generally known and deservedly appreciated, a critical examination is not required from us. We may say, however, that Mr. Miller's "Principles of Surgery" is a work of the highest class, and that, throughout its pages, the author shows himself to be equally sound and scientific in his medical treatment, and in his surgical practice. The constitutional character of local diseases is judiciously and practically treated; and the preeminence of conservative over destructive surgery is constantly maintained.

PERISCOPIC REVIEW.

MIDWIFERY AND DISEASES OF WOMEN.

RUPTURE OF THE UTERUS:—RECOVERY.

The following case is recorded by Dr. THOMAS CHRISTIE, of Lachate, Canada West, in the *Canada Medical Journal* for February 1853.

On the morning of the 21st August, 1852, he was summoned to attend Mrs. M. during her sixth accouchement. On arrival, he ascertained from the midwife that the patient had been in labour twenty-four hours; the pains had been regular, but not severe; the membranes had ruptured a few hours prior to his arrival; the head had advanced so far as to press on the perineum; just when she expected that another pain would have effected delivery, the patient felt something give way; since then the child's head had receded, so that it could not now be felt, and the pains were suspended.

Dr. Christie found the patient in bed, with her shoulders raised by an attendant; her face was pale and ghastly, with an expression of intense suffering and anxiety; the pulse was rapid and feeble, and the respiration difficult. The expulsive efforts had entirely ceased. Dr. Christie found a large rupture in the front of the uterus, through which the body of the child had escaped into the abdomen, the head still remaining in the uterus. Passing on his hand through the laceration, he succeeded, after a little search, in laying hold of one of the feet, and effected version and delivery without difficulty. The child was dead. After delivery, the patient was attacked with severe vomiting. A large dose of laudanum was administered. At the end of three hours, she appeared to be better. Dr. Christie then left her, prescribing thirty drops of laudanum three times a day.

August 22nd. She was much stronger, and had dozed almost constantly. He prescribed twenty drops of tincture of opium three times a day.

August 24th. He found her much worse. The pulse had taken on the inflammatory character; the tongue was coated; the abdomen extremely tender, and much distended. He bled her largely, and ordered eight grains of calomel and one of opium to be given three times a day, and a large blister to be applied to the abdomen.

August 25th. She was still worse; the pulse was 130; the tongue was brown and coated; the countenance anxious and pinched; she had hiccup and vomiting. Hot fomentations were applied to the abdomen, and calomel and opium were given every four hours.

August 26th. The calomel was omitted; the opium continued. She gradually made a perfect recovery.

FORENSIC MEDICINE.

EXPLANATION OF THE RARITY OF FRACTURE OF THE CRANIUM IN CHILDREN EXPELLED WHILST THE MOTHER IS IN THE ERECT POSITION.

Dr. J. G. SWAYNE, in commenting upon a case of fracture of the cranium in an infant at birth (*ASSOCIATION JOURNAL*, 14th October, p. 901), judiciously remarked, that the discrepancy in results between the experiments of Chaussier and the cases collected by Klein admits of a simple explanation. Chaussier allowed fifteen still-born children to fall from a height of eighteen inches on a paved floor; and in twelve of them, one or other parietal bone was fractured: whereas, in 183 cases collected by Dr. Klein, "in which the women were rapidly delivered whilst standing, sitting, or kneeling, not one child died, nor did any fracture of the bones or severe external injury take place." Upon these facts, Dr. Swayne remarked:—"When delivery takes place in a standing posture, the child falls obliquely instead of directly downwards, in consequence of its following the direction of the vaginal canal, which is obliquely downwards and forwards, especially near the os externum. It thus becomes expelled forwards against the clothes of the mother, and these, as well as the umbilical cord, serve to break the violence of its fall." These observations, in connexion with the facts recited, point out how necessary it is for the jurist in such cases to inquire into all the particulars of the birth; and they also show of how small importance the averment of delivery in the erect position may be of itself as a defence against a criminal charge of fractured cranium from violence to the fetus. The exact position of the mother, her dress, and the nature of the floor, must be determined and considered as essential elements in the cases. This is well illustrated by a communication lately brought before the Boston Society for Medical Improvement, by Dr. STORRER, published in the *American Journal of the Medical Sciences* for July 1853, p. 76. The child was expelled while the mother was standing leaning her head upon a shoulder of her nurse. The child's head struck with great force the floor, which fortunately was protected by a rug upon a carpet. The mother was of medium height, and the funis was thirty inches in length. Dr. Storrer alluded to the case (published some years ago) of a coloured woman suspected of destroying her child, it having been found with its cranium fractured. She insisted that the death of her child was occasioned by its having passed from her when she was walking upon frozen ground. Dr. Storrer thought that in the case which he had described, serious injury would have ensued had the head struck the unprotected floor.

SURGERY.

CONGENITAL ERECTILE TUMOUR OF THE TONGUE SUCCESSFULLY REMOVED BY LIGATURE.

J. G., aged 16, was admitted into the Royal Infirmary of Edinburgh upon the 1st of September 1852, on account of pain and increase of bulk in a congenital tumour of the tongue. After admission, she had a slight febrile attack, on account of which the operation was delayed till the 28th of September, when Mr. Syme, having passed a double ligature through the base of the tumour, separated the threads, and included the whole base of the tumour between two knots.—From *Monthly Journal of Medical Sciences*, Oct. 1853.

AMPUTATION OF THE PENIS FOR CANCER.

W. F., a pensioner, was admitted into the Royal Infirmary of Edinburgh on the 30th of August 1852. Two months before admission, he observed a pimple on the under surface of the prepuce, which continued to increase in size. His medical man applied first the nitrate of silver, then the sulphate of copper, without affording him any relief. The prepuce continued to increase in size, and in a short time he had complete phymosis: his medical man then slit up the prepuce, which gave him great relief for a time. The disease continuing to increase, red precipitate was applied; and after this, nitrate of silver was again tried; but neither of these applications had any effect in checking the disease. On admission, the tumour was firm, about the size of half an orange, involving the prepuce chiefly, and imbedding the glans in its centre. The surface was irregular, and discharged a thin foetid pus. The local pain was so intense as to prevent him from getting any sleep. As there was no glandular affection, Mr. Syme recommended the removal of the disease; and on the 8th of September, he removed the penis by a single sweep of a long amputating knife. About

twelve vessels required ligature. The patient felt himself at once relieved. In the words of the report in the *Monthly Journal of Medical Sciences*,—"He had no more pain; the wound healed quickly; and he had no difficulty in making water. Was dismissed from the hospital quite well on the 18th of September."

So far as it goes this case is interesting; but surgeons who report amputations of cancerous parts ought to endeavour to give an account of the patient for a longer period after the operation than ten days.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

THE HÆMOSPASTIC APPARATUS OF DR. JUNOD.

Dr. JUNOD, a physician formerly residing at Berne, has for many years given his attention to the possibility of producing a state of syncope, or, short of this, of arresting inflammation, without the loss consequent on the removal of blood. He has for this purpose contrived an exhausting apparatus, which is applied to a part distant from that affected, and thereby produces a diversion from the general circulation of a large amount of blood, which again becomes available for use after the removal of the apparatus. The following wood-cut represents the application of the instrument.



We have before us a report, signed by Dr. Scott, Deputy Inspector-General of Army Hospitals, and by Staff-Surgeons G. R. Dartnell and Dr. J. Forrest, of Chatham, as to the efficacy of Dr. Junod's apparatus. They say:

"Although most of the cases in which it was used were chronic, and not fairly suited to test the merit of the instrument as a therapeutic agent, we have been well satisfied with the general result, and feel convinced that it is calculated, when properly persevered in, and used with discretion and judgment, to aid powerfully the surgeon, as well as the physician materially, in the cure of diseases, especially those of an acute and inflammatory character, and attended with local congestion, such as cerebral affections, pneumonia, hepatitis, rheumatism, amaurosis, ophthalmia, etc."

They mention cases of obstinate intermittent neuralgic headache, pain and inflammation of the stump, and general febrile symptoms in a case of amputation of the fore-arm twenty-four hours after operation; also cases of iritis, of chronic conjunctivitis, etc., in which the use of the instrument produced relief.

"The apparatus is now being tried in a case of amaurosis of nearly two years' standing, after an attack of fever, in a young soldier of the 15th hussars. On admission to the general hospital, this patient was suffering from continued headache, tenderness of the scalp, flushed face, etc., the pupils widely dilated and quite immovable; now, after fifteen applications of the instrument, the headache, scalp tenderness, and flushed face, are entirely removed, and the iris of each eye has become ordinarily sensitive to the stimulus of light, the pupils contracting to their natural dimensions. No improvement of vision, however, is yet apparent."

Dr. Junod believes the application of his instrument to be an efficacious means of removing the internal congestions and the consecutive symptoms in cholera.

The apparatus to which we have referred is certainly ingeni-

ous, and we believe it well worthy of a trial in cases where it is an object at once to relieve congestion of some important organ, and to economize the amount of blood.*

TOXICOLOGY.

DEATHS FROM CHLOROFORM.

Since we last reported a fatal case of inhalation of chloroform in the *JOURNAL* of April 1st, four deaths have been recorded from this cause. In the *Gazette des Hôpitaux*, of June 16th, a case is reported by M. de VALLET, surgeon-in-chief to the Hôtel Dieu d'Orleans. The occurrence took place on the 20th of last December, but was not previously published.

The patient was a soldier, aged 27; he seemed of strong constitution, and had no affection contra-indicating the use of chloroform, which was administered with the intention of removing two encysted tumours; one on the left cheek, and the other behind the right commissure of the lips. A gramme of chloroform, *i. e.*, about fifteen minims, were poured into a conical sponge, which was gradually approached to the face. In a minute, no effect having been produced, four grammes, or about a drachm more, was added, and, a short period of agitation having occurred, the patient became insensible in about four minutes. At this moment, the respiration was natural. The state of the pulse was not ascertained. The first incision on the tumour near the mouth had scarcely been made, when the patient became suddenly pale, and the respiration ceased. Amongst the means used for reviving the patient were, tracheotomy, and artificial respiration with an elastic tube. A current of galvanism was also passed through the region of the heart, by means of needles; but these measures were of no avail.

On an examination of the body, the vessels of the brain were found to be empty. The heart was very flaccid, but not diseased. There were some soft coagula in the right cavities; the left cavities were empty. The lungs, as also the liver, spleen, and kidneys, were much congested with blood.

The *Monthly Journal of Medical Science*, for November, contains the account of a fatal case of inhalation of chloroform, which occurred in the Royal Infirmary of Edinburgh, on September 28th.

A tobaccoconic, aged 43, of intemperate habits, had been three months in the infirmary, under the care of Dr. DUNSMURE, for stricture of the urethra. The operation of dividing the stricture, in the method practised by Mr. Syme, was determined on, and the chloroform was administered by Dr. Struthers, a gentleman who had long been in the habit of applying it. Dr. Dunsmure says: "While the patient was inhaling the drug, he struggled considerably, and became a good deal congested in the face and head. He seemed to take a slight convulsion, like an epileptic fit, and such as I have seen on several occasions in people who have led an intemperate life. During the convulsion, the handkerchief containing the chloroform was removed to some distance from the face. In a short time, the inhalation took effect, and he began to snore, and although still violent, the chloroform was removed from the face entirely, and the handkerchief placed under the pillow. As soon as the patient became more quiet, he was pulled down on the table, and placed in the proper position for the operation. I then shaved the perineum, and was just going to make my first incision, when one of the assistants said that his pulse was becoming weak. The posterior tibial, Mr. Spence remarked, was good, but, in a second or two afterwards, both gentlemen exclaimed that the pulse was gone". The breathing did not cease before the pulse. At the moment when the pulse and respiration had ceased, "the face was much congested, the jaws were firmly closed, and the pupils were dilated". Dr. Dunsmure forced open the mouth and pulled out the tongue with forceps. Artificial respiration was had recourse to, and in a few moments the patient made a long inspiration. This was followed by a second, by a third at a longer interval, by a fourth at a still longer period, and then a fifth, when all attempts at natural breathing ceased. No pulse could be felt after it first stopped. Tracheotomy was performed, in order that artificial respiration might be carried on more effectually. The external jugular was opened, and about two ounces of blood flowed. Galvanism was applied, with the effect of causing the diaphragm to descend as during life, but all these efforts were in vain, the diaphragm gradually lost its contractility, and, at the end of an hour, the case was given up as hopeless.

An examination of the body was made by Dr. Gairdner, and all the organs were found to be in a pretty healthy condition. The pericardium contained about half an ounce of serum. Both sides of the heart contained blood, the right side more than the left. Blood more than usually fluid. Muscular tissue of heart generally flabby, and rather pale, but not distinctly disorganised to the naked eye. Microscopic examination shewed the fibres of the heart to be nearly normal, though scarcely so distinctly striated as in some cases. The lungs were somewhat congested.

The quantity of chloroform used in this case was about an ounce.

A death from chloroform occurred in University College Hospital, on October 5th, to a man aged 40, on whom Mr. QUAIN was just about to operate for strangulated hernia. It is reported in the *Medical Times* of October 22. Chloroform was administered on a piece of lint, which was held at first three or four inches from the face, and then brought to within an inch and a half. One fluid drachm was first put on the lint, and, at the end of three or four minutes, forty minims more were added. For three or four minutes the pulse and breathing remained natural, and nothing unusual presented itself. Within a minute after the second quantity of chloroform was added, the patient struggled violently. During these struggles, Mr. Hillier, the resident medical officer, who administered the chloroform, was unable to feel the pulse, on account of the constant motion of the patient. The struggling lasted about a minute; and, on its ceasing, the patient commenced to breathe with a loud rough stertor. The lint was at once removed from the face, and Mr. Hillier felt for the pulse, but could not find any. Cold water was dashed on the face. Two or three short inspirations took place, with the kind of stertor just mentioned; then two or three long inspirations, and the breathing ceased. Artificial respiration was immediately resorted to, and, within a minute, galvanism was applied to the back of the neck and the diaphragm. Under the influence of these agencies, the patient gasped about three times at intervals, but after this no signs of life were exhibited.

Autopsy was made by Dr. Garrod, thirteen hours after death. Rigor mortis was well marked in all the limbs. The blood was very fluid in all parts of the body.

The abdomen was tympanitic, pressing the diaphragm upwards. The pericardium contained about an oz. of colourless fluid. The heart was quite collapsed and empty, which may have been due to the fluidity of the blood. Its anterior aspect was covered with fat, almost hiding the muscular substance. Weight of heart 7½ ounces; valves healthy. The walls of the right ventricle were flabby and pale. At some parts the muscular substance was very thin, being much encroached on by fat. In several places, especially near the apex, there was scarcely any muscular fibre visible. Much fatty degeneration of the muscular fibres of this ventricle was discovered by the microscope. The left ventricle was pale, flabby, and very friable. Both lungs were crepitant throughout; not much engorged. Brain not congested. Liver, kidneys, and spleen normal.

The remaining fatal case of inhalation of chloroform occurred on Oct. 20th, in St. Bartholomew's Hospital, in a patient under the care of Mr. PAGET, who intended to apply the actual cautery to a sore in the vagina, of a canceroid nature. The subject of this case was a stout, florid, young woman, aged 22, "formerly of dissolute habits; but apparently, with the exception of the local ailment, in perfect health. She had been in the hospital several months, and, about a fortnight previously, had been put under the full and prolonged influence of chloroform for a like purpose, without the occurrence of any untoward symptoms whatever." The chloroform was given with an inhaler—a padded, metal cup, fitting over the nose and mouth, containing a sponge, and supplied with valves. A drachm by measure was first poured on the sponge; but, as the administration did not immediately commence, a considerable part of this was, no doubt, wasted. After a short inhalation, a second drachm was supplied, and subsequently, the further quantity of half a drachm. "The patient had gone through the usual stages of excitement, etc., and the last dose was scarcely used as she sank off, almost immediately after its application, into a state of complete insensibility, unattended by any alarming symptoms. About five minutes had been occupied in the inhalation, and probably not more than a drachm and a half of the fluid really inhaled. The apparatus was now removed from the face; and the patient having been drawn into the proper position, Mr. Paget was about to commence the operation, when Dr. Black, who throughout had kept his finger on the pulse, noticed it to have become extremely feeble and fluttering. Almost immediately afterwards, the patient's countenance was observed to be dusky, turgid, and con-

* Dr. Junod is at present residing at 36, Cardington Street, Hampstead Road, London; and will with pleasure give information with regard to his apparatus to any member of the Association who may feel an interest in the subject.

gested, and the respiratory movements began to be performed at long intervals, and by slight, catching efforts." Cold water was dashed on the thighs, face, and breast, and the failure of the respiration becoming shortly complete, Mr. Paget began artificial respiration, by alternately blowing into the nostrils, and compressing the chest. Various other measures were used, amongst which were galvanism, but without any good result; and after three quarters of an hour, they were laid aside as hopeless. "It was noticed, that immediately after the first alarming symptoms, the pupils were of medium size—neither contracted nor dilated. All efforts at respiration ceased about two minutes after the first indications of failure; the pulse, however, as a very feeble flutter, was felt occasionally for, at least, two minutes later."

Autopsy performed by Mr. Paget, twenty-two hours after death. The countenance was still bloated and suffused; the *post mortem* rigidity was moderate in degree. The corpse was very fat. "The thorax was first examined, and nothing whatever abnormal could be detected in any of the viscera; the lungs were healthy, and crepitant in every part; their posterior lobes were not more congested than is seen in almost every examination; the heart was collapsed, but not contracted, and containing a small quantity of fluid blood in each cavity, was of normal size and proportions in every respect, and its muscular structure, examined by the microscope, shewed no degeneration." "The brain, its sinuses, ventricles, etc., were all carefully examined, and neither in texture nor quantity of blood was anything abnormal detected." The blood, in every part inspected, was quite fluid, and without the slightest trace of coagulum. An ounce or two of it being collected, and allowed to stand in an open vessel, it did not coagulate, nor change much from its dark purple colour.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, OCTOBER 22ND, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

PRESERVATIVE POWER OF METALS IN CHOLERA.

BY DR. V. BURQ.

Dr. ROUTH communicated the paper for Dr. Burq. The author related a case of cholera, which occurred in the Hôpital Cochin, in which the external application of a copper band arrested the cramps; on the removal of the copper plates the cramps re-occurred. He found subsequently, on inquiry, that workers in copper and brass were remarkably exempt from cholera. This was the result of a careful and personal investigation in nearly all the metallic workshops in Paris, in which from 100 to 600 (and over) workmen were employed. In all these the mortality never exceeded 5 in 1000, and in many it was *nil*; and this in the midst of a neighbourhood in which the population was decimated. In many cases the wives suffered, while the workmen escaped. Dr. Burq investigated the matter in other countries—Sweden, Vienna, Russia, Turkey, and England. In all the same exemption was observed. In many cases also, it was remarked that removal to a copper mine, or even district, arrested choleraic symptoms. The exemption of Birmingham, Sheffield, etc., he explained in this manner. The individual cases so tested amounted, in round numbers, to about 300,000. A review of all these facts led him to conclude: I. That nearly all metals with strong electric affinities were in different degrees preservative; but of all these, copper and steel were most so, the mortality being almost null among workmen engaged in working these two metals. II. With a view of resisting cholera, he recommended the presence of copper and steel ornaments in rooms, as also plates worn next the skin on the body. III. In the treatment of cholera, their internal administration, especially copper, in powder in the metallic state, as also application externally of plates. These plates he calls armatures; these he prefers to the salts of metals. The memoir concluded with an attempt to explain these phenomena, which he did not believe depended on any electric or galvanic influences; indeed, these he considered rather noxious than otherwise. He suggested—1, that, as in the production of ozone by phosphorus, an atmosphere affected by copper might be so modified that the cholera poison could not exist in it; 2, it might be due to minute absorption of oxide of copper by the skin and lungs, acting in a similar manner upon the system.

CANCER OF THE UTERUS, PROBABLY INDUCED BY INOCULATION.

BY B. W. RICHARDSON, ESQ.

Mr. RICHARDSON related the case of a woman, aged 57, who was under his care, suffering from cancer of the uterus. Her husband died in January, 1848. For three years before death, he had had pain in and a strong discharge from the generative organs; and a year before his death, cancer of the penis manifested itself. They had connexion frequently until within sixteen months of his death. The woman first consulted Mr. Richardson in October 1851. She had been complaining for some time of general debility, with a discharge from the vagina and a "bearing down" sensation. On examination, he found a large cancerous mass occupying the vagina; and the walls of the cavity were covered with a number of excrescences. The first symptoms had appeared about two years and nine months after the death of the husband: and Mr. Richardson thought it an interesting subject of inquiry, whether the woman had been infected by her husband.

ON PERICARDITIS. BY F. SIBSON, M.D., F.R.S.

After alluding to the difficulty of distinguishing between bellows-sound, as indicative of endocardial, and friction-sound as indicative of exocardial disease, and referring to the opinions of various authors on the subject, Dr. Sibson observed that it was evident that other tests, besides the difference of the two murmurs, are required to distinguish between pericarditis and endocarditis in the early stages, when the discrimination of the disease is so important. The principal test proposed by Dr. Sibson is the employment of pressure. If a friction-sound exists, that sound invariably becomes louder and harsher by making moderate pressure with the end of the stethoscope, so as to bring the surfaces closer together. In the earliest stage, pressure will often excite a friction-sound when none was previously present. In a case of pericarditis under Dr. Sibson's care in St. Mary's Hospital, pressure brought out a sound like a bellows-murmur. A few leeches were applied. Next day there was a loud to and fro *frottement*. In the advanced stages, when the effusion of fluid, by separating the two surfaces, extinguishes the sound, pressure, by bringing the surfaces again in contact, will restore the lost friction-sound. An interesting illustration of the effect of pressure in exciting sound presented itself in a patient of Dr. Sibson's in St. Mary's Hospital. A female affected with phthisis had ascites. On displacing the fluid, and pressing on the liver, a to and fro thrill was felt under the finger; as was anticipated, a loud, harsh, double, creaking noise, during inspiration and expiration, was heard on making pressure with the end of the stethoscope. On withdrawing the pressure, the sound ceased. After death, the surface of the liver was found to be roughened.

The first patient in whom Dr. Sibson observed the effect of pressure in reinforcing *frottement*, was a female affected with pericarditis, in the Nottingham Hospital, on 25th November, 1838. Since that period, he has recognised this important sign in every case of pericarditis he has examined. He gave an account of it in his paper on the "Position of the Internal Organs", in the *Provincial Medical Transactions* for 1844. This effect of pressure is rarely excitable in men after the age of forty-five, the cartilages being then firm and unyielding. The only point to guard against is the possibility of exciting anæmic murmur in very young persons.

The anatomical position of the *frottement* ought to be noted. Dr. Stokes found friction-sound to be audible generally only over the region of the heart, while endocardial murmurs are transmitted beyond that region. This rule holds good in the early stages, and while effusion is present; but when the fluid disappears, and the surfaces come in close contact, the noise may sometimes be heard extensively over the front of the chest. To the right of the lower sternum, over the right auricle, the friction-sound is usually double, soft, and equally loud, during systole and diastole; to the left of the sternum, over the right ventricle, it is also double, but harsher, especially during systole; over the apex it is generally only systolic. The form of the region of pericardial dulness is important, being conical, the point upwards reaching to the top of the sternum. When the effusion is great, the heart is often raised, so that the impulse is felt, and the *frottement* and heart in the second and third spaces instead of the fifth. Dr. Latham observes, that at this stage not only is the impulse raised, but the thrill felt by the hand is raised also. Dr. Walsh has noticed the tilting upwards, during effusion, of the impulse of the apex from the fifth to the fourth intercostal space. Adhesions usually begin to form over the outer edge of the right and left ventricles. If so, the *frottement* ceases there, while it remains

over the base; the region of *frottement* with the advancing adhesion gradually narrows to the middle of the sternum, and at length, when adhesions are complete, the friction-sound suddenly becomes inaudible. If adhesions do not take place, the friction-sound may remain long after the pericarditis has ceased. If a patient is seen at this stage for the first time, care must be taken not to treat him as if he were subject to the disease in the acute stage. In pericarditis, especially if it affects the central tendon of the diaphragm, the respiratory movement of the upper ribs is excessive, especially on the right side, while that of the abdomen is restrained.

With regard to treatment, there can be little doubt that the severe antiphlogistic plan pursued by Bouilland, and to a lesser degree by Dr. Taylor and others, has increased rather than diminished the mortality, besides inducing a tedious convalescence in those who recovered. A few leeches to the region of pain, opium in repeated doses, on Dr. Graves' plan, with, in severe cases especially, small doses of calomel, in addition to the treatment previously pursued for the acute rheumatism, will usually prove adequate to meet the disease. Dr. Risdon Bennett had proved, that in many cases the treatment need not be altered when pericarditis sets in in acute rheumatism. The great object is to restrain the disease, without doing damage to the constitution, so that the convalescence may be as rapid and complete as possible. Indeed, each case must be treated on its own merits. After the acute stage, food, stimulants, and tonics, properly apportioned, are in many cases well borne, and they materially shorten the convalescence. It is not by one sign only, however distinctive, that pericarditis is to be ascertained, but by the combination of the various diagnostic signs, not neglecting either the character, nearness, or rhythm of the friction-sounds, their limitation to the region of the heart, or extension beyond it, their reinforcement or actual production by pressure, the form and extent of the pericardial dulness, the presence of fluid, the seat of the impulse, the prominence of the cardiac region, and the altered movements of respiration, as well as the pain on pressure over the heart and epigastrium, the dyspnoea, and the various general symptoms, the sum of which go to inform us, more even than the physical signs, of the severity of the case, and to suggest the required treatment.

A discussion followed, in which Drs. Semple, Risdon Bennett, Sibson, Hare, and Theophilus Thompson, took part.

SATURDAY, OCTOBER 29TH, 1858.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

CYSTORRHOEA PRODUCED BY A VASCULAR GROWTH AT THE EXTERNAL ORIFICE OF THE URETHRA. BY WILLIAM COULSON, ESQ.

Mr. COULSON related the case of a lady, aged 40, who had suffered for two years from a burning pain at the orifice of the urethra, constant desire to pass urine, with almost continual escape of that fluid in drops. She had lately been obliged to rise every half hour in the night, and a strong ammoniacal odour exhaled from her person. The urine was of a dark brown colour, strongly ammoniacal, containing much tenacious viscid mucus, and deposited considerable fragments of friable phosphates. The tenderness of the inflamed vulva, from the constant dripping of urine, was so intense, that walking was exceedingly painful, and any attempt at sexual intercourse produced great agony.

The orifice of the urethra was found surrounded by vascular and excessively sensitive growths. Dr. Golding Bird, under whose care the patient was, considering that the vascular growth at the orifice of the urethra was the exciting cause of all her symptoms, requested Mr. Coulson to see the patient. Mr. Coulson ascertained that no calculus existed; he applied the potassa fusa to the part, and, after four applications, the vascular tumour nearly, but not quite, disappeared; this treatment occupied about three weeks. The effect was remarkable: the urine became acid and clearer, the mucus rapidly decreased, and the phosphatic deposits disappeared; the patient was not called upon to rise more than once in the night, and could bear exercise with comfort. At this period, a sudden attack of menorrhagia occurred, which prevented the destruction of the growth from being completed. In a short time, the vascular excrescence returned, and all her old urinary symptoms appeared. Mr. Coulson then removed these growths completely, with a pair of scissors, and afterwards applied nitric acid freely to the bleeding surface. The result of this operation was most successful. The urine soon recovered its healthy character, she could retain it a considerable time, and had perfect control over the bladder. Her general health, which had been much impaired, was completely restored. Soon after this, she became pregnant, and miscarried at two months; she has, since this time (now at the end

of six months), remained in perfect health. Dr. Golding Bird had pointed out these growths as a cause of cystorrhoea. The rationale is at once found in the obstruction offered by the growths to the complete evacuation of the bladder. Some ounces of urine are always retained, and, becoming ammoniacal and foetid, act as an irritant on the mucous membrane, producing excessive secretion of ropy mucus and all the symptoms of calculus. Hence, in these cases, as in those lately described by the same physician, of prolapsus of the bladder into the vagina, causing the anterior wall of the canal to project between the labia, the cause of these painful symptoms is, retention of a portion of the urine and its decomposition in the bladder.

ON THE TREATMENT OF LABOUR, MARKED BY DEFECTIVE UTERINE ACTION, AND ON THE COMPARATIVE VALUE OF ERGOT OF RYE AND GALVANISM IN OBSTETRIC PRACTICE. BY ROBERT BARNES, M.D.

The author stated that in the range of obstetric practice there occurred a large class of cases characterised by defective uterine action. Two questions immediately arose: 1. What are the conditions of uterine inaction which call for interference? 2. What are the agents to be selected for the purpose of evoking the dormant energy of the organ? The first question was necessarily passed over, in order to direct special attention to the second. He adverted, however, so far to the first question, as to point out the extreme difficulty of determining in many cases the cause of the existing inertia, and the consequent danger of misapplying the agents in use for inducing contraction. He then explained the peculiarities of the action of ergot, insisting upon its dangerous properties. He enumerated the bad effects it might produce upon the mother; as rupture of the uterus and perineum; laceration and consequent mischief of the os and cervix uteri; prolapsus of the uterus and bladder; the depressing effect upon the pulse, etc. Then the injurious effects upon the child, and the frequency of still-born children in ergot labours were considered. He related an interesting case, in which he had had the opportunity of observing the effect of continued contraction in arresting the fetal circulation. The author doubted whether the restrictions upon the use of ergot, commonly recognised, were sufficient; he urged the necessity of no longer employing an agent so uncertain, so uncontrollable, and so dangerous; the more especially as we possessed in galvanism a safe and efficient power, adapted to every case in which ergot was considered to be necessary. The author then adverted to the various isolated writings upon the use of galvanism in obstetrics. He enlarged upon the advantages attending its use for the induction of premature labour, citing two original cases in illustration. He then considered its application in inertia uteri accompanying the first and second stages of labour. Then its use in the third stage, in retention of the placenta, and in hæmorrhage, citing cases of its successful employment. He next pointed out a variety of other cases in which galvanism might be most usefully resorted to; in paralysis of the bladder following delivery; in arrested uterine action from chloroformisation; in the excitation of respiration in still born children; in the expulsion of uterine polypi; in the evacuation of the uterus in case of hydatigenous placenta. The author then described the mode which he preferred in the administration of galvanism. He observed that it was certainly inconvenient and seldom necessary to adopt the usual practice of applying one pole of the battery to the spine and one to the cervix uteri. The application of the discs one on either side of the uterus was sufficient. He observed that galvanism did not act by primary excitation of the spinal centre, but by direct stimulation of the muscular fibre. This effect was thoroughly obtained by passing the shocks through the uterus, by applying the poles one on either side of the abdomen, and no obvious advantage was gained by passing the shocks through the uterus by the spine. The electro-magnetic apparatus constructed on the principles in ordinary use for medical purposes, was the best suited for obstetric use. He explained that the efficacy of this form of apparatus was owing to the production of a rapid succession of shocks. The author concluded his paper by enumerating some of the principal advantages of galvanism as an agent for producing uterine contraction, adverting to the extensive range of cases admitting of its employment; its perfectly manageable character and easy graduation and intermission: its certainty and efficiency; its safety; the possibility of employing it successfully in cases of exhaustion where no other remedy could be used; and the fact that it did not preclude the resort to other means.

EDITOR'S LETTER BOX.

CLIMATE OF MADEIRA.

LETTER FROM T. H. BURGESS, M.D., TO THE EDITOR.

SIR,—In a late number of the ASSOCIATION JOURNAL, Dr. George Lund, of Madeira, has undertaken to controvert some general remarks on the climate of Madeira, which I had occasion to make in my recent work on the "Climate of Italy".

Free discussion is always desirable on disputed subjects, especially those relating to so conjectural a science as medicine. It is the only sure method of arriving at the truth. But, in order to be useful, such discussion should be fair as well as free, and not open to the charge of misrepresentation.

Dr. Lund says: "Dr. Burgess, a recent author on the climate of Italy, declares change of climate in disease to be a delusion." I never wrote or thought anything of the kind; but I did write the following sentences, which Dr. Lund has not quoted: "In pointing out the inutility of the Italian climate for consumptive invalids, I should be sorry to be understood as denying the sanative effects of climate in all diseases. In several affections of a painful and distressing kind, the benefit to be derived from a well selected and appropriate change of climate is incalculable." (p. 8.) Dr. Lund complains that I have not given the whole of long sentences in my quotations from works on Madeira, in a general summary of those foreign climates most frequented; and yet his very next quotation from my work is as choice a specimen of interpolation as I have ever met with. It consists of seven lines; the three first of which are taken from page 1, the fourth line from page 3, and the remainder of the sentence from the middle of page 2, of my work.

This is the so called quotation: "There is no greater popular delusion than the belief in the existence of some undefinable specific virtue in the climate of Italy for pulmonary consumption. (page 1.) This foreign climate delusion is not confined to the rich invalid" (page 3); "he adds: "It is only when the disease is confirmed, and softening exists, that, in the great majority of instances, the patient seeks in a foreign climate that relief or cure which he believes nature has denied him in his own." (page 2.) So that Dr. Lund makes one "add" to a sentence in page 3 one which precedes it in page 2!

Dr. Lund says, correctly enough, that, "having no personal knowledge of the island, I have formed my opinions from the works of White and Dr. Mason, and the statements of Drs. Heintzen and Gourlay." But, that I have omitted to mention Mr. Murray's "Guide Book" because it was in favour of the climate, I altogether deny. No writer could speak in more glowing terms of the climate of Madeira than Mr. White, whose work I placed foremost in my necessarily short sketch of the climate of that island. Corinne herself could scarcely surpass him. Strangely enough, the eminent authority whom Dr. Lund cites in opposition to my statements is liable to the same charge of "want of personal knowledge of the island"; for Sir James Clark acknowledges his obligation to Drs. Heintzen and Renton while collecting materials for his article on Madeira. Indeed, if the merits of the deservedly popular work on the "Sanative Influence of Climate" were to be limited to those parts in which the distinguished author writes from "personal experience" of the climate, a considerable, and not the least deserving, portion of the work might be omitted. Well, Dr. Lund, who is a practitioner at Madeira, and has "personal knowledge of the island", will surely be able to enlighten, with original observations made on the spot, his medical brethren not so favourably situated. Can the reader believe that, in his long and laboured defence of the climate of Madeira, Dr. Lund does not give a single original idea, fact, or observation; that he is obliged to draw upon other writers for all his statements, and to prop up his defence by extracting Dr. Renton's tables from Sir James Clark's work? So far, then, as his "personal knowledge of the island" goes, he might as well have written on the climate of Kamschatka. One might suppose that a practitioner, so deeply interested in preserving the fame of the climate of Madeira, would have something else to offer than a mere *rechauffé* of stale and familiar observations, the fruits of others' industry.

Dr. Lund says, in reference to the variations of the atmosphere, that, out of 824 observations in this climate (he does not say by whom), we find only nine strong winds, and one presumed gale. Did the reader ever before hear of such a nondescript as a "presumed gale"? What does it mean? It is of a piece with another phrase equally unique, in which Dr. Lund talks of "enabling the system to throw the tubercular materials out of

the blood." Dr. Lund is very angry with Dr. Mason, who has written the best work on the climate of Madeira that has yet been published, because he takes an unfavourable view of the climate in relation to phthisis; and endeavours, to the best of his ability, to disparage the work, and throw discredit upon its statements. For example, he has again recourse to misrepresentation, when he says, "Dr. Burgess informs us that the instruments used were improperly placed: a fact which alone vitiates the whole of the results." From this, it would appear that I stated from my own knowledge that the instruments were badly placed; whereas I merely found the assertion in the volume of Dr. Lund's non-medical friend, Mr. White, who is an ardent supporter of the climate in a sanitary point of view; and, on the principle of hearing both sides, I gave the statement on Mr. White's authority. Of the truth of the assertion I had no means of judging. Dr. Mason and Dr. Gourlay both agree as to the frequency of consumption amongst the natives of Madeira; but Dr. Lund enters a caveat against the opinion of Dr. Mason, "because he did not speak the language!" Dr. Lund winds up his letter with the following strange jumble:—"Dr. Burgess thus sums up: 'Madeira, with all its sanitary fame, is no exception to this rule; [that is, it affords no proof of salubrity] as the meteorological observations of Drs. Heintzen, Gourlay, and Mason, incontestably establish.'" "Setting all other considerations aside," says Dr. Lund, commenting on this extract, "we [I] do not think that these three observers bear out this assertion in their own cases. Dr. Gourlay was not consumptive. Dr. Heintzen was originally sent out as a dying case, lived nine years on the island, and ultimately died from accidental exposure to the night air in an open boat. Dr. Mason, notwithstanding his neglect of means for preserving health, and devoting himself instead most assiduously to meteorological observations, lived in Madeira two years." What have "their own cases" to do with the meteorological observations referred to? Does it strengthen, or invalidate, or in any way affect them, to know whether those gentlemen had consumption or not? Where are we to look for positive information respecting the salubrity of this island, but from the local practitioners? Yet it is strange that so earnest an advocate as Dr. George Lund could produce nothing of his own to support his views. I am sure he will profit by the following remarks of the gifted editor of Dr. Mason's work on the "Climate of Madeira":

"It is singular that, in an island so celebrated for its salubrity, no regular meteorological records should be kept, or, at least, published; and that such difference of opinion should exist as to certain features in the climate. Dr. Mason most justly remarks, that the memory of the 'eldest inhabitant' is little to be depended on, if not supported by written and recorded observations; and it strikes me that the medical practitioners resident in the island can hardly allow the subject to be longer neglected, in the present advanced stage of science, without subjecting themselves to the reproach of indifference relative to the charge sometimes urged against them, of withholding the truth, under a dread that the *far famed climate of the island will not bear the test of close and accurate examination.*"

Since the publication of the article on the "Climate of Madeira", of which Dr. Lund so grievously complains, I have been favoured with several communications from persons who had resided in the island, fully confirming all that I had stated. I have had besides painful experience of the effects of a temporary sojourn at Funchal on several consumptive invalids, two of whom were hurried to the grave by their visit to Madeira. The particulars of these cases I shall publish in extenso in a new edition of my very obnoxious work. Meanwhile, I have only to state, that Dr. Lund has entirely failed to subvert any of the objections to the climate of Madeira urged by Dr. Mason, namely, "dampness, rains, injurious effects of the Leste (Atlantic blast), and heavy precipitation of dew."

Luxuriant vegetation may be very effective to gradually the senses, or to garish graves; but it is no proof of the salubrity of any climate. Neither is "balmy air", subject to vicissitudes, in a foreign climate, a whit more likely to arrest the progress of tubercular consumption in a native of England, than the strict Devonshire, Hastings, Cove or Undercliffe, however it may please invalids or practitioners to foster a "good delusion". Madeira is no exception to the rule; and of Dr. Lund's assertion

* "The strangers' burying-ground," says Dr. Lund, "has a fine appearance, and one Burgess, not a native, was seen to be in the habit of flowers, while reading with sadness the epitaphs on the graves of the young and joy of youth, having sought these flowers in the bosom of the earth through the influence of its being the only place where the flowers of friendship and love, and the flowers of the heart, are not buried."

wish to see the rival climate of Malaga (the latest novelty) attract all the wandering consumptive invalids thither, he will, by devoting himself "most assiduously to meteorological observations", endeavour to make out a better case than his last essay, in favour of the sanative fame of the "Island of the Blessed." (*Herodotus*.) I am, etc.,

T. H. BURGESS.

Half Moon Street, Piccadilly, Oct. 10th, 1853.

[In reperusing Dr. Lund's article, we find that the author's desire is to give an impartial view of his subject. His opinions are supported by Mr. Dyster's paper in last number.—EDITOR.]

DR. DAVEY'S REMARKS ON DR. SWAYNE'S CASE.

LETTER FROM J. G. DAVEY, M.D., TO THE EDITOR.

SIR,—Will you allow me to correct the observations attributed to me in the report of the Bath and Bristol Branch, at p. 894 of the *ASSOCIATION JOURNAL* for October 14th? Instead of saying that the "convulsions", in the instructive case read by Dr. Swayne, were dependent, *primarily*, on the injury done to the brain, I said that they *were*, it would appear, so reputed; but that I could regard them only as a mere sequence to the injury, i. e., as the immediate effect of the succeeding inflammation of the parts affected, involving, as such a pathological condition did, more or less effusion, thickening of structure, and such like; and that these so interfered with the normal relationship of the cerebro-spinal system and its bony parietes, or, in other words, so altered the relation of the containing and contained parts, that the spinal functions were necessarily interrupted, and *convulsions*, THEREFORE, were induced.

My object was merely to draw the attention of the members to the fact, that, inasmuch as the brain has really nothing to do with the normal motive powers else than *indirectly*, it can in no way be *directly* or "*primarily*" concerned in *convulsive movements*: such I do consider to depend on "*spinal irritation*" (I am represented as having expressed the very opposite opinion), but not to arise "*because the relation between the brain and spinal chord has been disturbed*", to quote the words attributed to me in the *Journal*. These involve so much mystery, and are altogether so incomprehensible, that I am desirous not to be held responsible for the same.

I am, etc.,

JAS. GEO. DAVEY, M.D.

Northwoods, Bristol, Oct. 19th, 1853.

MR. WINCHESTER'S METHOD OF TREATING FRACTURES.

LETTER FROM W. H. WINCHESTER, ESQ., TO THE EDITOR.

SIR,—From your editorial remarks in the *JOURNAL* of 21st October, on the "Prevalent Treatment of Disease", particularly of fractures, I am induced to think that an account of my method of treating these cases, with a description of the apparatus, may not be unacceptable to your readers, especially as it was designed whilst practising in the country, and for the very purpose of obviating the difficulties of which you speak.

In seeking for an efficient apparatus, my chief aim was to imitate nature; and, as perfect uniformity, a symmetry between the two halves of the body, is nature's invariable law, so I conceived, if by any means I could contrive an apparatus which should assume the form of nature, or, in other words, be capable of being moulded to a sound or healthy part for the use of an injured or diseased one, such mechanical appliance would not only be rendered as perfect as it is possible, and be generally useful, but afford the surgeon a fixed principle of action, and an unerring guide in the treatment.

After considerable thought, and taking all the requirements of the surgeon into consideration, I contrived the apparatus, of which I send you an engraving; its superiority over every other splint consists in its simplicity, universal applicability, and efficiency. One and the same splint doing the work of three or four. Whilst every other apparatus tends, more or less, to alter the original form of a limb,—whether made of metal, wood, gutta serena, or starch,—the direct tendency of this one is to preserve it, having, before its application, assumed the natural form. It consists of jointed pieces of wood, metal, or other suitable material, which have the power of being fixed at any desired angle; and in its application, is first laid against and fixed to the shape of the sound side, and then immediately turned and applied to the broken one, affording a complete support to the entire shaft of the bone, preventing retraction, and consequently

doing away with the ordinary means of extension, which are painful to the patient. To the country surgeon, a great saving of time will be effected in its use, as no unnecessary journey may be taken, but armed with this *multum in parvo*, he may sally forth and give immediate relief to his patient.

I am, etc.,

W. H. WINCHESTER.

14, Westbourne Terrace Road, October 27th, 1853.

Fig. 1.

Fig. 2.

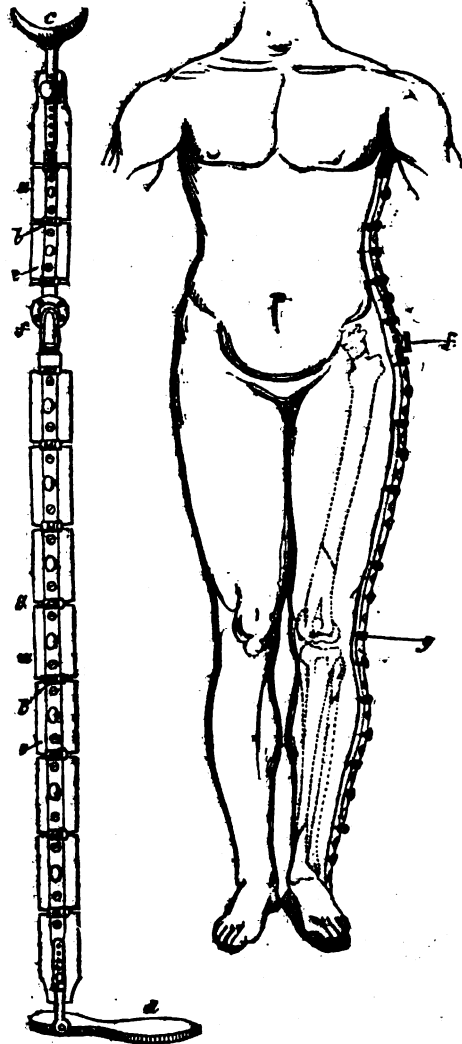


Fig. 1 shows the splint. a. a. Pieces of wood, metal, etc. b. Joints, which are fixed at any angle. c. A crutch for the axilla, if necessary; and d. The foot-piece, both of which can be regulated to any length or angle. e. Studs for the straps.

Fig. 2 shows the splint applied to the broken side, after being adjusted to the opposite uninjured one. It will be perceived that even should both thigh and leg be broken, the same adjustment does, showing a great superiority over all other splints. It can be lengthened or shortened at pleasure, and a piece removed from any part, should there be a wound, without deranging the adjustment. f. Ball-and-socket joint for hip. g. Hinge-joint for knee.

Fig. 3.

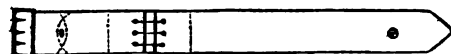


Fig. 3 shows the straps used in the application of the splint. The size of the sound limb is taken when the splint is adjusted by means of the buckle with the lacing fastened. When applied to the injured limb the original size is still maintained by the buckle; and should swelling occur the lacing is loosened, allowing the strap to expand by means of a piece of vulcanized India-rubber inserted. As the swelling subsides the strap goes back to its original size, and is again laced. By this means the necessity for loosening the strap is avoided.

MEDICAL METEOROLOGY.

LETTER FROM GEORGE F. BURDER, M.D., TO THE EDITOR.

SIR,—At the present time, when the attention of the medical profession is so generally directed to the subject of meteorology in its relation to the public health, it becomes very important that investigations in this branch of science should be conducted upon sound principles, lest valuable time be wasted upon fruitless researches, and the progress of knowledge retarded by the hasty adoption of erroneous conclusions.

The following remarks have been suggested by the meteorological table published in your Journal of the 7th inst., taken in connexion with a circular reprinted from a previous number.

In reference to the table alluded to, it is not my object to point out errors either of plan or of execution in its strictly meteorological part, although here exception might be taken to more than one instance of apparent inaccuracy—as, for example, to the fact that the weekly mean of the barometric readings at 9 A.M. at two stations, Bedford and Uckfield, reduced to the level of the sea, differ about three-tenths of an inch; similar comparisons of observations taken at Clifton with those published by Mr. Glaisher rarely, if ever, giving a difference of as many hundredths.

My present object, however, is chiefly to point out what appears to me an objectionable principle in the medical department of the table; and I am the rather induced to do so, as this point is insisted upon in the circular as the distinguishing feature of the system. I allude to the very precise specification which is demanded of the *hour* of the commencement of a disease, or of the occurrence of death. I am aware that it is an invidious task to complain, or seem to complain, of excessive accuracy in the registration of scientific facts; nevertheless, it is certain that much time may be lost, and much laborious investigation misdirected, by the endeavour to secure a degree of accuracy in one element of a calculation totally inconsistent with the accuracy attainable in the other elements. If I might be permitted to state concisely my objections to this feature of the proposed system, I would say, first, that it is not likely to facilitate the discovery of truth; and secondly, that it will be very apt to lead to positively erroneous deductions.

That no laws can be safely deduced from such facts as are proposed to be supplied will, I imagine, be evident from a consideration of a special instance. Thus, on a certain day, we find it stated, that puerperal convulsions occurred at 11 A.M. Now, apart from the *prima facie* improbability of the supposition that the occurrence of these convulsions was determined either by the barometric pressure at that hour, the temperature or humidity of the air, the direction of the wind, the character of the clouds, the quantity of ozone, or the amount of rain fallen in the previous twenty-four hours,—apart from this, let us inquire what means we have of determining the condition of the various atmospheric elements at this particular hour? Clearly none. Let it be granted that the instruments are good, and that careful observations are taken twice a day—a frequency (to judge by the vacancies in the published table) greater than many professional men will find it convenient to maintain. On this supposition, the *weekly* mean of each element, after being subjected to the proper corrections, may be considered a close approximation to the truth. The *daily* means, though not to be relied upon for accuracy, may be regarded as a useful indication of the character of each day. Beyond this, we have positively nothing to go upon; for it must be apparent that observations taken at 9 A.M. and 3 P.M. scarcely afford even a clue to the determination of the special peculiarities presumed to exist at 11 A.M. To secure the result intended, hourly observations should be taken—an arrangement obviously impracticable.

It if be urged, that the precision complained of, however unnecessary, can at all events lead to no error, an answer is supplied to our hand by the circular already referred to. "If, however, when the wind is east, a case of toothache, neuralgia, diarrhoea (with or without cramps and vomiting), convulsions, epilepsy, apoplexy, menorrhagia, epistaxis, hæmoptysis, or premature uterine action, should occur, the barometer readings decrease either immediately, or in a few hours afterwards." "He also observes, that apoplexy, epilepsy, and sudden deaths, invariably occur with a prevalence of hail and snow showers." Can comment be necessary upon such statements as these? "Very interesting conclusions" they may be; but can we regard them as *reliable* conclusions, or, indeed, as anything but an illustration of the statement just now advanced? disproportionate accuracy of detail proving not only a useless refinement, but becoming likewise a snare to the investigator, in proportion as it is considered an equivalent for extended observation.

There are other points in the circular to which exception might justly be taken—as, for example, the specimen table of the relative prevalence of diseases under different atmospheric conditions; which table I have tried in vain to understand.

But it is unnecessary to add more. In writing what I have written, I have been actuated simply by a regard for the interests of meteorological science—interests which I conceive to be endangered by the adoption of what appeared to me to be an ill digested scheme.

It is truly enough remarked, that the Registrar-General's weekly tables are not sufficient for our purpose. They apply only to London; they take no account of non-fatal diseases; they do not even accurately represent the mortality of the week to which they profess to apply. We want observations from all parts of the country, returned with promptitude to some central station for publication and diffusion, including both diseases and deaths. These conditions are to some extent fulfilled by the scheme already commenced in your Journal. I would suggest, however, that, instead of stress being laid upon the day, still less upon the precise hour of the occurrence of a disease or a death, the observer should content himself, for the most part, with noting the weekly totals of each disease, and of deaths from each cause; experience showing that a week is the shortest period for which the atmospheric conditions can be accurately determined from observations taken once or twice daily. By some such plan as this, if it could be generally adopted and faithfully carried out, there can be no doubt that valuable results might be obtained.

I have only to apologise for the length of this letter, and to add that, if any of my suggestions should lead to an improvement in the method adopted for investigating the truths of this important science, my object will have been fully accomplished.

I am, etc.,

GEORGE F. BURDER, M.D.

Clifton, Oct. 20th, 1853.

[Improvements in the Weekly Table are at present under the consideration of the Meteorological Observers. We invite all who have suggestions to make to forward them now, not for publication, but for our guidance. Editor.]

OBSERVATIONS ON OZONE.

LETTER FROM DR. JOHN DREW TO THE EDITOR.

SIR,—As you take an interest in ozone observations, and many of your readers have engaged to take part in those which will be forwarded to Dr. Schönbein through me, perhaps you would kindly inform them that Mr. Cox will be prepared in about three weeks to supply Schönbein's ozonometer on application. We propose to commence simultaneous observations all over Great Britain on January 1st, 1854.

In a letter just received from Dr. Schönbein, he says,

"I am indeed very glad you have so well succeeded in engaging a large number of gentlemen to make regular ozonometric observations; and I am inclined to believe that by so doing, you have rendered a valuable service, not only to the physical but medical and physiological sciences.

"Having of late been in Vienna, and seen there M. Kreil, the head of the meteorological stations being established at very different points of the Austrian empire, I induced that gentleman to introduce my ozonometer in the observatories placed under his guidance, and by this time the observations will have begun to be made from the Turkish to the Italian frontiers, in the lowlands as well as in the highest Alpine regions."

The Astronomer Royal will obtain observations in conjunction with the elaborate system of meteorological registration kept at Greenwich Observatory.

I am, etc.,

JOHN DREW.

Southampton, October 17th, 1853.

ASSOCIATION STATISTICS.

LETTER TO THE EDITOR.

SIR,—Allow me to suggest to you the publication monthly of the names of new members, and a statement of the amount of subscriptions received.

I am, etc.,

November 1st, 1853.

[The General Secretary alone possesses the means for the compilation of such statistics: but as interest and endeavour, with his aid, to give as much information on the topics referred to. Editor.]

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. V.—WEEK ENDING 29TH OCTOBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Wind.		Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Rain, Snow, Fog, Frost, Thunder, and other Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Direction.	Mean Force for the Day.						
Oct.	in.	in.	°	°	°	°	°	°	a.m.	p.m.	0—6	am	pm		in.	
23 S.	29.724	29.827	66.2	52.5	58.3	72.5	47.5	51.4	SSW.	SSW.	3	0 — 10		0.033	[Epidid. Neu. Di. 2	
24 M.	29.849	29.757	59.	50.5	53.7	71.	42.7	52.6	SSE.	SE.	1	10, cu.-s.		0.000	Ery. Qu. 2, Boil. T.	Sc. Fe. [liver.
25 Tu.	29.656	29.554	63.	41.5	51.2	71.	34.7	51.8	E.	S.	2	10, cu.-s.		0.000	Di. 2, Inf. Lichen.	Diabetes, Cancer of
26 W.	29.656	29.526	60.7	48.	53.3	63.7	38.5	50.1	NE.	ESE.	2	8.5, cu.-s. ci.-cu.		0.014	Inf. Catarrh. Qu.	Conv. Sc. Fe. Phth.
27 Th.	29.573	29.502	58.8	48.7	52.7	59.5	40.	52.6	ESE.	E.	1.5	9.5, s. cu.-s.	Fr.	0.135	Di. Col. — Vom. noon.	
28 F.	29.426	29.445	56.3	45.5	49.9	59.	38.	50.7	SE.	WSW.	1.5	10, s.	F.	0.384	Di. 2 a.m. Br. 1 a.m.	Chronic vomiting.
29 S.	29.709	29.787	54.	31.5	41.7	56.	25.	43.2	WSW.	WSW.	1	7.5, cu.-s. ci.-cu.		0.003	Neu. 8 p.m. Di.	
Col..	1	2	3	4	5	6	7	8	9	10	11	12			16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MOFFAT, M.D.

Oct.	23 S.	29.600	29.704	63.0	51.0	57.0	74.0	44.0	50.5	0.752	SW.	SW.	2	3	7, cu.	0.00	Cyn. T. 2, Neu. 2.	
	24 M.	29.648	29.539	61.0	54.0	57.5	67.0	50.0	52.9	0.842	SSE.	SE.	2	4	9, ci.	0.00	T. Di.	
	25 Tu.	29.439	29.447	61.0	52.5	56.7	68.5	47.5	49.0	0.815	SSE.	SW.	2	1	7, ci. ci.-s. cu.	0.00	Cyn. T.	
	26 W.	29.376	29.324	58.0	45.5	51.7	60.5	32.5	51.0	0.967	0	S.	0.5	1	10	0.20		Anæmia.
	27 Th.	29.373	29.311	54.0	47.0	50.8	61.5	39.5	50.5	0.962	0	0	0.5	0	10	0.15	Di. 2, Epistaxis.	
	28 F.	29.378	29.322	53.0	50.0	51.5	54.5	45.0	52.0	1.000	0	0	0	1	9, cu.	0.10		Anæmia.
	29 S.	29.612	29.664	50.0	44.5	47.2	61.0	40.0	45.9	0.916	WSW.	WSW.	1	6	7, ci. ci.-s. cu.	0.35		Decay of nature.

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

Oct.	23 S.	29.738	61.4	51.1	56.2	46.9	52.9	0.842	SSW.	SSW.	8	7, ci. cu.-s. ci.-s.	0.079			Typhus fever.
	24 M.	29.827	58.8	53.4	56.1	51.5	52.0	0.938	sbe.	s.	1	7, ci.-cu. s. ci.-s. h.				Consumption.
	25 Tu.	29.610	60.7	50.6	55.7	48.5	52.2	0.974	SSE.	WSW.	0	7, ci.-s.				
	26 W.	29.542	62.0	42.1	52.0	38.9	51.9	0.944	SE.	sbe.	1	6, ci.-s. ci.-cu.				
	27 Th.	29.494	60.8	48.8	54.8	44.9	53.5	0.961	SSE.	s.	0	10, ci.-cu. s.				
	28 F.	29.368	59.8	53.4	56.6	50.5	55.0	0.966	SSE.	s.	0	10, ci.-cu. s.				
	29 S.	29.661	52.0	47.7	49.8	45.0	46.2	0.890	w.	w.	0	8, ci.-cu. s.				

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

Oct.	23 S.	29.876	29.927	63.5	54.5	59.0	72.5	51.0	56.1	0.820	SW.	SW.	2		8, cu.	0.00		
	24 M.	29.944	29.829	60.2	50.0	55.1	61.5	47.0	59.9	0.842	S.	SSE.	1		8, ci.-cu.	0.00	Rub.	
	25 Tu.	29.697	29.658	62.2	50.0	56.1	63.0	47.5	54.5	0.853	SSE.	SSW.	0.5		6, ci.-cu.	0.00	Cyn. Tr.	
	26 W.	29.626	29.571	65.0	42.5	53.7	72.0	43.5	53.5	0.892	SE.	SE.	1		7, cu.	0.00	Prem. L.	[Di.
	27 Th.	29.571	29.558	62.0	50.5	56.2	67.5	48.0	56.2	0.900	SE.	SE.	1		6, cu.	0.17	Vert. Inf. Col. — Vom.	[Fever.
	28 F.	29.449	29.447	60.0	52.5	56.2	65.0	49.5	54.6	0.893	SSW.	SW.	2		6, ci.-cu.	0.10	Di. 2.	Abdominal tumour.
	29 S.	29.743	29.836	52.6	47.5	50.0	63.5	48.0	44.0	0.761	NW.	NW.	0.5		7, cu.	0.02		

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

Oct.	23 S.	30.10	64.	55.	59.5	67.	51.	54.9	0.843	SW.	w.	3	0	10, ci.-s. n.	.16	Di. Hep.	
	24 M.	30.10	66.	47.	56.5	72.	40.	52.6	0.890	S.	SE.	1	0	8, var. ci.		Ophthalmia 2, Di. 3.	Paralysis.
	25 Tu.	29.89	64.	48.	56.	66.	41.	54.9	0.843	SE.	w.	2	1	9, var. ci.		Hep. T. 2, Vom.	
	26 W.	29.79	66.	48.	57.	73.	42.	54.9	0.843	SE.	SW.	1	1	10, var.		Hæmop. Vom. T. Pn.	
	27 Th.	29.73	63.	53.	58.	65.	50.	56.3	0.946	SE.	SW.	1	1	ci.-s. cu.-s. n.	.25	Neu. T. Hep. Rh. Ac.	
	28 F.	29.64	63.	54.	58.5	66.	52.	53.9	0.842	SE.	SW.	3	2	cu. cu.-s. ci.-s.	1.02	T. Di. 3, Inf.	
	29 S.	29.90	61.	47.	58.4	67.	45.	50.	0.875	SW.	w.	0	3	ci.-s. n.	.20	T. Di. 2.	

EXETER. Lat. 50.45.0 N.; Lon., 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTER, M.D.

Oct.	23 S.	29.980	30.042	62.7	54.6	58.6	64.3	51.	55.	0.920	SW.	S.	2	8	7, cu.	.02	Serous apoplexy.	
	24 M.	29.942	29.836	64.2	52.8	58.5	67.3	47.5	56.3	0.946	S.	S.	2	6	4, cu.	.00		
	25 Tu.	29.682	29.792	63.6	48.	55.8	67.6	42.7	56.	0.970	S.	w.	2	6	2, cu.	.12		
	26 W.	29.569	29.538	59.	49.6	54.3	60.	53.8	54.3	0.944	SE.	SE.	3	9	8, cu.	.04		
	27 Th.	29.534	29.512	61.7	50.2	55.9	64.6	45.	54.	0.980	SE.	SE.	2	3	7, cu.	.30		
	28 F.	29.543	29.498	59.	47.	53.	59.7	42.2	53.3	0.944	SW.	SW.	2	4	7, cu.	.14		
	29 S.	29.936	29.960	55.	42.	48.1	64.5	37.	42.7	0.807	NW.	w.	1	0	3, cu.-s.	.2		

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

Oct.	23 S.	30.028	61.0	54.4	58.3	63.0	57.7	0.944	S.		1.0	10	0.09			
	24 M.	30.069	60.0	50.4	56.5	64.0	56.3	0.893	SE.		0.5	4				
	25 Tu.	29.721	61.0	51.4	56.8	63.5	55.3	0.893	SE.		2.0	9				
	26 W.	29.603	57.0	47.4	54.8	63.0	56.4	0.893	SE.		1.0	6				
	27 Th.	29.589	62.0	51.4	56.1	65.0	56.1	0.946	SE.		2.0	5	0.26			
	28 F.	29.463	59.0	56.4	56.1	62.0	54.4	0.893	S.		0.5	10	0.47			
	29 S.	29.894	56.0	48.4	52.3	57.0	56.0	0.816	NW.		0.5	8	0.53			

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

Oct.	23 S.	30.000	30.025	60.5	56.5	58.5	57.3	0.944	SW.	SE.	1	0	0	8, cu.-s.		Di. 3. [fant]	
	24 M.	29.912	29.804	60.5	55.5	58.	54.7	0.867	SE.	SE.	1	0	0	4, ci.-s. cu.		Di. 2, Jaundice (in-	Ch. English.
	25 Tu.	29.681	29.745	61.	56.	58.5	55.6	0.893	SE.	WSW.	1.5	0	0	5, cu.-s. ci.			
	26 W.	29.538	29.523	57.	55.	56.	52.7	0.867	SSE.	SE.	1.5	0	0	7, cu.-s. n.			Phthisis. [(child).
	27 Th.	29.456	29.442	60.5	53.5	57.	55.6	0.893	SE.	SE.	2	0	0	7, cu.-s.		Hæmop.	Congen. dis. of heart
	28 F.	29.476	29.510	58.	54.5	56.2	52.6	0.890	SW.	SW.	1.5	0	0	6, cu.-s. ci.-cu.	.097		
	29 S.	29.860	29.914	54.5	51.	52.7	48.	0.815	WSW.	WNW.	1.5	0	0	5, ci.-cu. s.	.305		

NEWS AND TOPICS OF THE DAY.

[Continued from page 960.]

CENTRAL CRIMINAL COURT. Oct. 24. (Before the Recorder.) Henry Hamilton, described as a surgeon, surrendered to take his trial for an assault upon Elizabeth Brown. The defendant, who was an advertising doctor, practised in King William Street; Strand; and the prosecutrix, a young woman twenty-two years old, went to consult him; and according to her evidence, he told her she was in the family way, and then made disgusting overtures, and proceeded to commit acts of indecency on her. The Recorder having summed up, the jury, after a short deliberation, returned a verdict of *Guilty*.

On October 20th, the prisoner was brought up to receive judgment.

Mr. Parry, on behalf of the prosecution, said that he had to call to the notice of the Court the fact that the prisoner was a complete impostor; the advertisements put forth by him were a false pretence, as he styled himself Dr. Hamilton, of the Royal College of Surgeons, when he was not a surgeon, neither was that his name.

Four ladies, and ten highly respectable gentlemen gave the prisoner a good character: but in cross examination they admitted that they did not know him to be an "advertising surgeon".

The prisoner said the reason he practised under the name of Hamilton was that Dr. Hamilton was formerly his partner.

The Recorder, in passing sentence, said that although the circumstances of the case surrounded it with difficulty, and made it one of an aggravated character, the jury could not have come to any other conclusion than they did. It was a most gross and serious matter: for a woman, when she placed herself in the hands of a medical man in such circumstances, was in a measure defenceless. It was of the utmost importance that women who were compelled to seek advice, and expose the maladies under which they laboured, should not be in any way deterred from doing so by the fear that their position would be abused and taken advantage of. He should not deal harshly with him because he was not a regular practitioner, nor because he was an advertising doctor, but for the reason he had stated. He then sentenced him to twelve months' imprisonment in the House of Correction. (Abridged from the *Times* of October 25 and 27.)

MYSTERIOUS AFFAIR AT THE HYDROPATHIC ESTABLISHMENT AT MALVERN. The *Sun* of October 29th contains an account of the circumstances attending the commission of a robbery from the apartments of a gentleman visiting Malvern. The following is an abridgment of the statement:—About the middle of July last, Mr. S. Kelsell, a gentleman of independent property, placed himself under the care of Dr. Wilson, a hydropathist at Malvern. Among the servants at the place was a man named David Filtness, with whose wife Mr. Kelsell is said to have made a pleasure excursion of a fortnight in the country, in the early part of September. Immediately upon Mr. Kelsell's return, Filtness absconded, taking with him £246 in gold and notes, with a diamond ring, and other property. In the early part of October, Filtness rendered himself up to justice, and has been examined before the magistrates at Malvern. He stated, on his examination, that the money was given to him by Mr. Kelsell for consenting to the commission of an abominable offence; which was at once denied by Mr. Kelsell. He has been committed for trial at the next Worcester Assizes. The accused attempted to implicate many in his alleged criminal practices.

EDINBURGH CHAIR OF NATURAL HISTORY: DIFFICULTIES IN THE WAY. It appears that Mr. Jameson's offer to resign his appointments is conditional upon the Town Council appointing his nephew his successor as Keeper of the Museum. Though the Town Council are patrons of the office of keeper, the Crown has the patronage of the Chair of Natural History. The two appointments ought to be, and always have been, held by the same individual, and if they are now to be separated, it is not likely that Professor Edward Forbes, or any other man of equal eminence, will accept of the Chair of Natural History. Apart from the division of emoluments, the irksomeness to a professor of having another party placed over the objects with which his lectures have to be illustrated seems quite enough to create many inconveniences and hindrances to efficiency. During the ensuing session, Dr. Traill, Professor of Medical Jurisprudence, is to give the course of natural history, the incumbent being disqualified through age and infirmity. We trust that a liberal

pension may be conferred by Government upon the retiring professor, in testimony of the sense which is universally entertained of the great and long-continued services which he has rendered to science; and we also hope that the character of this important chair may not be impaired by its partition from the keepership.

GIFT TO THE "GAZETTE DES HÔPITAUX." A subscriber for twenty-five years to the *Gazette des Hôpitaux*, as a return for the instruction derived from its pages, has presented to its proprietors the sum of 10,000 francs (£400), on the following conditions:—1st. That his name be concealed. 2d. That 3,000 francs be given to the authors of the most useful and practical papers inserted in its pages, and 7,000 francs to diminish the subscription of those who could not afford to pay the entire sum. The proprietors of the *Gazette* now offer to give their journal for twenty francs to 200; for fifteen francs to 200, and for ten francs to 100 subscribers.

CANADA MEDICAL JOURNAL: THE ARREARS OF ITS SUBSCRIBERS. The editor of the *Canada Medical Journal* has an abundance of readers who have promised to pay, but too few who really perform this promise. In his February number, he thus brings matters to a crisis:—

"As the subscribers have not paid up in the manner that we anticipated, we shall not issue the first number of the second volume until April, when it will appear at the same time with the number for that month. We have been induced to adopt this measure, from the difficulty we have experienced in convincing our readers that, to support a medical journal, money is really necessary; and many of them may think that, because the monthly visit of the Journal brings them no greater trouble than to send to the post-office for it, or expense than to pay the postage, that the publication entails very little expense or trouble upon its managers. We beg to disabuse their minds on this point. Journalism is both expensive and troublesome; and, though we cheerfully undergo the latter, we have no idea of encountering the former. In such matters, plain speaking is always best; and we give our proposal to the profession as follows: We will go on with the *Canada Medical Journal*, if you pay your subscriptions before the 1st of next April; if you do not, the Journal must cease. Our subscription list shows that the revenue of the Journal, if paid up regularly, would amply cover all expenses, and even admit of the editors illustrating some of the articles with wood-cuts, etc."

SMALL POX LEGISLATION IN CANADA. At the close of the session of the Parliament of Lower Canada, the Governor-General sanctioned a bill, intitled "An Act to restrain the injurious practice of inoculating with the small pox." The preamble and enacting clause of the bill read thus: "Whereas it is highly expedient to restrain the injurious practice of inoculating with the natural small pox (*variola*); Be it enacted, etc., That any person who shall produce or attempt to produce, by inoculation with variolous matter, or by wilful exposure to variolous matter, or to any matter, article, or thing, impregnated with variolous matter, or wilfully by any means whatsoever, the disease of small pox in any person in this province, shall be liable to be proceeded against and convicted summarily before any two justices; and for every such offence shall, upon conviction, be imprisoned for any term not exceeding one month."

EPIDEMIOLOGICAL SOCIETY. Meetings for 1853-4. In 1853: Mondays, Nov. 7th, Dec. 5th. In 1854: Mondays, Jan. 2nd, Feb. 6th, March 6th, April 3rd, May 1st, June 5th, July 3rd, Aug. 7th. The meetings will be held at half-past 8 p.m., at the house of the Royal Medical and Chirurgical Society, 53 Berners Street.

MEDICAL SOCIETY OF LONDON. The following papers are announced as intended to be read at the ordinary meetings of this society.

Saturday, November 5th. J. R. Cormack, M.D., "On Cholera".

Saturday, November 12th. R. H. Semple, M.D., "On the Pathology and Treatment of Cerebral Diseases."

Monday, November 14th, in the Physiological Section. Edwards Crisp, M.D., "On the Form and Weight of the Heart, the Diameter of the Aorta, and the Size of the Blood-Corpuscles, in the various classes of Vertebrate Animals."

Saturday, November 19th. Haynes Walton, Esq., "On Inflammation of the Eye-Ball, especially that form of it usually called Iritis."

Saturday, November 26th. E. J. T. M.D., "On Metritis."

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLV.

LONDON: FRIDAY EVENING, NOVEMBER 11, 1853.

NEW SERIES.

FRATERNITY BETWEEN METROPOLITAN AND PROVINCIAL PRACTITIONERS.

TWENTY-ONE years ago, when the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION was founded, there prevailed in the provinces strong feelings of distrust and jealousy of metropolitan physicians and surgeons. In fact, it was in no small degree owing to the arrogance of the London magnates, and to the depreciatory attitude which they assumed towards their provincial brethren, that so many rallied round our Association in its earlier years. The Provincial Association was, in fact, established and originally supported with the view of vindicating, before the world, the highly advanced state of the profession in the provinces, of maintaining its privileges, and securing its progress. These objects have been, all must admit, accomplished in no small degree. The advance of the new institution has been ever onward, in spite of many difficulties and discouragements which have beset its career; and with this prosperity, old jealousies, in place of being fostered, have gradually declined, and may now be truly said to have neither an existence nor an apology. The practitioners of town and country perceiving that by railways, journals, and improved education, their geographical and intellectual distinctions have been swept away, have seen that their true policy is to retire from even the appearance of antagonism, and to unite for mutual counsel and support, in one great fraternal association, in which the rights of all members shall be equal. These were the sentiments expressed by every one present at the dinner of the conjoined committees on Thursday last, and they are, we venture to aver, the sentiments of the five hundred gentlemen who have joined the Association during this year, of hundreds about to join our ranks in January, and also of a vast majority of the original members who, from the causes already stated, were once united to each other by very different bonds from those which now exist—by the necessity for protection, and by the jealousy of those who are now firm friends and active allies.

A great ethical movement is at present going on within our body, which cannot fail, ultimately, to cement together still more firmly than ever all the loyal and honest members of the medical profession. The two fundamental principles upon which the Medico-Ethical Committee of the Association and the Gratuitous Advice Committee of the Metropolitan Branch proceed, are cooperation with each other, and the careful collection and digestion of the opinions and facts supplied by all who are willing to contribute them. In subsequent numbers, we propose to direct attention to the proceedings and aims of the two committees. In the meantime, on their behalf and at their request, we earnestly invite all who have information to give, to forward it freely and early to the respective secretaries. The old jealousies between town and country must be buried in oblivion, since fraternity between metropolitan and provincial practitioners is not only morally right, but is, likewise, the best professional policy. Without this fraternity, the power and influence of the profession can never be increased.

ORIGINAL COMMUNICATIONS.

NOTES ON THE PATHOLOGY AND TREATMENT OF CHOLERA.*

By JOHN ROSE CORMACK, M.D.

The following notes are not offered as a complete paper on cholera; and they are simply intended to present, in a condensed form, the leading pathological and therapeutical opinions adopted by the author, after a careful study of the disease in books, and at the bedside. The views which are unfolded are the same as those which I espoused anonymously in the *London Journal of Medicine* for 1849, and in a speech delivered at the Westminster Medical Society, on October 6th of the same year.

To give some degree of method to the remarks, they are arranged under the following heads:—

- I. MANNER OF STUDYING CHOLERA.
- II. DIAGNOSIS OF CHOLERA.
- III. OBSERVATIONS MADE BY THE AUTHOR DURING PART OF THE EPIDEMIC OF 1848-49.
- IV. PATHOLOGY OF CHOLERA, INCLUDING ITS MORBID ANATOMY.
- V. TREATMENT OF CHOLERA.

I. MANNER OF STUDYING THE DISEASE.

The majority of authors who have treated of cholera, have drawn their descriptions too exclusively from the more appalling forms of the disease, and have too generally spoken of the diarrhoea concurrently abounding, especially at the beginning and at the decline of an outbreak of severe cholera, as if it were a malady different in kind, as well as in degree. To this obvious but common error must, in a great degree, be ascribed the unsatisfactory nature of the literature of cholera, and the perplexing contrariety of opinion which prevails among practitioners as to the pathology of the disease, and its appropriate treatment. The phenomena of aggravated cases, and the appearances found in the bodies of those who died, have unfortunately formed the chief materials out of which theories have been constructed; and the natural history of the disease, the true key to the mystery, has been nearly neglected; or, in other words, adequate attention has not been bestowed upon the natural course of those cases which, from being essentially mild in degree, or in some other way favourably circumstanced, terminate in recovery without much, or without any, medical interference. In all diseases, very much is to be learned by the minute study of simple and uncomplicated cases, which have not been disturbed in their career by any treatment; and assuredly no advance can be made in rational medicine by those who take their notions of what a disease is only from books, or only from their own observation of patients with whom active measures have been adopted. Therapeutical experiments must be jealously corrected by the observation of simple cases, which have been mainly confided to nature; and recoveries must not be promiscuously set down as cures. There are unfortunately some among us very prone to commit this error; while others, by pursuing no plan of treatment upon clear principles, or with the necessary firmness, or with the slight modifications which may be required from day to day, become sceptical of the therapeutical resources of medical science, and yet never suspect that their scepticism is mainly

* The substance of this paper was read before the Medical Society of London on the 6th current.

the fruit of their incapacity to furnish for themselves legitimate data. Cherishing, however, as I do, a strong faith in the efficacy of many of the curative means employed in practice, I equally hold that one of the best ways of learning the skilful use of these means, is patiently to watch and study the phenomena of spontaneous recoveries. It is a species of investigation which is replete with benefits to all concerned. By pursuing it, the practitioner procures and secures for himself a stock of knowledge which neither the theorist of the closet, nor the empiric of the day, can ever wrench from him nor deteriorate; and which will impart to his practice an amount of well founded self-confidence and of success, which could in no other way be obtained.

Numerous illustrations of the truth of these remarks readily suggest themselves; and probably no one has any objection to offer to them, except that they are very prosy and common place. Nevertheless, if we turn to the current medical literature, we find that they are practically disregarded by some of our most ready writers. They are too plain and homely to win the favour of those ambitious men who yearn after brilliant theories, and seek to captivate the world by special systems and new formularies. But while the evils which flow from the want of adequate attention being paid to the natural history of disease are conspicuous, the advantages of this study are equally striking in the improved treatment of many diseases; among which may be mentioned some of the most formidable disorders, such as pneumonia, tuberculosis, syphilis, and fever.

Thousands of cases of scarlet fever recover almost spontaneously, while others are obviously saved by the skilful use of remedies; but, on the other hand, not a few are tremendously rapid in their fatal career, and proclaim to the eye of experience, almost from the moment of seizure, that a sentence of death has gone forth, and that the hours of the victim are few and may be numbered. Now, although epidemics of scarlet fever differ much from one another in severity and in other respects, yet we often meet with the mildest and the most terrible cases occurring simultaneously or consecutively even in the same house. We are taught by the frequency of such occurrences that both classes of cases, though strikingly different in many of their phenomena, are the results of one morbid poison; and that the diversity of effects proceeds not from a diversity of poison, but from a difference in the quantity imbibed, and in the condition of the recipient. It is equally reasonable to regard tractable cholera and intractable cholera as pathologically the same; and therefore of course to include in the same category all the cases which are intermediate between these two extremes. If this rule were adopted, the mortuary statistics of cholera, as published in the newspapers, would be more truthful, and less appalling.

If we hope to learn from nature, we must interrogate her fairly. If we wish to discover the essential character of any epidemic—be it of measles, of scarlatina, of cholera, or of any other disease—we must not only follow the rules which have been above stated, but we must also proceed a step farther. We must observe and study the condition of the whole population during a given period, and within a given district: we must, in particular, trace out and record the characters by which the maladies of all the sick persons are characterised; and we must not begin by adopting an ideal standard of what are the essential features of the disease to be investigated, and then limit our observations to such instances as fall within this ideal boundary. Is it not by adopting foregone conclusions as to the very essence of the questions to be solved, that even good observers have accumulated materials too faulty to be safely used in the construction of opinions? But, however painstaking and conscientious a single observer may be, he cannot singly collect all the materials for a complete history of an epidemic; and this is a fact too commonly forgotten. Isolated observers can do little for epidemiology, compared with what might be accomplished by district societies of medical observation, in which the members adopted by mutual consent

an uniform plan of treatment and of reporting. If such societies were now to be extensively formed and carefully organised, a mass of trustworthy data would be obtained; and there is no other method by which many disputed questions relating to cholera, and epidemics generally, can ever be settled.

Painfully impressed with the imperfections of the following observations, I have ventured to introduce them by these prefatory remarks. My little contribution of facts may be useful apart from all theory; and, while I freely state the opinions which I have formed, I avow with equal frankness my conviction that, notwithstanding all that has been written regarding cholera, sufficient data do not yet exist to entitle any one to feel quite confident that his opinions are built upon an unassailable foundation.

After briefly reciting a chapter from my own experience, I propose to state briefly the opinions which I have been led to adopt, and which I have based upon that experience, in conjunction with a tolerably extensive course of reading upon the subject of cholera.

II. DIAGNOSIS OF CHOLERA.

The diagnosis between English cholera and Asiatic cholera has engaged the attention of many writers; but I agree with Dr. Knox in thinking that it is "useless and impracticable" to discriminate between them. That judicious author well remarks:—"No means of discrimination are generally known, or we should not hear one practitioner saying that he could see no difference in the diseases except in the number of the cases; and another, that he should be of opinion that he had been treating a case of Asiatic cholera, had that disease been present in the country." [KNOX, Alex., M.D., *On Cholera*, Dublin, 1849.] Slight cases of cholera, like slight cases of all diseases, are the least easily recognised, and when cases of cholera occur sporadically, they are doubtless very often mistaken as to their nature, even when they are to a certain extent correctly treated. On the other hand, severe cases generally present certain symptoms in combination, which leave little difficulty in determining their character. The symptoms to which I refer, are vomiting, serous purging, cramps, prostration, coldness, collapse, and suppression of urine. I have, however, seen every one of these symptoms concurrently present in the same patient upon three different occasions, the disease being decidedly not cholera, and probably being fungus of the stomach, similar in character to the uterine disease known by the name of cauliflower excrescence. The gentleman to whom I refer, is subject to severe attacks of pain in the stomach. Some days ago, after much agony, at last alleviated by the external use of belladonna, he vomited several quarts of fluid greatly resembling dirty water, after which he nearly fainted, became extremely prostrate, and then suffered great pain from cramps in the legs. By the application of warmth externally and of turpentine fomentations to the extremities, the alarming coldness of the body was removed within an hour: and he then passed twelve hours without any fresh symptoms to excite alarm. He then, however, became faint, cold, and nearly blind. In these circumstances I was summoned. I had left him an hour previously tolerably well; I now found him collected but deadly cold; the countenance was haggard, and he complained of almost total loss of vision, painful cramps, and utter prostration. After some hours of anxious treatment, in which the external application of warmth and stimulants, along with the internal use of sulphuric acid, were the predominating features, his almost suspended animation returned. He collapse now described was not ushered in by vomiting or purging; but some hours after reaction had been established, he discharged from the stomach by vomiting several quarts of a fluid, resembling cream in consistence and tar in colour. This was undoubtedly blood which had been poured into the stomach immediately antecedent to the time of his rapidly becoming affected with the symptoms simulating the cold stage of cholera.

In this instance (without a previous knowledge of the

history of the case) its character might, and, indeed, must have been mistaken. This case strongly impressed me with the truth of the opinion which is generally, though not universally held, that the collapse and spasm of cholera are not usually, if ever, the direct effects of a morbid poison, but simply the consequences of the serous hæmorrhage resulting from the action of a morbid poison.

A few days before the occurrence above described, my friend Mr. B. W. Richardson had under his care a man who suffered in a very similar way, though the case was not one so liable to be misunderstood. The following notes were given to me by Mr. Richardson.

S., aged 65, was seized, while out of doors, on the 27th of October, 1853, with pain in the stomach, followed by the vomiting of a large quantity of dark coloured blood mixed with clots. He went home and kept quiet; but on the following morning immediately after breakfast, the vomiting having returned with increased violence, he came to Mr. Richardson. He was very cold and faint, his pupils were dilated, his face was pinched, and his voice was weak. There was likewise at intervals involuntary jerking of the limbs. He was ordered to go and keep himself warm in bed, and to take every six hours ten minims of aromatic sulphuric acid in an ounce of the decoction of cinchona. He continued under this treatment for three days, without any return of the symptoms; and he is now perfectly restored.

The collapse of cholera may be closely imitated by the secondary consequence of the serous purging, induced by elaterium and other drugs in inordinate doses.

I have seen scarlet fever patients become collapsed, and die rapidly from sudden and profuse serous purging. Death in typhoid fever likewise occasionally happens in the same way, and I am not sure that in such cases the diagnosis can be made, except from determining the presence or absence of the eruption. In enteritis there is often a series of symptoms similar to those of cholera.

From the preceding remarks, it is very evident that other causes than the cholera poison may induce collapse and spasms, similar to those which characterise the cold stage of cholera. The differential diagnosis has, in fact, repeatedly been a matter of difficulty, both with the medical jurist and with the practical physician. The way to avoid error is to investigate thoroughly every circumstance, and to bear in mind that different causes may, and often do, produce similar symptoms.

III. OBSERVATIONS MADE BY THE AUTHOR DURING PART OF THE EPIDEMIC OF 1848-49.

Before proceeding to speak of cases of disease, it may be well to give a short account of the localities within which they occurred.

The field of observation embraced the suburban parish of Putney, part of which is close to the Surrey bank of the Thames, and contains some insalubrious localities, although, speaking generally, it is a remarkably healthy district. Towards the close of 1848, I was one of a committee of parishioners to whom was intrusted the domiciliary visitation of the whole parish. The following is a verbatim copy of the report given in to the Local Board of Health by the sub-committee which visited that part of the parish described as "the Lower Richmond Road, commencing at Windsor Place, taking in Putney Lower Common, right and left, to the extremity of the parish, where it joins the parish of Barnes". Some parts of Putney Lower Common are close to and almost level with the river Thames.

REPORT, etc. "We have visited every house in this district, and have to report that we find the whole in a very healthy state. But, although we have pleasure to state so much generally, we feel bound to express our surprise that that part of our district on the Common, to the right of the Lower Richmond Road, should be so, for we find the cottages there, or most of them, overcrowded with inmates; some with little or no furniture in them, and from five to seven persons being in two rooms. Dirty, badly clothed, shoeless, and miserably poor boys and girls sleep together of greater age than is

prudent. There are many children running about the Common. In many cases the mothers and fathers were out at work, and the children left in the care of the eldest girl, perhaps about ten years old, without education. No clergyman visits the neighbourhood, nor any members of the Putney Visiting Society. The premises are in a bad state of repair, and the poor persons are much exposed. There is one open privy assigned to ten houses, of which all the tenants complain. A general sink is in the centre of these houses, which occasionally gets stopped up, and then the water lies on the surface, opposite, and near to the doors of the houses.

"These ten form a kind of square. To these, and fourteen other houses, in all twenty-four, there is a good well; but it is open and exposed, and is dangerous among children; and in this small locality we think there are more children than in any other place of its size within our recollection.

"In this place some privies are good, and others bad. The same remark applies to the drains. Some tenants have no drainage, and the wash water is thrown from the houses upon the common. The whole of this property is so situate as to be capable of drainage at little expense. As the parish holds houses here, we recommend this to be done, and that the owners of the adjoining property be required to join in the expense of making an improvement generally, so as to make the spot more conducive to health than it now is. There is a dung-heap here, which must be removed; for, independently of the quantity of dung, the heap tends to stop the soil of a privy from taking its proper drainage course: this drain or ditch requires cleansing.

"There are a few swine in the neighbourhood, but we find no accumulation of dung, nor any annoyance arising from pigs, except in the case of a Mr. P., after mentioned, whose privy and pigsty are in too confined a spot, and too close to several small tenements, to be wholesome.

"The above remarks apply specifically to the spot before named: and as the other parts of our district are not particularly observed upon, it must be understood that we have not anything to report regarding them.

"The owners of the above property are the Parish, Mr. F., Mr. S., and Mr. W.; and the objectionable parts (in connexion with the number of inmates more particularly) are these.

"PARISH PROPERTY. Tenant G., seven persons in two rooms, seven feet high. Privy in bad condition: no drain.

"Tenant J. S., seven persons, five children, none at school. Eldest son twenty; girls ten to seven. Girls sleep with mother and father. Two chairs and one table. Boys sleep on floor. Room dilapidated. Privy bad. Children healthy: good drain.

"Tenant J. R., wife and three children. Boy nearly fifteen. Girls ten and thirteen. Girls and boy sleep together. Privy wants emptying. The house is otherwise very clean.

"Tenant W., wife and five children: two rooms: place in good order: but the tenant should acknowledge a tenancy. It appears the land belongs to the Parish, but the tenant built the house, etc., by permission.

"Tenant T. E. Very clean and good.

"Tenant Mrs. M. She and her son live together in one room. She is eighty-three, and he forty-four. Drains right, but privy wants emptying, and she cannot afford to do it. [N.B. This tenement is not with the others, but is situate to the left of the Lower Richmond Road, opposite Langshaw Lodge, and is merely spoken of here to keep the Parish property under one head.]

"MR. F.'S PROPERTY. It consists of ten houses in a kind of square: in the centre are two sinks, and at the end in a corner one open privy.

"Tenant M., wife and four children. Three rooms.

"Tenant L., wife and five children. Three rooms.

"Tenant R., wife and six children under eleven. Three rooms.

"Tenant H., wife and two young children.

"Tenant W., wife and five children. Eldest son sixteen. Eldest girl fourteen. All sleep in one room, but in two beds. The man out of work, and a most miserable family.

"Tenant S., wife and ten children; but six only at home, from eleven to seven years. Two rooms and three beds, all sleep up stairs. Caroline, eleven years, sleeps alone: five boys together: and husband and wife together.

"Tenant W. and wife. Three rooms. Roof bad, and wet comes in. Woman in delicate health.

"Tenant Mrs. C., and four inmates: three adults and two infants.

"Tenant W. S., wife and five children. Eldest boy at home is eighteen, and eldest girl thirteen: only two rooms. Mother and father, and a little boy of three years sleep together in one bed, and in another bed in the same room the other three boys and girl sleep.

"Tenant C., seven inmates. They use the general privy. No drain; no sink; they throw the waste water before the door on the common.

"MR. S.'S PROPERTY. Tenant P., wife and two children. Plenty of room and underlets. The privy is badly constructed, as also the pigsty. There is one pig in it. The sty is covered in, but too close to three or four tenements; and all the inmates complain.

"This person's dung-heap is away from the premises, but close to Mr. S.'s other property, near L.'s, after mentioned, the soil of whose privy is stopped by it. It should be removed, and the drain or ditch dug out, then there would be a fall, and all would go off clear. This person (P.) is a night-man, and has been known to deposit night-soil here, and some few months ago was made to remove it. Such acts as these should be narrowly watched.

"Tenant B., wife and child. These have all requisite conveniences, with a privy for this and the next named house; but premises are too close and offensive to this and the other tenants close by.

"Tenant T. and son. The preceding remarks apply here. The houses join.

"Tenant L., and wife only. No sink: no sewer: wash water thrown on common. There is a privy conveniently placed at the end of the garden with a fall; but P.'s dung-heap before named, prevents the soil from being carried off. This house does not adjoin the foregoing houses.

"MR. W.'S PROPERTY. Tenant K., wife and child. Tenant R., wife and two children. Tenant D., wife and a little boy.

"The above occupy three tenements in a line with L.'s. They are in want of a drain to connect it with a ditch behind at the end of garden which is well situated. Their privies are at the end of the garden, well away from the houses, overhanging the ditch, which requires digging out; and then, when P.'s dung-heap is removed, the soil would go away in all probability. All complained of P.'s dung-heap, which makes their privies less comfortable.

"There are other houses in this locality not belonging to the foregoing owners. They need not be remarked upon, except

"Tenant J. R., wife and four children. Three rooms. Privy requires attention. They complain of it because their overflow is caused by P.'s privy being badly constructed and out of order. They back each other.

"Tenant B., wife and five children. The privy is in too confined a place, requiring more air. It leads out of B.'s workshop. He is a carpenter. It smells, and must be bad for him who is necessarily confined in it for hours together.

"G., a gardener. He should remove his dung and decayed vegetable matter to another part of his premises, and he has much space. His heap is offensive and unwholesome to Mrs. T. and Mrs. C., behind whose premises it is.

"Wm. S. Privy and drain connected with it were bad. He is clearing them out. There is another drain farther off which should be connected with the preceding. The tenant justly complains of it.

"Mr. H. and Mrs. W. Mr. C. owner or mortgagee. These houses run in a line with Mr. S.'s. There requires a drain to be made here. The houses must be very unwholesome. There is a considerable quantity of water under the sitting rooms, and we learn it remains. It wants to be let off. There is a drain close by, with which it can be easily connected. It would seem as if these rooms were built over a

ditch or fall of water from adjoining grounds. It may be a spring.

"Tenant G. Owner M. In two rooms on the ground floor, he, his wife, and five children live. All sleep in one room. They seem miserably poor. The husband and wife were out at work. He is a gardener with M. It seems a damp place in the winter, but is very open, and we saw no nuisance, but extreme poverty." [Then follow the signatures.]

The village of Putney was, at the period referred to, and still is, extremely ill drained. Nevertheless, from the comfortable circumstances in which most of the inhabitants are placed, and the general absence of excessive crowding, it is a healthy place; and the description which has just been given of the Lower Common is not applicable to the village, nor to the parish generally. I must state, however, that in 1849, there were some houses even in the best parts of Putney which formed notable exceptions; among which I must include my own residence, the drainage of which had never, up to that period, been performed, except by a series of cesspools. In my house, two cases of cholera occurred; and although both recovered, one got well after all hope had been abandoned. Putney Heath and the adjoining neighbourhood are famous for free and bracing air; and, lying far above the range of the river vapours, ought to present circumstances the most favourable for health. At the period, however, to which I refer, ancient unemptied cesspools were in close contiguity with the mansions of the affluent; and in some instances these dangerous depots of filth still remain, saturating the surrounding soil with their exudations.

The suburban village of Fulham, on the Middlesex bank of the river, and only separated from Putney by a bridge, is even worse drained than Putney; and, at the northern extremity of the village, on most days of the year, the air is charged with a heavy stink. I have heard it said that there is nothing unwholesome in this smell; but I cannot help thinking that the causes which generate it likewise give rise to unwholesome emanations. Around the episcopal palace there is a moat or great tidal ditch, which, in its circuit, comes up pretty close to the houses in the western side of the High Street, and to the cottages in the road leading to the Fulham fields. This moat has existed for about six hundred years; and, unless the commissioners of sewers attack it as a dangerous nuisance, it is likely to remain for six hundred years longer; for there is no one sufficiently interested in filling it up. In fact, it is by occasionally discharging its contents through the Fulham sewers, that the imperfect drainage of the village is accomplished.

The subsoil of Putney Lower Common and of Fulham is a stiff clay; but a great part of the village of Putney and of Putney Heath is situated on gravel, through which a large fall of rain rapidly disappears.

All the patients referred to in the following notes were in comfortable circumstances; and, though some of them were in a humble rank of life, they had the full benefit of efficient domestic attendance. From this circumstance, combined with the early period of the disease at which I was sent for, the cases afforded great facilities for studying its natural history, and for successfully applying remedies.

Having now sufficiently glanced at the characteristics of the locality about to be referred to, it becomes necessary to describe the cases of disease which were under treatment during the period specified. We cannot place truthfully on record the constitution of an epidemic, by simply detailing characteristic cases; it is necessary to bring into some degree of prominence every description of disease which has come under notice during the period to which our history refers. By doing this carefully and faithfully, and by such means only, can we correctly communicate to others the facts which we have observed, and upon which our generalisations are founded. Our descriptions, it is true, may in the estimation of some be redundant and overloaded; yet, in epidemiological inquiries, it is safer to be prolix than meagre; in the one case, the reader is able to judge for himself; but in the

other, he is either unfairly entrapped into conclusions, or is prevented from fully testing their soundness by the light of his own reason.

These considerations induce me to mention, categorically, three groups of cases which particularly arrested my attention during the epidemic of 1848-49, all of which distinctly partook more or less of the prevailing epidemic influence.

The following is a summary description of the three groups of cases now referred to :—

FIRST GROUP. *Quotidian fever*, or *febricula*, with diarrhoea, which was not at first serous; hepatic, splenic, and gastro-enteric symptoms being in some cases prominent and in others absent. Cases of this group may be called *epidemic diarrhoea*.

SECOND GROUP. Similar to the first group excepting that the purging was always serous and the type was either remittent or irregularly intermittent. The secretion of urine was scanty or absent. Cases of this group may be called *cholérine*.

THIRD GROUP. The severer cases of the second group passed by insensible gradations into the third; the distinction between the aggravated cases of the one and the milder cases of the other being purely arbitrary and one of degree. The cold stage was sudden and protracted, and passed into collapse. This we term *cholera*.

In the above division, discharge from the bowels is made the basis of classification; or, at least, one of its essential features. This, however, without explanation, might mislead; and I therefore subjoin a more detailed method of grouping, which enables me to embrace every case of acute disease which came under my care within the period embraced, excepting a case of menorrhagia. Of neuralgia, in a variety of forms, I had numerous cases; but the predominating forms were *ague* and *neuralgia of the feet*. Of the latter, I saw three cases in September 1849; and I have had only one since that period. I felt it quite impossible to resist the conclusion, that every case of disease then prevailing manifested more or less the characters of periodicity, associated with neuralgic or choleraic symptoms. At the commencement and close of the cholera epidemic, neuralgia was common; but when the epidemic was at its height, cholérine and cholera seemed to swallow up all other forms of disease.

To present clearly my meaning then, I would say that during the height of the epidemic, the choleraic type was impressed on all diseases, or that there was nothing to be seen except choleraic disease; whereas, at the advent and subsidence of the epidemic, the neuralgic type was distinctly visible, and became gradually displaced by serous diarrhoea, and at last by algide cholera.

During the late epidemic, I recorded the following well-marked

GROUPS OF CASES :—

1. Quotidian fever and quotidian neuralgia; and diarrhoea a subordinate symptom.
2. Quotidian, tertian, and irregular neuralgia—no diarrhoea.
3. Quotidian fever, with gastro-enteric and hepatic symptoms—diarrhoea?
4. Dysentery.
5. Remittent and intermittent serous diarrhoea (cholérine), cramps, and prostration.
6. Cholera in the first degree.
7. Cholera in the second degree; the algide stage being complete.

I feel quite satisfied in my own mind that there is nothing fanciful or overstrained in this grouping of cases; though I willingly admit that in several instances it was only by dint of minute investigation that I could obtain evidence of the occurrence of intermissions and remissions at regular periods. If a few cases be well observed, the truth of my statements may often be corroborated in the future: but of course by those who have hundreds and thousands of cases to deal with, no correct data can be

established regarding the affinities and course of such a pestilence as cholera.

I subjoin some choleraic cases which were observed with great care, and reported many times daily at the time of their occurrence.

CASE I. Mrs. P., aged 30, residing at Holcrofts, Fulham. On the night between August 31st and September 1st, 1849, she was seized with diarrhoea and cramps in the legs, for which she took repeated doses of a mixture which I had prescribed for general use in the family in which she resided, to be used in such emergencies. She felt so much better on the 1st, that she did not think it necessary to have medical advice. On the 2nd, she continued to improve, and considered herself nearly quite well when she went to bed. On both of these days, she had sudden cold fits. About six o'clock in the morning of the 3rd, the characteristic symptoms of cholera set in with great impetuosity and suddenness. She remained in bed some time, unable to make known her condition. I was called to see her at 8 A.M., and found her vomiting and purging incessantly, and pulseless. She had a senile, haggard expression of countenance. The legs were quite cold, as were likewise the arms, face, and abdomen: the thorax was the only part of the body approaching to the natural temperature. The lips and tongue were also cold; and the lips were livid, as was likewise the countenance generally. The intellect was quite clear; she answered questions with great precision, though she articulated with some difficulty, and spoke in a feeble and sepulchral tone of voice. She had cramps in the calves of the legs, but in no other part of the body. There was an uneasy feeling at the præcordia, with a good deal of pain in the lower part of the bowels. She complained of excessive thirst. During the two hours which elapsed before I saw her, the quantity of fluid discharged by vomiting and stool was quite enormous. The discharge per anum had no fæculent odour, and entirely consisted of a fluid resembling the washings of raw meat. There were a very few shreds resembling flocculi of mucus seen floating in it. What she vomited was paler in colour, and was quite homogeneous: it a good deal resembled slightly dirty water. She stated that she had not passed any urine for twenty-four hours, but might have passed some with the stools. A grain of solid opium was administered in the form of pill; sinapisms were applied to the calves of the legs; and the lower two-thirds of the body were enveloped in a blanket, wrung out of very hot water. She was cautiously kept in the horizontal position; and dry heat was applied to the upper part of the body, to avoid the fatigue which would have been inseparable from removing her chemise. Two ounces of brandy were at the same time administered. In ten minutes from the commencement of this treatment, the pulse returned, and gradually increased. She was ordered to take a teaspoonful of the following mixture every hour:

R Tincturæ catechu ʒij.
 „ opii ʒij.
 „ cardamomi co. ʒj.
 Mist. camphoræ chlorof. ʒss.*
 „ acaciæ ad ʒijj. M.

At a quarter to eleven, Dr. James Bird saw her with me; and the following was her condition at that time. Considerable præcordial tenderness, extending to the umbilicus, and along the course of the colon. Respirations 40 in a minute; pulse 100, feeble, and labouring; considerable tenderness at the nape of the neck, accompanied with oppressed respiration and severe headache. The warmth of the body was maintained with great difficulty, by means of sinapisms and bottles of hot water. The mixture was continued; and a liniment of turpentine and pyroligneous spirit was ordered to be applied to the epigastrium and abdomen, until free redness was produced: also to the nape of

* The following is the formula for preparing the camphor-chloroform mixture, according to Messrs. T. and H. Smith of Edinburgh.

R. Chloroform, ʒi.
 Camphoræ ʒijj. M.

The camphor is perfectly dissolved; but, in consequence of the volatility of the chloroform, it is advisable to add another drachm of this fluid.

the neck, and along the spine. She was allowed to drink plentifully of soda-water, to each bottle of which two teaspoonfuls of gin were at first added, but afterwards omitted, as the heat of surface increased.

2 P.M. There had been some slight return of the vomiting, and four stools of the same character as in the morning. There was less abdominal tenderness, and tolerable heat of surface.

3 P.M. There was more warmth in the skin: and the body was bathed in a profuse perspiration. During my visit, there was some vomiting, and a copious discharge from the bowels, similar to that previously described. The interval between the doses of the camphor-chloroform mixture was increased to two and a half hours.

8 P.M. The condition (now and at half-past five) was very similar to that at three o'clock: there had been several stools, and some vomiting. The last motion contained more flocculi than had hitherto been observed; in other respects, it possessed the same characters. The abdominal pain, which was somewhat relieved by the liniment, having returned, it was re-applied. She took the two following pills immediately:

R Quinæ disulph. gr. vj.
Calomelanos gr. iij.
Opil gr. ss. Ft. pilul. ij.

Half of the following injection was administered directly, and the rest was ordered to be repeated in two hours, if required:

R Plumbi acetatis 3i.
Tinctur. opii 3iss.
Decoct. oryze 3viii. M.

4th, 9 A.M. She passed a tolerable night. The other half of the enema was not administered, as there had been no stool. There had been no urine passed. She had been in a profuse perspiration since last report; and, indeed, since between 2 and 3 P.M. yesterday. She had occasional sudden and very transient attacks of nausea, and these were generally accompanied with a temporary augmentation of the perspiration, which was then seen to stream down her face in greater abundance. The tongue was clammy and furred, except at the point, where it is dry and red. The pulse was 100, and the respirations 30 in a minute. She had finished the camphor-chloroform mixture prescribed at the first visit. There was great prostration, which had been relieved by each dose of this mixture.

2 P.M. About 11 A.M. she became much flushed, and complained of intense headache, with pain in the muscles of the back of the neck, and some flying pains of the limbs. The state of perspiration continued unabated. Pulse 130; breathing a good deal oppressed. At half-past one P.M., she passed between one and two ounces of very high coloured urine.

R Quinæ disulph. gr. iii.
Calomelanos gr. vj. M. pil. ij.

One immediately; the other in two hours, if the bowels have not been moved.

6 P.M. She had taken both the pills; but had had no stool. She had, however, passed fully a pint and a half of urine, which, though dark in colour, was not so much so as that mentioned in the last report. On examination, it was found to be acid, of sp. gr. 1022.5: it lost much of its dark colour on the application of heat, and became momentarily clearer; when there were seen, as the heat was continued, milk coloured filaments in abundance. The addition of nitric acid did not seem to produce any change; but, on boiling it with liquor potassæ, there seemed to be an aggregation of the filamentous or flocculent particles into larger bodies, with a clearer appearance of the urine.

According to the report of the nurse and of the patient herself, a marked improvement speedily followed the discharge of urine. She felt much better, and drank a tumbler of cold beef-tea, being her first application for that beverage during the day. She had drunk a large quantity of soda water. Her thirst was now much abated. It is necessary to note, that during yesterday and the night, and this forenoon, she drank many quarts of water and soda water. At

present, the perspiration continued; and was reported to be more abundant than during the height of the febrile paroxysm some hours ago. There was still a good deal of headache; pulse 90, respirations 26 or 28; but the pulse and respiration varied considerably from slight causes, as when she moved in bed, or attempted to raise herself on her pillow.

10 P.M. There was decided improvement in all respects, though she became very faint when her chemise was being shifted. At about 9 P.M., she had a scanty black, fluid, and somewhat fæculent motion. There had been no more urine passed. On sitting up in bed to take a little arrowroot with wine, she was seized with faintness, and had some vomiting.

R Opil gr. 4.
Camphoræ gr. ss.
Quinæ disulph. gr. iss.
Calomelanos gr. ii.
Extr. anthemidis q.s. ut fiant pil. ii.

To be taken immediately.

R Liquor. quinæ amorph. ℥xv.
Ferri sulphat. gr. 4.
Aque 3iss.

To be taken in the morning.

5th. She passed a good night: the medicine was taken as directed, and she had a few spoonfuls of thin arrowroot with wine at intervals during the day. In the morning early, she was described to have awoke pretty cool and comfortable; but between six and seven she became flushed, and had a good deal of headache up to noon. When I saw her at eleven, the pulse was above 100, and the breathing laboured; she was also restless and uncomfortable, but this state did not long continue. She had a black, tarlike, copious stool in the afternoon; after which there was some temporary exhaustion, speedily relieved by a little wine. The quantity of urine passed was excessive; it had now a pale straw colour. Pulse, at eight in the evening, 54; perspiration continued. A good deal of lachrymation was present.

R Calomelanos gr. vj.
Quinæ disulphat. gr. xii.
Pulv. opil gr. iii.
Camphoræ gr. iv.
Ext. anthem. q.s. ut fiant pil. vi.

One of these was taken at 4 P.M., and another at 8 P.M.

6th. At 9 P.M., the four remaining pills had been taken. Towards the afternoon, the perspiration began to moderate, but it never ceased, and still continued excessive. Pulse 78, irregular, small, and compressible. Respirations 32. No stool to-day; but an abundance of urine. She seemed extremely depressed, both in body and mind; and her necessary movements in bed caused much muscular pain. To have a tablespoonful of wine in negus every hour.

7th, 9 A.M. Seven ounces of wine were taken during the night, which was the quantity I had said was not to be exceeded. I found that the last dose had been given two hours before my visit; and that, from the longer interval, she had become cold on the surface, and alarmingly depressed. During the regular continuance of the wine, her condition was represented as more favourable. I directed her to have a tablespoonful of wine every second hour; and on the alternate hours, some veal broth or arrowroot, occasionally substituting the one for the other.

To take one of the following draughts every three hours.

R Spir. æth. sulph. co. 3 ss.
Mist. camph. chlor. ℥ii.
Tinct. cardam. comp. 3 ss.
Mist. acaciæ ad 3i. M.

Mitte tales iij.

Pulse 70, irregular and feeble; respirations 40, catching, and occasionally sighing.

3 P.M. Two of the draughts had been taken, and the wine, arrowroot, and veal broth, given as directed. She was much better; pulse 80, regular, and firmer than in the morning; and surface warm, and bedewed with a gentle perspiration. 3ii. of castor oil to be taken immediately.

Half-past nine P.M. There had been great improvement

since the afternoon, especially since the bowels were moved about two hours ago. The stool was of the consistence of thickish mortar, but not formed; it was of an inky blackness, with some patches of dark green. There had been much less urine passed to day than yesterday, and comparatively little sweating. To take a draught in the morning, similar to those prescribed above; and a pill of citrate of iron and quinine.

The subsequent history of this case it is not necessary to detail. Recovery was gradual. The use of alcoholic stimulants was freely resorted to, and seemed essential to prevent sinking. During convalescence she took—and apparently with great advantage—the citrate of iron and quinine.

CASE II. C. U., aged 2 months, residing in Putney Lower Common, was taken ill on the morning of the 18th August, 1849. She was violently sick, and refused the breast, or food of any kind; and before I saw her at noon, had had a great number of stools. The first towels which had been used, contained some matter like very soft clay-coloured mortar; but the towels in which the latter evacuations had been passed, though soaked therewith, were hardly discoloured in any way. When I was in the house, she passed a large quantity of inodorous, almost colourless fluid from the anus. A mixture of chalk, catechu, and opium was prescribed, and a little brandy in beef-tea was directed to be given *pro re nata*. In the evening, the child was somewhat better. On the following day, she was again worse; but the discharge was again moderated, and for some hours arrested, by means of small doses of acetate of lead and Dover's powder. On the 20th, she seemed improving. On the 21st, about 9 A.M., she had a rapid succession of copious fluid motions, from which time, up to death at 7 A.M. on the 23rd, being a period of forty-six hours, she had no discharge either from the bowels or bladder; and remained in a state of absolute collapse, with the eyes open, and sunken, and the countenance haggard. The alteration in the countenance was described to me as having taken place quite suddenly. By means of the diligent use of hot fomentations, the temperature was maintained at the natural standard throughout the whole of this time; and small doses of beef-tea and brandy were administered every half hour, so long as the power of swallowing remained. Shortly before death, the movements of the hands, arms, and legs, were very active; and this continued long after the surface had become quite blue. I was not present when the infant died; and those who were in attendance could not exactly say the moment at which life ceased; for after they had concluded that death had taken place, notable movements of the arms were observed.

EXAMINATION OF THE BODY, 9 hours after death. *External Appearance.* The countenance was haggard, the eyelids open, and the eyes sunken. The fingers were blue; and there were extensive marks of ecchymosis on the posterior aspect of the trunk, but in no other part of the body. In some degree, the extremely collapsed appearance had disappeared since death; and the fingers were certainly not so blue as during life. There was a total absence of cadaveric rigidity in any part of the body.

Head. The vessels of the pia mater were considerably congested; but not more than is usual in deaths from very many diseases. The brain was of soft consistence. There was no effusion under the arachnoid, or into the ventricles.

Chest. On opening the chest, there was a considerable layer of fat in the integuments. The lungs did not collapse; the left overlapped the heart. They presented a perfectly white appearance. The anterior lobes were oedematous, not in any degree emphysematous; they were bloodless. The middle portion was pallid and oedematous, but not entirely destitute of blood. The posterior lobes were likewise oedematous, and, in their more dependent portions, were almost black from the contained blood: but this coloration seemed to depend more on the character than on the quantity of blood. The posterior aspect of the lung, in contact with the parietes of the chest, was deeply furrowed

by the impressions of the ribs. It may be said of the lungs, therefore, that their prevailing character was oedema; and that, although there was an unequal distribution of blood in them, there was nothing which could be truly called sanguineous congestion.

The auricles and ventricles of the heart contained a very small quantity of black, thickish, but not coagulated blood. There was no fluid in the pericardium, nor any fibrinous clots in the heart.

Abdomen. Here, as over the chest, there was a considerable layer of subcutaneous fat. On displaying the viscera, they were observed to be in their natural position. The stomach and intestines were moderately distended with air, but entirely destitute of solid or fluid contents. A large brown patch was observed on the ascending colon, just above the cæcum. Some portions were reserved for microscopic observation. The spleen seemed to be quite natural, and certainly was not enlarged or congested. The liver was rather more pallid than is usual; its inferior surface had a tarry look. The gall-bladder had a similar appearance, and contained a moderate quantity of tarry somewhat inspissated bile. The kidneys were anæmic. The bladder was contracted, and contained no urine.

The general deficiency of blood throughout all the organs was striking.

CASE III. — Churchill, a labourer, aged about 50, resided in the north-west corner house of Saddler's Buildings, Lower Common. I was summoned at 9 A.M., on the 27th July, a close, sultry morning with an ardent sun, to see this man. His wife, who came for me, said that he had been poorly for two days with aguish feelings and undue purging; that he had taken some mixture from a druggist (prescribed for diarrhoea), which had done him some good, she thought, and that morning he had gone to try to labour in a neighbouring market garden, but was obliged to come home. She described him as cold, rigid, and convulsed, and so ill that she did not expect me to arrive to see him in life. I found him with a blue cadaveric countenance; pulseless at the wrists; his heart beat irregularly; and the surface (excepting the chest), was quite cold. He could articulate distinctly, but his voice was weak, and his words were slowly uttered. I had him carried from his chair, stiff and doubled up as he was, and laid in bed. From the severity of the cramps, it was impossible to get him out of his sitting position; the legs and abdominal muscles were rigid, and occasionally violently affected with spasmodic movements. At the moment of my arrival, there was no evacuation going on; but it was stated to me that for an hour previously a fluid resembling dirty water had poured from the bowels. He had likewise had vomiting of a similar fluid. The patient seemed moribund. I had with me pills of camphor and Cayenne pepper; but his efforts at swallowing were not successful, though they were determined and intelligent. A little time was lost in getting some camphor-chloroform solution, which was administered in large doses every ten minutes; but, before he began to take this medicine, hot bags of salt were placed around him, and a large sinapism to the spine. In the course of an hour and a half, during which this treatment was unremittingly continued under my personal superintendence, the pulse became apparent at the wrist, and the body became warmer. The cramps likewise abated; and the blueness of the skin diminished. I then left him in charge of Dr. Henry, who continued the treatment with some modifications. At 2 o'clock, I found him going on favourably, and at 4 P.M., in my presence, he swallowed a cup of cold beef tea. At 7 o'clock, he was very hot, and complained of acute pains in his limbs and of headache; he seemed drowsy, which was not surprising, as he must have taken, within twelve hours, more than a scruple of camphor. All medicine was now suspended; but the warmth was ordered to be kept up, and the friction continued at intervals. If thirsty, he was to have draughts of water acidulated with sulphuric acid, and some cold beef tea at specified periods.

I did not see him for eleven hours. He had passed

the night uncomfortably; but there had been no return of the coldness, collapse, or purging. No one could have supposed that it was the same man, so entirely had the features changed for the better. There was a great moisture on the skin; and the kidneys, which had on the previous day secreted no urine at all, were now rather active. He complained of an uneasy and distended condition of the bowels, for which I prescribed a full dose of castor oil with some laudanum and carminatives. Towards evening, he had a stool without much feculent odour; and, about an hour afterwards, he had simultaneously slight rigors, with a discharge of serum from the bowels. He then had a draught of camphor, chloroform, and creasote.

Next morning, the report was favourable; and he was certainly better. I then prescribed, to be taken three times daily, disulphate of quinine with sulphuric acid; each dose containing four grains of the disulphate, and fifteen drops of the acid. This treatment was continued for two days: when he was able to walk out. After that time, he continued to take the medicine for several days.

CASE IV. Mrs. C., wife of the preceding, had a severe attack of serous purging, with subsequent coldness of the surface on the 28th of July. I saw her two hours after the first liquid stool. She never had another serous evacuation from the time that she took the first dose of a mixture of creasote and mucilage. Each dose contained three drops of creasote, and she took three doses in as many hours. Next morning she was very weak, and the tongue was furred. She took a dose of calomel and rhubarb, and for several days afterwards, though apparently perfectly recovered except as regarded her strength, she took citrate of iron and quinine.

CASE V. Loveday, a labourer. The symptoms and the treatment very similar to those of Mrs. C. For sixteen hours he passed no urine. I mention the case because it also occurred on the Lower Common, and in a house close to that occupied by Churchill and his wife, and on the same day in which Mrs. C. was seized.

At the same time I was attending upon the Lower Common (along with the above cases) four cases of diarrhoea in one family, two cases of severe neuralgia, and a case of fever (Thornton), with the remittent type so obscurely marked as perhaps to bring it under the designation of continued fever. There was no purging or collapse in these cases. An infant in an adjoining house was also at the same time under my care, with the usual symptoms of infantile remittent fever. Other cases of disease were under treatment in this locality by other medical men at the same time; but some weeks afterwards, upon diligent inquiry, I found that there was no sickness. The susceptible population had probably been exhausted by the outbreak, which occurred about the 27th and 28th of July.

CASE VI. J. R. B. C., my son, aged 13 months, was seized on the morning of the 10th September, 1849, with serous purging. This was restrained by chalk and Dover's powders, but not until extreme exhaustion had occurred. The temperature of the body was maintained by the application of external warmth. A stimulating liniment was rubbed in over the spine, and I administered thirty drops of brandy at very short intervals, according to the demands of the languishing circulation. The pulse and the respirations were very slow; but towards evening they both increased; and the external warmth and the brandy were less called for. About four in the morning of the 11th, he became blue and cold, and the inodorous watery fluid poured from his bowels. An enema of acetate of lead was at once administered. Warmth was diligently applied to the surface, and brandy was again freely administered. By these means, complete collapse was probably prevented. He did not, however, rally so well as on the previous day; and although the body was kept warm by artificial means, the blueness of the skin never disappeared, and the tongue and breath were cold. During this day, very small doses of the citrate of iron and quinine were given every hour.

He drank several pints of cold beef-tea, to the doses of which were occasionally added brandy. Between 5 and 9 P.M., he had a more life-like appearance; but the tongue, which had hitherto been cold and moist, became hot and dry. He perspired slightly from nine to about five or six in the morning, and seemed altogether better than he had done since the first attack. Suddenly, however, the former symptoms recurred—the blueness, the cold surface, and the serous purging. The quantity evacuated was not nearly so large as on either of the previous attacks, which was perhaps attributable to the acetate of lead enema having been administered without a moment's delay, on the first gush from the bowels. He had evidently, however, by this sudden relapse, lost more ground than he had previously gained; and while his mother and I personally continued to keep up artificial heat, and to administer the citrate of iron and quinine, the brandy, and the beef-tea, we had no hope of life being prolonged many hours. We now resolved, that if he showed the slightest disposition to rally, we should be ready at once to start with him for Brighton, to give the chance of benefit from a change to sea-side air. He hardly improved; but still we determined to go; as by remaining, death seemed inevitable on the next recurrence of the previous symptoms.

He was carefully wrapped up in flannel, wadding, etc., and hot water vessels were applied around him; but when about to be carried down stairs, a sudden gush from the bowels, and his shrunken death-like aspect, made me hesitate as to removing him, as it seemed, merely that he might die from home. However, the acetate of lead enema was repeated, and brandy was freely given. Though the tongue was cold, and the body cramped, he swallowed easily, and I might almost say greedily, whatever was put into his mouth. He decidedly improved in warmth and in appearance as we went along; and when we reached Brighton, there could be no question as to his being better than when we left Putney about three hours previously. There was no more serous purging. From the time of his leaving Putney, he had no medicine of any kind for twenty-four hours. The treatment consisted more in watching than in acting. During the night he became very hot, and continued so during the greater part of the next day. He passed no water from the previous evening till the afternoon of the day following his arrival in Brighton; and how long previously the kidneys had ceased to act, I cannot say. He seemed every hour to improve, and in a week was out of danger; though for more than twelve months afterwards he had a puffy skin and an anæmic aspect. When at Brighton, he continued to take the citrate of iron daily, and had occasionally some doses of hydrargyrum cum creta.

In addition to the cases detailed, I had, subsequently to the illness of my child, four cases in Fulham, and nine in Putney, in which there were more or less of the algide stage with cramps, as the sequence of serous purging. The treatment adopted in all of them was external warmth, and creasote internally. In some, acetate of lead enemata were used; and the majority had either ammonia, camphor, or brandy, as a stimulant. All had iron and quinine during convalescence. I never felt any temptation to use calomel or other medicines empirically. Each successive case tended more or less to convince me of the paramount importance of arresting the serous discharge from the bowels, and of diligently maintaining warmth.

In one case (Oatts, Gardener's Lane), at the suggestion of Dr. J. Bird, who saw the case, quinine was freely given from the first in consequence of the distinctly marked ægæ type being present. I was convinced that the quinine did much good.

IV. PATHOLOGY OF CHOLERA, INCLUDING ITS MORBID ANATOMY.

The history of the cholera epidemics of 1832 and 1849 points out a clear course to sanitary reform, and it assuredly holds the torch of truth to the physician, pointing out to him the true pathology of cholera, and the means of that pathology, guiding him to the remedy.

he is to apply the abundance and variety of his therapeutic resources.

The first subject which suggests itself for investigation is the relation which cholera bears to other diseases, which, while they require a general epidemic influence to cause them to be severely felt upon a community, have likewise a necessity for the assistance of endemic or local causes, before this can take place. We have also to consider whether cholera be a new disease.

Marsh miasmata, and the putrid exhalations from decaying animal and vegetable matter, are really the chief causes of intermittent, remittent, and yellow fever; although, most probably, these diseases, or rather, we should say, these modifications of the same disease, may, in their more intense forms, and under certain peculiar circumstances, be communicated by personal contact, and thus show themselves beyond the territorial range of the miasmata. They do not each, however, originate in distinct specific poisons; nor do they originate in morbid animal poisons, like scarlatina and typhus—diseases which are, in the strictest sense of the term, contagious. The true state of the case seems to be this; that miasmatic fevers cannot be propagated to any extent where there are no miasmata prevailing; but that a partial eruption of cases may occur, depending on contagion. The effect produced by a change of wind points out strikingly how fevers are rapidly carried from one place to another. Dr. Dundas, quoting Lancisi, informs us that thirty people being out boating on the Tiber, the wind suddenly veered round to the south; the consequence of which was that twenty-nine out of the thirty were seized with fever. The miasmatic diseases already named, however, while they essentially differ from typhus and scarlatina, do not differ pathologically from each other; the apparent distinctions between their phenomena depending upon accidental causes, such as climate, temperature, and what, for want of any other term, we must, with Sydenham, call the epidemic constitution of the atmosphere.

A very cursory glance at the statistics of malarious fevers in the West Indies will convince any one how much the type of the fever is influenced by the condition of the atmosphere, especially as regards temperature, winds, and electricity. A hurricane has been known to convert the most malignant type of yellow fever into a manageable intermittent. This fact is of itself sufficient to establish the pathological identity of intermittents and remittents, which have been so often described as essentially differing from each other.

The previous sanitary condition of individuals is also a remarkable element in determining the type and gravity of the fever. The degree of exposure to the miasmata, the sudden or gradual nature of that exposure, are circumstances which give a character to groups of cases. Persons going from a healthy district to one where ague is prevailing as an epidemic, are generally seized, not with the *intermittent*, which is affecting the natives and long residents, but with *remittent* fever; *i. e.*, with the same disease in a more aggravated form. When a yellow fever epidemic breaks out, the acclimated and non-acclimated, regarded as two classes, are attacked with diseases of very different degrees of malignity; and, in both, the periodicity of the fever is strikingly modified. For example, it often happens that, when the acclimated are attacked with a common intermittent fever, the non-acclimated are swept away by a more pernicious form of the disease, by remittent fever, or by that more intense form called yellow fever. Europeans, on their arrival in the West Indies, are very commonly seized with bilious remittent or yellow fever, which, from this circumstance, are in their cases properly called "seasoning fevers", or the fevers of new-comers; and, indeed, they may be truly called the fevers of new-comers, for new-comers are seized by them even when there is no prevailing epidemic. Here we have an illustration of endemic causes being sufficient to originate, in one class of individuals, a certain definite train of morbid phenomena, which require, in another class of persons, the operation of epidemic as well as of endemic causes. The pestilential miasmata are,

therefore, we must suppose, floating constantly in the atmosphere of these places, or in the water used by the inhabitants, but not in sufficient abundance, concentration, or virulence, to affect those who have become habituated to their influence, though abundantly potent to give rise to fever in persons suddenly, or for the first time, exposed to them.

It does not seem necessary to prove that cholera is a malarious disease. True though it be, that the pestilence has travelled to our shores from the far East, and that we must therefore recognise, as essential to its propagation, a specific poison or a specific constitution of the atmosphere, yet it is equally true that it has only been able to do its deadly work on a large scale on the banks of rivers, or amid the inhabitants of districts ill drained, or the air and water of which have been notoriously contaminated by open privies, cesspools, or other putrescent nuisances of like character. In a word, the recent vital statistics of the Registrar-General unequivocally corroborate what Macculloch averred in 1828, from the comparison of various data, that cholera is a disorder produced by malaria.*

The apparent exceptions to the malarious character of cholera are not stronger than those which have been brought forward to disprove the malarious origin of ague. For example, in the Alentejo, a province of Portugal, south of the Tagus, 500 feet above the level of the sea, and entirely devoid of marshes, intermittent fever is endemic, and hardly any one escapes. The whole country is covered with Gum Cistus, in rank vegetation; and the surface abounds in rocky debris, wonderfully retentive of moisture. These circumstances abundantly explain the prevalence of miasmatic fevers. With regard to these diseases, it must also be remembered that they may be disseminated to a small extent by personal communication; and still more by corrupt water, as is abundantly proved by facts such as those which Dr. Snow has collected.

It has been the ignorant or interested boast of the bone-crushers of Lambeth, that the emanations from their stores of putridity are harmless, because those living on the premises have been more exempt from the epidemic than others at a little distance. If this be a fact, it is one which admits of a ready explanation. Those resident on the premises are acclimated; whereas those living at some distance have the seeds of pestilence sent to them only fitfully, according as the wind may blow. There can be little doubt that the ravages which cholera has made in Milbank Prison are mainly dependent upon the putrid bone-yards on the opposite side of the river. The prisoners are probably, in the majority of cases, feeble, dissipated characters; they are also suddenly brought into the malarious atmosphere; and these two circumstances, when taken in connexion with the mental depression which we must suppose to exist more or less in every prisoner, point out how it is that they may suffer from the pestilential emanations referred to, while those residing in the midst of them are less frequently or less severely affected. The same remarks will hold good with reference to the horrible graveyards of the metropolis, which have been recently shut up; and to the filthy bilgewater in the holds of vessels, which accounts for the outbreak of cholera in ships at sea. In the autumn of 1843, the modification effected upon the fever prevailing in Edinburgh, by previous residence, was well seen. Tramps, vagrants, and Irish reapers, upon arriving in Edinburgh, were in general seized with the disease in a much more virulent form than those of the same class, and of precisely the same habits, and inhabiting the same localities, who had been resident for some time before their seizure.

Duflot states, in his work on "Yellow Fever", that persons habitually exposed to putrid emanations, as tanners, tallow-chandlers, and soap-boilers, are less liable to that disease than agricultural labourers, who work under an ardent sun, or smiths, bakers, etc., and others, who are subjected to great heat within doors. There would, therefore,

* Macculloch, John, M.D., On Remittent and Intermittent Diseases. London: 1828.

seem to be something preservative in being habituated to the operation of the same poisons which dangerously or fatally affect those suddenly brought into contact with them. Every one can, within his own experience, recall cases in which malignant fevers have suddenly broken out in houses where the sewerage or cesspools have been allowed to contaminate the water-cisterns, or the air of the apartments.

Illustrations might be indefinitely multiplied, to show how much accidental circumstances may modify the type of disease; and, having premised thus much, we become better prepared to appreciate the doctrine of Dr. Billing, Dr. James Bird, Dr. Charles Bell, and others, that cholera is pathologically of the same family as intermittent fever; that it is, in fact, a pernicious ague, as was long ago believed by Alibert, Comparetti, Sydenham, and Morton.

The doctrine which is most in consonance with my reading and observation, is very concisely stated by Dr. Billing in the following sentences. "Under the denomination of ague, I include remittent as well as what are called intermittent fevers. Ague is essentially fever: it forms, however, a connecting link between fevers and neuroses, as a considerable degree of nervous sensibility exists in it. Ague is, besides, closely allied to Asiatic cholera and influenza, which are also essentially febrile diseases, as I demonstrated in 1832, when we had daily opportunities of seeing the epidemic." (Billing's *First Principles of Med.*, p. 236.)

Various methods may be suggested, by which each may examine for himself the question as to the resemblance between, or rather identity of, cholera and ague. For example, we may examine the records of various epidemics of intermittent and remittent fever, wherein we shall find abundance of cases which might truly be designated cholera. I have now before me the work of Alibert, entitled *Traité des Fièvres Pernicieuses Intermittentes*, originally published fifty years ago. This author hesitates as to whether *cholera-morbus* ought to be considered as a distinct disease, or as a variety of pernicious intermittent fever.* He quotes the following illustrative case from Torti:

"A man, aged 64 years, was attacked by simple tertian fever, accompanied by bilious vomiting, and dejections of the same character. These symptoms had, on several previous occasions, complicated diseases by which the patient had been affected, which induced Torti to administer the remedies reported to have been previously beneficial in similar circumstances. But after the fourth or fifth paroxysm, the phenomena indicated a frightful intensity in the disease; the vomiting was violent and copious, and the stools followed each other almost without an interval; and each time he vomited or was purged, there was extreme anxiety. The symptoms which succeeded were, a general coldness, a feeble pulse, sighing respiration, hiccup, sunken eyes, lying in the supine position, and an almost total inability to perform any muscular movement. In this alarming state of matters, it was probable that deglutition would be very difficult, or that if the patient did swallow anything, it would be immediately rejected. The danger was imminent; the sacrament was administered to the patient; when, although everything seemed to announce speedy death, Torti resolved to give cinchona in large and often repeated doses. The symptoms did not diminish; and, although there were no fresh paroxysms, the condition of the patient remained very critical. The pulse gradually became restored; but the heat was with extreme difficulty re-established. The cinchona was continued for several days in large doses; by the use of wine, which the patient could hardly retain during the first few days, his almost extinguished life was supported. In a few days, he was convalescent, having been (so to speak) recalled from death to life."

Alibert says that the predominating symptom which constitutes the disease (fièvre pernicieuse intermittente hépatique ou atrabilieuse), is a copious and frequent flux from the bowels, resembling the washings of raw meat (semblance

à la lavure de chair); and which was described by the ancients under the name of hepatic flux. "It first shows itself," says he, "without any symptoms of apparent danger; but it speedily induces extreme prostration of the vital forces. The pulse becomes small and feeble; the voice is sharp, and sometimes aphonia comes on. There is a remarkable chilling of the body and of the extremities. The patient has such a tendency to fainting, that it occurs whenever he attempts to get out of bed. The intellectual functions are, nevertheless, unchanged." (p. 15.)

Comparetti, in his work entitled *Risconti Medici della Febbre Larvate Periodice Perniciose*, published at Padua in 1795, speaks of a species of double tertian fever, which he designates *collerica sincopale*, in such a way as to show very clearly the correctness of the views which it is at present attempted to illustrate. The diminution of animal heat, and the weakness of the pulse, characterise the cold stage of the fever, rendering it truly a stage of collapse.* The remedies which he recommends are laudanum and cinchona. He refers to three cases of intermittent fever described by Morton, which had the mask of cholera, and which had alarming symptoms of delirium, violent spasms, and purging. It appears that Raimond-Restaurant treated choleraic intermittent fever by cinchona in 1680. Scanty or suppressed urine forms a leading symptom in the histories of cases of choleraic intermittent fever, described by the authors whose names have been already mentioned.

Dr. Webster, in 1832, satisfactorily showed that cholera with a well marked intermittent type was, in the time of Sydenham and of Morton [1669-1693], a great scourge of London. It was called cholera morbus by these physicians, and, in the Bills of Mortality, "gripings in the guts", and "plague in the guts." In 1669, when the population of London was only 600,000, the deaths from this disease were 4,385.

Enough has now been said to show that cholera is not a new disease, that periodicity has been long ago recognised as an essential character, and likewise that its treatment by antiperiodic remedies is of equal antiquity.

It may, however, be interesting, as corroborating the doctrine that cholera is a form of intermittent fever, to refer to the following extract from the New Statistical Account of Scotland, regarding the medical statistics of Kelso, a town in the county of Roxburgh, during the cholera epidemic of 1832. It is well known that an improved agriculture has extirpated ague from many districts, where it used at one time to prevail. Its total disappearance from the county of Haddington, where it was formerly endemic, must be ascribed to an amelioration of the atmosphere, the result of the drainage of the land, which has there been carried out on a scale of great extent and magnificence. The same cause has produced a similar effect in Kelso, and many other places. The following table is compiled from the records of the Kelso Dispensary.

In 1832, it is said that the increase in the number of agues was apparently occasioned by the opening of some drains in a piece of marshy ground. It was in this year that cholera visited Kelso with such fatality; and, for two months, the dispensary was used as a cholera hospital; during which time, no records of the other cases were kept, so that the cases of intermittent fever for that year must have been more numerous than they appear in the books.†

* "La febbre per l'ordine degli accessi, per la qualità, e relazione di alcuni sintomi, per la remissione de' più gravi in certe ore, per la qualità dell'urina, pel difetto del calore, per la debolezza del polso, e pel cambiamento di tali caratteri nell'uso del febrifugo dichiarasi periodica del genere delle doppie terzane, e della specie perniciosa collerica-sincopale."—Comparetti, part. II, p. 414.

† The table quoted in the text possesses considerable interest in several points of view. It appears that the years 1780, 1781, and 1782, were very severe upon the lower orders, in consequence of the inclemency of the weather, and the scarcity of food. In addition to the heavy list of fever and ague cases, there occurred, during that period, twenty-one of scurvy. In 1781-82, there was an unusual number of cases of dropsy, depending, there can be little doubt, upon the great prevalence of intermittent fever during the preceding years. Asthma is often a sequel of intermittent fever; and by reference to the table, we see this well illustrated. Probably, the asthma, which follows intermittent and remittent fevers, and likewise cholera, is the result of the peripheral portions of the lungs never recovering from the capillary congestion characteristic of the primary diseases.

* "Si l'on a égard au cholera-morbus, considéré comme indépendant de la fièvre pernicieuse intermittente, aucune affection peut-être n'a été décrite avec des couleurs plus vraies, plus énergiques, dans les épidémies d'Hippocrate."—Alibert, 4ème édition. Paris, 1806, p. 14.

DISEASES.—FIRST SERIES.

Years.	No. of Patients.	Fever.	Ague.	Asthma.	Rheum.	S. Fox.	Dropsy.
1777-8	302	13	17	10	15	2	10
1778-9	306	26	33	13	16	17	2
1779-80	460	109	71	17	22	37	2
1780-1	675	147	159	19	32	4	5
1781-2	510	65	103	24	21	4	11

SECOND SERIES.

1831-2	772	66	0	4	40	0	9
1832-3	561	26	6	1	18	1	7
1833-4	729	39	1	3	42	2	8
1834-5	678	65	0	3	30	51	5
1835-6	593	63	1	2	38	0	6

The effect of malaria is to render the blood dark coloured, and to cause a breaking up of its globules, and consequently the imperfect elimination or a complete suppression of the normal secretions. Majendie has produced artificially, in dogs, these effects by injecting a small quantity of putrid water into a vein. In reference to the appearances found on dissection, he says: "Among the pathological phenomena presented by animals into whose veins putrid water has been injected, we have principally remarked among the intestines that which is commonly called acute inflammation, or in other words, an exhalation of a matter of the colour of the water in which meat has been washed, as pathologists have so happily described it. This matter, adherent to the mucous coat of the intestine, and solidified in the form of jelly, is, in reality, a portion of the fibrin of the blood, which has transuded and become coagulated in a peculiar manner in the cavity of the digestive canal. Here is the way in which we prove this position. We have detached and washed with care this intestinal secretion, we have removed the colouring matter from it, and it has precipitated very minute particles of fibrin. I intentionally make use of the word particle, for it is in some respects different from a globule; the latter being to a certain extent organised, and affecting a determinate form, and because globules constantly present a great analogy the one with the other, whereas, on the contrary, what I term particles, are merely a heap of extremely delicate parcels, differing in form and volume, and to which one cannot attach any idea of regular or symmetrical configuration."* These masses, since they do not possess the cellular structure of coagulated fibrin, or of accidental tissues, cannot be regarded as the results of inflammation; and it is probable that, were the analogous masses found in the intestines in cholera and yellow fever to be similarly examined, they would present the same physical characters.

The condition of the blood and of the internal organs in persons who have died of cholera has been made the subject of laborious investigation by Garrod, Gairdner, Raikem, Levy, and other pathologists. It is to be regretted, however, that, in many of these observations, sufficient attention has not been paid to the stage of the disease in which the patients have died, and especially to the amount of serous draining which has taken place; for it is evident that on this must in a great measure depend the state in which we shall find the residual blood.

In his valuable paper on the "Blood in Cholera", published in the *London Journal of Medicine* for May 1849, Dr. A. B. Garrod draws the following conclusions from his own investigations, and from those of Drs. O'Shaughnessy, Thomson, and Clanny, and MM. Lecanu, Rose, and Wittstock:—

"1. In cholera, the physical characters of the blood are altered, and its tendency is to become thicker, tar-like, and less coagulable.

"2. The proportion of water is much diminished.

"3. The specific gravity of the serum is very high, which is due to the increase of the solid portion of the serum, and especially of the albumen; and the fluid also tends to become less alkaline in its reaction.

"4. The saline constituents of the blood are not only not decreased in amount, but sometimes exist even in increased proportion; and the diminution of its alkaline reaction is not due to the loss of salts, but to the impeded excretion of organic acids which are constantly being formed in the system.

"5. Urea usually exists in increased quantities in cholera blood, but the amount differs considerably in the different stages of the disease, being but small in quantity in the intense stage of collapse, increasing during reaction, and in excess when consecutive febrile symptoms occur."

Dr. W. T. Gairdner, in his "Memoir on the Pathological Anatomy of Cholera", published in the *Monthly Journal* in 1849, says: "The remarkable viscosity so often noticed was chiefly observed in cases fatal during the collapse or early reaction; and was certainly owing to the removal of the fluid matter by the intestines." These remarks of Dr. Gairdner I believe to be very correct. It is to the excessive evacuation of the fluid part of the blood that we must refer the spissitude of that portion which remains in the vessels: and it is from the examination of patients dying in the stage of collapse, or of early or feeble reaction, that the description of the blood in cholera has mainly been taken. Of the blood in the earlier stages, less is known; but Dr. James Bird, after stating that he was rarely able to obtain blood from the veins of patients in the collapse, says that, "in the earlier periods, the blood flowed more freely from the veins of the arm, though it trickled down in a small feeble stream"—evidently showing that, although alteration had commenced, it had not become so far inspissated as is commonly described.

Dr. Zarlengo of Naples, says that cholera is a disease in which the blood is unfit to support life. He remarks—*"Hæc crasi corrupta fit ut sanguinis serosa pars e cruore disjunctatur ac ad tubum gastricum congregatur; ex quo evenit, ut materia serosa continuo vomatur aut per alvum ejiciatur, dummodo membrana serosa atque vesica urinaria, liquore omnino carens, exarescit."* (Quoted by Knox, *op. cit.* p. 50.)

The remarks which I have made with regard to the importance of noting the stage of the disease apply with great force to the pathological conditions of the internal organs. Let me take an example from among other diseases. A patient may die in the early stage of scarlatina, and may have had anasarca and albuminuria, but we may find the kidneys only congested; whereas, if we examine these organs in one who has died after suffering from dropsy and albuminuria for weeks or months, we shall probably find degeneration. The observations of Drs. Gairdner and Raikem were made on patients who had died in the stage of collapse; and they, as well as those of MM. Levy and Tholozan and others, point to a general deficiency of blood in the system; many organs presenting the appearance of bloodlessness in a marked degree. It is true, that "congestion" and "sanguineous infiltration" have been mentioned by MM. Levy and Tholozan, as being found in the algide stage; but these phenomena are by no means to be confounded with the congestion or subacute inflammation arising during reaction. They are, I think, chiefly mechanical effects of the thickening of the blood; and in this way also are to be explained the "subpleural ecchymoses", "hyperæmated vascular ramifications in the gall-bladder", "hyperæmated villosities" in the stomach (Raikem), and the ecchymoses, arborisations, etc., described by Levy and Tholozan as present in the intestinal canal. These observers mention the congestion of the kidneys, and effusions in the lungs; but they also describe the blood procured from these "congested" organs, by section and pressure, as being thick.

I have not considered it necessary to enter minutely into the appearances presented by the various organs in cases of death from cholera, believing that more information is to be gained from a careful consideration of the alterations produced in the blood. It is simply absurd to fix on any part, and to say that, because we there find "congestion" or "inflammation", cholera has its seat there.

* Majendie, *Leçons sur les Phénomènes Physiques de la Vie*, tome iv p. 226. Paris, 1836.

If indeed any of the appearances of hyperæmia found in cholera patients are referrible to the same causes as the eruptions of measles or scarlatina, or to the bronchial or renal congestions in these diseases, they are not, in the present state of our knowledge, to be distinguished from those—probably the most numerous class—which obviously arise from the cause to which I have already so often referred—the inspissation of the blood, and the consequent impediment to its passage through the capillaries.

The adoption of the following conclusions seems to be justified by the facts and analogies now brought under review:

1. Cholera is a fever, intimately related to those fevers which depend on malaria.
2. The intermittent or remittent type can be generally recognised in the milder, and also not unfrequently (though less distinctly) in the severer cases.
3. The stage of collapse ought to be considered as an aggravated cold stage of the paroxysm of a pernicious fever, which may spontaneously terminate in death or reaction.
4. The least dense portion of the blood has an excessive tendency to exude through the capillaries of the stomach and bowels, and pass from the body by vomit and stool.
5. The inspissated residual blood being unable to pass through the small pulmonary vessels, causes congestion of the lungs; and as speedy consequences of this condition, paralysis of the right side of the heart from over-distension, asphyxia, and other subordinate derangements of the vital actions.
6. Death may take place from
 - a. Asphyxia.
 - b. Necræmia, with loss of the least dense portion of the blood by stool and vomit.
 - c. Necræmia without such loss of the least dense portion of blood as can be discovered during life—the exudation remaining within the stomach and intestines.
 - d. Toxæmia from absence or deficiency of sanguineous depuration.
 - e. Inflammation of lungs or other organs supervening in convalescence.
 - f. Debility.
 - g. Gastro-enteritis.
 - h. Two or more of the above causes combined.
7. The anatomical lesions found on dissection vary with the causes of, and circumstances attending, death.

V. TREATMENT OF CHOLERA.

The advocacy, by many, of a uniform and empirical system of treatment of cholera, has greatly tended to obstruct the progress of rational inquiry. Several plans, and particular remedies have been found useful; and practitioners, impressed by the published account of this success, have too often contented themselves with empirically repeating the instructions of others, without carefully analysing the facts and seeking for a rational explanation of the *modus operandi* of the therapeutical agents which they employ. The stage of the disease has not been sufficiently noted in relation to the therapeutic means employed; and recoveries have been too largely designated cures. With one, capsicum has been the specific; with another, camphor; with another, sulphuric acid; with another, acetate of lead; with another, quinine; and so on might the list be indefinitely extended. Now, that all of these and other medicines are *par excellence* cholera remedies, I perfectly believe; and it seems to me that a more successful treatment is to be discovered by a judicious application of the means which we possess, than by searching for some new specific.

It seems to be of primary importance to bear in mind that we have a poison-disease to deal with, resembling, if not indeed identical with a pernicious ague: that it has a course to run, which may be modified and curtailed, but which, even when let alone, shews a disposition to terminate in recovery. We have, therefore, in the first stage, in which chills and

other premonitory symptoms of discomfort may be present, to adopt measures which may be regarded as prophylactic rather than curative. It is in this stage that the pernitrate, or some other preparation of iron, and the disulphate of quinine, are of signal benefit. Here, however, we must not follow a blind empiricism. We must, if the digestive system is at fault, combine with the use of these special medicines a judicious alterative system; and, should there be any tendency to copious watery evacuations,—the serum of the blood,—we must be prompt in our administration of those remedies which are generally termed hæmostatics; among which may be particularly mentioned quinine, sulphuric acid, nitrous acid, acetate of lead, creasote, and nitrate of silver. If the case should proceed a little farther, in spite of our endeavours to arrest its progress, or should the case, from its inherent intensity, or from neglect, not present itself for medical treatment till the secondary effects of the loss of serum have become apparent, we may probably find it useless to think of the quinine, and be obliged to treat the cramps and collapse which threaten speedy dissolution. The necessity for diffusible stimulants is now apparent: and, of them all, as a general rule, camphor will be found the most useful. It can be conveniently administered in large doses by dissolving it in chloroform; and the solution combines so well with creasote, that it will often be found prudent to confine our administration of medicine to frequent doses of a mixture of camphor, chloroform, and creasote. The chloroform is useful as affording facilities in dispensing; and it cannot, in the small quantities administered, do any harm. The camphor acts quickly as a diffusible stimulant; and the creasote has a powerful effect in restraining the serous discharge. Indeed, I am inclined to think that its beneficial effects are not much, if at all inferior in this respect to those of sulphuric and nitrous acids. External warmth, and the use of stimulating embrocations, are very beneficial in conjunction with the internal use of camphor. The suppression of urine is not a symptom which is to be relieved by the administration of diuretics; it is a necessary consequence of the congestive paroxysm of the disease, and its removal is likely to follow the cessation of that paroxysm.

Enormous doses of opium, of calomel, and of other powerful drugs have been given to cholera patients; and there can be no doubt that such substances, when introduced into the system when in a state of collapse, are not likely to produce any very suddenly appalling effects. And indeed, in a vast number of cases, they seem to lie as quietly in the stomach of the cold cholera patient, and to produce as little effect, as if they were deposited in a glass bottle. Should the patient, however, emerge from the state of collapse, he runs as great a risk from the poisonous doses of these medicines which have been placed in his interior, as he has just escaped from the pestilence. Large quantities may certainly pass off by the bowels, unacted upon; but it cannot be questioned that in a very great number of cases which have been treated in the way mentioned, patients have had their convalescence abruptly arrested by fatal narcotism or exhausting salivation. The use of opium and calomel, in ordinary doses, is often necessary: but the inordinate doses of these medicines formerly, and perhaps still, employed by some, cannot be too much condemned.

The importance of arresting the serous discharge, and of maintaining the warmth of the body by the application of heat externally, cannot be over-estimated. In fact, the judicious carrying out of these intentions constitutes the essence of the treatment of cholera. Other therapeutic measures may be regarded as liable to considerable variety, according to circumstances, and as valuable and auxiliary, rather than as always indispensable. The prompt arrest of the serous discharge, by creasote, sulphuric acid, nitrate of silver, or other remedy, has undoubtedly saved innumerable lives; and from amid the chaos of contradiction, depreciation, and laudation, in which the merits of special modes of treating cholera are involved, the diligent application of warmth to the surface can be extricated as a measure of established value.

Mr. Barwell, in a little work just published, says: "It is

a grand essential to keep up the temperature of the patient, since the tendency to become cold is certainly a great characteristic of this disease. Hot bottles should be placed to the feet, and inside of the thighs; and India-rubber bags filled with hot water to the loins and abdomen. The bed-clothes must be ample, and should be so arranged, by means of an extra blanket wrapped round the shoulders, or passing round the chest and under the arms, that he does not bare that part to the cold in his restless jactitations, nor in rising on the elbow to vomit, as he may perhaps frequently be obliged to do." These recommendations of Mr. Barwell are sound and practical. They are, moreover, firmly based upon facts which came under his observation in St. Thomas's Hospital. In the following passage, he states very clearly, and, I think, very correctly, the relative value of internal stimulants and external warmth in cholera; and he also refers to the hospital experience already referred to, upon which his opinions are founded.

"Stimulants," says Mr. Barwell, "such as brandy, ammonia, or wine, though decidedly useful in their place, have not such effect in restoring circulation, and exciting the system to greater action, as in collapse from other disease; indeed, considering the difference of its cause in this and in other maladies, it is not to be expected that they would be as beneficial; for prostration usually occurs in consequence of nervous shock, and consequent loss of nervous power; therefore stimuli which act upon that system are naturally, in those cases, such as would benefit. But in this disease there is comparatively little loss of nervous power; in fact, with so great disturbance of the circulation, the retention of nervous power is marvellous. Our remedies ought not, therefore, to be directed through that system, but we should, if possible, find some means of acting on and recalling the circulation, without exciting the nervous centres; and the best mode of doing this is by external heat. This principle of combating the deadly cold collapse was not found or recognised at St. Thomas's until after several cases had been treated at the hospital, and the general inefficacy of medicines or of stimulants proved. Though a certain number under the treatment then adopted recovered, still the whole result was unsatisfactory: thus, of twenty-eight cases of perfect collapse, before external heat was used, seven only recovered—a very small proportion; but, after this was employed, sixty-one patients were treated by some mode in which this formed an essential part; and of these, twenty-seven recovered, or not very far from half the whole number." (p. 97.)

Did space permit, I could adduce much evidence of the same description, in addition to that which has now been quoted. In fact, I could show that the success which many have ascribed to favourite pharmaceutical nostrums, ought, with much greater probability, if not with absolute certainty, to be ascribed to the external warmth employed along with the drugs.

Having now glanced at the general principles upon which medicines ought to be employed in the treatment of cholera, I would now remark, that I have not enumerated every drug which may be usefully employed, and have selected those with the operation of which I am personally most familiar. This much, however, may be added; that they are good types of the respective classes of remedies to which they belong.

The formulæ to be adopted must of course be varied in accordance with the circumstances of each case; and it is by a ready power of modifying these formulæ, that the skill of the practitioner is displayed. The formulæ cannot be too simple. No therapeutic advantages flow from the multiplicity of ingredients; and by administering remedies for the purposes of clinical study, as well as of cure, it is obviously necessary not to give more than one medicine, or one class of medicines, at the same time.

The following medicines possess in a high degree the power of arresting the serous diarrhoea, which generally precedes collapse by a good many hours, and which is the immediate cause of that collapse as well as of the cramps:

Creasote;
Turpentine;
Sulphuric acid;
Nitrous acid and nitro-sulphuric acid;
Nitrate of silver;
Quinine;
Gallic acid;
Alum; and
Acetate of lead.

1. *Creasote*. Some patients refuse to take creasote, from a dislike to its odour; but if one or two doses of two or three drops can be taken every hour or two hours, in mucilage, I prefer it to any other means of cure in serous purging. It hardly ever fails.

2. *Turpentine* may be used in place of creasote, in doses of ten minims. I have in several cases of diarrhoea found it quite successful.

3. *Sulphuric Acid*. The use of this acid in diarrhoea is by no means new. The late Dr. Anthony Todd Thomson, in his *Dispensatory* (Edit. 1837, p. 762), wrote as follows: "When combined with mucilages, it has been beneficially given in passive diarrhoea, operating on the relaxed nervous coat of the intestine as an astringent. The usual dose is from ten to thirty minims, but this dose may be very often repeated." In later years, its use has been revived; and several writers in the various medical periodicals have spoken in high terms of its efficacy. Among these I may mention Mr. W. I. Cox of Kensal Town, who has also employed it in cholera; (*Lancet*, for August, September, and October 1849, etc.); Mr. W. Griffith of Eaton Square, (*Ibid.*, Oct. 4th, 1851); Dr. G. B. Payne; Dr. Miller of Stoke Newington; Mr. Edgar Sheppard of Enfield (*Provincial Medical and Surgical Journal* for September 15th, 1852, and *ASSOCIATION JOURNAL* for March 18th, 1853); and several other practitioners. To Mr. W. I. Cox is due, as far as I am aware, the merit of having first employed sulphuric acid in the treatment of cholera. In a tabular view of the result of treatment of ninety cases, given by him in the *Lancet* for January 26th, 1850, five are mentioned as having been treated with sulphuric acid, generally in combination with Dr. Ayre's method. Four of the cases so treated recovered; but we can scarcely draw a conclusion from so small a number.

Dr. Fuller, of St. George's Hospital, in a paper lately published in the *Medical Times and Gazette*, speaks in high terms of the efficacy of sulphuric acid in arresting diarrhoea. In bilious diarrhoea, and in certain chronic diarrhoeas, he says it is of little or no avail; but in epidemic diarrhoea, in "acute autumnal diarrhoea", and in more decided choleraic diarrhoea, he has known no single instance of its failure. He gives it in doses of half a drachm mixed with water every twenty minutes or oftener; and the effects produced are described as remarkable; heat returns to the extremities; the nausea and vomiting cease; the purging is stayed; the cramps subside; perspirations generally break out; the tongue becomes moist and slightly coated; the intestinal evacuations become healthy; and the pulse regains its normal steadiness.

In epidemic cholera, Dr. Fuller has had no experience in the use of this remedy. He would give it in doses of ℥xl or 3j, five or six times in an hour, simply mixed with water; and he is opposed to the employment at the same time of brandy or any strong flavoured stimulant or carminative. Calomel, if it is thought necessary, may be given at the same time with, or after the acid. Mustard, bran, or other warm poultices or fomentations, may be applied; they usually afford relief. From the prompt action of sulphuric acid in arresting diarrhoea, Dr. Fuller expresses great hopes as to its superiority in cholera over other medicines which require a longer time for their action.

4. *Nitrous Acid and Nitro-Sulphuric Acid*. Mr. W. J. Anderson, in the *ASSOCIATION JOURNAL* of Nov. 4, 1853, recommends a combination of nitrous acid and sulphuric acid. He says: "Can a remedy be found which will readily yield up its oxygen, and supply that element to the impure blood; and at the same time, by its astringent properties,

tend to check the enormous exudation which takes place from the mucous surface of the intestinal canal? In our present state of knowledge, some of the mineral acids appear to be the best adapted to this purpose; and, for certain reasons about to be explained, a combination of nitric with sulphuric acid seems to me to be preferable to any other. The acid should be administered in tolerably full doses, and repeated at intervals varying according to the nature and urgency of the case. For an adult, we may give *acidi sulphurici diluti* f. 3ij, *acidi nitrici diluti* f. 3j in a six ounce mixture, an ounce being the dose for an adult.

Mr. Hope, of Chatham, in the *Edin. Med. and Surg. Journal* of July 1826, recommended nitrous acid in cholera. He spoke strongly of the efficacy of the following mixture:

R *Acidi nitrosi* 3j.
Misturæ camphoræ 3viii.

Misce, et adde tincturæ opii ʒij.

Of this one-fourth is to be taken every three or four hours. Mr. Whiteman, of Putney, informs me that he finds nitrous acid so prompt and so satisfactory a remedy in epidemic diarrhoea, that he trusts to it in preference to every other medicine. He often combines with it a little laudanum, but, in the majority of cases, he uses the acid alone. I have not used nitrous acid in diarrhoea or cholera; but I have no doubt as to its value in arresting the discharges.

5. *Nitrate of Silver* I have not given in cholera and diarrhoea, except in the form of enema. It is valuable in this form. My experience is too limited to enable me to compare the efficiency of enemata of nitrate of silver with enemata of acetate of lead, and of alum.

Dr. Lever and Dr. Aitken are the principal English writers who advocate the use of nitrate of silver in cholera and diarrhoea. On the continent, the authorities by whom it is recommended are Hirsch, Canstatt, Boudin, Bouchardat, and Trousseau. Dr. Charles Lever, in 1832, extolled the nitrate of silver as a remedy in cholera. In a forlorn case, he administered thirty grains dissolved in three ounces of distilled water, which the patient swallowed at once. She lay quiet for six minutes, when she vomited a small quantity of whitish turbid fluid. She had no return of the vomiting, fell asleep, and recovered. [*Johnson's Medical-Chirurgical Review*, Oct. 1834, p. 444.] I give ten grains in half a pint of water as an enema. Hirsch prescribed it in the form of mixture; and I am sure that it is a safe medicine in this form, as I have given it internally in other diseases, dissolved in abundance of water. The danger lies in giving the medicine in too concentrated a form.

6. *Quinine*. Of the power of quinine to check epidemic diarrhoea, and to thus arrest cholera in what may be regarded as its first stage, I feel well assured, from an extensive use of the remedy. It is true that I have generally combined it with sulphuric acid, or with iron, and sometimes with both; so that my facts are not available for the purpose of accurately determining the value of the quinine given alone. Dr. James Bird and others have, however, from ampler data, arrived at the same conclusion. Dr. Mandl, in the *Gazette Médicale* of October 29th, p. 682, speaking of the importance of checking the diarrhoea which he has generally found in the initiatory stage of cholera, says, "the most powerful means of arresting epidemic diarrhoea is by administering disulphate of quinine in doses of ten centigrammes (a grain and a half) every two hours." He says that he has seen cases of cholera, in which opium and injections had failed to arrest the discharge from the bowels, cured by quinine in twenty-four hours. Dr. Charles Bell, who has written so ably in favour of the doctrine that cholera is a fever of a remittent or intermittent type, naturally advises quinine. He says: "If asked what I should do in a case of cholera, I should answer, that that depended very much on the stage in which I found my patient; but, in all cases and in all stages, I should certainly give a largely diluted solution of some salts of iron and quinine, with a view to counteract the morbid inactivity of capillary congestion, and repeat it as often as the patient would drink of it, till warmth was restored." The practice is, there can be

little doubt, correct; but it is equally probable that it is a method well calculated to stop the diarrhoea, which Dr. Bell strangely considers salutary. He makes this dangerous announcement:—"Diarrhoea is a natural mode of relief to congestion, and thereby tends to the prolongation of life." The hæmorrhage from the stomach thrown up as black vomit in yellow fever, is nature's mode of relieving congestion; but it is not a salutary hæmorrhage. Within certain limits, a serous or a sero-sanguineous discharge may be harmless, or even useful; but in as much as it is physically impossible for the blood to circulate when it has been deprived of its serum, so is it imperative upon the practitioner to restrain the serous evacuations of cholera.

7 and 8. *Gallic Acid and Alum*. I have often used these remedies in the diarrhoea of phthisis, and occasionally in epidemic cholera. They are less to be relied on as means for arresting serous diarrhoea than creasote and the mineral acids. They are not superior, and hardly equal, to logwood and catechu, as mere astringents; but I know that some authors regard them as especially the astringents to be used in cholera and serous diarrhoea.

9. *Acetate of Lead* may be used internally alone, or in combination with opium. It is generally a prompt astringent when used in the form of enema.

I have not space to enter upon a consideration of all of several reasonable methods of treatment which have attracted the attention of the profession, and deserve to be spoken of with respect. I can only notice one of them at present.

The sulphur plan, as advocated by Mr. Grove of Wandsworth, has evidence in its favour, though I do not think that the theoretical ground—the fungus theory of cholera—upon which it is advocated, is tenable. Mr. Grove uses the following formula:—

R *Sulphuris precipitati* 3j.
Sodæ bicarbonatis 3j.
Sp. lavandulæ compositi 3vj.
Aquæ q. s. ut fiat mistura ʒiij.

A teaspoonful of this is taken every half hour or every quarter of an hour. Mr. Grove informs me that the effect of the medicine is to restore warmth, and promptly to check the serous discharges.

I believe Mr. Blacklock was the first author who recommended sulphur as a remedy for cholera. Although I have no personal experience of its virtues, I may quote, in connexion with this subject, the following passage from a letter dated September 22, 1849, which I received from a non-medical friend residing in Edinburgh:—

"I saw a man to-day from the south mairs, who told me that his wife and he, as well as many of the people of his remote landward parish, had been very unwell; and, from the symptoms which he mentioned, it was clear that they had suffered from cholera, and had been saved from it. They had no medical man near them, and got no medical attendance; yet there were no deaths. As soon as they found cramps come over them, they took a teaspoonful of powdered brimstone, or sometimes the flowers of sulphur, mixed with a little whiskey, to which was added water, if the sick could not otherwise swallow the dose. The man described the cure as certain and very rapid. Try this on the London folks; it may serve the afflicted, and do you much good."

Mitchell says that, "the sulphureous localities of the sickly island of St. Lucia are its only salubrious places. Cities, too, which abound in sulphur products.....enjoy an immunity from ague, for which they are everywhere noted. Immediately around the sulphur works, and factories for making gunpowder and sulphuric acid, the vegetation and the ague disappear together." To this we may add, that, in 1849, during the bombardment of Rome, that city suffered much less than usual from malarious fevers,—a fact which induced Mr. Walker to recommend cannonading, and the discharge of fireworks, as measures likely to ward off, or prevent the spread of, cholera. The rushing of columns of air, caused by the production of a vacuum, is, however, the more probable explanation of the benefits (if any) which

resulted from the cannonade. Mr. Blacklock (Madras, 1848) says: "I hope yet to see the day when sulphur, in small quantities, will be regularly issued to every soldier in the field, in India, say forty grains per day, while actually marching, and twenty grains per day, during halts, as a sure way of warding off this terrible disease; and I have a firm belief that sulphur, so employed, will be as effectual in banishing cholera from our armies, as lime-juice has been in eradicating scurvy from our fleets."

Mr. Grove quotes the following curious passage from the *London Practice of Physic*—a work published in 1692:—"In the year 1670, about the autumnal equinox, a world of people here were seized with a most dangerous flux (though without blood), and joined with a cruel vomiting, which presently caused great faintings and a total decay of strength. For the cure of this disease, no evacuation did good; nay, bleeding, vomiting, and purging did hurt: only cordials, and those of the hottest nature, to wit, such as abounded with *spirit and sulphur*, did good." (p. 22.) From this, it would appear that the whiskey and sulphur treatment of the south muirs of Scotland is an old tradition.

Manec administered sulphur in all possible forms, in his treatment of Cholera in the Salpêtrière in 1849.

Sulphur is a stimulant of the capillary circulation, and so is camphor—one of our best remedies against collapse. Perhaps the combination of the sulphur with hydrogen is the cause of the augmented heat in the surface of those who take the former in repeated doses. The characteristically offensive smell of sulphuretted hydrogen gas is sufficient proof that this chemical action does take place. The therapeutic action of sulphur is, however, yet open to investigation.

The treatment of cholera cannot be reduced to any routine formulary, but ought to be adapted to the particular condition of each patient in each stage of the disease.

The principal indications of treatment may be thus summed up:

1. The "rice-water" vomit and purging require to be energetically subdued by quinine, sulphuric and other acids, creasote, nitrate of silver, and such like remedies.
2. In actual and threatened collapse, external warmth, stimulant embrocations, and those internal stimulants which act on the capillaries, are of signal benefit.
3. In reaction, and during convalescence, local inflammations and congestions require to be guarded against or subdued; and rational means must be adopted to restore the secretions of the liver, kidneys, and skin, but particularly of the two former.
4. Lastly, though not of less importance, the character of the fever should be modified, and a repetition of the paroxysm guarded against, by change of air, or by the administration of quinine, which, in the majority of cases, from the existence of anæmia, ought to be conjoined with iron.

Putney, London, November 5, 1853.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By W. W. MOXHAY, Esq.

[Read June 28th, 1853.]

The annual retrospective address of the Reading Pathological Society contains many cases of interest; and will serve to shew how great an amount of information may be derived from attendance on such meetings. The cases are arranged under the heads of the various systems diseased.

DISEASES OF THE NERVOUS SYSTEM.

SOFTENING OF THE SPINAL CORD: DEATH. By T. L. WALFORD, Esq. (June 30th, 1852). Mr. Walford mentioned the case of Edward Gore, aged 51, who got wet on the 9th October 1852, and lay asleep for some time in an outhouse in his wet clothes. On the 11th, on rising to go to work,

he found great difficulty in moving his legs. On the 12th, his arms also became weak, and he became restless, constantly requesting to be lifted out of bed, etc. On the 20th, articulation became difficult and indistinct; his breathing also became difficult and gasping; his voice dwindled to a whisper; and he expired on the 21st.

Examination of the Body. The spinal marrow was found softened in parts, in some being quite diffuent, and there was much fluid in the theca vertebralis. This case seemed very similar to that of the late Mr. Dunn. He was exposed to cold; numbness and loss of power in the feet began soon after, with the addition of pain along the sciatic nerves, and in the sacrum. The paralysis gradually crept upwards, and ultimately killed him by suffocation, from the intercostal and phrenic nerves being implicated. A *post mortem* examination would doubtless have revealed a similar state of things to that found in Mr. Walford's case.

TETANOID DISEASE. By F. A. BULLEY, Esq. (Nov. 24th, 1852.) George Chilvers, aged 19, applied at Mr. Bulley's house on the evening of April 26th, with painful tonic contraction of the forefinger and thumb of the left hand, the result of a wound which he had received four days previously. He was told by a fellow-servant that he might have locked-jaw; and soon afterwards, in gaping, his mouth became fixed in the open position, and he could not shut it again for five minutes. Tobacco steeped in brandy was applied, and the muscles relaxed. Soon afterwards, the boy took hold of a broom, and the hand became so firmly clenched on the handle, that he could not let it go for some time. He seemed to have been much frightened by something a druggist practising in the town said to him, and applied in consequence at Mr. Bulley's surgery. Mr. Bulley found a slight cut between the thumb and forefinger nearly cicatrised. The countenance expressed alarm; the pulse was quick, but feeble; and the skin pale and cold. The chief complaint, on the patient's part, was that the jaw, finger, and thumb, were very stiff. Mr. Bulley was about to pass a few mild shocks of electro-galvanism from the brachial plexus downwards, and had just adjusted the poles of a battery for that purpose, when the boy swooned. On his recovery from this state, muscular twitchings took place in the body and limbs, and the whole became convulsed, the trunk being violently bent backwards as in opisthotomos, so that three men were required to hold him. Some froth oozed from his mouth. The convulsions recurred frequently, and the boy seemed partially insensible in the intervals. He spoke little, and with difficulty. The skin remained cold and bathed in cold perspiration, and the pulse very feeble. The muscular disturbance began to diminish in about four hours, when, a conversation being held in the patient's hearing about procuring a shutter, and the necessity of conveying him on it to the hospital, it ceased altogether, and he was removed in a state of fatigue to that institution. He subsequently complained of some pain up the arm, and the finger and thumb remained contracted into the palm of the hand for some days. He had, however, no further convulsions, and was soon discharged well.

DISEASE RESEMBLING HYDROPHOBIA. By F. A. BULLEY, Esq. (Nov. 24th, 1852.) Mr. Bulley was called on the 2nd September, 1851, at 8 P.M., to James Woodlands, aged 28, a man of intensely melancholy countenance. He found him laid on some bedding in a yard in Friar Street, with several people holding him, whilst his body and limbs were affected with violent contortions. These had been going on for some time, and recurred every five or ten minutes. In the intervals, he was moody, frequently sighed, and was obstinately silent. The jaws were firmly closed, except when a teaspoon or cup containing fluid was brought near him. He in this case made attempts to bite at the article, and his countenance became expressive of great horror; he would utter a low groan, his features relaxed from their malignant expression, muscular contractions ensued, beginning in the face and extending over the whole body, which, at length, was thrown into convulsions, so violent

as to require four or five men to prevent injury. Mr. Bulley, thinking the case one of epileptic seizure, ordered water to be brought, for the purpose of dashing some on his face. A little made a splash on the stones; intense horror was shown by the man; he endeavoured to rise, and snapped at Mr. Bulley like a dog, and the convulsions became more violent. These ceased about half-past one A.M., when the hospital was mentioned, and the patient firmly ordered to get up. He walked with assistance. Mr. Bulley mentioned, that, upon turning on a water-tap which was in the court, the greatest horror was shown by the man; and even spitting on the ground near him produced a similar result, and excited a convulsion. He stated the extreme resemblance of this case to one of hydrophobia he had seen in London; and how much alarmed he was on this account for the result, especially as there were some wounds on the patient's hand, of which no history could be obtained. After the removal to the hospital, no further symptoms were noticed, except the moodiness of countenance and extreme melancholy. It was found on inquiry, that the man had been bitten by a dog; but he was quite a child at the time, and the dog was a healthy one. He had, however, thought much of this lately; and his fellow-workmen and he had talked much of hydrophobia. It was also found that he had been lately disappointed in love, which had preyed much on his mind. He had been seen on the evening of his seizure to walk in a staggering manner, and subsequently to fall insensible. No evidence was given of his having been drinking. The only treatment in the hospital was a mercurial laxative or two, as his tongue was dirty and his bowels confined. He left in a few days.

Mr. Bulley said that, no doubt, in these two cases, fear was the exciting cause of the attacks of convulsion; the nervous system being peculiarly predisposed to receive such an impression, the circulating system became depressed, as indicated by the cold clammy skin, and feeble pulse. The internal organs, as it were, became clogged, and the capillaries deserted by the blood; the convulsive movements which ensued were, he thought, a cure for this state of things, by restoring the equilibrium of the circulation. He leaned to the idea of the first case being really one of tetanus; but no opium nor other medical treatment having been used to check the salutary spasms, they had thereby opportunity given them to relieve the internal congestion. Mr. Bulley promised on some future occasion to give to the society more fully his ideas on convulsions. I may remark on these two interesting cases, that I thought them to bear a general resemblance to attacks of hysteria, as seen in the female, and also occasionally (though the derivation of the term makes it an awkward one to use) in the male. There were the same causes in operation, which will produce an attack of hysterical convulsion; viz., a state of mental depression and fright. There were the biting and endeavour to injure the bystanders, and the throwing about of the limbs, as if the movements were to a great extent under the command of the will: these symptoms I find mentioned in my account of both cases. There were the same obstinate silence, the apparent insensibility, but real consciousness of what was said and done near them: as witness the abrupt termination of the convulsions, on mention being made of the hospital. The fear of water, I apprehend, in the second case, was due to the one peculiar source of disquietude, i.e., the fear of hydrophobia; the mind having being impressed with the notion; that dread of water was one of the essential symptoms of the disease. The peculiar countenance of tetanus was absent, I think, in the first case, as also the peculiar lasting rigidity of the muscles, especially of the masseters and pterygoids, which, had it been present, would have rendered biting and snapping perfectly impossible. Was the lasting contraction of the flexor muscles of the thumb and forefinger different from the irregular vagaries of muscular action so frequently seen in hysteria?

DISEASE OF THE BRAIN IN A SYPHILITIC PATIENT: DEATH. By T. L. WALFORD, Esq. (June 30th, 1852.) The subject was a woman, aged 50, who had contracted

syphilis four years previously. She had since complained of pain in the head, and was, a day or two since, said to have had a fit. She began to turn about restlessly in bed; she could not be got to take medicine; and took little or no food. She answered in monosyllables. There was great difficulty in swallowing. The intelligence was neither exalted nor depressed. The opinion of the Society was in support of the existence of nodes pressing on the brain, and in favour of the use of mercury internally, as well as the application of mercurial ointment to the blistered scalp.

The *post mortem* examination in this case, as subsequently related by Mr. Walford, revealed opacity of the membranes of the brain, serous effusion at the base, and softening of the right optic thalamus and other central parts.

Mr. MAY mentioned the case of a military man, who had complained of severe fixed pain in the head for a length of time, and he was paralytic; the origin of these symptoms being syphilis. He died; and, on pressing upon the painful spot, the bone was found to be destroyed. There would probably have been an ulcer through before long.

DISEASE OF THE PONS VAROLII. By G. MAY, Esq. (Sept. 29th, 1852.) The patient was a girl, Miss C., aged 9. About six months before death, she had fallen from a swing, and had struck the back of her head. In a fortnight, she began to speak badly; then she was sick, especially in the morning; symptoms of chorea followed; she occasionally fell down; etc. At this time, she had convergent squint of the eyes, chiefly the right. She gradually lost general power, and was confined to bed for three months before death, having paralysis of the right arm and leg. Both limbs were extended and stiff. The other side became gradually affected, but not to the same extent. Convulsions occurred occasionally; the intelligence, special senses, and sleep, remaining unaffected. She became more asthenic, convulsed, and comatose, and sank by apnoea.

Examination of the Body. An abscess was found in the right side of the pons Varolii, with ulceration of its entire surface, and congestion of the membranes. The sixth or abducent nerve on the right side was destroyed; the left had also probably been destroyed. There were about four ounces of fluid in the ventricles. This case, Mr. May said, bore out Dr. Marshall Hall's views on the pathology of chorea, as he placed the seat of this disease in the pons Varolii.

DISEASES OF THE RESPIRATORY SYSTEM.

SUDDEN DEATHS IN PHTHISICAL PATIENTS. By T. L. WALFORD, Esq. (May 26th, 1853.) Mr. Walford mentioned that two phthysical patients under his care had died more suddenly than usual; one by bringing up a large quantity of blood; the other, an old man, by syncope.

Mr. MAY said, that the latter was not an unusual termination; the heart, participating in the general debility, being at last unable to carry on the circulation.

MASSSES OF COAGULATED MILK IN (ESOPHAGUS OF A CHILD. By G. D. BROWN, Esq. (May 25th, 1853.) Some specimens were exhibited by Mr. Brown of what he thought to be casts of the trachea and bronchi; they had been vomited under the use of an emetic, in a child, who had suffered from measles, and had croupy breathing and urgent dyspnoea. These symptoms ceased on the action of the emetic. The substances were white, greasy to the feel, and capable of being rubbed down between the finger and thumb.

Mr. WALFORD (and in this the Society coincided) thought these masses were portions of coagulated milk, which had filled the oesophagus, and so pressed on the trachea and larynx from behind.

Mr. BROWN was inclined to adopt this opinion, especially as the microscope showed oil-globules. There was no appearance of these masses being tubular; they were quite solid.

DISEASES OF THE DIGESTIVE SYSTEM.

EXPULSION OF TAPE-WORM FROM THE SMALL INTESTINE. By G. MAY, Esq. (Oct. 21st, 1852.) He reported a case of expulsion of tape-worm from the

lowed by castor-oil. The worm was subsequently examined microscopically by Mr. Goodwin; but he did not succeed in finding the head.

VOMITING AND EMACIATION DURING PREGNANCY. By E. WELLS, M.D. (Jan. 26th, 1853.) The patient was a lady whom Dr. Wells had visited in the Isle of Wight, in June 1852. She was then suffering from vomiting and anorexia. In July, emaciation had rapidly progressed, and tympanitis began. She was placed under the care of a homœopathic practitioner, who five months afterwards suspected pregnancy, and wished her to be removed to London. The uterus was then found to contain an eight months' fetus. She continued to lose flesh, though taking iced food; and one day she suddenly died, after a hearty meal. When the body was examined, marks of inflammation and ulceration were stated to have been found in the stomach; but there was no other organic disease. The curious points of this case were the obscurity of the signs of pregnancy; the persistence of emaciation, though abundance of nutriment was taken; and the difference in the character of the vomiting from that of ordinary pregnancy.

The members of the Society thought that the question which presented itself was, Whether, when the existence of pregnancy had been decided on, and was the presumable cause of the vomiting, emaciation, etc., premature labour should not have been induced?

CALCULI IMPACTED IN THE CYSTIC DUCT: DEATH. By I. HARRISON, Esq. (Nov. 23rd, 1852.) Mrs. P., a robust and healthy woman, aged 33, had been attended by Mr. Harrison several times, on account of severe bilious attacks, with much pain in the stomach, obstinate vomiting, and slight jaundice. She had married twice, and had become quickly pregnant by her second husband, but had had no children by the first. Seven days before her death, she was seized with vomiting, which continued until within two days of that event, nothing appearing to arrest it. She had also acute pain in the right hypochondrium. She rapidly became weak; the skin assumed a dirty yellow colour; and her expression became that of hebétude produced by poisoned blood. Delirium supervened, and she sank from asthenia. A blister to the epigastrium, calomel and opium, purgatives of tartarised soda, with pills of colocynth and hyoscyamus, constituted the treatment; the diet being beef-tea and brandy, and soda-water with lumps of ice in it. As to the diagnosis, Mr. Harrison remarked, that it was evident that the under surface of the liver was the part attacked. There was no tumour nor distension of the bowels.

Examination of the Body. The liver was found small, and slightly congested only; its structure being healthy. The gall-bladder was small, with a much thickened capsule; the ducts also were thickened. Two stones, of the size of peas, were impacted firmly in the cystic duct, which was much contracted in calibre. The hepatic and common ducts were pervious. The uterus contained a three months' fetus.

Mr. Harrison remarked that there was no obstacle to the flow of bile from the liver, so that the theory of obstruction to the passage of bile would not apply here. The best explanation he could offer was, that the continued irritation of the impacted calculi so acted on the liver, that its operations became suspended, and the blood, especially in the state of pregnancy, became poisoned. He thought that poisoned blood was the immediate cause of death.

OBSTRUCTION OF THE BOWELS: OPERATION FOR ARTIFICIAL ANUS: DEATH. By G. MAY, Esq. (April 20th, 1853.) This case is related in the ASSOCIATION JOURNAL for May 6th, 1853. The points of interest were, the capability of passing a long tube, twenty inches, *per rectum*; the consequent choosing of the cæcum as the seat of operation, and the revelation, by *post mortem* examination, of the interesting fact, that the stricture, which was produced by cancerous disease, existed only six inches from the anus, and that a portion of the intestine above falling, as it were, like a valve on the upper opening of the stricture, so perfectly closed it as thoroughly to prevent the feces from coming down,

though the tube could readily pass from below upwards. The operation was performed through the anterior abdominal parietes, with the effect of allowing a small quantity of feces to escape before death.

Mr. WALFORD objected to opening the cæcum, both on anatomical and on physiological grounds. The cutting into this part of the bowel, surrounded by peritoneum, involved a greater amount of risk than opening the descending colon from behind. The cæcum, he thought, performed an important part in the function of defæcation; and the colon could not be brought to empty itself here.

Mr. MAY, in reply, stated that the statistics of the operation, as given by Mr. C. Hawkins, did not show a great difference in mortality in favour of the posterior operation; and he (Mr. H.) seemed, in his comments on the cases tabulated by him, rather to prefer the anterior.

CASES OF OBSTRUCTION OF THE BOWELS: USE OF TOBACCO INJECTIONS. By E. H. PAYNE, Esq. Mr. PAYNE read the histories of three cases of obstruction of the bowels, in which he had used injections of tobacco. He attributed much to this remedy in the recovery of these patients. He had great objection to purgatives when there was obstinate vomiting; and he laid great stress on obtaining good tobacco, recommending highly the sort called Cavendish, as being less likely to be adulterated. He infused from twelve to twenty grains of this in a half pint of boiling water, for fifteen minutes.

CASE I. James G., aged 68, was seen by Mr. Payne, June 7th, 1830, in the evening. This patient had always enjoyed good health, but his bowels had lately been irregular; they had not acted, at the time of his being first seen, for five days. He vomited constantly; the abdomen was distended and uneasy on pressure, and he complained of its being tight; his countenance was anxious; the pulse was 90 and tolerably firm. He was bled to faintness; and calomel and opium with effervescing salines were ordered.

June 8th, *morning*. The bleeding gave him several hours comfortable sleep; he had no sickness. The vomiting, however, returned about the middle of the day with much pain; the pulse being 108 and weak. Everything was rejected by the stomach. He was ordered to have a hot poultice applied to the abdomen; and abstinence from fluids and a continuance in the use of the pills were enjoined.

Evening. The countenance was very anxious; he had vomiting of fecal matter; the pulse was 130; the abdomen tympanitic; he had constant hiccough. Mr. Payne ordered a tobacco injection (☉j. to Oss). It caused slight faintness; the patient had, however, afterwards, some relief from the pain; and his sickness abated. He had a wine-glass of sherry during the faintness; and was ordered to continue the pills every three hours. Another injection with fifteen grains of tobacco was used in six hours.

June 9th, *morning*. He had been sick twice only after the last injection; he had no hiccough; he had expelled some wind by anus. The countenance was improved; the pulse 94, weak. He was very thirsty. The injection was repeated, and the pills were continued.

Evening. He was easier; the belly was less tense; he was very thirsty. The injection was repeated; this was followed by free evacuation from the bowels; after which he speedily got well.

CASE II. Mrs. C., a corpulent, drinking woman, was seen by Mr. P., on Feb. 13th, 1832. Her countenance was anxious and sunken; the pulse 111, very weak; and the abdomen much distended. There was constant vomiting of stercoraceous matter, with hiccough; the pain had been very great, but she seemed sinking; her skin was cold and moist. She had been under treatment for a week, for constipation of the bowels. Mr. Payne ordered the following pills to be taken every three hours:

R Calomelanos gr. ij.
Camphoræ gr. i.
Opii gr. i. M.

The patient was directed to abstain from fluid. A tobacco injection (☉j. to Oss.) was used. This woman passed some

flatus on the 15th; and, in the night, a large amount was forcibly expelled, which was followed by an immense foetid evacuation, with some bloody serum. The calomel and opium had been continued, and she had had five more enemata administered, the quantity of tobacco used at a time being from twelve to fifteen grains only, on account of her extreme weakness. Wine and brandy were likewise given. She nearly sank after the evacuation; but, under the use of brandy and opium, with the injection of two drachms of compound tincture of camphor, she gradually recovered, the peritoneal covering of the abdomen being somewhat thickened.

CASE III. Mrs. S., a short, stout, thickset washerwoman, was seen by Mr. Payne's assistant on April 2nd, 1838, having then, after a week's constipation, been suddenly seized, at the wash tub, with violent pains in the abdomen. She was bled to six ounces, and croton oil with a senna mixture was ordered; everything was, however, vomited. Afterwards, Mr. Payne himself saw her. The pains were then very violent, and the sickness was excessive; the pulse was 136, full, and firm. He bled her to twenty-six ounces with much relief to the pain and the vomiting. He ordered two grains of calomel and one of opium every three hours. No fluid was allowed.

On April 3rd, she was again bled to faintness, the sickness and pain being as violent as ever, and feculent matter being ejected. This woman sank into a very feeble condition.

On April 14th, after a tobacco injection, flatus escaped with a loud noise, which was followed by stools, great faintness, and produced the flow of bloody serum. She recovered from this faintness under the same treatment as in the previous case; the peritoneum remaining also thickened. She had marked tenderness above the ileum on the left side; two tobacco enemata were administered, the calomel and opium having been continued only up to the 6th, on account of the patient's refusal to take them. She, as well as the second woman, often asked for the injection.

Mr. Payne had been led to abstain from violent means for getting the bowels open, by having, many years ago, witnessed a case, in which the transverse colon was borne down upon the uterus by the weight of a pound and a half of fluid mercury, the administration of which had formed part of the treatment. He determined for the future to have recourse to sedatives, and used the tobacco injection on this account. He only allowed a mild aperient after the sickness had subsided. He thought that every addition of fluid in the distended state of the bowels was extremely injurious, and delayed relief.

SCIRRUS OF THE PANCREAS. By G. MAY, Esq. The tumour had been felt, during life, near the region of the pylorus and towards the umbilicus; it was hard, but not defined; was deep seated, and slightly tender. The prominent symptoms had been, shooting pains through from the abdomen to the back, occasional vomiting, a disgusting taste in the mouth, loathing of food, and flatulent distension. The patient died asthenic.

Examination of the Body. The pancreas was found enlarged and nodulated at its head, and infiltrated with scirrhous deposit. Ulceration had commenced in the transverse duodenum posteriorly. The liver contained nodules of scirrho-encephaloid deposit, and one or two existed in the lungs.

CONSTRICTION OF THE ŒSOPHAGUS. By R. T. WOODHOUSE, M.D. (May 25th, 1853.) A lady, aged 43, who had long suffered from dysmenorrhœa, and had some stomach derangements which had generally yielded to alkalies. About eighteen months ago, she complained of pain in swallowing, referred to the lower third of the sternum. Emaciation ensued from the inability to swallow sufficient nourishment, the appetite being craving. She was relieved by anodynes, and partly nourished by asses' milk and injections of beef-tea. The passing of bougies was recommended by a medical friend in London, but another disapproved of this proceeding. She latterly complained of excruciating pain in the mammae, awakening her about one or two o'clock in the morning, notwithstanding large doses of morphia at

night. A distinct bruit was heard behind, in the situation of the aorta, between the ninth and twelfth dorsal vertebræ. She died on May 20th.

Examination after Death. There was extreme emaciation, but the mammae were of full size. The œsophagus was slightly constricted below the cricoid cartilage; and there was an irregular thickened opening, which led into a small abscess filled with sanious offensive matter. The coats of the tube were infiltrated with a dense greyish deposit, which narrowed the calibre, so as scarcely to admit the finger. About the third or fourth dorsal vertebræ, the tube dilated into a large pouch, containing the same sanious fluid; this sac extended to the right of the spine, and separated the pleura from the root of the lung on this side. Just above the cardiac orifice of the stomach, there was a dense ring of adventitious deposit, about half an inch in thickness, through which, however, the finger passed readily into the stomach. The large pouch presented internally a number of nodulations, irregular in shape. The stomach was slightly congested; the pylorus was healthy. A lymphatic gland at the head of the pancreas presented some malignant deposit. The cervix uteri was hypertrophied, and the os contracted. There was a hard calcareous mass, as large as a pullet's egg, at the situation of a bronchocele which had been cured by iodine.

This case showed the value of beef-tea injections in sustaining life for a long period; the patient having been mainly supported by this means for twelve months. The pain in the mammae Dr. Woodhouse explained by the pressure of the thoracic abscess on the intercostal nerves.

The following case illustrates the necessity of extreme caution in the use of bougies. A man had dysphagia, hoarseness, cough, and hæmoptysis, but only to a moderate amount. After some time, an aneurism was diagnosed, on account of dulness under the upper part of the sternum, and to the right of it, with impulse, and an occasional indistinct bruit. The man died; and a small aneurism was seen, which opened into the left bronchus, and also into the œsophagus, by large apertures with rounded edges, showing that they had existed some time. The free flow of blood had apparently been prevented by clots blocking up the apertures. The opening into the œsophagus would have readily admitted the end of a bougie. Mr. May has reported a similar case. On the other hand, in cases of apparent obstruction of the œsophagus, the passing of bougies has not only been not detrimental, but has afforded the greatest relief.

The value of beef-tea injections is further shown in the case of a child, who had been burnt on the shoulder. This burn was followed by erysipelas of the whole trunk; he had diarrhœa, and obstinate vomiting of everything given; the ejecta being like coffee-grounds. The features were sunk, and the pulse was almost imperceptible. He appeared, in fact, to be sinking. A beef-tea injection, containing two drops of laudanum, was ordered to be given every four hours; and collodion was painted freely over the reddened skin. The vomiting and diarrhœa ceased as if by magic; and, after a few injections, the child was able to take nourishment by the mouth, and recovered from its perilous condition.

Reading, September 1858.

[To be continued.]

ON CHANGE OF SIGHT AS PREMONITORY OF HARD CATARACT.

By W. WHITE COOPER, F.R.C.S., Ophthalmic Surgeon to St. Mary's Hospital, and Senior Surgeon to the North London Eye Infirmary.

In the second edition of my work *On Near Sight, and on the Eye, etc.*, reference is made to a class of cases of rare occurrence—cases in which persons, having been presbyopic, and having used convex glasses, as they advanced in years recover natural vision, or become near-sighted. I

avoided expressing a positive opinion as to the cause of this; but I have now been led to differ from the conclusions entertained by Mr. Ware and M. Sichel. Mr. Ware explained the phenomenon on the supposition that, in consequence of absorption of a portion of the vitreous humour, the sides of the sclerotica were pressed inwards by the action of the muscles, the effect being to lengthen the axis of the eye, by which the aberration becomes corrected. M. Sichel considers this apparent return of the power of accommodation as in reality a shortening of the visual focus, caused by the use of too strong convex glasses.

I have recently had the opportunity of studying four cases of this description, and have quite satisfied myself that, in them at least, the change from presbyopic to myopic sight was premonitory of hard cataract.

I have observed that myopic persons, who become affected with cataract, increase the power of their glasses to the very highest numbers, even to No. 14. It is often considered that the need of higher and higher glasses under these circumstances is a delusion, and that the mere fact of the vision becoming more and more imperfect leads the patients to seek increased assistance in stronger glasses; yet, as the highest concave glasses diminish objects to almost microscopic minuteness, it was difficult to believe that they really afforded assistance. Observation has, however, led me to believe that the assistance was not imaginary; and the reason is probably this. In all cases of hard lenticular cataract, the crystalline lens becomes closer and denser in structure, and generally rather flattened in shape; but the flattening is in some cases less in proportion than the increase of density. By this increase of density, the refractive power is altered, and consequently the focal distance is shortened; so that a myopic eye, which formerly derived sufficient assistance from lenses Nos. 6 or 8, needs Nos. 12 or 14 for reading, or seeing moderately distant objects.

To an analogous change* I refer many of those singular cases in which old persons lay aside their convex presbyopic glasses, being able to do without them, or find themselves under the necessity of using concave or myopic glasses. The increase in density may be sufficient to counteract the changes which had previously diminished the refractive power, and to restore to the eye its natural focal distance; or it may go a little further, and cause the image to be formed in front of the retina as in near sighted persons. Such a change in the density is not necessarily attended with so much diminution of the transparency of the lens as to materially interfere with vision, though I believe the sight is always a little impaired, which the patient properly sets down to the account of old age; but, in many cases, the change goes on; the lens becomes shrunken and amber coloured; and the patient is sooner or later pronounced to have hard cataract.

The characteristics of the cases which I have seen have been these. A person, about the middle period of life, has taken to glasses, which have been increased in power as years rolled on. He has numbered perhaps seventy summers, when he finds the high powers less agreeable than the lower, which are resumed; but, after a time, they too, strain the eyes. Perhaps glasses are altogether laid aside, and the fortunate individual receives the congratulations of his friends on his renewed juvenility. In some cases, the sight is far from clear, and objects are held near the eyes to be discerned; accidentally, perhaps, he looks through a concave glass of low power, and is agreeably surprised at finding his sight improved. As these symptoms occur in advanced life, the persons may die before other phenomena present themselves, and the true nature of the case may never be discovered. But if the parties live, the sight, sooner or later, becomes little by little obscured, and the characteristic symptoms of hard lenticular cataract are established. I have often been struck with the slow progress of some of

these cataracts. During the last ten years I have, from time to time, examined the eyes of a clergyman who consulted me in 1843, for slight imperfection of vision. In his right lens two small striae were then visible; in the left lens there were three; the nature of the case was explained to him, he has taken great care of his eyes, and although there is now a general haze in both lenses, he has sufficiently useful vision to perform his clerical duties. Another patient, a physician, has had cataract fully formed in the left eye for six years, and incipient cataract has existed in the right for nearly the same time; but it has been so stationary that he still reads and writes.

The formation of cataract, then, may be so gradual that it may have made considerable progress before the patient will admit that his sight is much impaired; I have known patients almost angrily protest that their sight was good—not quite so sharp as it used to be, but still very good—when decided cataracts were plainly visible. The fear of the proposition of an operation may lead them to make the best of matters, but there is much self deception in many cases.

In the four last cases of sight changed from presbyopia to myopia, which have fallen under my observation, careful inspection, at intervals of two or three months, has traced the change of structure from the first faint indications to the unmistakable characteristics of hard, lenticular cataract; and, as a general rule, such cases should be carefully watched, for it commonly happens that persons who appear to have recovered their pristine sight in the manner described, are disposed to take liberties with it and to use their eyes more than is prudent. They should be warned against this; for though art can do little directly to arrest the progress of cataract, congestive action of the eyes may be prevented by the patient abstaining from over exertion of those organs, especially by artificial light; and he ought to be careful so to arrange his position when reading or writing, that the object on which he is engaged should be well illuminated, but the eyes kept in the shade, and protected from the injurious stimulus of heat and glare. He should always use the blackest ink, write a bold hand, and above all avoid reading small and indistinct type.

19, Berkeley Square, October 1853.

TWIN PREGNANCY: ABORTION OF ONE FŒTUS IN THE THIRD MONTH, THE OTHER ATTAINING THE FULL PERIOD.

BY G. G. BROWN, Esq.

Mrs. W., aged 30, a dress-maker, had suffered, up to the time of her marriage, about twelve months since, from irregular menstruation, vicarious with which there was occasionally excessive intestinal mucous irritation. She has also suffered for some two or three years from spinal irritability, slight lateral curvature of the spine; and, when engaged more than usual in her business, she had, as the result of the disordered condition of the spinal column, severe spasmodic contraction of the extensors of the hand and forearm. These symptoms were always relieved by a tonic plan of treatment, rest from work, counter-irritation, sea air and bathing, and the exhibition of chalybeates. By the advice of one of our most talented provincial physicians, she got the common spine support, with crutches for the arms, etc., in the hope that she might resume her business; and its adoption gave very decided relief to the muscular contractions, but was shortly succeeded by dyspnoea and cough, bearing a close analogy to spasmodic asthma, and relieved by the same class of remedies.

The catamenia, having ceased to flow on the 5th of January, 1853, were succeeded by the usual symptoms of pregnancy. On the 10th of April, I was summoned to my patient, when I found she had aborted of a fœtus of the size and development of ten weeks, or thereabouts. Some kind of clot (which had been disposed of) had preceded the

* Since this paper was written, I have conversed with a distinguished Viennese ophthalmologist, Dr. Meyr, and find that he had arrived at the same conclusions as myself, as to the nature of the cases in question.

escape of the fetus, and, I presume, contained the membranes and placental mass, as no subsequent clot or hæmorrhage followed it. On the following day, she was about again; and (looking at the delicate health of my patient) I congratulated her on getting so well through it.

From her miscarriage till the 6th of July, I did not visit my patient, but at this time was consulted by her on account of the large size of the abdomen, which she attributed to dropsy, or other visceral enlargement from disease. On making an external examination, I found a tumour of the size, and having the position of a gravid uterus at six months. On questioning her as to the symptom indicating fetal viability, she could not speak positively (being her first pregnancy), attributing such movements to flatus. Whilst observing to her that I should wish to test the presence of a second child by applying my cold hand to the abdomen, I, on the instant, felt what I could not mistake as the fetal movement, and, extraordinary as it appeared to my patient, gave my opinion accordingly. I have only to add, that her health had much improved since her miscarriage; the dyspnoea and cough had passed away, and she had taken nourishment with advantage to her strength.

On the 1st of October, the waters came away with very slight pains; and these continued at intervals, with some discharge of the same kind, till 4 A.M. of October 5th, when decided uterine contractions set in, and, at half-past nine A.M., she was delivered of a lively healthy male child, of the average dimensions of a nine months' gestation.

By a reference to Dr. Tyler Smith's method of calculating the period of pregnancy, it will be found that, by taking January 1st (the day when the last catamenia appeared) as the commencement of our reckoning, October 5th will be found as the tenth return of the catamenial period.

Stourport, Worcestershire, October 28th, 1853.

ASSOCIATION INTELLIGENCE.

MEDICO-ETHICAL COMMITTEE.

This Committee met in the Freemasons' Tavern on Thursday, November 3, at 3 P.M. The members present were Dr. Ogier Ward, of Kensington, W. H. Michael, Esq. of Swansea, Dr. Woodforde of Taunton, and J. S. Bartrum, Esq. of Bath. A sub-committee was appointed to prepare a draft code of ethical laws, to be forwarded to all the members of the Committee, and then discussed at a general meeting of the Committee to be held in January or February. The place of meeting was not fixed.

N.B. In the list of members of the Ethical Committee, published at p. 948, we omitted the name of Dr. Barclay of Leicester, Secretary for Leicestershire (Midland Branch).

METROPOLITAN COUNTIES BRANCH: PROCEEDINGS OF THE COMMITTEE ON GRATUITOUS MEDICAL SERVICES.

The members of the ASSOCIATION are aware that, at the annual meeting of this Branch, held in July last, Sir JOHN FORBES, M.D., D.C.L., the President, in the chair, the following resolution was carried unanimously:—"That a Committee be appointed to inquire into the evils which are said to flow to society and to the medical profession from the practice of giving gratuitous advice indiscriminately and unnecessarily." (*Vide JOURNAL*, July 22.) Eight gentlemen were appointed, with power to add to their number.

The Committee first met on the 5th of August, when Dr. Cormack was appointed Chairman, and Mr. Charles, Honorary Secretary. It was resolved to request several gentlemen to join the Committee. They for the most part acceded. A complete list of the Committee was published in the ASSOCIATION JOURNAL of Oct. 28th.

A sub-committee was appointed on the 5th August, "to arrange a plan of proceedings, to be submitted to the next meeting." This meeting took place at 3 P.M. in the Freemasons' Tavern, on the 3rd instant. The following members were present:—Henry

Ancell, Esq.; C. T. Carter, Esq.; Thos. Charles, Esq.; John Rose Cormack, M.D.; R. Payne Cotton, M.D.; Patrick Fraser, M.D.; A. Halley, M.D.; Henry Lee, Esq.; C. F. J. Lord, Esq.; W. O'Connor, M.D.; R. R. Robinson, Esq.; T. O. Ward, M.D.; and George Webster, M.D.

The chair having been taken by Dr. CORMACK, the sub-committee presented their report, including a series of queries, proposed to be extensively circulated amongst the members of the profession. The queries were discussed *seriatim*, and were unanimously adopted for circulation in the following form:—

1. Are you acquainted with the practical working of any medical charities? If so, state their names: the number of patients relieved annually, in doors and out doors: the annual expenditure in each: the salaries paid to legally qualified medical officers: also the number and denomination of medical officers giving their services gratuitously.

N.B. The last annual report, if forwarded to the Committee, will aid their inquiries.

2. State the classes or denominations of the poor whom you consider the proper recipients of gratuitous medical services in these institutions.

3. State the classes, orders, or denominations of the community habitually receiving gratuitous medical services in these institutions whom you consider *not* to be proper objects of charity, with any information you can append as to their circumstances and habits of life.

4. Give particular instances of the abuses (if any) of these charities.

5. State the character and efficiency of the gratuitous medical services rendered at these institutions,—such as the time bestowed by the medical officers; the average number of patients seen on each day by each officer, etc.

6. Are you acquainted with any facts relating to the system of gratuitous medical service by private practitioners? If so, state them, with any particulars calculated to aid the Committee in arriving at correct knowledge as to its extent and bearings.

7. State generally your opinions as to the effect of gratuitous medical services as at present afforded:

I. On the public:

II. On the Science of Medicine: and

III. On the profession in a moral, a social, and a pecuniary point of view.

Illustrate your opinions as much as possible by facts.

8. Mention the gratuitous medical services to your knowledge given by the profession to classes of society respecting whom *charity* is quite out of the question.

9. Name the sick clubs, provident and self-supporting dispensaries, in your neighbourhood, and give your opinion of their effects on their members, and on the medical profession.

N.B. A copy of the rules and reports would be very useful to the Committee, and also information on the following points: average per centage of members on sick list; average duration of illness; average pay per case; whether membership is limited within a certain amount of income; and if so, within what amount.

10. Can you give any information regarding the origin of the sick clubs, the provident and self-supporting dispensaries, and the medical charities with which you are connected, or which exist in your neighbourhood?

JOHN ROSE CORMACK, *Chairman*,
THOMAS CHARLES, *Hon. Secretary*.

The sub-committee having been reappointed, (with the addition of Dr. Cormack,) was entrusted with the circulation of the queries, and with ascertaining the best manner of securing funds for the purposes of the Committee.

Mr. Cantrell, of Wirksworth, attended the Committee and communicated much valuable information regarding the sick system. The next meeting is to be held in January.

EDITOR'S LETTER BOX.

CHLOROFORM IN MIDWIFERY.

LETTER FROM J. C. BLOKAM, ESQ., TO THE EDITOR.

SIR,—I am unwilling to enter into a controversy on the subject of anæsthesia in parturition, because, in the first place, engaging in any controversy has a strong tendency to enlist one inseparably on one side or the other of the question, both in regard to reasoning and in regard to practice; and, in the next place, there are probably not many of your readers who will wish to follow the controversy now referred to. Mr. Deane, however, brings his great guns into the field, and opens such a heavy cannonade on my letter published in a late number of the *JOURNAL*, in reply to Dr. Simpson, that I seem to have a claim upon you for another hearing. If Mr. Deane's shots are calculated to make me tremble for my own safety, or to frighten me with a picture of the many faults I have committed, it is incumbent upon me to show that the masonry of my arguments has not been shaken by his heavy artillery.

Mr. Deane apparently considers my letter an able one (and I thank him for his commendation); and, as far as I understand, he has but one objection to make to it, viz., that it is false—not false in any statement of facts, but, in the matter of ratiocination; and it is for me to show—if I can—that the falsity exists merely in his imagination.

In the first place, Mr. Deane, I think, misapprehends the position I assume in the subject under consideration; and I may as well explain what my position is. Mr. Deane seems to assume, and to intimate, that I have not had the benefit of any personal observation of anæsthesia in labour, and he evidently supposes me to be a decided opponent to its use. Now, I think I may say that he has no ground for the assumption; and I can assure him that he is quite wrong in the supposition. Mr. Deane says, in a former letter, "no man ought to utter a word on the question unless he can give the affirmative to the question, 'Have you used chloroform in labour?'" This may be a very convenient doctrine, because it must be nearly tantamount to excluding all but its advocates from the discussion. Those who have not committed themselves, who still wish to be determined in their practice by the results of experience and reason, are to be entirely excluded. I entirely dissent from the doctrine; and I say that I am just as much, and just as little, capable of detecting the errors in reasoning of Dr. Simpson, or of Mr. Deane, if I have never seen a case treated with chloroform, as if I had used it a thousand times. Now, I tell Mr. Deane frankly, that I have not ever used chloroform in labour; but I have heard the sentiment expressed, during the birth of a twelfth child, that it required more courage to be put under the influence of chloroform than to undergo the "agonies" (to use the oft quoted term which Mr. Deane uses) of labour. I have not ever used chloroform in labour; but I have not ever had occasion to declare myself, and never have professed myself, to be an opponent to its use. I believe, however, that I shall not adopt the practice—not in ordinary labours—until my mind is more satisfied than it is at present, that such practice is justifiable, and that it is unattended with danger. The tone of Mr. Deane's letters makes it appear that he does not consider the question as one open to discussion; his mind is determined on the matter, and no more need be said about it—or rather *against* it. It appears to me that the whole merits of the question have not by any means as yet been elicited, and that experience must necessarily, as yet, have a great deal to say upon it. I feel that, being engaged in practice, it is in some measure my duty to study the question; and that it is one, moreover, of considerable interest—its interest and importance taking a much wider range than that of any professional practice. The evidence, at present deducible from experience, I consider to tend strongly to show that the practice is not unattended with danger.

The two cases detailed by Dr. Murphy, in the number of the *JOURNAL* for September 2nd, seem to me to afford strong evidence in this respect. Dr. Murphy argues at some length to show that the chloroform *ought* not to have been the cause of these deaths; but it appears from his own statement that it was so. He shows that women have died unexpectedly after parturition, without chloroform; but he cannot undertake to say that they have so died, with the peculiar symptoms that these cases exhibited. Such deaths, after all, are of very rare occurrence; and it is at least very unlucky for the cause of humanity and chloroform, that two fatal cases

should already be on record, in connexion with the use of chloroform; considering the small scope there has been for them, comparatively. Dr. Murphy says, that it is not to be argued that, because these deaths occurred after the use of chloroform, therefore they must have occurred in consequence of it; but he does not tell us that it would be an unfair inference, that the deaths were occasioned by chloroform under the following circumstances, viz., that they occurred in a very unusual manner—that is, within a short period of the apparently satisfactory completion of labour; that they occurred in connexion with very peculiar symptoms; that these peculiar symptoms were the very ones that are known to attend upon the exhibition of chloroform; that the fatal termination was inexplicable upon any other supposition, than that of the chloroform having occasioned it. In one case, a *post mortem* examination took place, and disease of the kidneys was found, which was quite inadequate for the explanation of the symptoms (including the last fatal one), *independently* of the chloroform; and the lungs were highly congested, which was precisely what was to be looked for as the effect of anæsthesia. We certainly do not *know* that these deaths were occasioned by chloroform; but it is at least highly probable that they were so, and we must often be content to regulate our practice by probabilities. I do not see how the first two fatal cases could well exhibit more conclusive evidence as to their causation: what is wanting to complete it that *could* be found in these cases? Two well authenticated cases, such as these, ought to have considerable weight. The two recorded cases are in all probability not the only ones that have occurred of the same kind; and I cannot understand any person allowing his convictions (I do not say practice) to remain uninfluenced by them. So much for past experience: that which is to come may prove more encouraging. For my own part, I cannot look upon the question as settled; and I still look out for further evidence.

In the next place, I think Mr. Deane appears to have written his letter under the impression that I was arguing the main question—for or against anæsthesia; but all my arguments, I believe, were limited in their application to the remarks made by Dr. Simpson; and this must be kept in mind whilst judging of the appropriateness of the arguments.

Mr. Deane says, that no special pleading can stamp Dr. Simpson's reasonings as fallacious. I am not concerned at all to controvert this position—far from it; but I conclude that I am to understand Mr. Deane as charging me with special pleading, and this I cannot accede to. I only ask any person, who takes an interest in this matter, to read Dr. Simpson's letter, and to read mine; and then say whether Dr. Simpson's line of argument be fallacious or not. Mr. Deane may say, "But read my letter also." By all means; but then read this likewise. I sincerely feel that any special pleading would be peculiarly misplaced in such a matter as this. I was certainly quite unconscious of any special pleading whilst writing my letter; and if it have existence, I must consider it to be a great fault. It is difficult, however, to deal with a general accusation of this kind; and I must, for the present, console myself with the consideration, that it is a very common move with those who are hard pressed by an argument which they feel to be hostile to their own views and principles, to condemn it as a specimen of special pleading.

The line of argument that I directed against Dr. Simpson's analogies was precisely that of showing that they failed in the one essential point; and the distinctions, therefore, referred to in Mr. Deane's third paragraph, are mere surplusage; the paragraph is a mere collection of words, *independently* of the particular instances he may give of my non-observance of these distinctions; the examples forming the body and substance, connected with the dress.

I say this much by way of parrying the *thump* contained in this portion of Mr. Deane's letter. I turn now to the first instance he adduces of my error; and, in doing so, I notice that which I may distinguish as the criticism of this portion.

In Mr. Deane's fourth paragraph, I find the following words, which are to be understood as collected from my ninth paragraph; and the first six words are marked as being an extract. "A fork may aid in eating; but he does not see how chloroform can aid in labour." The sentiment contained in the eleven last words, he attributes to me, but without any ground. When a person makes a quotation from what another has written, for the purpose of criticising it, it is not amiss to be scrupulously attentive to the correctness of the quotation; but Mr. Deane does not subscribe to this maxim, or, at any rate, he disregards it repeatedly. I do not know where Mr. Deane finds the words which he gives as a quotation; they do not occur in my letter.

Neither have I anywhere expressed the sentiment which he attributes to me in the remainder of the sentence. I distinctly disclaim the sentiment as any of mine. I do not know that it can be necessary for me to do more than repeat the passage he refers to in Dr. Simpson's letter, fully and *correctly*, and also that referred to in my own letter: the mere juxta-position of the two passages seems to be all that is needed, to judge of the merits of Mr. Deane's criticism. Dr. Simpson says: "In the reign of the earlier Stuarts, forks were introduced from the continent, to assist our hands in the act or function of seizing and lifting the divided portions of meat, etc., that we wished to eat. But this was a very sad and uncalled for innovation upon the old and established physiological functions of the human fingers; and, at the time, it was as loudly opposed and decried as the modern employment of anaesthetics in aiding the physiological function of human parturition." The passage in my own letter is thus: "The use of forks is alluded to as a means of assisting our hands in lifting portions of meat, etc.; and this innovation is then likened to the employment of anaesthetics in *aiding* the functions of human parturition. But there is no objection made, apparently, to the use of anaesthetics for the purpose of *aiding* parturition, and consequently the two cases are not analogous." I think, if I enter a little more fully into this part of the subject, Mr. Deane himself will see that my argument is sound, and that Dr. Simpson's analogy is unsound. Mr. Deane's criticism rests on the use of the word *aid*—on the use that Dr. Simpson makes of it, and the use that I make of it. The word is apparently an influential one in Dr. Simpson's statement of his own ideas; but Mr. Deane says that it does not form an essential element in his analogy. Now, I maintain, in spite of anything that Mr. Deane has advanced to the contrary, that it is thus essential. What is the essential characteristic of the innovation immediately under consideration—the characteristic that is relied upon as rendering it analogous to the innovation of subjecting women to the influence of chloroform whilst in labour? There are two characteristics for us to choose between; and I apprehend that we must take one of these two as that which is involved in Dr. Simpson's analogy. One of these characteristics is the aid which this and other contrivances and innovations afford towards rendering our bodily organs more efficient tools in the performance of their several natural functions. Our organs are admirably contrived for the general purposes for which they are intended; but they have, none of them, perhaps, that sort of perfection which precludes the possibility of their being rendered by special contrivances more efficient for individual purposes. The other characteristic consists in the substitution of some artificial contrivance for the natural function—the abrogation, suspension, or destruction of the natural actions of the organs; as was done by binding infants in swaddling clothes, or on wooden boards, and tying their heads to their shoulders (these practices were innovations formerly, though they are exploded follies now), in order to prevent the injury that nature would have left them to experience by using their limbs, and which, no doubt, they do now frequently sustain, to a certain extent. I conceive that Dr. Simpson did not mean to refer to this latter characteristic, though it would have been very relevant to have done so, seeing that it involves precisely the objection that the opponents to the use of anaesthetics raise to the practice: it is the characteristic which ought to have been referred to, in order to make good the analogy. I conceive that Dr. Simpson could not have referred to this characteristic, because I do not see that the use of forks deranges, suspends, or impedes any one of the natural functions. The local and partial, the general and vital actions, are all called into exercise, just as much with the use of forks as without them. I conceive that Dr. Simpson is in the position of not only implying that he referred to the former characteristic, by the use he makes of the words "*assist*" and "*aiding*"; but also that he *must* have referred to this. And then the analogy fails, *quoad* the point on which the objection of the opponents rests. I think neither Dr. Simpson nor Mr. Deane can understand accurately the principle on which the objection rests. A large portion of Dr. Simpson's arguments is in many respects parallel to what it would be if he were to insist upon medical men having children bound hand, foot, and head, upon boards, in order to prevent the bruises and injuries (sometimes severe ones) that now arise from the physiological use of their limbs—*because* they (the medical men) bind up limbs and joints to prevent movement, whilst they are in a state of disease.

Having disposed of this first instance of my mistaken analogy, I find there is none other brought under notice, and conclude that the most formidable was selected for exposure.

There are some other remarks in the same paragraph, which concern me only secondarily; they more immediately concern Dr. Simpson and Dr. Meigs. It is a good maxim, and one received in the profession as generally correct, that nature should be assisted and forwarded in her functions and remedies, rather than obstructed or perverted; that she should be allowed to take her own course, rather than be forced into one that may appear to our understandings, fancies, or prejudices, to be better. And this maxim is, in principle, perhaps, always correct; but, in practice, not always applicable: there is often a difficulty in determining what the natural course is, and whether the course actually taken may not be a provoked one, and consequently requiring control. There can be no difficulty of this kind here; there can be no doubt that it is not a provoked action, but the natural action, that is endeavoured to be counteracted by the use of anaesthetics in ordinary parturition. Mr. Deane considers it to be inconsistent for the same party to advocate the control of the perverted action of the disease, and also to object to counteracting the natural state of the system, in parturition; in the same way as Dr. Murphy thinks it *inconsistent* to object to the use of anaesthetics in parturition, and at the same time to use them during surgical operations; but it should be remembered that it is not a natural condition for muscles, nerves, etc., to be severed by the knife; and that the pain attending upon the process is not a natural physiological pain. The controversy, I think, must in great measure be kept up by the one party misunderstanding the position for which the other contends. The opponents of the new practice say, that you cannot interfere with nature in her own course of action, and thwart her in her own plans and intentions, without mischief, or the danger of mischief; and this position is certainly in itself a correct one; and it has a double application. It applies against deranging a course which is a natural one, and it sanctions deranging one which is not natural. To quell the non-natural pain of a surgical operation may very well be a benefit, at the time of the operation, and also subsequently to it; but, in parturition, the circumstances being reversed, the rule, in order to remain the same rule, must be applied inversely. Is it not quite consistent with reason for these opponents to suppose, until experience can be appealed to to decide the point, that there must be danger of seriously deranging the vital energies by such artificial interference with the functions of the nervous system—a system, the whole of which is so essentially involved, both physically and psychically, in the act of parturition?

In discussing the position that the pain of parturition is part of our nature, I think each of the two parties shows an inclination to refer to the parallel position, that the toil of manual labour is part of our nature; each party feeling conscious that the facts and principles of one of these positions, are calculated to illustrate those of the other. Mr. Deane, in his former letter, suggests that this part of our natural condition may be abrogated by the possession of £500 per annum; but he should remember that money is available in this way only so far as it may confer upon the possessor a command over the labour of others; so that for every one relieved from, there must be many subjected to, this burden; and it thus becomes evident that labour must remain the lot of the great mass of mankind. And is this necessity of our nature to be looked upon as an evil? Surely not; it may be a source of temporary suffering, but no doubt of lasting benefit.

I now proceed to Mr. Deane's fifth paragraph. His objection here refers to my using the same words in a wider range of meaning, which Dr. Simpson had used in a more contracted range. But why do I do so? Dr. Meigs prescribes to himself a certain latitude in his endeavours to relieve human suffering. He relieves the suffering arising from a provision of nature—from disease; but he objects to the use of one particular means for relieving the suffering which he considers to be the physiological attendant upon one particular act. Dr. Simpson then argues that if he would do the one thing, he ought to do the other also. The gist of Dr. Simpson's argument (as I understand it), is this; if you are justified in relieving any human suffering, you are bound to relieve all human suffering. This appears to me to be bad reasoning; and in order to put it to the test, I have recourse to Dr. Simpson's method. I apply his principles in a still larger circle than he had in view, following, by this means, the erroneous example that he had set, for the purpose of exposing the error involved. It appears to me evident, considering the tenor of the whole paragraph in question, that this was the line of my argument; and that Mr. Deane's criticism, however learned, is totally uncalled for. I admit that the range of my idea was quite different from that of Dr. Simpson's; but so is Dr. Simp-

son's quite different from that of Dr. Meigs. Dr. Simpson urges Dr. Meigs, on the ground of consistency and humanity, to extend his sphere of action from the relief of morbid pain to the relief of natural physiological pain, which Dr. Meigs thinks cannot be done with impunity. I suggest, in return, that Dr. Simpson should extend his sphere of action from the relief of the pain of disease, and the relief of the pain that naturally attends upon a natural process, to the relief of the pain of a wounded conscience. Dr. Simpson no doubt will not feel himself bound, in consistency or humanity, to do as I suggest; neither will Dr. Meigs feel himself bound to do as Dr. Simpson urges him. The principles of right and wrong are different in each of the three positions, but there is sufficient analogy in the differences.*

I now come to Mr. Deane's sixth paragraph; I am really at a loss to account for the accusations here put forward. I must first give some explanation of what the state of the case is, because I have to show that not only are Mr. Deane's arguments perfectly irrelevant, but, also, that his statements are quite the reverse of correct. Mr. Deane gives the sixth, seventh, and eighth paragraphs in my letter, as his subject. It is the sixth paragraph that is principally concerned. In this paragraph I expressly refer to the twenty-third of Dr. Simpson as forming the subject of my argument. Therefore the sixth paragraph of my letter and the twenty-third of Dr. Simpson's contain the essential matter for determining the merits of this present dispute; both these paragraphs are short ones. Dr. Simpson introduces a sentence, which is placed between inverted commas, for the purpose of expressing in small compass the position which he considers his adversary to occupy, and of propounding the subject of his own argument; and the argument which he erects upon this foundation then, forms the subject of my argument. The sentence alluded to is as follows, "I do not believe that any one in Dublin has, as yet, used a carriage in locomotion; the feeling here is very strong against its use in ordinary progression, and merely to avert the ordinary amount of fatigue which the Almighty has seen fit—and most wisely we cannot doubt—to allot to natural walking; and in this feeling I heartily and entirely concur." I now quote from Mr. Deane's statement (p. 821, par. six, beginning with the word *In*). "Dr. Simpson had argued that the pain and extreme fatigue caused by the last few miles of a journey of thirty miles on foot, have a strong resemblance to the last stage of labour". Dr. Simpson *had done* no such thing. I shall not be accused, perhaps, of supererogating nor even of special pleading if I show what he *did do*. Dr. Simpson, seven columns further on in his letter, whilst writing under a different text, uses words which it is pretty evident must be those referred to by Mr. Deane, though I admit they are *very far* from being identical; they are, at all events, the only ones I have been able to find bearing any resemblance. This part of Dr. Simpson's letter is, in its turn, dealt with in mine, on its own merits; and is not involved in Dr. Simpson's twenty-third paragraph, and still less is it in my sixth. A few lines farther on, Mr. Deane says, "the words 'ordinary fatigue of walking', are substituted for the words 'a continuous journey of thirty miles on foot'". I emphatically deny the fact of any such substitution. Why, speaking in a logical sense, I need never have seen these words of Dr. Simpson's when I wrote mine—the two sets of words are not only perfectly distinct, as to their location, but they refer to two distinct branches of the general subject. The passage from which Mr. Deane takes these words, is to be found in my sixth paragraph; the passage is as follows, "it certainly is unwise to renounce the ordinary amount of fatigue that attends upon ordinary progression and natural walking". And now, having shown what these words do *not* refer to, I will explain what they *have* reference to. I have used these precise terms because, by so doing, the terms as well as my meaning are strictly in accordance with those of Dr. Simpson, to which they relate, as will be made evident by a reference to the passage I have already given from his twenty-third paragraph. I cannot find the half page in my letter that is devoted to prove that the ordinary amount of fatigue that attends upon ordinary progression is conducive to health; but I do find *six lines* devoted to such a statement in regard to "ordinary progression and natural walking".

Mr. Deane's thumps in this part of his letter are particularly heavy; and I say that his statements are erroneous, his accusations are unjust, and his arguments are perfectly inapplicable to the occasion.

In referring to Mr. Deane's seventh paragraph, which relates

* My fourth paragraph, which Dr. Deane calls the third, refers to the eighteenth of Dr. Simpson's—not the fourteenth, as it is printed in my letter.

to my eleventh and twelfth, I must observe that there is a misprint in the twelfth. I am not sure what the correction should be, but I believe that in the third line, the words, *the proposition is*, should be inserted before the word "that". Mr. Deane remarks, "The reasoning is good, except that, unfortunately, it is all based on the assumption that anaesthesia adds to the danger of labour". In the eleventh paragraph there is no reference whatever made to the danger attendant upon anaesthesia. I allude to the dangers of railway travelling, and the dangers of parturition; but I allude neither directly nor indirectly to the dangers of anaesthesia.

In the twelfth paragraph, I do allude to the dangers of anaesthesia, but there is no such assumption as Mr. Deane speaks of. I assume nothing of the kind. Dr. Simpson takes up the suggestion that there is such additional danger (see the heading to this part of Dr. Simpson's letter which is marked 4, and which stands just above the paragraph to which my remarks refer, viz.: par. thirty-three), and then argues upon the hypothesis. My argument involves merely the hypothesis which Dr. Simpson brings under consideration. Mr. Deane might as well, or rather better, accuse Dr. Simpson of making this assumption, as to accuse me of it.

To Mr. Deane's last paragraph I will only observe,—to what strange resorts are men reduced, who dispute in favour of innovations, instead of attempting to test (I do not mean use) them.

I am, etc.,

JOHN C. BLOXAM.

Newport, Isle of Wight, Sept. 22nd, 1853.

CHLOROFORM IN MIDWIFERY.

LETTER FROM ROBERT MANNERS MANN, ESQ., TO THE EDITOR.

SIR,—I am much pleased to find on reading your remarks on chloroform in our JOURNAL, for Nov. 4th, that you still hold the opinion that no death from its exhibition in midwifery has occurred. If such be the fact (and from what little experience I have had, and from what I have carefully read on the subject, I am inclined to believe it is), it must be highly gratifying to all accoucheurs who are inclined to mitigate the agonising pains of labour.

In all cases where I have administered it, not only have I been satisfied with its anæsthetic effects, but my patients have expressed themselves as wonderfully relieved, and that, if possible, they would never be confined again without it. With regard to the dose, I have followed Dr. Snow's advice, and given from fifteen to twenty minims, always cautiously, and taking care to allow the occasional admixture of air. I have seldom found it necessary to deprive my patients of consciousness; but whenever rambling or incoherent talking has taken place, I have immediately removed the chloroform, and I believe that the patient was then almost, if not completely, free from pain during the expulsive efforts of the uterus.

I have rarely administered altogether more than from half an ounce to an ounce, never commencing till the os uteri is tolerably dilated, from the size of a crown piece upwards. But, in one instance, a first labour, where the pains or rather the contractions were very powerful and protracted for several hours, in a fine, stout, young woman from the country, I administered as much as three ounces and a half, or more, certainly not less; and in this case I regulated it according to the patient's sensation of a freedom from pain; i.e., the moment she felt pain after the removal of the anæsthetic, she called out hastily for more; and when once sufficiently under its influence, I found that, as Dr. Snow tells us, she could go through several strong and effective uterine contractions without a fresh application.

I believe I have observed labour to a certain extent retarded by it, but not materially; and if so, the patient in the meantime suffers little or no pain. Again, in other cases, it has undoubtedly assisted in dilating the perineum and os uteri, and has even accelerated the muscular contractions. I do not think it should be given indiscriminately; but, in those where the pains are lingering, severe, and protracted, as also where there is a rigid os uteri, and in instrumental or operative cases, I deem it invaluable. In conclusion, allow me to remark that my humble opinion entirely coincides with yours, viz.: "that the cautious inhalation of the vapour of chloroform, during labour, is entirely free from danger, and calculated to afford merciful relief from pain in one of the most agonising trials of humanity."

I am, etc., ROBERT MANNERS MANN,
Late Surgeon to the Manchester and Salford
Lying-in-Hospital, etc.

2, Great Bridgewater Street, Manchester, Nov. 5th, 1853.

CHLOROFORM IN MIDWIFERY.

LETTER FROM W. SANKEY, ESQ., TO THE EDITOR.

SIR,—The discussions that have lately appeared in the ASSOCIATION JOURNAL on the subject of chloroform induce me to furnish you with the results of my experience of this valuable agent in midwifery, surgery, and other cases. It is now upwards of five years since I began to employ it in labours, and although, from the prejudice of patients, and much more frequently of relatives or nurses, I have not used it in the majority of cases till lately, yet I have had opportunity of testing its efficacy in every variety of labour. Its efficacy in first labours, in producing relaxation of the os uteri and external parts, with copious secretion of glairy mucus, has been most marked. In every species of labour, it soothes the patient, and materially lessens her sufferings, in small doses, and entirely renders her unconscious when administered to the full extent.

The only preternatural case of consequence was a shoulder-presentation. Turning was effected with considerable difficulty, but no expression of pain escaped the patient, except a slight groan; and, when she became conscious, she would not believe that the child was born. I may add, that, in alleviating severe after pains, chloroform has been most useful.

The last case was a lady who, from religious scruples, had objected to the use of chloroform in two former labours; in her third, which took place on the 4th instant, she was kept under the full influence for two hours, and did not wake up till some time after the removal of the placenta.

It is, I presume, unnecessary to give the details of all the cases, particularly as I am able to state that, in no single instance, has the patient suffered the slightest inconvenience from its use. In surgery, I have found it most useful in hernia and dislocations, as well as operations. Among other instances of the value of this anæsthetic agent, I may mention the passage of a renal calculus where, from irritability of stomach, every anodyne was instantly rejected; and most severe dysmenorrhœa in several instances, that had equally resisted the usual remedies.

I fear I have been too prolix, but you will abbreviate where you deem proper.

I am, etc., W. SANKEY.

Dover, October 9th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—I have seen with much concern and some amusement the numerous angry communications which have lately appeared in the JOURNAL on the subject of the New Vaccination Act. It was inevitable that the operation of the act should excite hostility somewhere. *Summum jus, summa est malitia*.

But surely the legislature must observe with chagrin and astonishment the conduct of its medical assailants. Their untimely valour, their awkward tactics, and their false position, seem better calculated to provoke derision than to procure redress.

In what troublous times do we live! The peace of Europe is imperilled by the arrogant ambition of the Czar; the repose of the medical profession by the "flagrant impositions" of the New Vaccination Act. The Emperor of all the Russias seeks, it is said, to *Burke* the rights of his sublime and turbaned brother; the British legislature, it is affirmed, has abrogated those of our ill used profession. *Bella, teterrima bella*. War in the East, war in the West.

But let me ask, Have the medical malcontents, the promoters of this *bellum sine hoste*, well considered the formidable character, unlimited resources, and favourable position of the foe? Have they duly estimated their own inferiority in strength, position, and weight of metal, as well as the extent of treachery in their camp? Surely the result of so unequal a contest is not difficult to predict. It is earnestly to be deprecated, as *occurring between recent allies*. Let hostilities be suspended; let a truce be proclaimed. The interchange of a few "notes" may conduce to a "pacific solution".

Now let us take counsel together. How in reality stands the matter? A large majority of the profession called for a compulsory vaccination act. They furnished the materials and the arguments for the measure. The legislature—*erectis auribus, intentique ora tenebant*—were convinced, and promptly complied. In framing the measure, that august body felt assured of the disinterestedness of the profession, and confidently relied on their proverbial devotion to the public good. They duly appreciated the parsimony of the public in all sanitary matters,

and were keenly alive to the power of the rate-payers at certain seasons. With a view, also, to reconcile the community to a measure which, by captious or careless observers, might be deemed arbitrary and offensive, or cunningly devised for the special benefit of the medical profession, they took unwonted pains so to frame it that high and low, rich and poor, the subjects and the agents of vaccination, should equally feel and unanimously acknowledge their mutual participation in one grand and comprehensive scheme of social sacrifice for social good.

The bill passed. It was thus decreed by Act of Parliament, that pecuniary interests, private feelings, and popular prejudices, in reference to vaccination, should share the same fate, and yield to the public welfare.

Whether the act will accomplish the beneficent and impartial designs of the legislature, time alone can tell. It is quite possible that parliamentary wisdom may prove inferior to parliamentary power, as many "an act to amend an act" amply testifies. Present appearances, indeed, are rather unpromising. If the educated and intelligent members of a liberal profession already manifest symptoms of rebellion; if the abettors of compulsory vaccination are the foremost to exhibit examples of contumacy, on the score of self-interest,—what are we to expect from the poor and the ignorant, when their feelings and prejudices are assailed?

Come, come, gentlemen; this will not do! *Sævitique animus ignobile vulgus*. If we conceive ourselves aggrieved, let us make our complaints known in the right quarter, and in a becoming manner. Remember, "till the law is amended, it must be minded." Let us be reasonable and consistent. "What is sauce for the goose is sauce for the gander." Instead of vain and empty threats, never likely to be executed with impunity, and rude and ungentelemanly conduct to one of the involuntary administrators of part of the act—to whom the profession is deeply indebted—let us behave like men of sense, and appeal as once to the author, promoter, and approver of the measure, viz., Lord Lyttelton, Sir John Pakington, and Lord Palmerston. Let us boldly and candidly declare to them, that, in urging them to annihilate by Act of Parliament vulgar prejudices, mawkish feelings, and ignorant objections to vaccination, we had not the remotest idea that we also should be subjected to such grievous "impositions" as the act contains; that we cannot see any necessity for it, but deem such treatment as a strange way of "backing your friends"; that they may rest assured the act will prove a dead failure, unless these preposterous and arbitrary "impositions" are removed.

Lord Palmerston, who invites information and suggestions from all quarters, will be too happy in receiving ours. I doubt not he is already expecting them; for he knows the act will not work. Lord Lyttelton and Sir J. Pakington have expressed their desire to render the act agreeable to the profession. Union, they say, is strength. That is all nonsense in parliamentary acceptance. In Parliament, numbers alone prevail. If otherwise, union would be unattainable with us. Let every individual medical malcontent, therefore, after addressing the above named personages to the effect suggested, if they please, make known his complaints to his own parliamentary representative also, and claim his attention. Such a course, I flatter myself, is far better calculated to obtain redress than the random and reprehensible proceedings which I have ventured to condemn. It is possible, I grant, that some monopolising public vaccinators may forward counter memorials and remonstrances, expressive of their unqualified satisfaction with the act, and of its pleasant operation in their neighbourhood; but the obliquity of their judgment and the transparency of their motives will be too obvious to the wisdom, and their numbers and influence too insignificant for the power, of Parliament.

I trust, sir, if you cannot altogether approve my plan, you will at least allow me to commend it, as I now do in all humility, to the careful and candid consideration of my disappointed and indignant brethren.

I am, etc.,

BUBRICOLA.

Nov. 5th, 1853.

WHAT CAN THE ASSOCIATION DO FOR MEDICAL PUPILS?

LETTER TO THE EDITOR.

SIR,—I am one of a class usually described as *immoral and depraved*—medical students; and certainly with some reason. Although the causes of this immorality have frequently been laid before the public, and are patent and well known, nothing has been done to meet the wants of that numerous and increasing body. An effectual remedy for this depraved

proposed, and carried out in one establishment. I mean the collegiate system. The cost of education at the Queen's College, Birmingham, is more than the majority of students could afford: for that, this system would be perfectly effectual.

But, can nothing be done in other ways? It is proverbially true that "no man careth for the student of medicine". If he have the advantage, during his apprenticeship, of being received into the house of his master, and having constant supervision exercised over him; when he attends lectures and walks the hospitals, all restraint is removed. His principles, as yet, perhaps, only the force of habit, are sorely tried; and with the many temptations which surround him (and which I need not stop to mention, as they must be well known to every medical man), can we wonder if he fall?

Youth is the most ductile period of life: and it is precisely at this period that the medical student is left to himself. I should not say left to himself: far worse, he is associated with youths of his own standing, who laugh at his religious scruples; and, in his attendance at the hospitals, he must necessarily meet with those abandoned females who are ever ready to corrupt him. The surgeons of the hospital (with some praiseworthy exceptions), do not watch over his conduct; indeed, it would be in general impossible for them so to do. The chaplain of the hospital has no authority or influence over him.

What, then (laying aside the system mentioned above as in most cases impracticable), can be done? Can the Association do nothing?

The Pharmaceutical Society have organised a body of "associates", consisting of apprentices to the members. These associates, by paying an annual subscription of 10s. 6d., have the monthly journal, and are admitted to other privileges; and this single bond of association has contributed greatly to the respectability of the youths.

Though the present race of medical students have no connexion probably with the Provincial Association, yet, if a proposal were made to them, admitting them on payment of a small subscription to various privileges, as might seem fit, I think many would avail themselves of it. And if the apprentices of members be induced to join in it, they will, when their diplomas have been obtained, become members of the Association, and so greatly conduce to its stability.

We are constantly told that it is to the rising generation, that society looks for great benefits. Let society take up the cause of the medical student and apprentice, and assuredly she will receive a full reward.

There is no profession on earth in which more deference is paid by the juniors to the seniors than the medical, and if some of our leading men were to interest themselves in this cause, I am persuaded that much, very much good might be effected.

The thanks of many students will be justly due to you should you insert these remarks. Discussion may be elicited. "Where there is a will there is a way"—in most cases.

I am, etc., A MEDICAL STUDENT.

October 10th, 1853.

MR. HUNT'S PAPER ON DIARRHŒA.

LETTER FROM JOHN GROVE, Esq., TO THE EDITOR.

SIR,—It is with some hesitation I venture to make a few comments on Mr. Hunt's contribution to the JOURNAL of the 28th October. His first paragraph contains an erroneous assumption, an unsubstantiated charge, and a claim of jurisdiction. With your permission, I will endeavour to rebut the assumption, to repel the charge, and to dislodge the claim.

The first nine words, "The frequency with which diarrhœa degenerates into malignant cholera", constitute an assumption from which, I believe, a very large proportion of the profession would withhold their assent. Now, as this is the whole theme of Mr. Hunt's paper, it requires but little argument to demonstrate the utter uselessness of applying "first principles" to the unproved dogma, "the degeneration of diarrhœa into malignant cholera". Can Mr. Hunt, or any one else, draw the line which divides cholera and diarrhœa? Is there more difference between these two diseases than between simple and malignant scarlatina? The real question for solution is, whether cholera and epidemic diarrhœa are essentially two distinct diseases, or are grades of one malady having a common cause. It is my humble opinion, that until this point is settled, no discussions on treatment, however temperate and considerate they may be, can lead to any practical results. Indeed, it was the very failure of success from the application of the first principles of medicine which led every man to seek his own line of treatment out of the beaten track of ordinary practice. Hosts of men, to

whom orthodox physic is an immutable creed, have found their physiology and pathology, however perfectly attained, serve them but little in the face of the deadly foe. What wonder then that men, earnest and zealous in their calling, put forward their views in the public journals of the day. And here I would refer to the unsubstantiated charge.

Mr. Hunt talks of the "zealous scribblers in our periodicals", and he has not much respect for "their somewhat dogmatic and earnest style". As to the epithet, "scribblers", the charge falls rather on the editors of journals than on the writers of the offending documents; for the former have a discretionary power in the selection or exclusion of articles.

The onus of defence, on this head, rests manifestly with the journalists who have admitted so much "scribbling" into their periodicals; but it is not my business to attempt their vindication.

Mr. Hunt further writes, for "incompetent" and "indiscreet" practitioners and others equally censurable, who, he assumes, are very numerous, and incapable of exercising their calling with judgment or discretion, simply because with much zeal and energy they have carried out and advocated a definite line of treatment for a specific disease, not for *all cases* of diarrhœa, but for all such as range themselves within the epidemic cause.

Mr. Hunt, in the conclusion of his first paragraph, takes upon himself the generalship of the nomadic tribes of empirics, who have, as he thinks, wandered from the paths of legitimate physic; he, however, allows that some of them are respectable, which may in some measure account for his having taken upon himself such responsible duties. Now, I really do not think that the "zealous scribblers" are likely to acknowledge their general; if they are deserters, they will remain deserters still; if they are honest searchers after truth, first principles based on anatomy, physiology, and pathology, I can without hesitation affirm, are as much a guide to them as Mr. Hunt. His claim to generalship is, I think, with all deference, as much a dogma as any he has himself condemned. If there have been over zealous writers, they have had an exciting theme.

I have the greatest respect for zeal and energy wherever they are to be found; but in such a cause as that of saving human lives, those who exhibit these qualities are entitled to the respect of all persons. If there has been evidence of vanity, weakness, or folly, ignorance or obstinacy, in the condemned writings, we must remember that the wheat cannot grow without the chaff, and that truth is often reached through a multiplicity of errors. It behoves us to be thankful for what we have, and for what we know: and I think it would always be wiser if we could be contented to let our own lights shine without endeavouring to extinguish those of our fellow labourers.

I am, etc., JOHN GROVE.

Wandsworth, October 31st, 1853.

ARE ARREST OF DEVELOPMENT, MONSTROSITIES, ETC., ATTRIBUTABLE TO MENTAL EMOTIONS OF THE MOTHER?

LETTER FROM G. E. NICHOLAS, Esq., TO THE EDITOR.

SIR,—I have heard so many cases on this interesting subject related, and have witnessed one in particular, from which fair inference might be drawn that arrests of development, blemishes, etc., have been occasionally the result of mental emotion, that, on perusing your remarks on the case reported (in the *American Journal of Medical Science* for April) by Dr. Storrer, I was surprised to find that you discard such an idea, as emanating only from the credulity of womankind.

Dr. Storrer's case seems matter of fact enough. A lady in early pregnancy is much affected at seeing a hen injured—its leg broken by a boy having thrown a stone at it—her mind, continually dwelling upon the subject throughout pregnancy, has become impressed with the idea that her offspring would be deformed; and so it happens, her child presenting at birth arrest of development of one of the lower extremities. Upon this case you observe, "We really do not see anything remarkable in all this; for women are constantly fancying that they are to give birth to monsters, and also insisting on minutely inspecting what is born, when there is no blemish of any kind discoverable upon their offspring." Proceeding, you say, "The discussion on Dr. Storrer's case was very appropriately closed by Dr. Gould mentioning a 'set off' case." "He had lately attended a woman who at the birth of her child was very anxious that its palate should be examined, she having been very unpleasantly affected in early pregnancy at seeing a person

with a very disagreeable countenance from deformity of the palate; notwithstanding her strong apprehension, no effects were visible on the child."

Allow me to relate a parallel case to Dr. Storrer's, but a more forcible one. Mrs. E., in early pregnancy, was very much frightened by a beggar, who solicited alms, holding up to her horrified gaze (I presume with a view of creating pity) the stump of his arm, which had been amputated. Her mind continually recurred with fear to the subject. Her child was born with one arm presenting the exact appearance of having been amputated; the stump being so like (when I saw it, about twelve months ago, the lad being fourteen years old), that many a surgeon might be mistaken as to its nature. Here there was something very like cause and effect. Supposing that another lady in the same condition as Mrs. E. had seen and been similarly affected by the same object without the same result having occurred, surely it would be illogical to call the latter a "set-off" case (by which, I presume, is meant equally good evidence) against the former; to say nothing of the probability of the different result being due to the difference of temperament, sensibility, subsequent occupation of mind to the exclusion of the fearful idea, and of all those collateral circumstances which must of necessity happen in two individuals. Like the latter supposed case, Dr. Gould's (which is in exact accordance with your remarks) can, I think, be considered as negative evidence only, and not referable to that *argumentum ad judicium*, so necessary to a clear investigation. A positive statement is worth a hundred negative ones.

I have ventured upon this communication, in the hope that it may elicit from your numerous readers some well authenticated facts, which may throw light upon this interesting and generally considered inexplicable subject.

I am, etc., G. E. NICHOLAS.

3, Union Place, Clapham Rise, October 24th, 1853.

DR. JUNOD'S HÆMOSPASTIC APPARATUS.

LETTER FROM T. JUNOD, M.D., TO THE EDITOR.

SIR,—I am much gratified by the notice taken in the ASSOCIATION JOURNAL for July 15 and November 11 of my *appareil hæmospastique*. Allow me more particularly to direct attention to its utility in cholera, which I believe I have proved by experiments performed in the Parisian hospitals and elsewhere.

Subjoined are reports of some cases which have come under my notice, extracted from an essay which I published in 1849, in the *Revue Médicale*, entitled *l'Emploi de la Méthode Hæmospastique dans le Traitement du Choléra Epidémique*. It is, I think, especially applicable in the consecutive febrile reaction of cholera; but it has proved useful even in the cold stage.

CASE I. A young woman, aged 22, was received into the Hôpital de la Charité on June 22nd, 1848. During the reaction that followed the state of collapse, she was affected with various cerebral symptoms, which led to a state of coma, despite of all the means which were employed during two days for their removal. The hæmospastic apparatus having been applied during thirty-five minutes, the cerebral congestion was dissipated.

CASE II. A woman, aged 28, having been struck by the epidemic, was received into the Hôtel Dieu on July 2nd, 1842. As in the preceding case, grave cerebral disorder attended the reaction, but it yielded with the same facility, by the employment of the apparatus, except that it was necessary to resort to its use several times during the four following days, in order to remove the cephalalgia and coma.

CASE III. Madame X., aged 70, had a severe attack of cholera. On the tenth day, she fell into a state of deep coma, which resisted the application of leeches to the temples, cold lotions to the head, and sinapisms to the lower extremities. It was determined to employ the hæmospastic apparatus, which was accordingly done at 8 p.m. At 9 o'clock, the expression of the countenance was much improved, the respiration was more free, and the patient began to be able to answer questions. The application was continued for some hours, with steady improvement in the symptoms; when the medical attendants had the patient placed in the warm bath. When she was taken out, there was violent determination of blood to the head, the face became contracted and flushed, the respiration stertorous, the forehead burning; and the pulsations increased by 30 each minute. The patient was unable to answer questions, and fell into a state of profound coma. The apparatus was at once re-applied, and the patient was roused from her lethargy; but she had become too feeble; expectoration could not be reestablished; and she died.

The death in this case, was, I believe, due to the untimely employment of the warm bath.

My object in bringing the apparatus under your notice is that it may receive a trial in cases of cholera occurring in this kingdom. I do not vaunt it as an infallible remedy; but I wish it to be tried impartially, and adopted or rejected on its own merits.

I am, etc.,

T. JUNOD.

86, Cardington Street, Hampstead Road, November 7th, 1853.

HOT WATER CUSHIONS IN CHOLERA.

LETTER FROM MR. W. HOOPER TO THE EDITOR.

SIR,—Since I introduced the elastic water cushions and mattresses for bedsores, etc., I have also manufactured an India-rubber cloth cushion, that resists the action of heat, to any degree up to 212° Fah., and which (when applied as hot as can be borne), in lumbago, cramp, and rheumatism, pain in the loins, stomach, and bowels, generally gives almost immediate relief, and affords the greatest comfort. In obstinate cases of fever, that resist diaphoretics, perspiration may be quickly produced by placing one over the stomach and abdomen. For ordinary application of heat, it is said to be the best means known, while all wetting the bedding, etc., is prevented.

My present object in drawing the attention of the profession to the subject of temperature, is with the view of trying the value of heat in cholera.

It is well known that sudden lowering of the temperature to a certain degree results in death; and it is known that in cases of cholera, as well as poisoning in general, there is a remarkable lowering of the temperature.

I shall therefore be happy to send one of these hot water cushions, free of expense, to any hospital, for the medical officers to report upon.

I am, etc.,

WILLIAM HOOPER.

Pall Mall East, October 25th, 1853.

[The hot water cushion is an admirable means of applying external warmth in cholera. EDITOR.]

NEWS AND TOPICS OF THE DAY.

THE PRESBYTERY OF EDINBURGH AND THE CHOLERA. The Moderator of the Edinburgh Presbytery of the Church of Scotland addressed Lord Palmerston a few days ago, stating that the Presbytery had in view the propriety of appointing, on ecclesiastical authority, a day for prayer and humiliation, within its bounds, on account of the reappearance of Asiatic cholera in this country. Considering, however, that it was likely that a national fast would be appointed on royal authority, they begged respectfully to ask whether such an appointment was in contemplation. The following letter from the Home Office, in reply, was read at the last monthly meeting of the Presbytery:—

"Whitehall, October 19th.

"SIR,—I am directed by Viscount Palmerston to acknowledge the receipt of your letter of the 15th instant, requesting, on the behalf of the Presbytery of Edinburgh, to be informed whether it is proposed to appoint a day of national fast on account of the visitation of the cholera, and to state that there can be no doubt that manifestations of humble resignation to the Divine Will and sincere acknowledgments of human unworthiness are never more appropriate than when it has pleased Providence to afflict mankind with some severe visitation; but it does not appear to Lord Palmerston that a national fast would be suitable to the circumstances of the present moment.

"The Maker of the Universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or the neglect of those laws. One of those laws connects health with the absence of those gaseous exhalations which proceed from overcrowded human beings, or from decomposed substances, whether animal or vegetable; and these same laws render sickness the almost inevitable consequence of exposure to those noxious influences. But it has, at the same time, pleased Providence to place it within the power of man to make such arrangements as will prevent or disperse such exhalations so as to render them harmless, and it is the duty of man to attend to those laws of nature, and to exert the faculties which Providence has thus given to man for his own welfare.

"The recent visitation of cholera, which has for the moment

been mercifully checked, is an awful warning given to the people of this realm that they have too much neglected their duty in this respect, and that those persons with whom it rested to purify towns and cities and to prevent or to remove the causes of disease, have not been sufficiently active in regard to such matters. Lord Palmerston would, therefore, suggest that the best course which the people of this country can pursue to deserve that the further progress of the cholera should be stayed, will be to employ the interval that will elapse between the present time and the beginning of next spring in planning and executing measures by which those portions of their towns and cities which are inhabited by the poorest classes, and which, from the nature of things, must most need purification and improvement, may be freed from those causes and sources of contagion which, if allowed to remain, will infallibly breed pestilence and be fruitful in death, in spite of all the prayers and fastings of an united but inactive nation. When man has done his utmost for his own safety, then is the time to invoke the blessing of heaven to give effect to his exertions.

"I am, sir, your obedient servant,

"HENRY FITZROY.

"To the REV. W. H. GRAY, Moderator of
the Presbytery of Edinburgh."

On the reading of the letter,

The Rev. Dr. CLARK expressed his total dissent from the sentiments expressed in the letter, and said he would not wish to be a sharer in the responsibility of those who refused or declined to give Her Majesty's subjects an opportunity of meeting for prayer in regard to so fearful a visitation.

The Rev. Dr. MUIR said, he thought there could be but one unmingled feeling of pity entertained by them that such a document should emanate from a professedly Christian Government.

Several members expressed concurrence in these sentiments. It was agreed to refer the appointment of a day of humiliation and prayer to the approaching meeting of the provincial Synod of Lothian and Tweeddale, that the same day might be fixed for the whole Synod. The question was put whether the answer of Mr. Fitzroy should be engrossed in the minutes, and it was unanimously carried in the negative.

SUPPRESSION OF THE TRAFFIC IN INTOXICATING LIQUORS. A public meeting was lately held in the Manchester Corn Exchange, to inaugurate the United Kingdom Alliance, established for the suppression, by legislative enactment, of all traffic in intoxicating drinks. Among the leading advocates of the movement present, were—Sir Walter C. Trevelyan, Bart. (who presided), Mr. James Silk Buckingham, Dr. F. R. Lees, the Rev. Jabez Burns, D.D., London; Messrs. Benjamin Parsons, of Ebbiley; Lawrence Panting, M.A., Chebsey; Fergus Ferguson, B.A., Glasgow; Henry Gale, B.C.L., West Lambrook; D. M'Rae; Samuel Bowley; and W. Willis, of Luton. Mr. Pope, the secretary, read a declaration agreed to by a conference of the gentlemen present, previously held at the Athenæum, setting forth the principles on which the Alliance was formed—a declaration in substance similar to that on which the Maine liquor law movement in the United States of America is carried forward. He also read the resolutions agreed to at the conference, recommending the appointment of lecturers and agents, publication of tracts and addresses, etc., in furtherance of the movement. One resolution pledged the council to aid the executive in raising a fund of £2,000, to defray the expenses of the first year's agitation; and, in reference to this, Mr. Pope stated that a subscription was opened at the conference, which had already reached £847:12:6, so that £2,000 was not necessarily the whole amount that would be raised. (Cheers.) Dr. Lees, of Leeds, moved the first resolution:—"That the prime end of social legislation is to secure the utmost protection to the citizens against all destructive acts and demoralising agencies in the commonwealth." The resolution was seconded by Mr. J. S. Buckingham, supported by the Rev. L. Panting, and carried unanimously. The Rev. Benjamin Parsons moved—"That the traffic in intoxicating liquors as beverages is always and inevitably productive of immense injury to the social, moral, and material interests of the nation." Mr. Willis seconded the motion, which was supported by the Rev. H. Gale, and agreed to. It was further resolved:—"That this meeting, regarding the liquor-vending establishments of this country as a source of temptation and a nursery of crime, incompatible with the advance of society in the path of true civilisation, calls for the entire suppression of the traffic in intoxicating liquors. That this meeting cordially approves the objects and constitution of

the United Kingdom Alliance for procuring the legislative prohibition of the traffic in intoxicating beverages, and accords to that movement its hearty sanction and support."

MEDICAL SOCIETY OF LONDON. The following papers are announced as intended to be read at the ordinary meetings of this society.

Saturday, November 12th. R. H. Semple, M.D., "On the Pathology and Treatment of Cerebral Diseases."

Monday, November 14th, in the Physiological Section. Edwards Crisp, M.D., "On the Form and Weight of the Heart, the Diameter of the Aorta, and the Size of the Blood-Corpuscles, in the various classes of Vertebrate Animals."

HUMANITY AND LIBERALITY! The Board of Guardians of the Bakewell Union (Derbyshire), in advertising for a "medical officer" for the "Hartington Middle Quarter District" of the union, makes the following *liberal* offer in this courteous manner:—"The salary of the *person* elected will be £18 per annum." For this large sum he is "to supply such requisite medicines and appliances" as may be required by the poor of the district! To the person who accepts this stipend, the appointment of vaccinator at 6d. each case would of course be a boon.

RETIREMENT OF LOUIS. Louis, the eminent physician of the Hôtel Dieu of Paris, has resigned his appointment, and is about to leave Paris. He is to accompany an invalid only son to the south.

MEDICAL BENEVOLENT COLLEGE. The builder's contract for this national undertaking was signed on Monday by the Treasurer, John Propert, Esq., on behalf of the Council, and the works are now rapidly progressing.

UNIVERSITY OF ST. ANDREW'S:—PASS LIST. The following gentlemen had the degree of Doctor of Medicine conferred upon them on October 21st, 1853:—Henry Bickersteth, F.R.C.S., Cape Town, Cape of Good Hope; Henry Critchley Brodick, L.A.C., Macclesfield; John James Douglas Burns, M.R.C.S.Ed., R. N., Woolwich; John M. Butler, M.R.C.S., L.A.C., Woolwich; Thomay Spry Byass, M.R.C.S., Sussex; Robert Cartwright, M.R.C.S., Salop; Thomas Fernandez Clarke, M.R.C.S., L.A.C., London; Matthew Corner, M.R.C.S., L.A.C., London; James Joseph Cregeen, M.R.C.S., L.A.C., Deptford; George Hickie Daly, M.R.C.S., H.E.I.C.S., Bengal; John Ross Diamond, M.R.C.S., L.A.C., London; Theodore Duka, M.R.C.S., East Indies; Henry James Franks, M.R.C.S., L.A.C., Leamington, Warwickshire; Robert Greenhalgh, M.R.C.S., London; George Arthur Humble, Lic. Fac. Phys. and Surg., Glasgow, L.A.C., Islington; John Matthews, L.A.C., London; John Muir, Lic. Fac. Phys. and Surg. Glasgow, Welwyn, Herts; Lewis Paine, M.R.C.S., L.A.C., London; John Blakemore Phipps, M.R.C.S., Suffolk; Theobald Ringer, M.R.C.S., L.A.C., Clifton, Bristol; E. Malcolm Sinclair, M.R.C.S., Manchester; William Stillman, M.R.C.S., L.A.C., Birmingham; Robert Crossing Thorpe, M.R.C.S., Devon; John Trull, L.A.C., Bath; Arthur Umphelby, M.R.C.S., H.E.I.C.S., Madras; William Webb, M.R.C.S., L.A.C., Barton-under-Needwood, Staffordshire; William Robert Woodman, M.R.C.S., Exeter.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN:—PASS LIST. On October 20th, medical degrees were conferred on the following candidates, after the usual examinations, viz.:

DOCTOR OF MEDICINE. James Valentine Brown, Professor in Queen's College, Galway; William Lindsey Emmerson, Northumberland; Samuel Palmer Goddard, Staffordshire; George Ireland Russell, Kent; Courtland Skinner Shaw, Cheltenham; John Henry Walker, Kent.

BACHELOR OF MEDICINE. Pierre Eloy Bachelet, London; Charles William Whitby, Devonshire.

At the same time, the degree of Doctor of Medicine was conferred on William Stewart, M.B., Mull, Argyleshire; and the following were declared to have undergone and passed part of their examinations for medical degrees:—John Charles Campbell, Aberdeen; Wm. Milne Troupe, Aberdeen.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

MEDICO-METEOROLOGICAL OBSERVATIONS*Taken for the Association Medical Journal.***No. VI.—WEEK ENDING 5TH NOVEMBER 1853.****WAKEFIELD.** Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.*Observer: W. R. MILNER, Esq.*

1853. Month and Day.	Barometer.		Thermometers.								Wind.		Amount of Ozone for the Day.	Amount and Class for the Day.	Hail, Snow, Fog, Frost, Thunder, Thunder and Lightning, Aurora, Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.	Mean Force for the Day.							
Oct.	in.	in.	°	°	°	°	°	°		a.m.	p.m.	0—6 am pm	0 — 10 1		in.			
30 S.	29.983	29.936	55.8	39.	47.	61.	29.	42.3	0.897	W.	SE.	1						
31 M.	29.774	29.691	53.8	46.	49.5	55.5	44.5	47.1	0.889	SE.	SE.	2						
1 Tu.	29.706	29.705	55.3	45.5	50.	55.5	39.5	46.5	0.813	SE.	SE.	2		7, ci.-cu. cu.-s.	F.	0.000	Colic. Col. with vom.	
2 W.	29.619	29.800	58.	29.	40.6	60.5	22.5	39.3	0.791	S.	SSW.	2.5		10, cu.-s. s.	F.	0.000	Colic. Catarrh 2.	
3 Th.	30.077	30.019	52.3	32.	41.7	52.	27.5	44.8	0.945	SE.	E.	1.5		4.5, ci.-s.	F. h.-fr.	0.000	Ery. 4 p.m. Di. Oph.	
4 F.	29.942	29.861	52.5	45.2	48.4	57.	40.5	46.0	0.871	E.	ENE.	1.5		7.5, s. cu.	F.	0.016	Per.Br.Inf.Op.Br.Ca.	
5 S.	29.811	29.777	48.5	45.	46.3	49.	40.5	44.9	0.965	E.	E.	2		6, s. ci.-cu.		0.000	Neu. Pleurodyn. Ca.	
														10, s.		0.018	Di. Epil. 9 a.m.	
Col.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. *Observer: T. MOFFAT, M.D.*

30	S.	29.807	29.764	52.0	38.5	45.2	62.0	31.0	41.1	0.777	0	SSE.	1	1	2, ci. cu.	0.00	Diarrhoea.	Decay of nature.
31	M.	29.507	29.446	51.5	41.0	46.2	52.5	38.5	44.8	0.897	SSE.	SSE.	2.5	6	10, ci. ci.-s.	0.00	Toothache.	
1	Tu.	29.517		54.0	50.0	52.0	57.0	48.0	50.0	0.875	SSE.	SSE.	2.5	6	8, ci. cu.	0.00		Typhus fever.
2	W.	29.505	29.659	56.5	47.0	51.7	64.0	43.0	43.5	0.735	SW.	SW.	2.5	6	5, ci. 0. haze.	0.00	Diarrhoea.	
3	Th.	29.885	29.806	51.5	39.5	45.7	63.5	28.0	42.2	0.835	0	0	0	1	6, ci. haze.	0.00	Toothache.	Hydrothorax.
4	F.	29.723	29.632	54.0	49.0	51.5	63.5	48.5	47.0	0.951	SSE.	SSE.	1	2	10, haze, ci.	0.05	Diarrhoea.	
5	S.	29.614	29.551	47.0	43.5	45.2	48.0	39.5	44.4	0.965	SSE.	SSE.	2	5	10	0.00		

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. *Observer: J. W. JEANS, Esq.*

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BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. *Observer: T. H. BARKER, M.D.*

Oct.	30 S.	29.959	29.959	51.0	41.5	47.7	62.0	44.0	44.0	0.833	S.	S.	0.5		8, cu.	0.00	Phthisis.
31 M.	29.854	29.882	55.0	39.0	47.0	60.5	40.0	46.8	0.790	S.	S.	1		4, ci.-cu.	0.00	Rub. Tic Doulour.	
1 Tu.	29.802	29.736	58.0	46.0	52.0	53.0	40.0	48.0	0.815	S.	S.	1		8, ci.	0.00	Pleuritis.	
2 W.	29.749	29.845	57.5	41.0	50.7	57.5	42.0	48.6	0.784	SW.	SW.	1		6, ci.-cu.	0.00	Phthisis.	
3 Th.	29.909	29.908	56.5	38.5	47.5	53.0	40.5	48.1	0.953	S.	ENE.	0.5	0	10	0.01	T. Fever.	
4 F.	29.874	29.858	56.0	43.6	49.8	61.0	42.0	48.5	0.902	SE.	SE.	1	0	1, ci.	0.00	T. Col. with vom.	
5 S.	29.776	29.729	51.0	44.0	47.5	55.5	47.0	46.3	0.910	SSE.	SSE.	1.5	0	10	0.00	T. Rub. Cyn. T. Vert.	

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. *Observer: C. L. PRINCE, Esq.*

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EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. *Observer: T. SHAPTER, M.D.*

Oct.	30	S.	30.079	30.048	54.	39.	46.	63.	34.	42.8	0.866	nw.	nw.	1	4	3, cu.-s.	0.14
31	M.	29.850	29.804	57.5	53.	55.2	57.5	48.5	47.	0.815	sbw.	sw.	2	8	7, cu.		
1	Tu.	29.791	29.725	58.5	49.	53.7	62.	43.	52.6	0.890	s.	s.	2	0	8, cu.		
2	W.	29.865	29.951	57.	38.	47.	67.	33.	45.	0.814	sbw.	sbw.	1	0	0, s.		
3	Th	30.048	29.949	57.	48.	52.	57.	43.	45.9	0.930	E.	E.	1	5	9, cu.		
4	F.	29.843	29.984	58.	53.	55.	59.	49.	49.2	0.793	sbe.	sbe.	1	4	8, cu.		
5	S.	29.726	29.666	59.	47.3	53.1	61.	46.5	50.	0.875	E.	E.	2	0	8, cu.	0.31	

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. *Observer: B. BARROW, Esq.*

TABLE 2.—Data for Cases IV, Lumbago, W., Height of Chest, 170 cm. Chest 17. D. Back, 22.																	Oct.	
30.	S.	29.984	51.0	41.4	54.0	48.5	0.932	N.							6		0.31	20. Phthisis.
31	M.	29.907	58.0	41.4	59.0	43.0	0.709	SE.							5			23. Tuber. Pleuritis.
1	Tu.	29.849	60.0	49.4	60.0	49.9	0.793	SE.							5			26. Bronchitis.
2	W.	29.849	62.0	51.4	61.0	47.6	0.813	SE.							10			29. Peritonitis.
3	Th.	29.992	54.0	46.4	59.0	50.0	0.934	NE.							9			
4	F.	29.847	55.5	50.4	58.0	49.0	0.815	SE.							9			
5	S.	29.716		48.4		50.0	0.873	NE.							7			

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. *Observer: S. E. HOSKINS, M.D.*

Oct.	30 S.	29.987	29.990	54.5	50.	52.2		46.	0.816	WNW.	WNW.	1.5		5, cu.-s. n. ci.-cu.		0.53	Peritonitis subacute
31 M.	29.850	29.791	55.5	45.	50.2		48.	0.815	SE.	SE.	2.5		6, ci.-cu. s.				
1 Tu.	29.788	29.677	56.	51.	53.5		49.	0.845	SSE.	SSE.	2.5		5.5, cu. ci.-s.				
2 W.	29.844	29.909	57.	51.5	54.2		49.9	0.843	SW.	SW.	1		4, ci.-cu. s.				
3 Th.	29.923	29.829	56.	49.6	52.7		51.6	0.888	NE.	NE.	1		6, cu.-s. ci.-cu.	Dew.			
4 F.	29.729	29.654	58.	53.	55.5		52.6	0.890	NE.	NE.	1		3, ci.-cu. s.	Dew.			
5 S.	29.612	29.593	57.5	53.5	55.5		53.6	0.891	SE.	NE.	1		7, cu. ci.-s.	Dew, t. [and l.]			

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLVI.

LONDON: FRIDAY EVENING, NOVEMBER 18, 1853.

NEW SERIES.

THE INVESTIGATION OF CHOLERA.

THE question must often be asked by each of us, "In what way can we as individuals, or collectively, as societies, or associations, or corporations, make the best use of our coming experience in CHOLERA to increase our knowledge of the laws of the disease, and thus to prevent or cure it in future?" Speaking generally, there is but one way to the discovery of truth, and that is by accuracy of observation, judicious experiment, and sound reasoning on the facts so observed and tried. No imperfect observations of individual cases, or any number of statistical tables founded on imperfect facts, can lead to the discovery of the knowledge of the causes of the disease, or rules for right treatment. In the first instance, then, accuracy of observation and close attentive reflection are essentials in any plan. But it is also necessary to clear the mind of its ignorance, and to know exactly what is really known. One of the commonest causes of failure, is taking for granted that we are wise, when, in truth, we are ignorant. In a probable and progressive science like medicine, where laws may be laid down on paper with dogmatic authority, and are often incapable of contradiction unless by a long and careful inquiry and wide investigation, this assumption of knowledge on insufficient premises is a prolific source of error. Regarding Asiatic cholera, many of these assumed laws require to be re-investigated, and not taken for granted.

Thus we are at present in the dark as to the mode or modes in which cholera is propagated. To take up any one side on this question is, in the present state of our ignorance, at least unphilosophical. When there is doubt, we should keep our minds open to receive any good evidence; for, on a question which is not determined satisfactorily, it is surely the part of a wise man to wait for further evidence. But, above all things, we should keep our minds free from any approach to party spirit; for, if there is any such bias, the investigator will be led rather to act as an advocate than a judge, to make out a case to prove his preconceived opinion, rather than to ascertain the truth. If he does this, he fails, and his verdict will never be registered amongst the immutable laws of nature. Some of these party men seem to fear that principles which they know are true and valuable will be endangered by the discovery of laws apparently in opposition to them. But no truths contradict each other; all laws harmonise. The communicability of cholera from one individual to another is a doctrine opposed by those who see most clearly the importance of sanitary arrangements, when, in fact, there would be no necessary contradiction to the belief in both; for, even if cholera is propagated from individual to individual, yet a *predisposition* is necessary, and this predisposition is produced by impure air, filth, intemperance, and all general bad influences which deteriorate the general health. It is a bodily state, probably an impure condition of the fluids. But this predisposition alone is not sufficient; another element is necessary. Some poison or dynamic influence is

necessary to act on this predisposed state of body; and the question is not yet solved as to what this poison or influence is, and in what mode it is communicated. Is it communicated from one individual to another, or is it the result of atmospheric or telluric influences? On this important inquiry, let us trust that the epidemic which now threatens us may be the means of throwing some light; but let no one flatter himself that the question is as yet answered. The manner in which cholera is propagated remains to be discovered. This is a point which must be kept open for investigation; and we think that those who live in small towns, villages, or country districts, are peculiarly well situated to investigate it. In the country place, it is more easy to trace all the circumstances attending the earliest cases, and the people amongst whom the disease spreads. The same medical man is probably called to every case in his district, or is aware of every case, and can make inquiries; whereas, in large places, many practitioners attend the same district, and know nothing of any cases except their own. We should expect, therefore, many more trustworthy data as to the propagation of the disease from accurate and attentive observers in the country districts, than from those in great cities, where experience (considered numerically) may be much larger. And we would suggest to those of our members who are thus favourably situated, the importance of making unbiased inquiries as to the antecedents of the first cases, and as to the persons amongst whom the disease spreads. Negative evidence is here as valuable as positive. If the same kind of searching investigation had been pursued in tracing cholera from one individual to another, as is employed by the detective police officers in tracing criminals or stolen goods, or by lawyers in detecting frauds against property by following up the suspected individual's course of life and companions for years, "leaving no stone unturned", some clearer light would ere now have been thrown on this subject, and we should not be still at the mercy of every ingenious theorist.

MILITIA SURGEONS.

In a subsequent page, we publish a letter from "A Militia Surgeon", which, we think, well merits the special attention of the class to which the writer belongs. There cannot be any doubt as to the existence of a great grievance; but, if a meeting of militia surgeons must be held before redress be asked, we fear that no relief can be expected before the Greek Calends. Let our correspondent, in the first place, discover who his colleagues are; let him then concert with the more active of their number; and so proceed, in concert with them, to draw up a form of petition to be forwarded to all militia surgeons. The forms, we predict, will be at once signed and returned ready for presentation to Parliament. A meeting might be held in London with most advantage when Parliament is sitting, and a deputation to government might then best be made to tell. The petitions, however, ought

now to be in course of preparation, and the idea of a meeting regarded as subordinate.

Although militia surgeons are more particularly the parties interested, we need hardly say that through them the whole profession is now receiving a slight and an injustice at the hands of government. As our correspondent remarks, "it is only another instance of the exaction of duties from the profession without any adequate reward." For this reason, the injustice done to the militia surgeons is not a question of mere sectional interest, but one of general importance to the whole profession. We shall be glad, therefore, to see a committee formed for the purpose of offering an efficient remonstrance on behalf of the aggrieved, and by seeing it well backed by an organisation of a large body of medical practitioners who are not pecuniarily and personally interested.

CHOLERA QUERIES ISSUED BY THE EPIDEMIOLOGICAL SOCIETY.

We have been favoured with a copy of the Cholera Queries of the Epidemiological Society, and we regret that their great length renders it impossible for us to reprint them in this number of the ASSOCIATION JOURNAL.

We cannot help thinking that the Society would elicit more replies were they to simplify and diminish the number of their questions. Many of the subordinate queries—those which refer to minute details—might be with advantage suppressed in a circular intended for general circulation, and in this way the present very formidable and repulsive aspect of the document would be removed. It would be quite easy to invite attention to all the topics by introducing paragraphs suggestive of the sort of answers which different places and different circumstances were expected to elicit. We make these remarks simply because we feel certain that the first glance which many a busy practitioner gets of these queries will make him resolve not to attempt to reply to them. By a select few, such a circular as that before us may be appreciated and responded to, but it is certainly not suited for the general body of the toil-worn medical profession.

ADVICE GRATIS TO MEMBERS OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

MUCH has been said in our columns and elsewhere about the enormous extent to which gratuitous advice is given by the medical profession, and of the rarity with which other professions and trades return the compliment. It behoves us, therefore, to record the disinterested kindness which was last week manifested towards the members of our ASSOCIATION by our esteemed friend, the eminent medical publisher, Mr. CHURCHILL. On Saturday last, he gave the following most sagacious gratuitous advice through the editor of his *Medical Times*. Speaking of the 1,300 signatures to the Albert Park petition, obtained from the medical profession by means of penny post circulars, he says:—

"Why should not representations to government, on the subject of medical grievances, be made in the same way? It would take little from the funds of any large association. Surely the money of such a society as the Provincial

Medical and Surgical Association would be more legitimately expended in making known the wants of their members in this way, than in the support of a weekly Journal which absorbs the whole receipts of the body, and obliges the Council to discontinue the publication of their *Transactions*, and apply for subscriptions to carry on the battle of medical reform."

The advice of Mr. Churchill ought at once to be acted on. Not an hour ought to be lost. Let the JOURNAL of the ASSOCIATION be forthwith suppressed; let Mr. Churchill publish, as formerly, our annual volume of *Transactions*; and let all representations regarding medical grievances be inserted as advertisements in the *Medical Times*, at £5 : 5 a page. There would be in this arrangement an obvious financial safety; as, when there were no funds, there need be no advertisements. The Albert Park advertisement, which called forth Mr. Churchill's excellent advice to our body, occupied four pages of last Saturday's *Medical Times*, and therefore cost only twenty-one pounds sterling. Perhaps, by means of a series of advertisements in the *Medical Times*, upon a scale similar to that to which we have adverted, Parliament might be induced to grant us all that we desire.

The novelty of the proposal must be accepted as an apology for not discussing it at present in more detail. We would only add, that the noble and generous course adopted by Mr. Churchill upon this occasion entitles him to our everlasting gratitude and most exalted praise.

PAYMENT OF SUBSCRIPTIONS. The Law of the Provincial Medical and Surgical Association is as follows:—

"Each Member of the Association shall pay One Guinea annually: the Subscription to commence from the 1st of January in each year, and to be considered as due, unless notice of its being withdrawn be given to the Secretary or Secretaries antecedently to the year for which it would be payable; for such Subscription each Member shall receive a copy of all publications issued for the general use of the Members of the Association."

Gentlemen wishing to join the Association ought invariably, to prevent delay and trouble, to pay their subscription to the Treasurer, or enable their proposer to do so, at the time of their election.

Letters referring to the commercial department ought to be addressed to Mr. HONEYMAN, 37, Great Queen Street, Lincoln's Inn Fields; and communications for the Editor to Essex House, Putney, London, by post. The Editor is generally at the Office on Wednesdays, from four to five p.m.

We must remind correspondents that, although they may wish their letters to appear under special signatures, it is absolutely necessary to communicate in confidence their names and addresses to the Editor.

CHLOROFORM IN MIDWIFERY. We have not room in the current volume for any more letters upon this subject.

HOMOEOPATHIC MEMBERS. The names shall not appear again in the list: and steps are now being taken in accordance with the laws for their removal.

ERRATA IN THE LIST OF MEMBERS. We particularly request that gentlemen who have discovered errors or omissions in the list published on the 21st of October, will have the kindness to send a correction of them to us within eight days from this date, so that a complete list of errata may be prepared for publication.

ORIGINAL COMMUNICATIONS.

ON THE DIAGNOSIS OF URÆMIC BLINDNESS AND DYSPNŒA.

[Excerpt from a Clinical Lecture.]

By W. H. WALSHE, M.D., F.R.C.P.Lond., Professor of Medicine and Clinical Medicine in University College, London; Physician to University College Hospital; etc., etc.

I HAVE recently seen, out of doors, a very striking example of uræmic blindness; one illustrating so plainly the occasional difficulties of its diagnosis, that I will avail myself of the particulars for the discussion of the general question.

CASE. On the 12th of November last, Mr. J. R. Wells brought me a patient of his, under the following circumstances:—

"Mr. —, aged 29, widower, leading a steady and quiet life, has generally enjoyed good health. Ten years ago, he had a peculiar contraction of the right leg, the tendons feeling stiff in the ham. Three years ago, he was ill for a fortnight with sore throat. He has now been ill for upwards of two months. A fortnight ago, boils commenced to form about his body; one, above the left orbit was followed by great pain on the spot. All of these boils got well; he felt generally ill and depressed, but was improving, when, ten days ago, he found he could not see as usual; the left eye being decidedly the worse of the two. He had no cephalalgia, nor swelling of the face.

"Nov. 12th. *Present State.* (a) He looks depressed, somewhat stupid; has slept badly for last two nights, without bad dreams; spirits low; temper of late rather morose; inclined to talk to himself. (b) The skin is pale and sallow; he does not perspire; there is no skin affection of any kind; no distinct swelling about eyelids; he says they are stiff; no swelling of ankles. (c) The legs are weak, about equally so; if any difference, the left is the worse (*vide k*). (d) Tongue tolerably clean; bowels open from medicine; anorexia. (e) Resonance is good under clavicles; no chest symptoms. (f) Heart's action is rather too extensively felt; first sound at base and apex rather too clear and full; no murmur at heart (pulse 76); strong venous hum in neck. (g) No swollen lymphatic glands. (h) Urinary organs patient declares to be in good order; three years ago, however, he had hæmaturia, for which he knew no cause. (i) Moderate headache at vertex; no vertigo; no tinnitus; no peculiar sensations of any kind in head; intellect perfectly clear; some stiffness in joints of upper extremities, shoulders most, right and left the same; he squeezes awkwardly with left hand, but about as forcibly as with right; no deviation of tongue; articulation quite distinct; no peculiar sensations in limbs. (l) No convulsive movements anywhere. (m) Pupils medium sized, round; contract immediately and gently well under light (merely that of the room); then expand a little; the action is not distinctly different on the two sides; no opacity in either eye; no amaurotic look; no photopsia; no muscæ; and no spontaneous pain in the eye-balls; no photophobia, but is pained, he thinks, by continuing the effort to see; he cannot distinguish moderate-sized objects at opposite side of the street; cannot read small print at all; sees better in morning when gets up, and with strong light; has never had diplopia."

Here, then, was an anæmic person, suffering from boils (which were, as is well known, epidemic at the time), but caring neither for his anæmia, nor his boils, nor the general disturbance of health accompanying these, but solely anxious about the sudden and increasing failure of his sight.

Were the eyes themselves diseased? No opacity could be discovered in either; membranes and humours appeared perfectly transparent. That the cornea, chambers, lens, and its capsule, were free from any change sufficient to explain the symptoms, was, in fact, unquestionable. Again, disease of the retina, producing blindness, if acute, would have been attended with local symptoms, weight and ful-

ness in the eyeball, with throbbing pain, photopsia, change of colour of the irides, etc., and with fever—conditions all of them wanting here. Chronic retinitis is attended with morbid sensibility to light, which our patient did not complain of. It is so infinitely unlikely that tumours connected with the deep seated tissues of the eye should form simultaneously in both organs, that the idea of their existence here might, almost without examining the globes themselves, be rejected. Disease of the optic nerves, or their sheaths, enlarges the pupil, paralyses the iris, and very, very rarely attacks both sides simultaneously: it was, therefore, not the cause of the blindness here.

Nor could the case be supposed one of idiopathic amaurosis. The eyes had not the amaurotic look nor expression; there was no lustre of their surface, no rolling or unsteady movements of the eyeballs, and none of the peculiar vacant gaze of that affection. This patient, on the contrary, directing the axes of the eyes appropriately, *looked as if he could see well.*

The least reflection on the condition of the patient's motor and intellectual faculties satisfies us that none of the ordinary affections of the brain could have existed here. Neither meningitis, simple or tuberculous, nor hæmorrhage, produce blindness of the type before us; and, though both acute and chronic softening do actually cause impairment of vision on one, or even on both sides, blindness never constitutes the prominent symptom it did here; besides, all other evidences of softening were deficient.

But it was not so easy to exclude tumour of the encephalon. For not only has blindness, more or less complete, been a frequent symptom in cases of intra-cranial morbid growth, but actually, next to cephalalgia, their most, or nearly their most, frequent symptom. This is true of tumours of the cerebrum, cerebellum, pons, and pituitary gland; a circumstance showing, by the bye, the vainness of the attempts to diagnosticate the seat of a cerebral tumour, solely through the perversion of special senses. It is true that there was no cephalalgia of note in this instance, but cephalalgia may be absent from first to last, even in protracted cases; and we might have been at the commencing period of the formation, at which period, there is every reason to believe, if not to be absolutely certain, the head is often free from pain. Intra-cranial tumour was, therefore, by possibility the cause of the failure of vision in this patient.

But, again, there are cases on record, tending to show that injuries to the supra-orbital nerve may produce obscurity of vision, nay, complete blindness. It is true that some observers hold that, in all such alleged cases, there has in point of fact been concussion of, or other injury to, the eyeball itself; but the weight of the evidence seems to me decidedly in favour of injury to the branch of the fifth nerve named sufficing to impair vision. Now the patient had had no traumatic mischief done to his eyebrows, it is certain; but he had had a boil there, the source of much pain and irritation; and it seemed an admissible hypothesis that the local inflammation might have acted the part of a wound in the spot. It is alleged that the nerve of one side only being implicated, the eye of the other has suffered by sympathy.

It was certain the patient had not been taking any of the drugs—belladonna, aconite, stramonium, etc.—which injure sight.* Besides, the pupils were not dilated.

Hæmic or blood-diseases (I use the adjective as more euphonious) are many of them, more or less constantly, attended with perverted vision. Now our patient was anæmic to a high degree; but I could not admit this to be the cause of his blindness; for though impairment and perversion of sight often attend this state, they never, as far as I know, do so to the extent observed here: they never constitute the prominent enduring symptom of the state. But anæmia might here be fairly taxed with increasing the blindness, though *essentially* otherwise caused.

But however plausible it might have appeared to refer

* Perry, U. C. H., Males, vol. ix, p. 105, admitted January 6th, 1853, after taking half an ounce of salts of lemon, had considerable deficiency of sight, when seen eighteen hours later.

the imperfect sight either to encephalic tumour, or to implication of the frontal nerve, examination of the urine, a few days later, furnished a much more satisfactory clue to the symptom. The fluid was highly albuminous. We now ascertained from relatives that the daily amount was small (a fact previously denied by the patient). A few days later, the eyelids were distinctly, though very slightly, oedematous; the ankles remained free from dropsy throughout. The most active measures failed to produce any secretion from the skin, which continued to the last day dry and harsh.

Between this period and that of the patient's death, on the 29th of November, one or two circumstances occurred worthy of note. The hydrochloric acid test succeeded strikingly; the expired air gave thick opaque fumes: but in this instance, as in many we have seen in the wards together, the breath was of strongly urinous odour—a state quite as significant of uræmia, as an affirmative result by Frerichs's test. For several days before his decease, the patient had *uræmic dyspnoea*, as I would call it—a dyspnoea evidently depending on the morbid state of the blood: for there was no pulmonary nor cardiac affection to explain it; the percussion-sound was excellent everywhere; there was no rhonchus, no serious alteration of the respiration-sound, and no cardiac disease. The pulse-respiration ratio averaged during this time 3:1, both pulse and respiration being, absolutely speaking, very frequent, namely 120 and 40. But there was an amount of breathing distress materially greater than attends a respiration of forty per minute: to this the poisoned blood was the apparent clue.

Now, remarkably enough, this patient remained, almost to the last moment, free from the more ordinary effects of uræmic poisoning. The brain and cord gave no sign of suffering; his intellect continued clear; there was neither delirium nor sopor; and convulsions did not occur. This dissection of the effects of the kind of poisoning in question is not uncommon: the brain and vision may alone be affected; or the vision, the functions of the spinal cord, and those of the brain may suffer simultaneously.

40, Queen Anne Street, Cavendish Square, Nov. 11, 1853.

REPORT OF THE READING PATHOLOGICAL SOCIETY.

By W. W. MOXHAY, Esq.

[Concluded from p. 996 of last number.]

DISEASES OF THE VASCULAR SYSTEM.

HYPERTROPHY OF HEART: DISEASE OF AORTIC VALVES: SUDDEN DEATH ON THE DAY FOLLOWING DELIVERY. By W. B. YOUNG, Esq. (Sept. 1st, 1852.) A married female was delivered of her seventh child on the morning of 21st August, 1852. She had a natural labour. On the following morning, she suddenly expired after taking some tea and bread and butter.

Examination of the Body. The omentum was loaded with fat, the stomach and bowels were much distended with flatus, and the liver was enlarged; the uterus was fully contracted, containing no clots; the right kidney was somewhat enlarged, but not altered in structure—the left was natural; the cavity of the chest was rather contracted, and the lungs were congested; the heart was larger than normal; the left ventricle was hypertrophied, and contained dark clots; the aortic valves were thickened and rigid; the right ventricle was small, atrophied, and quite empty.

Mr. Young considered that the disease of the heart had been the cause of death, and that its function had been arrested by the distended state of the stomach, and large size of the liver.

MIXED OR COMPOUND ANEURISM OF THE AORTA. By C. H. GAMBLE, Esq. The ascending aorta and arch were dilated to twice their natural size; while the upper part of the descending portion presented in addition a rupture of its coats, and a sac communicating with it as large as an

orange. The two upper dorsal vertebrae were eroded by the pressure, and formed a boundary to the sac; this part of it was the only one containing coagulum. The patient was a brewer's man, aged 54. He had continued his employment, with temporary intervals, until within a few days of his death. He died after excitement, which had produced rupture of the sac and effusion of blood into the right thoracic cavity. The right lung was emphysematous; it lay across the front of the pleural cavity under the sternum. Three pints or more of blood were found effused into this cavity.

DIFFUSED POPLITEAL ANEURISM. By F. A. BULLEY, Esq. The patient was W. B., a man in the Royal Berkshire Hospital, whose thigh Mr. Bulley had amputated a few days ago, on account of threatened sloughing. The man stated, on his admission on August 21st, that eleven months previously he experienced, after having carried a sack of wheat up some steps, a tingling sensation in front of the right knee. He noticed also a small swelling, not larger than a pea, in the ham; this and the tingling sensation disappeared in a few days. On the 23rd June, he again noticed the swelling, and he had some throbbing in it, and also pricking sensations up the inner side of the thigh. The tumour reached the size of a pigeon's egg. On the morning of his admission into the hospital, he was engaged in hoeing turnips; he felt something give way in the ham, and experienced rushing sensations down the leg, and up the thigh, in the course of the femoral artery. The limb became disabled, and the leg and foot numb and oedematous. The popliteal swelling rapidly increased in size, and he had sensations of burning in parts of the leg, etc. Pressure was tried by means of Mr. Bulley's tourniquet; but, the patient being obstinate, the plan was not properly carried out, and amputation became the only resource, gangrene being threatened, and the man being in a very cachectic and exhausted state.

There were found on dissection two sacs; one, the larger and posterior, contained much coagula, and was formed by the surrounding textures (fascia lata, gastrocnemii, and hamstring muscles, cellular tissue, etc.); the smaller, communicating directly with the artery through a longitudinal aperture, had more distinct parietes, continuous with the coats of the artery, but lost posteriorly in the mass of coagula of the larger cyst. The arteries were healthy above and below. The man made a slow but good recovery.

Mr. Bulley thought pressure had one inconvenience attached to it; viz., that it might damage the artery by thickening its coats, so as to render the separation of a ligature difficult and dangerous. He thought the collateral arteries had begun to dilate in this case.

Mr. MAY would limit the trial of pressure to cases of circumscribed aneurism, where the sac was entire; or where, if it had given way, a second sac had formed from the condensation of cellular tissue by inflammation.

DISEASED ARTERIES IN A PATIENT DYING OF GANGRENE. By F. A. BULLEY, Esq. (March 23rd, 1853.) Mr. Bulley presented some specimens of arterial disease taken from a woman aged 68, who had lately died in the hospital with dry gangrene of the right hand and arm. She had been exposed to cold in hanging up some clothes in her garden, and had a rigor, followed by fit, soon after. One night, having previously complained of smarting in the hand, she had great pain in it and in the wrist; she found they were of a dark colour; this change extended upwards, and had involved nearly the whole of the forearm, the hand and arm being a dry black and charred looking mass. Some of the toes were gangrenous, but there was more action in the neighbouring parts; so that the gangrenous parts were not so dry. She had for years been subject to cold extremities, shewing great feebleness of circulation.

Examination of the Body. The main arteries were examined. The right brachial artery was blocked by a firm adherent coagulum for two or three inches; the lining membrane of the artery shewing dark discoloration through this extent. The whole arterial system seemed affected

with deposits of bony and cartilaginous matter; the former being most marked at the bifurcation of the aorta into the common iliacs, and of the latter into external and internal.

DISEASES OF THE URINARY SYSTEM.

MALIGNANT DISEASE OF THE KIDNEY. By C. H. GAMBLE, Esq. (Feb. 23rd, 1853.) A child, aged two years and a quarter, had recently recovered from symptoms resembling those of acute hydrocephalus, under active treatment. The belly became afterwards tympanitic; a tumour could, however, be felt in the left iliac region, but no diagnosis was arrived at. Death by asthenia ensued.

Examination of the Body. The abdomen was found to contain a large quantity of grumous blood, which had escaped through an aperture in the peritoneum from a mass of malignant disease, which arose from the tubular structure of the left kidney, leaving the cortical substance to a certain extent untouched, but involving the colon and supra-renal capsule. The tumour, which was encephaloid and contained in the spaces left in its structure much blood, weighed five pounds; the kidney alone weighed two and a quarter pounds.

MALIGNANT DISEASE OF THE KIDNEY. By R. T. WOODHOUSE, M.D. This specimen weighed eighteen pounds; only a small portion of the cortical structure was unaffected. The tumour had occupied the whole of the right side of the abdominal cavity, and had extended itself across the spine into the left, pushing the small intestines into the left iliac fossa. The ascending colon went over the front and inner part of the diseased mass, and the ileum over the lower part, both being attached to it; the peritoneum covered the whole. The iliac, pelvic, and lumbar glands were all infiltrated with malignant deposit. The substance of the tumour was made up of a stone coloured medullary deposit, easily broken down, and having in it one or two cavities containing straw-coloured fluid. There was a cyst formed by the expansion and thickening of the capsule of the kidney, the tumour seemed to grow from the tubular structure of that organ. The left kidney was found large and congested but healthy. The history was imperfect; but the man from whom this immense mass was taken was sixty-six years old; he seems to have met with a strain twelve months ago, but dated his illness from only four months since, having been then seized with vomiting and biliousness. The legs, face, and left hand began to swell as well as the abdomen. On his admission, Jan. 26th, the tumour seemed to extend from the ribs down to within two or three inches of Poupart's ligament, and a spur could be felt going over the spine. There was a depression near the margin of the ribs, resonant on percussion; fluid existed in the abdominal cavity. He sunk by asthenia.

The urine had been examined, and was found to be sp. gr. 1022, containing no albumen. Dr. Walshe mentions, in regard to the urine, that it is unaffected in cancer of the kidney, until the renal structure is deeply diseased, blood, pus, and encephaloid matter being then found in it. In this case nothing could pass from the kidney to the bladder, on account of the ureter being obliterated by the pressure of it between the mass of the kidney and lumbar glands. Some of the diseased deposit was placed under the microscope, and was found to consist of oval cells, some of which contained nuclei; they were intersected by curvilinear fibres.

DISEASE OF THE KIDNEYS IN A CHILD. By EDWARD WELLS, M.D. (Oct. 27th, 1852.) The patient, G. K., was between two and three years of age. The mother gave the following account. On Saturday, Oct. 16th, she first noticed the child to be poorly, without any particular symptoms; on the following Tuesday, the body began to swell; but she merely thought he was getting stout; the anasarca increased. On Friday, the breathing became affected; and on Saturday, the day the child was brought to the hospital, the dyspnoea was very urgent. He died by apnoea two hours afterwards.

Examination of the Body. Very considerable serous effusion was found in both pleuræ; some in the pericardium. The heart was healthy, there was consolidation at the base of the right lung, and congestion of the liver. The left

kidney was larger than natural, the capsule readily peeled off, the exposed surface was studded with red points; the cortical substance was in a state of degeneration; the tubular was healthy. The right kidney was smaller; the cortical structure was also in a state of degeneration. The body was anasarcaous. There was no opportunity of examining the urine before death, and none was found in the bladder.

DISEASES OF THE UTERINE SYSTEM.

*** ENCEPHALOID CANCER OF THE UTERUS.** By C. H. GAMBLE, Esq. (Jan. 26th, 1853.) The specimen was taken from a woman, aged 38, the mother of nine children. In October 1851 she suffered from a profuse inodorous watery discharge, and the menstrual flow became more sanguinolent, frequent, and copious. At a time when this flow was very free, the diagnosis of cauliflower excrescence was made, a tumour filling the vagina which was crisp and friable at the lower end, but firmer above; it was attached firmly by a base larger than half a crown to the inner surface of the os uteri. Considerable bleeding followed the examination, from the tumour breaking down in its substance. Bleeding again and again recurred; in July last, one attack was so severe as to be followed by syncope of two or three days duration, since which, so much serum or blood has never escaped. Mr. G. found the alum hip bath of Dr. Ashwell the most useful remedy in checking these hæmorrhages. The pain which she had suffered in the back and hips, had been of a dull, aching character, but it now became more distressing, and accompanied with aching in the legs, more particularly the left, and in the course of the sciatics; much weight and bearing down on the perineum had also existed latterly. Symptoms connected with other organs occurred, as nausea, vomiting, diarrhoea, dyspeptic ailments, puffiness of the whole body, and incapability of being raised from the recumbent posture.

Examination of the Body. The body was found extremely exsanguine, but by no means deficient in condition. The pelvic organs were matted together; the uterus, ovaries, and cellular tissue, had much cancerous matter deposited in them; that in the centre of the uterus was tolerably firm and cut crisp; what was in the other parts was more cerebriform. There was also some malignant deposit at the vesical ends of the ureters, partially blocking up the left. A thin dirty white and slimy piece of membrane hung from the uterus.

Mr. Gamble said that in this case, Mr. May, Mr. Workman, and himself, had all agreed in the symptoms indicating cauliflower excrescence in the first instance; but he thought that the termination of the case had been by conversion of the womb, etc., into that species of cancer known as medullary sarcoma. He desired, therefore, the opinion of the Society as to whether this was a natural termination or an accidental complication; in a case where life had been unusually prolonged. Mr. May expressed his opinion that cauliflower excrescence and encephaloid cancer were identical; and Dr. Wells also thought that cauliflower excrescence was a malignant disease.

UTERINE POLYPI. By G. MAY, Esq. (April 20th, 1853.) An unmarried lady, aged 45, had for six years had occasional uterine hæmorrhage. In consultation with Mr. Stone, a small tumour was found, and tied. She still suffered from periodical floodings, which reduced her very much. A second pedunculated tumour was found, which gradually descended into the vagina; this was surrounded by a stout ligature, which, after some days, broke. The peduncle was nearly ulcerated through, and the tumour soon came away (about a fortnight before death). On the 18th instant, while about her household affairs, she was seized with vomiting, diarrhoea, and shivering, with pain in the abdomen. She appeared death-struck, and died on the 19th.

Examination of the Body. The peritoneum, over the

* A case of Internal Uterine Hæmorrhage was related by Mr. Harrison, but as it was published in the ASSOCIATION JOURNAL for January 7th, it is not necessary to reproduce it here.

small intestines, was found vascular; and there was slight serous effusion into the abdominal cavity, with a few flakes of lymph. The vagina and cervix uteri were healthy; the seat of the polypus showed only a slight projection—no inflammation nor ulceration. The body of the uterus was greatly hypertrophied, weighing $2\frac{1}{2}$ lbs., with several nodules of various sizes projecting from its surface. There was a small pendant polypus within the cervix, about an inch in length; and, on laying open the cavity of the uterus, a larger one was seen hanging from the fundus, $2\frac{1}{2}$ or 3 inches in length. The peduncles were pale, but the bulbous heads purple and flaccid, as if composed of turgid vessels. A question arose as to the malignancy of the tumours in the walls of the uterus; but the general opinion seemed to be, that they were fibrous and non-malignant. They were perfectly smooth, almost globular, and slightly elastic to the passage of the knife, the section giving a distinct fibrous appearance.

DISEASES OF THE CUTANEOUS SYSTEM.

LUPIN-SEED FAVUS. By E. WELLS, M.D. (June 30th, 1852.) Dr. Wells presented wax models and a drawing of a specimen of the lupin-seed favus, extending over the whole body, which had existed in a little girl in the hospital. The disease had yielded to alkaline baths every night, of six ounces of carbonate of potash, in thirty gallons of water at 98° . The portion of the disease on the scalp was treated with equal parts of sulphur ointment, and tar ointment, and alkaline lotions. Dr. Wells remarked, that the disease began in small points, which coalesced and formed patches. Some of the smaller of these much resembled a section of calumba root. He also stated, that favus in the scalp often got well under simple poultices. These were, at any rate, absolutely necessary, before stimulating applications were used. Three of this patient's brothers were, it seems, affected with the same disease in the scalp.

CUTANEOUS CANCER. By I. HARRISON, Esq. (Sept. 1st, 1852.) Mr. Harrison presented a cast of cutaneous cancer in the neighbourhood of the left eye, taken from a man aged 92. Mr. Harrison thought this man's death had not been in any way accelerated by it. He died by asthma. Mr. H., however, recommended the early removal of tumours of the face; as, he thought, they always degenerated into malignancy. He mentioned a case in which Sir A. Cooper had been consulted, and had advised non-interference, but in which cancerous degeneration had since taken place.

Mr. MAY referred to the case of the clerk at Sonning church, in whom an epithelial cancer had existed thirty years, and had now destroyed the cheek. He thought that, in this form of disease, the neighbouring tissues were tolerably free.

In surgery, there has been little brought before the Society. The few cases relating to this subject I have thought it better to place amongst the diseases of the different systems to which they belong, finding it very difficult to distinguish where medicine ends and surgery begins. I may refer, in proof of the necessity of their existing together, to the two cases of operation by Mr. May. In these, what would have been the value of the attendance of a man endowed merely with the knowledge of external disease and hand work? In his most anxiously treated case of artificial anus, the symptoms brought to him the knowledge of some hidden grave obstruction somewhere in the intestinal canal, and his knowledge of hand-work enabled him to find and use the probable remedy.

We might hope for greater advances than even have been made in our capability of distinguishing disease, but more particularly in our capability of advising our patients well as to some of the dangerous operative proceedings they are to undergo, if all our brethren were induced to adopt the practice of reading their unsuccessful as well as their successful cases. Doubts are thrown on the results of the ovarian section, and its justifiability as a surgical operation, by the non-appearance of facts which, though they

may, in the eyes of some, militate against the reputation of an individual, would make easier the path of many an anxious member of our profession in his endeavours to relieve suffering humanity.

Reading, September 1853.

TWO CASES OF VIOLENT INFLAMMATION OF THE PENIS, CAUSED BY CONSTRICTION WITH STEEL RINGS.

By S. T. CHADWICK, M.D. Edin.

ALTHOUGH the following cases may not possess much practical value, their unusual occurrence may render them of sufficient interest to merit being recorded.

CASE I. A farmer's son, aged 7 years, residing in the neighbourhood of Standish, was brought to me on a Tuesday morning, in consequence of what his parents (who accompanied him) stated to be an inflammation about his private parts.

On examination, I found the penis prodigiously swollen, tense, and inflamed; and, on the least attempt at manipulation, he involuntarily receded, and screamed out from pain, which was evidently of an agonising character. I was astonished on observing the defined form of the swelling, which abruptly terminated near the root of the penis, at which part there was a grooved appearance that completely encircled the organ; and on forcibly pressing the swelling to one side, I thought it was surrounded by a tight ligature. After urging the boy for an explanation, he for the first time gave a narrative, from which the following facts were gleaned; viz. that on the evening of Sunday he was in one of the outbuildings, amusing himself by attempting to pass a metallic ring over the penis, which, after some difficulty and perseverance, he effected, and very shortly after accomplishing it, he was called into the house by a servant, to partake of supper and be put to bed. In the course of the night he awoke from a feeling of uneasiness; and then, for the first time, he made an attempt (which was ineffectual) for the removal of the cause of the inconvenience. He passed a restless night; and on rising in the morning, he complained of indisposition, so much so, that he was kept from school. During the day he got worse, refused his food, became feverish and restless, was frequently sick; but it was not until evening that he directed his mother's attention to the seat of his suffering. She informed me that at that time there were considerable swelling and inflammation, and she commenced fomenting with a decoction of herbs, and gave him a potion of some domestic cathartic. These means, however, afforded him no relief; the night was passed without sleep, and there was occasional delirium. In the morning, the case had assumed an appearance so alarming, that he was brought over in a spring cart to my surgery, attired in girl's apparel, as he could not endure the contact of his own clothes.

As a similar case had never before come under my observation, I felt exceedingly perplexed how to proceed under the circumstances. By means of several scarifications, which were followed by a copious discharge of blood and serum, and the use of an evaporating lotion, the swelling and sensibility were diminished, and thereby a greater tolerance of handling was the result.

An ingenious mechanic, who chanced to be present, suggested the possibility of the ring being snapped with a powerful pair of forceps or pliers; but the difficulty that presented itself was the deep sulcus in which it was imbedded. Nevertheless, after the lapse of considerable time, we succeeded in breaking the ring on each side, by the means alluded to above.

An emeto-cathartic mixture was ordered to be administered, and warm water dressings kept assiduously applied to the parts.

CASE II. The second case was the son of a nail maker from Atherton, aged 8 years. This case also was produced by

similar circumstances, and presented almost the same appearances; it is therefore unnecessary to go into any lengthened detail. In addition, however, there were several vesications at the end of the prepuce, retention of urine, the distended condition of the bladder being evident in the hypogastric region. The same plan of treatment was pursued, and the removal of the foreign body was equally painful and protracted. The difficulty of both operations was greatly augmented by the utter impossibility of restraining the writhings of the sufferers. It was gratifying to witness the sudden amelioration of both the general and local symptoms, following almost immediately on the removal of the exciting cause. In a few days, the patients could move about the room; and before the expiration of a month, the only abnormal appearances observable, were some thickened condition of the integuments, and marks left by the abrasion produced by the rings.

Had the constriction not been removed, it is evident that gangrene must have very shortly ensued.

The induction of anaesthesia would doubtless very materially have facilitated the various steps of the operation, and also have saved the children much torture; certainly, should I meet with another case, I shall resort to its agency.

Bolton-le-Moors, Lancashire, November 10, 1853.

CASE OF TRACHEOTOMY; WITH REMARKS.

By CHARLES WEBB, Esq.

AT 5 P.M., Sept. 5th, I was called to see a fine stout child, aged two years and two months, who had inhaled the steam from the spout of a boiling tea-kettle, a few minutes before I arrived. On examining his mouth and tongue, I found no blisters. I advised the mother, if she found the breathing affected, to apply bread and mustard poultices to the throat, and give him small and repeated doses of oil, and to let me know if she saw any change. About eleven o'clock the same night, my assistant being in the neighbourhood, I got him to call in and see the child. He found him heated and restless, and some difficulty of breathing. I gave him an aperient powder and an antiphlogistic mixture, and applied two leeches, which bled freely, without relief. A little before five the next morning, I was informed that he was much worse; and, on visiting him, I found his lips blistered from the steam. He was perfectly insensible; his breathing was most laboured and gasping, as if the glottis were all but closed.

Under such circumstances, not a minute was to be lost; and I proposed the operation of tracheotomy, which was at first refused by the parents. I told them there was no time for delay, as it was the only chance of saving the child's life. With their consent, I immediately operated. Directly the trachea was opened, the breathing was instantly relieved. The child had been for some time troubled with a cough, and a good deal of mucus escaped from the opening. Having no tracheal trocar or canula, I used a common dressing case-knife, and enlarged the opening of the trachea with a blunt topped bistoury, and inserted a hydrocele canula; but, from the spasmodic coughing, it could not be retained. After waiting more than an hour, I obtained about two inches of a No. 9 catheter, and introduced it. This for a few minutes produced considerable irritation, and the expulsion of a great quantity of mucus. After this, he fell into a sound sleep, and slept for three hours, when he awoke up quite conscious and refreshed, and made his mother understand that he wanted drink. I had ordered cold thin gruel to be ready for him when he required anything, and he drank freely and frequently of it, and continued to do so for a week, and nothing else. He continued his mixture, and progressed daily, without a bad symptom, to recovery. The canula was removed several times to be cleaned, and it was withdrawn altogether on the 13th. The wound closed up in a short time, and was completely healed on the 2nd of October.

REMARKS. I have only to make some remarks on the operation to any one who may be placed in my situation, not having instruments proper for it at hand. After cutting through the skin, remove the fat which fills up the opening with a pair of forceps and scissors; by doing so, the wounding of vessels and hæmorrhage are avoided; and the trachea, being laid bare, will give a clearer sight for the insertion of the knife. Had I not done this, the operation would have failed, as the child would have been suffocated with blood and mucus, although he did not lose more than half an ounce of blood during the time I had to wait for the canula. The space being clear, I could wipe away both, with a cold sponge, as fast as either appeared.

Basingstoke, November 10th, 1853.

BIBLIOGRAPHICAL NOTICES.

HANDBOOK OF ORGANIC ANALYSIS. By JUSTUS LIEBIG, Professor of Chemistry in the University of Munich. Edited by A. W. HOFMANN, Ph. D., F.R.S., etc. London: 1853.

BARON LIEBIG, in his prefatory remarks to this book, acknowledging the assistance received by him from Dr. Strecker of Christiana, and Dr. Hofmann, his present editor, gracefully says, "I believe the cooperation of my friends, who possess so much experience in that department of chemical analysis, 'the organic,' has conferred a peculiar value upon this little work." To Liebig, however, we cannot but ascribe the simplicity and clearness pervading this Handbook, (and which, when he pleases, are the characteristics of his style,) as well as the excellent general arrangements, so plain and easy to be comprehended, that the student must be obtuse indeed who cannot understand and follow the directions without difficulty, after some slight practice in manipulation.

We can readily imagine that "the peculiar value" referred to, as due to Drs. Hofmann and Strecker, consists in what the former calls "little improvements"; being in truth the details of those seemingly trifling precautions, and the methods for making, arranging, and using various simple apparatus, without the careful observance and use of which, success in organic analysis is unattainable. With such "little improvements" every page is studded, lending most truly "a peculiar value to this little work;" its smallness being, in our eyes, not the least of its merits.

Whatever may respectively belong to each author as his special deserts, we cannot speak too warmly of the manner in which the triumvirate has produced the useful *vade mecum* before us. We particularly thank Dr. Hofmann for his successful adaptation of coal-gas to the purpose of organic analysis, an arrangement of especial benefit to the chemists of this country. To point to the pleasant rendering of the original into our language is almost superfluous, the editor being, as it were, naturalized amongst us, and we, moreover, remembering a very successful exercise of this faculty on a former occasion, and on a more difficult subject. The engravings are unusually distinct and good; and we are glad to see that the accessories of paper and type are such as should always be bestowed on a useful and original work, especially if it be one intended for hard service.

PRACTICAL PHARMACEUTICAL CHEMISTRY. By DR. G. C. WITTSTEIN. Translated by STEPHEN DARBY. London: 1853.

MR. DARBY's command of his mother-tongue is not evidenced in this translation. He pleads, indeed, in extenuation, that it was executed in the hours of relaxation from business: but we cannot see the force of this excuse. When he was at work, he might as well have done it thoroughly as indifferently. "Whatever is worth doing, is worth doing well."

He has, however, evinced much patient determination, resolute labour, and praiseworthy accuracy in the performance of his task, and has produced a book which, if the manufacturers of therapeutical chemicals can be induced to study it, is likely to be very useful to most of them.

We do not think the work will add to Dr. WITTSTEIN'S reputation in this country. As a collection of facts and a book of reference in the library, or in the pharmaceutical laboratory, it will prove valuable; but it is wearisome, spun-out, and pedantic; there are upwards of nine pages devoted to the trumpery preparation of *Ferrum oxidatum hydraticum*, as it is termed. Indeed, these barbarous repellent names run through the book. Who would recognise "Lead plaster" when masquerading as *plumbum oxidatum margariticum et oleinicum*? Should this translation reach a second edition, Mr. Darby would greatly increase its value were he to condense his author's text, and substitute the English names of the preparations, as he has wisely done in the index, for the wretched pedantry which now heads the pages.

A HANDBOOK OF INORGANIC CHEMISTRY. By WILLIAM GREGORY, M.D., F.R.S.E., Professor of Chemistry in the University of Edinburgh. Third Edition. London: 1853.

We have here an old friend under a new name; this "Handbook" being "A new and greatly enlarged edition of the *Outlines of Inorganic Chemistry*"; and being also, what we can seldom say of books of this class, greatly improved by the enlargement. We well remember that the very brevity of the "*Outlines*", i.e., of the first edition (we do not think we ever saw the second) vexed us; brevity was there, seemingly, the one thing needful in the author's eyes, and utility itself was sacrificed to it. In its present shape, this grave though rare fault is remedied; nor is it often our fate to meet with a book which, with fair diligence on the part of its reader, can so well realise the promise upon its titlepage, "For the use of Students". A young man, who has mastered these few and by no means closely printed pages, may venture to face any board of examiners on chemistry without fear of being posed by any fair questions.

Were we required to name a book which should convey to the reader, in the most simple and terse manner, a sound and general knowledge of chemical science, we should unhesitatingly say "Gregory's Handbook". The pleasant simplicity, easiness, and even elegance of style, continually remind us of the "Manual" of the late amiable and talented Dr. Edward Turner; a book which was our own guide to the shrine of chemistry. We have no higher praise.

PERISCOPIC REVIEW.

MICROSCOPICAL DISCOVERY.

THE CELL-THEORY.

The *Edinburgh Philosophical Journal* for October contains the summary of a lecture on this subject by Mr. THOMAS H. HUXLEY, in all the conclusions of which we cannot coincide, but which is well worthy of notice. It is entitled *On the Identity of Structure in Plants and Animals*; a structure distinguished from that of unorganised bodies by being neither chemically nor optically homogeneous, but composed of small definite masses, containing a large quantity of nitrogen, imbedded in a homogeneous matrix having a very different chemical composition. These nitrogenous bodies (called *endoplasts* by our author) may be more or less solid or vesicular, and are the "nucleus" of animal tissues, or the "primordial utricle" in plants. The matrix (or "periplastic substance") readily breaks up into definite portions surrounding each endoplast, and its modifications form the other histological elements of the tissues.

Upon this view we find that all the discrepancies which had appeared to exist between the animal and vegetable structures

disappear, and it becomes easy to trace the absolute identity of plan in the two; the difference between them being produced merely by the nature and form of the deposit in, or modification of, the periplastic substance. In both plants and animals, then, there is one histological element, the endoplast, which does nothing but grow and vegetatively repeat itself; the other element, the periplastic substance, being the subject of all the chemical and morphological metamorphoses, in consequence of which specific tissues arise.

The part of Mr. Huxley's paper, however, in which we cannot agree, is that in which he denies all vital force to the "cells" themselves, as being merely "periplastic". Now we submit that the very metamorphoses he describes prove the existence of such "cell-force", whether we reckon it chemical, mechanical, both, or neither. "Suppose", says Mr. Huxley, "that one, ignorant of the mode in which a house is built, were to pull it to pieces, and find it to be composed of bricks and mortar, would it be very philosophical on his part to suppose that the house was built by *brick-force*? But this is just what has been done with the human body; we have broken it up into 'cells', and now we account for its genesis by *cell-force*." Now we shall only say, that whenever Mr. Huxley shall exhibit a house in which the bricks are "the subject of chemical and morphological metamorphoses, in consequence of which specific tissues arise", granite, freestone, slate, and marble, appearing in gradually increasing masses as this wondrous development goes on—when the street and the number of this house are pointed out, then shall we admit the analogy: and as these strange changes are in progress, "may we be there to see."

Dr. MARTIN BARRY has published, in the same Journal, three "notes", respectively concerning the twin spiral filaments long ago described by him as the origin of every structure in the body; the entrance of spermatozoa into the ovum; and the formation of the ovum.

With regard to the first question, Dr. Barry holds to the spiral fibre theory in all its integrity, and claims the recent support of Agardh to uphold it, in as far at least as the vegetable tissue is concerned. As we are not prepared to give in our adhesion to this theory, we merely quote in brief the expression of it, that our readers may understand the question. "The prime mover is the *nucleolus*, which is the organ of absorption, secretion, and assimilation; the nucleolus always passes into fibre, and directly into no other form than that of fibre; and then the whole organism arises out of nucleoli, for fibre is but the nucleolus in another shape, and every structure arises out of fibre."

THE OVUM.

Dr. BARRY is led to the following conclusions with reference to the structures connected with the ovum in different animals:

1. That in mammalia the vesicle he described as the foundation of the Graafian vesicle, and termed the *ovisac*, does not remain permanently in the ovary, but is expelled and absorbed.
2. That in the bird this *ovisac* becomes the shell-membrane of the egg.
3. That after the formation of the ovum, the albuminous contents of the *ovisac* in mammalia correspond to the albumen in the bird's egg.

COLOUR OF THE HAIR.

The same Journal contains a paper on this subject by Dr. ALLEN DALZIELL, wherein he concludes as follows:

The colour of the hair depends upon one or more of three causes:

1. On *pigment-granules*, of which our author has assured himself that the pigment is never lodged exteriorly in the cells, but always in some part of the interior; and changes, during the growth of hair, often take place at regular intervals in the colour and amount of these deposits.
2. On *diffused colouring matter* impregnating the whole tissue, a good example of which may be found in the short hairs from the face of the hare.
3. On the presence of *air-spaces* within the fibres of the shaft, which refract light, and thus give the idea of colour; these are best seen in white hairs.

THE CORPUSCULA TACTUS.

Mr. HUXLEY has published, in the *Journal of Microscopical Science* for October, some interesting observations on those remarkable bodies, which we have twice introduced to the notice of the readers of this JOURNAL, and upon which, as we need not enlarge, further than just to state that they are Huxley's researches.

1. He has found in the human finger papillæ containing both corpuscles and vessels, though never any destitute of corpuscles, and yet containing nerves. It follows that the distinction originally made by Wagner into corpuscular and vascular papillæ cannot be absolutely maintained.

2. He believes that the corpuscle is not histologically a special structure, but is composed of tissue not radically different from that of the papilla itself, the sole difference consisting in this, that the elastic bands and filaments which the corpuscle contains are more or less parallel to one another, and perpendicular to the axis of the corpuscle. In one respect, however, he believes the corpuscles to be peculiar, namely, that they are the modified extremity of the neurilemma of the nervous tubules which enter the papilla.

3. Without positively denying that the nerves may end in loops, he states that he has never been able to convince himself of this mode of termination; and that, on the other hand, he has frequently observed the nervous tubules to end by pointed extremities, which appear to be continuous with the tissue of the corpuscle.

4. He considers the corpuscles in question as analogous to the Pacinian bodies, in which latter bodies he denies the existence of concentric laminae and of a central cavity, and considers them as nothing more than thickened processes of the neurilemma of the nerve to which they are attached, differing from the tactile corpuscles only in the circumstance that the thickening in the latter takes place on each side of the nerve fibril, while in the Pacinian body it takes place on both sides.

FUNGOID PARASITES OF THE SKIN.

C. MEISSNER has described, in the *Archiv für Phys. Heilk.* 12, 193, a new fungus, which he observed in the *finger-nails* of an old man. The nails were very thick, curved, yellowish white, and streaked; and, on examining them carefully under the microscope, they were found to be full of a rich plexus of variously convoluted filamentary fungi, which in many places formed a thick felt among the cells of the nail-substance. The toe-nails were unaffected.

When asked respecting the nails and the cause of their alteration, the old man stated that about thirty years previously a heavy weight had fallen upon his fingers, in consequence of which the nails were broken, and had come off; that they subsequently grew again, but had gradually become thick and white.

The last number of the *British and Foreign Medico-Chirurgical Review* contains an interesting review of M. ROBIN'S *Natural History of the Vegetable Parasites which infest the Bodies of Animals*, in which mention is made of about two dozen of these organisms as occasionally found on the human body. We think that, for practical purposes, it will be enough to notice the following fungoid denizens of the skin.

1. In the true favus, well known by its yellow crusts, we have the now familiar *achorion Schönleini*, the tubes and spores of which are found in the hair follicles surrounding the root of the hair, and passing out on the surface of the skin, where they form the familiar favous crusts of this "porrigo scutulata."

2. In ringworm of the scalp, or trichosis furfuracea (Wilson) we have the *trichophyton tonsurans*. The disease is distinguished by the bald patches being rough with the swollen and brittle stumps of the diseased and broken-off hairs; and the fungus, consisting of oval transparent spores and articulated filaments, is seated in the interior of the roots of the hairs. "The hairs and fungi simultaneously increase; the former seem larger than usual, are paler in colour, lose their elasticity, soften and break off when they have risen some one or two lines above the surface of the scalp; in the short cylinder then left the fungus grows still more rapidly, so that the normal structure of the small stump of hair soon becomes indistinguishable. Sometimes the hair breaks off before emerging from the skin, and the fungus, epidermis, and sebaceous matter, fill the ends of the piliferous conduits, and form the little prominences which can be seen by the naked eye in this disease, and give the skin a rough aserine appearance. The sporules and mycelium of the plant can sometimes be seen in the form of a white powder, on the roots of the broken hairs."

3. In porrigo decalvans, or alopecia circumscripta, is found the *microsporon Audouinii*, distinguished by its numerous waved filaments, and the extremely small size of its sporules. It is not found, like the *Trichophyton*, in the interior of the root, but forms round each hair a little tube; the hair then becomes opaque, softens, and breaks off. The alopecia is rapid, the dermis is not congested, and the epidermis is thin and smooth.

4. In mentagra grows a plant resembling the preceding, but possessing larger spores and filaments, yeilded the *microsporon mentagraphyta*. Its seat is between the bulb of the hair and the follicle in which the bulb is seated; and it never extends beyond the surface of the skin.

5. The brown scurf of the disease called pityriasis versicolor, or chloasma, is formed by another cryptogamic plant, the *microsporon furfur*.

The essential point in the treatment of all these diseases is to destroy the vitality of the parasite, by means which are pretty equally applicable to all of them. If hairs be present, as in most of the maladies above described, they must be removed by extraction, with or without previous application of some of the usual depilatory ointments; and then some "parasiticide" solution or ointment must be applied and rubbed into the skin, so as to reach the fungi in the recesses of the follicles. A solution of corrosive sublimate, two grains to the ounce; an ointment of acetate of copper, one grain to the ounce; and, above all, the saturated aqueous solution of sulphurous acid gas, diluted with two or three parts of water, may be used for this end. In cases of mentagra, we have found an ointment of sulphate of iron, 3ss to the ounce, completely effectual in curing the disease. There are no doubt many other substances which have a similar good effect; but a caustic such as nitrate of silver, which, by forming a crust on the surface, rather protects the fungus than destroys it, will not succeed.

CRYSTALLISATION OF THE BLOOD.

A new and very interesting subject has lately been more formally brought before the profession; we refer to the fact of the production from the blood, in certain circumstances, of red "albuminous crystals", which, though formed of animal matter, and sometimes, in all probability, during life, have yet forms as regular as any inorganic crystals. An excellent epitome of the facts bearing upon this matter has been published in the *Medico-Chirurgical Review* for October, from which we select as much as appears calculated to be interesting to the majority of our readers.

It has been hitherto held to be the rule, that crystallisation is peculiarly a property of inorganic chemistry, and that crystalline forms are met with in the animal economy only when the material giving rise to them has lost all claim to be considered as an integral part of the living tissues. The discovery of the crystallising power of the albuminous elements of red blood (*hematoidin* of Virchow) has, however, made it probable that there are exceptions to this general law.

Various authors, as Sir E. Home, Scherer, etc., had described reddish crystals in blood which had been effused into tissues or organs; but Virchow was the first who paid particular attention to their actual nature, as different from saline or earthy crystals. He considers that the formation of these red crystals is the terminal step of the transformation of the colouring matter of the blood, which, first diffused, passes into the granular, then into the crystalline form; the crystals being yellowish or red, of a rhomboidal form, occasionally as large as the ordinary triple phosphate crystals in the urine, and forming spontaneously in extravasated blood, in the course of from a fortnight to three weeks after its escape from the vessels. Virchow concludes, that the crystallising process may take place—1, in the cells; 2, in amorphous protein substances (in both cases from diffused colouring matter); or 3, from agglomerated and subsequently metamorphosed blood-corpuscles; that the crystallising power is inherent in the albuminous matter or protein; and that the colouring matter in the crystals bears no other relation to them than the metallic colours impregnating its crystals do to quartz. Reichert comes to similar conclusions: that the crystals are albuminous, and that the colouring matter is not an essential feature. Kölliker has advanced another step in this investigation, having detected the crystals in the interior of unbroken blood-corpuscles. In the blood of a dog's liver, he found a great number of blood-globules, containing from one to five rodlets of a dark yellow colour; and, in unchanged corpuscles from the splenic blood, the gradual formation of one or two of the crystals could be followed. Dr. Funke introduces the matter under yet a new aspect: he has succeeded in forming the crystals from the blood. If we add water to a drop of blood spread out upon the object glass of the microscope, when the drop has just begun to dry up, the edges of the heaps of blood-corpuscles are seen to undergo a sudden change. A few corpuscles disappear, others receive dark thick edges, become angular and elongated, and are extended into small, well defined rodlets. In this manner, an enormous quantity of crystal embryos are formed, which are too small to enable us to determine their shape; they rapidly

extend more and more lengthways, the entire field of vision being gradually covered with a dense network of acicular crystals crossing one another in every direction, other crystals presenting the form of rhombic plates.

The coloured rhomboidal crystals, however, as originally described by Virchow, do not appear to be capable of being artificially formed.

Such, we think, is a correct, though brief statement of the principal facts on this very interesting subject.

On referring to the drawings of some of the principal forms which we have already described, we think no one can fail to be struck with their great resemblance to the various crystalline forms found in the urine, uric acid, oxalate of lime, triple phosphate, nay, even cystine. Had we been shown the drawings without being told of their origin, we should at once have set them down as illustrations of the crystalline urinary deposits.

MODE OF TERMINATION OF THE NERVES.

From a paper by RUDOLPH WAGNER, in the *Annales des Sciences Naturelles*, xix, 370, we extract the following statement of that distinguished physiologist's late researches on this much vexed subject. His investigation has been carried on chiefly in relation to the ending of the nervous filaments in the dental pulp, the papillæ of the tongue, and the labyrinth of the ear.

In the tooth-pulp, the nerves end by free extremities; and though they form loops in great number, yet the same fibril may be traced through several loops, and appears always to terminate at last by a free ending. In the lingual papillæ, too, the termination by loops is apparent only, and the deception arises from the mere superposition of one curving fibre over another, each afterward pursuing a separate course, and ending free.

In the labyrinth, Wagner observes, 1, a system of fibres, manifestly ending by free extremities; 2, a set of looping fibrillæ; 3, another system of fine branching fibres; the connexion between which three systems is not easily traced. He concludes "provisionally", that the auditory nerves consist of primitive fibres, interrupted in their course by the frequent insertion of "ganglionic cells", which, connecting the ends of the interrupted fibre, are necessarily attached by each end, or "bipolar"; that these fibres then form with the loops a terminal plexus, next pass into the condition of pale thin fibres (without the medullary pulp), and that these ramify; and that, at the extremity of each branch, there is seated a ganglionic cell, fixed on it "like a pear by its stalk", and hence "unipolar".

Wagner concludes also, from his examination of the nervous fibres of the lachrymal gland, and of muscle, that all the primitive nervous fibres, motor, sensory, and "trophic", subdivide many times, and never form terminal loops; that free ending of the nervous fibrils is the general rule, and that to these fibrils are attached either the elements of the tissues, or, as appears to occur in many cases, ganglionic (nervous) cells, forming as it were "terminal buttons".

This conclusion with respect to the termination of the nervous filaments by free extremities, and the absence of proof, to say the least, of the ending being by loops, manifestly tallies with the observations of Mr. Huxley above detailed.

SURGERY.

STATISTICS OF TETANUS.

In the *Glasgow Medical Journal* for October 1863, Dr. J. A. LAURIE has published an instructive statistical record of cases of tetanus. In commencing, he makes the following remarks:

"When lecturing on tetanus, I have found it necessary to say that, while we knew it to be one of the most fatal of secondary surgical diseases, we were not in possession of data by which the ratio of its mortality could be ascertained. On this point, the inferences drawn from any tables which I have seen, especially that of Mr. Curling, are most fallacious; for the obvious reason that the tables, being made up of published cases, a large proportion of which are recorded because they are recoveries, give results which fall far short of the actual mortality. In the hope of supplying this desideratum, I turned to the records of the Glasgow Infirmary. The results of that investigation form the groundwork of this communication. It is only by a careful and truthful record of all the cases which occur in large hospitals, that accuracy on this and many allied subjects can be arrived at. After a very careful search through the

records of our Infirmary, from its commencement in 1794 to the present month, I have been enabled to construct the following table. In consequence of some of our records being lost, and others imperfectly kept, it does not contain all the cases of tetanus which have been admitted into our hospital, or have occurred within its walls, but it contains all I could find; and seeing that it has been constructed solely from the journals of the hospital, consisting of daily, sometimes hourly reports, taken at the bedside of the patients, by numerous observers, at long distant intervals, I am certain it is as accurate as any table of the kind well can be. For these reasons, it is more valuable than any table of cases of tetanus that I have met with. There has been no selecting, no recording, because the patients recovered, but all are given.

"To show that I do not undervalue the labours of those who have searched for and arranged 'published cases', I have prepared a table containing 171 such cases, the largest, so far as I know, yet recorded. My object in so doing, was partly to confirm some of the conclusions which I have drawn from our Glasgow cases, and partly by contrast, to show how little, as regards prognosis, and the results of treatment, inferences drawn from published cases are to be relied upon. In preparing this table, I have been greatly assisted by that published by Mr. Curling, in his *Essay on Tetanus*. Of his table, I have made liberal use; but I have not taken a single case on trust. I have examined the authorities for all the cases contained in it, and have added some particulars, especially the months in which the cases occurred, which are not given by Mr. Curling."

Then follow two tables; one of fifty-two cases—fifty traumatic, and two idiopathic—compiled from the records of the Glasgow Infirmary; and another, of one hundred and seventy-one cases, from other sources. The particulars in the tables are arranged under the following heads:—number of cases, name of patient, sex, age, nature of injury, state of wound at first symptoms of tetanus, month and year, date of appearance of symptoms after injury, duration and result, and treatment; and in the table of published cases, references to the authorities are given.

Dr. Laurie then gives a summary of the facts contained in the tables.

"Years in which the Glasgow cases occurred. In 1797, one case; 1802, one; 1804, one; 1807, two; 1808, one; 1809, one; 1813, one; 1814, two; 1817, one; 1818, one; 1820, one; 1824, one; 1830, five; 1831, one; 1832, three; 1833, one; 1839, one; 1840, one; 1841, two; 1842, one; 1843, one; 1845, two; 1846, one; 1847, five; 1848, two; 1849, three; 1851, one; 1852, two; first six months of 1853, four. Of the idiopathic cases, one occurred in 1844, and one in 1853.

"I do not pretend to give all the cases which have occurred in the hospital; but as I have given all that I could find, I have at least made an unbiassed approximation to the truth. So far as it goes, the table confirms a statement which I have frequently made, that tetanus at times assumes almost an epidemic character. I have had as many as three acute cases under treatment at the same time. In 1847, the table gives five cases; in 1849, three; and in the first six months of 1853, five.

"Months in which the cases of tetanus occurred:—

	Pub. cases.	Glasgow cases.	Total.
January -	16	6	22
February -	12	5	17
March -	10	6	16
April -	12	4	16
May -	18	5	21
June -	8	3	11
July -	11	5	16
August -	13	1	14
September -	7	4	11
October -	22	7	29
November -	19	2	21
December -	19	2	21
Not stated	6	..	6
Total -	171	50	221

"An opinion has long been entertained, that tetanus is more common in hot than in temperate and cold climates; and in Europe, that it is more frequent in summer than in winter. Alternations of temperature have also been supposed to have great influence in its production. On this subject, *Lévesque* (*Clinique*, tom. i, p. 90), that the wounded exposed to the moist air of 'les vents nord—nord ouest, surtout par

temps, contractent facilement le tétanos; cet accident au contraire paraît rarement lorsque la température est à peu près égale, soit en hiver, soit en été.' A statement nearly similar is made by Dupuytren, and by many English writers. Our tables do not fully confirm these opinions. Taking the Glasgow cases as the most correct, we find that August and June, two hot months, give four, while January and February give eleven. If we arrange the months into four cold, January, February, November, and December, we find fifteen cases; four warm, May, June, July, and August, we have fourteen; and four temperate, March, April, September, and October, we have twenty-one. When we turn to the published cases, we find the four winter months give sixty-six; the four summer, forty-eight; and the four temperate, fifty-one. Thus, both tables combined make the disease least frequent in summer, and most common in winter. The individual months show considerable eccentricity, but still confirming the same inference, January being one of the largest, June and September the two smallest.

"Has season any influence on the mortality of tetanus? In the Glasgow table, the number of recoveries is so small, that almost necessarily those months which show the largest number of cases exhibit the greatest amount of mortality—two recovered in January, and one in April, May, June, and October, each. Of the ninety recoveries in the published cases, there were in January six, February eight, March six, April eight, May ten, June four, July six, August ten, September four, October nine, November eight, and December eleven. If we arrange the months, as we have already done, we find the four cold months give sixty-six cases—of which thirty-three recovered, and thirty-three died; the four temperate months, fifty-one, of whom twenty-seven recovered, and twenty-four died; the four summer months, forty-eight cases, with thirty recoveries, and eighteen deaths. It would thus appear, that the winter months give the largest number of cases, and the highest ratio of mortality; while the four summer months give the fewest cases, and the smallest ratio of fatality.

"Sex. Of the 50 Glasgow traumatic cases, 41 were males, and 9 females; the proportion being 4½ males to 1 female. The table of published cases contains 144 males, and 27 females; the proportion being 5½ to 1. By Mr. Curling's table, the proportion of males to females is 8 to 1. The Glasgow tables give a proportion of nearly one-half of this; and, for the reasons already stated, I have no doubt that it is the more correct.

"Ages. Of 47 Glasgow cases, in which the age is stated, 3 occurred betwixt 6 and 10 years of age; 13 between 10 and 20; 17 between 20 and 30; 5 between 30 and 40; and 9 between 40 and 50. The youngest was 6½, and the oldest 50. Of the 47 cases, 30, or about 64 per cent., occurred between 10 and 30. Of the recoveries, 5 took place between 19 and 30, and 1 was 45. Of 153 published cases, of which the age is stated, 12 occurred between 1 and 10; 43 between 10 and 20; 49 between 20 and 30; 21 between 30 and 40; 21 between 40 and 50; 5 between 50 and 60; and 2 between 60 and 70. Of the 153 cases, 92, or about 60 per cent., occurred between 10 and 30. The youngest was 22 months, and the eldest 70 years. While the above shows that tetanus may occur at any period between infancy and old age, it confirms the opinion, that it is a disease of youth and early adult life—upwards of 60 per cent. occurring in the decades between 10 and 30.

"Ratio of Mortality. Of the 50 traumatic Glasgow cases, 44 died, and 6 recovered, giving a ratio of 7½ deaths to 1 recovery. Of the 41 males, 37 died, and 4 recovered, being 9½ deaths to 1 recovery. Of the females, 7 died, and 2 recovered, giving 3½ deaths to 1 recovery. This table confirms the popular belief, that tetanus is less frequent and less fatal in females than males.

"Of the 171 published cases, 80 died and 91 recovered—144 were males, among whom the deaths and recoveries were all but equal (71 and 73)—27 were females, of whom two-thirds lived (9 died, and 18 recovered). On this point, this and all similar tables are most fallacious. The majority of these cases have been recorded because the patients lived; and the result is, that the recoveries exceed the deaths. In the Glasgow cases, all that could be found are recorded, and the result is 7½ deaths to 1 recovery. This I am certain is not beyond the truth; for while I have excluded all cases of chronic trismus, except one, I have included all the subacute cases of general tetanus. If I were to confine myself to the intensely acute forms of the disease, our table would prove it to be all but absolutely mortal. But such a method of calculation would be obviously unfair and fallacious. By statistics drawn up in this way, the ratio of mortality of all our severe acute diseases, as

typhus, small-pox, and pneumonia, would be greatly exaggerated. Of these diseases, the great majority of the intensely acute cases perish, while comparatively few of the subacute are lost; and were we to exclude the latter from our calculations, the ratio of mortality would be very high. In tetanus, as in them, the correct method is to include all well-marked subacute and acute cases. Unhappily, in tetanus the majority are 'intensely acute'; and I fear all such perish.

"An interesting question has frequently been asked, what proportion does tetanus bear to surgical lesions, especially recent injuries and operations? In order to answer this question, I have selected the year 1847, in which we obtained the fullest records of the cases in the hospital. These were five in number, of which four occurred after admission. From the report of that year, I find that, including operations, wounds, compound fractures, burns, etc., there occurred in the hospital 347* acute causes of tetanus, and 182† abscesses, ulcers, and other chronic causes of that disease. If we take four cases occurring within the hospital in one year, as a full average, which it certainly is, then one case of tetanus will occur in every 132½ cases of general surgical lesions. If we limit ourselves to the acute causes, the proportion will be one in 86½. Two of the cases were caused by burns, of which there were admitted 82, giving the high proportion of one in 41. Two followed lacerated wounds and compound fractures, of which there were admitted 124, giving the proportion of one in 62. Although these are merely approximations, yet I believe I am not far from the truth when I say, that one case of tetanus occurs in 150 cases of general surgical disease, accompanied with lesion of the surface, and one in 100 recent injuries and operations.

"Duration of the Disease. Of 41 fatal Glasgow cases, 18 died within two days; 7 in three days; 5 in four days; 2 in five days; 1 in six days; 3 in seven days; 1 in eight days; 3 in nine days; and 1 in ten days. The shortest period was in case 47, which proved fatal in twelve hours, after amputation of the thigh. Of the recoveries, the disease continued from twenty-five days the shortest, to forty-six the longest, period. It would thus appear, that of 41 fatal cases, 18 died before the third, and 32 before the sixth day; and that if a patient survive beyond that period, his chances of recovery are considerable.

"Period after Injury at which Symptoms of Tetanus occurred. Of 48 Glasgow cases, in which the time is stated, 1 occurred fourteen hours after amputation; 2 in two days; 1 in four days; 2 in five days; 4 in six days; 4 in seven days; 13 in eight days; 3 in nine days; 2 in ten days; 4 in eleven days; 5 in twelve days; 1 in thirteen days; 3 in fifteen days; 2 in sixteen days; and 1 in seventeen days. Of the cures, 1 was seized two days after the injury; the other five from the tenth to the sixteenth; 1 on each day except the fifteenth. Thus, previous to the tenth day, there were 30; and from the tenth to the seventeenth, there were 18 cases; showing that the large proportion of cases of tetanus (amounting to nearly 63 per cent.) occurred before the tenth day, and that these, with one doubtful exception, were fatal. Of the 18 occurring after the tenth day, 5, or about 28 per cent. recovered; thus confirming the pretty generally received opinion, that the earlier after the occurrence of the accident the symptoms of tetanus set in, the more certainly fatal is the disease likely to prove. Excluding the doubtful case (40), the Glasgow table stands thus:—29 cases occurring previous to tenth day of the injury, all fatal; of 18 subsequent to tenth day, 5 recovered.

"Situation of Injury. Of the 50 Glasgow cases, 8 were on the head, 7 on the trunk, 11 hands and fingers, 10 feet and toes, 2 arms, and 12 legs and thighs. The number of head injuries, followed by tetanus, is larger than is generally supposed; all were fatal. The hands and fingers, feet and toes, 21, confirm the opinion, that injuries of these parts rank among the most common causes of this disease. Of 169 published cases, 15 were on the head, 10 trunk, 43 hands and fingers, 47 feet and toes, 14 arms, 40 legs and thighs.

"The nature of the injury is shown by the following classified table:—

	Glasgow cases.	Published cases.
Severe injuries, bruises, compound fractures, etc.	17	70
Prick by nail, etc, generally on foot	6	31

* Operations less cases under other heads, 106. Wounds, including scalp, 70. Fractured skull, 4. Bites, 2. Burns, 82. Compound comminuted fracture, 50. Cut throat, 4. Gangrene, 15. Injuries and fistula of urethra and pudendum, 8. Onychia, 4. Peristitis, 5.
† Abscess, 30. Bed sores, 5. Open cancer, 10. Caries and necrosis, 20. Carbuncle, 3. Fistula not cut, 4. Ulcers, 110.

Wounds and slight lacerations of fingers and toes	10	..	17
Slight injuries	3	..	28
Amputations	2	..	8
Burns	0	..	4
Removal of mamma	1	..	0
Cupping on temples	0	..	1
Flogging	0	..	1
Laceration of cornea	0	..	1
Blow on back, etc.	0	..	5
Simple fracture of thigh	0	..	1
Fall on nose	0	..	1
Abortion	0	..	1
Retained placenta	0	..	1
Ligature of piles	0	..	1
Fistula ani	1	..	0
Extraction of tooth	1	..	1
Frost bite	0	..	1
Spontaneous gangrene of feet and legs	1	..	0
Scirrhus testis	0	..	1
Carious bone	1	..	0
Ulcers	1	..	2
	50		171

"From the above table, several interesting inferences may be drawn. (a) While tetanus may follow almost any form of surgical lesion, it is comparatively common after recent injury, and rare in connexion with the more chronic forms of disease. Of the latter, the Glasgow cases give us four examples, one each of fistula ani, spontaneous gangrene, carious tibia, and ulcer of the leg. But even of these, one only (caries of the tibia, which recovered) can be set down as chronic. The fistula was complicated with acute rheumatism, the gangrene was acute, demanding amputation of the leg, and the ulcer was inflamed and sloughing. (b) The more severe forms of injuries, consisting of compound fractures, and violent injuries of the hands and feet, supply the largest individual per centage, 17 out of 50, or 34 per cent. Next come wounds, and the slighter injuries of the fingers and toes. Pricks by nails, generally on the sole of the foot, give 6 in the Glasgow, and 31 in the published cases. Burns have been a fruitful and fatal source of the disease in our hospital, perhaps from their frequency and severity. In 1847, 1 in 41 of the burns died of tetanus. (c) In 5 cases, blows and sprains, without external lesion, seemed to induce the disease: of these, two died, and three recovered. (d) It had always appeared to me a peculiarity in tetanus, that while it would at times appear to be intimately connected with inclusion of a nerve in a ligature, it never followed deligation of navi, tumours, piles, or any disease in which this form of removal is employed. Of the numerous cases in which I have used the ligature in this way, and seen it applied by others, I have never met with one in which tetanus supervened. I began to think, that they were never conjoined; and must confess, I felt some disappointment when I fell in with one in which tetanus followed ligature of piles. It is published in *Dublin Medical Rep.*, vol. xxvii, p. 45. It proved fatal in twenty-four hours. (e) Tetanus is happily rare in obstetrical practice. The table contains only two examples,—one (122) from abortion, recorded in the *Monthly Journal of Medical Science*, 1850, p. 387, which proved fatal in three days; and one (164) from retained placenta, recorded in the *American Journal*, which terminated fatally on the first day. Others from abortion are recorded, but not with sufficient details to enable me to insert them in the table. Dr. Simpson (*loc. citat.*) says, that he met with a fatal case from the spontaneous detachment, by the uterus, of a 'large soft cellular polypus'.

"For the following case of tetanus after abortion, I am indebted to my friend Dr. Fleming.

"Mrs. McLean, aged 36, a healthy woman, was the mother of five children.

"June 10th, 1852. Seven days ago, being about three months pregnant, she miscarried without any assignable cause; and this was accompanied and followed by obstinate, but not very copious hæmorrhage. The discharge ceased to-day rather suddenly, and soon afterwards symptoms of trismus, supervened. Next day (the 17th), it was very complete, affecting the muscles of the neck, jaws, and face, the head during the paroxysm being bent forcibly backwards: at this time the muscles of the back were not affected. The eyes were sunken, and the expression anxious; the pulse was 80, small, but regular when free from paroxysm; deglutition was difficult; the bowels were constipated; the abdomen was full and tympanitic; there was no discharge

from the vagina. The tetanic symptoms steadily increased, the muscles of the back becoming severely implicated; opisthotonos was at times complete. The paroxysms, which at first recurred every thirty or forty minutes, soon increased in frequency and severity, and she died on the forenoon of the 19th. The treatment consisted at first of purgatives and turpentine enemata, which were followed by large and frequent doses of opium, free inhalation of chloroform, and friction over the neck and spine with chloroform. Latterly, beef-tea injections and brandy were administered. The vagina was frequently washed out by injecting tepid water.

"The uterus was about two and a half inches in length, and of corresponding breadth; it was quite empty and more flaccid than natural. When cut into, the muscular substance and lining membrane, particularly the latter, were very empty, so that the whole organ floated in a basin of water. There was no decomposition apparent.

"(f) Of tetanus following amputation, the Glasgow table gives two examples. Both operations were demanded on account of acute gangrene, and were both performed by me. I recollect a third case, the record of which has been lost, in which amputation was performed by one of my colleagues, for acute gangrene of the leg—the result was fatal. There have, doubtless, been others; but taking the cases as they stand, they give amputation as the cause of 4 per cent. of the cases of tetanus. The published cases give a close approximation, nearly 4½ per cent. One case followed extirpation of the mamma.

"(g) Among the published cases, there are five from blows without wound. Some of these are considered by their recorders as examples of idiopathic tetanus, but I think erroneously. There is ample proof that other lesions, besides those of the surface, induce the tetanic spasm, and the 'subcutaneous' may, I think, be correctly ranked among the number. The tables only give one case from simple fracture. It appears to have been comminuted, and a portion of bone to have penetrated the vastus internus. The Glasgow table affords no example of tetanus following a subcutaneous injury or simple fracture; and so far as my memory serves me, none have occurred during my connexion with the hospital; while, therefore, we admit the cause, we have ample proof of its rarity.

"State of the wound at the time of the occurrence of Tetanus. Of 5 Glasgow cases, which recovered, the wound was 'healing,' 'without discharge,' and granulating in 3; sloughing and unhealthy in 2. Of 32 fatal cases, the wound was said to be 'nearly healed and doing well' in 12; 'inflamed or suppurating' in 6; 'gangrenous and sloughing' in 14, and in one, at least, it must have been quite recent. In 15, therefore, it was healthy; in 22, inflamed or sloughing; and in 1, quite recent. Of 96 published cases, in which the state of the wound is mentioned, the following short table shows its condition:—

	Fatal.	Cured.	Total.
Healed or said to be healed	4	20	11
Healing	21	7	41
Inflamed or suppurating	8	14	22
Unhealthy, sloughing, gangrenous	12	10	22
	45	51	96

"To these must be added, 5 cases in which the wound must have been recent, the symptoms having set in from the fifth hour to the second day after its infliction.

"That a wound so recent as not to come under any of the four heads in the above table, can cause tetanus, can hardly, I think, be denied. No doubt, in the case of amputation, we have in many instances a previous injury, which may have been the cause of the tetanus, independently of the operation. But, admitting this, we have, I think, a sufficient number of authentic cases to prove, that a recent wound can induce tetanus. In case 155, the symptoms set in in four hours, and in 161, on the second day after 'a cut finger'.

"The two tables, taken together, show, that the inflamed and suppurating state is not the most common antecedent, and that it is less so than the unhealthy, sloughing, and gangrenous. The number of cases in which this last state of wound is recorded as present, or having existed, is very considerable.

"Next, perhaps, in point of interest to the 'green wound,' comes the perfectly 'healthy, healing, or healed'. If we take the two tables together, this state rather exceeds the preceding, precluding, I think, the possibility of doubting that tetanus very frequently occurs when the wound is perfectly healthy.

"Does it occur when the wound is quite cicatrised? Of our Glasgow cases afford no unequivocal example. The ne

approach to it, perhaps, is case 13, in which the sole of the foot was pricked by a nail on the 16th July—tetanus set in on the 26th, and it is stated that the wound 'had not suppured'. But this is by far too equivocal to enable us to say that the prick had quite healed in ten days. In every other case, the wound was more or less open; and in my own experience, I have never seen tetanus supervene upon a 'healed' wound. Of the published cases, 11 are said to be 'healed'; and this, added to the high authority of Larrey, Dupuytren, Travers, Curling, and I believe many others, would appear amply sufficient to establish the fact. Still, I confess, it is one regarding which I entertain considerable doubt. The length to which this communication has already extended, forbids my entering on a detailed investigation of this point. So far, however, as I have carried it, the following quotation from Mr. Travers conveys the conclusion at which I have arrived: 'Not unfrequently the punctured wound, as from a nail, wears the aspect of being healed, and is almost forgotten, when the spasms set in.' I suspect that, though they 'wear the aspect', they are not healed."

Dr. Lawrie has reserved his analysis of the treatment and of other points to a future number of the *Glasgow Journal*. When his observations are published, we shall notice them.

TREATMENT OF VARICOSE VEINS BY NEEDLES AND LIGATURES.

Dr. J. C. BUTLER, of Dunham, Canada East, relates the following case in the *Canada Medical Journal* for February 1853.

Mr. F. C., aged 23, of a scrofulous diathesis, consulted Dr. Butler, on 30th July last, for varicose veins of the left leg. The patient said that this condition had been produced by over muscular exertion made several years previously, from which time it had constantly increased, accompanied by occasional obstinate ulcerations. The internal and external saphena veins, with their branches, presented the appearance of a complete mesh-work of diseased veins; also, on placing the thumb upon the principal vein above the knee, the patient being in the recumbent posture, and on removing the compression suddenly, while he was in the erect position, a sensible regurgitation of its contents was apparent, producing a disagreeable sensation to the patient.

On September 2nd, Dr. Butler performed the following operation. Common brass pins were introduced behind the veins; strong waxed ligatures were then passed tightly round the pins so as to include a portion of the integument and a fold of the veins to induce sloughing of the circumscribed parts. Thirteen pins were thus applied to different portions of the veins below the knee, and one to the common saphena, a few inches above it. Quietude and light diet were enjoined. On the fifth day after the operation, there was no constitutional disturbance, and but little swelling of the foot and leg. New ligatures were applied.

Sept. 8th. The patient had suffered much pain during the previous night. The foot and leg were more swollen. Dr. Butler ordered the limb to be elevated, lead lotion to be applied, and ten grains of Dover's powder to be taken at night, and a black draught in the morning.

Sept. 11th. There was sloughing of the strangulated parts. The ligature was tightened, and the Dover's powder was ordered to be repeated.

Sept. 15th. Several of the pins were removed by ulceration.

Sept. 25th. The pins were all removed, and the ulcers appeared healthy.

Oct. 7th. The ulcers were all healed, and the appearance of the leg was much improved. A ligature was applied to a large vein passing over the internal malleolus.

Oct. 14th. The patient had walked a mile on the previous day, and was seized with cold chills, followed by pain in the head, and pain and swelling in leg. He was bled from the arm, the leg was elevated, and cold water was applied. Ten grains of Dover's powder, with six grains of calomel, were given every eight hours.

Oct. 15th. The patient had rested quietly. There was redness and extreme sensibility along the internal saphena as far as the knee. A blister was applied from the foot to the knee, over the vein, and the powders were repeated.

After this time the patient improved, and became rapidly convalescent.

NEW METHOD OF PLUGGING THE NOSTRILS IN EPISTAXIS.

In the *Revue Médico-Chirurgicale*, for October 1853, Dr. A. LÉYDET, of Gardannex, describes an instrument which he has

contrived for plugging the nostrils in cases of epistaxis, especially in children. The apparatus consists of a gum-elastic sound, to which is applied a bladder. This can be introduced and inflated; the air is retained by a stop-cock; and the inflated bladder thereby is made to act as a plug and to restrain the hæmorrhage.

PRACTICE OF MEDICINE AND PATHOLOGY.

NON-RECURRENCE OF DYSENTERY.

In a Clinical Report on Dysentery, based on an analysis of forty-nine cases, and published in the *Buffalo Medical Journal*, Professor FLINT makes the following observations. We copy them from the *New York Journal of Medicine* for September 1853.

He proposes the following questions as interesting in themselves, and important in their pathological bearings. What remote effects, if any, in the organism, follow an attack of dysentery? Does it impair the constitutional vigour? Is the patient afterwards liable to renewed attacks of the disease, or is the susceptibility to the action of the cause, or causes, lessened or destroyed, so that, the morbid process having once taken place, there is greater security, if not entire exemption thereafter?

His facts, he says, are few, but they point to something more than coincidences—they point to laws of the disease which do not appear as yet to have received attention.

"Of the thirty-eight cases ending in recovery, in sixteen the patients either continued under observation, or definite information was obtained respecting their subsequent health for periods varying from one year to thirteen years. To be more precise, with regard to these periods, the duration of the subsequent history in the cases respectively, are as follows:—thirteen years, one case; seven years, two cases; five years, two cases; four years, nine cases; two years, one case; and one year, one case. In all, there were sixteen cases. Of these sixteen patients, only one has died. This patient died with tuberculosis of the lungs four years after recovering from dysentery. Of the remaining fifteen cases, in all the health has been good during the periods respectively during which the patients remained under observation, or within knowledge. I mean by this, that not one has suffered from any other important disease, and in nearly every instance there has been excellent health.

"Not one of these fifteen patients has experienced a second attack of dysentery. The result is rendered somewhat more striking by the fact that, exclusive of the case in which the date of the disease was but a year since, all the patients have been for several years past within the sphere of an epidemic influence, the disease, as already stated, having prevailed more or less, as an epidemic, in this city, in the autumnal months for the last four years. I can also call to mind several cases of dysentery occurring at least four years since, the histories of which were not taken, the patients, in the mean time, being under observation. In none of these instances has the disease been twice experienced. I have not yet met with a second attack of dysentery. It is worthy of notice that three of the cases in this collection occurred in one family at different dates,—viz., one case, thirteen years ago; one, four years; and one, two years. In these instances new subjects were attacked, they escaping who had previously had the disease.

"It would seem, from these facts, that an attack of dysentery does not exert an unfavourable influence on the organism, that patients are not rendered thereby prone to any particular disease, but, on the other hand, enjoy good health. It would also seem that patients are not liable to a repetition of the disease.

"I would not be understood as presenting these inferences in the light of established truths. The number of observations is too small to warrant deductions which shall represent fixed laws of the disease. But, as already remarked, it is difficult to account for the facts, on the hypothesis of their being due to mere coincidence; and I repeat, that the facts point to the existence of laws which remain to be settled by further investigation. We are at least justified in concluding, from the data before us, that deterioration of the health subsequent to dysentery is not the general rule, and that an attack does not lead to any increased susceptibility to the cause or causes of the disease."

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, NOVEMBER 7TH, 1853.

BENJAMIN G. BABINGTON, M.D., President, in the Chair.

The first meeting of the fourth session of this Society was held at the house of the Royal Medical and Chirurgical Society, 53 Berners Street, on Monday, the 7th instant.

Sir JAMES McGRIGOR, who retires from the office of Vice-President, was elected an honorary member.

PRESIDENT'S ADDRESS.

The PRESIDENT congratulated the members upon being again assembled for the purpose of inaugurating another session of the Epidemiological Society—a society which, although only just entering upon the fourth year of its existence, has already borne evidence of healthful and vigorous growth, and given ample promise of yielding rich harvests during future years.

After some general remarks, he read the following list of papers read at the monthly meetings during the past session:—

November 1st, 1852. Epidemic Suetie Miliare of the Herault. By Dr. Swaine of Scarborough. (Read by Dr. Babington.)

December 6th, 1852. Climate of the Hill Stations in India. Second Part. By Frederick Corbyn, of the Bengal Army. (Communicated by Col. Sykes.)

January 3rd, 1853. The Relation of Vaccination and Inoculation to Small-Pox. By Dr. Waller Lewis.

February 7th, 1853. The Influence of Noxious Effluvia on the Origin and Propagation of Epidemic Diseases. By R. D. Grainger, Esq. [This paper was published in the ASSOCIATION JOURNAL for February 25th and March 4th.]

March 7th. Facts relating to Scarlet Fever. By B. W. Richardson, Esq. [This paper was published in the ASSOCIATION JOURNAL for June 10th.]

Observations on Sore Throats, and their Relation to Scarlet Fever. By J. Bower Harrison, Esq.

April 4th. Epidemic Small-Pox in Calcutta. By Dr. Finch. May 2nd. Comparative Mortality of Large Towns and Rural Districts. By Dr. Snow.

June 6th. On Quarantine; being a sketch of the most striking results of Quarantine in British Ports since the beginning of the present Century. By Dr. Milroy. [This paper was published in the ASSOCIATION JOURNAL for July 8 and 22.]

July 4th. On Yellow Fever; comprising the History of that Disease as it appeared in the Island of Antigua in the years 1835, 1839, and 1843. By Dr. T. Nicholson, of Antigua. [This paper was published in the ASSOCIATION JOURNAL for September 16th.]

August 1st. Contagion and Infection, in Relation to Epidemic Diseases. By John Grove, Esq.

As cholera has unhappily reappeared in this country, papers on points connected with that disease will be especially acceptable. Our Society will be the most legitimate medium through which to bring such communications before the profession.

Circumstances have arisen within the last six months which have called forth unwonted exertion on the part of two of our Committees—the Committee on Small-Pox and Vaccination, and the Committee on Cholera. During the last session of Parliament, Lord Lyttelton succeeded in obtaining the sanction of the legislature to a bill for rendering vaccination compulsory in this country. During the progress of the bill, the assistance and suggestions of the committee were requested by the government, and deputations, on several occasions, had conferences with Lord Palmerston, Lord Lyttelton, and other Ministers of the Crown. It is also to the Society a source of gratulation and pride, that the first part of the Report on Small-Pox and Vaccination (the first fruits of the Society) has been printed at the expense of the government, and, in the form of a Blue Book, has been presented, by order of Her Majesty, to the members of both Houses of Parliament. A copy of the report has also been forwarded to each member of the Society.

The Cholera Committee appointed last year has been engaged in drawing up a comprehensive series of queries, with the view to obtain the most ample information regarding this mysterious disease. The queries have been completed, and are now in the hands of the printer. It is intended by the Committee that they shall have extensive circulation abroad, as well as at home; and here I cannot help observing how important it would have been

to the inquiries of the Cholera Committee, had the resources of the Society admitted of the simultaneous and unrestricted operation of the Committee appointed to investigate the Diseases that affect the Vegetable Kingdom.

Let us hope that the universal importance, and the benefits likely to follow from the labours of these committees, will excite sympathy in those quarters where effective aid can easily be rendered, so as to enable them and the other committees to prosecute their inquiries with that freedom which is most likely to insure success.

Our best thanks are due to the Right Hon. the Earl of Clarendon, for a renewal of the permission to our secretaries to inspect despatches and other documents bearing on cholera, first granted through the courtesy of his lordship's predecessor in office, the Right Hon. the Earl of Malmesbury. We are also under deep obligations to the Poor Law Board, the General Board of Health, the Registrar-General, and other government authorities, for access to public documents, readily accorded to the members of the various committees.

On former occasions, it had been his (the President's) privilege to open the session with an introductory address. This evening, however, this honourable and important duty devolved upon an excellent and able colleague—Dr. James Bird.

LAWS OF EPIDEMIC AND CONTAGIOUS DISEASES.

BY JAMES BIRD, M.D.

Dr. BIRD, after bestowing a well merited compliment upon Dr. Babington, addressed the meeting on the surpassing utility of those scientific investigations which are the objects of the Epidemiological Society's research. Fully appreciating the extent and importance of preventive medicine, as the mistress rather than the handmaid of curative science; and having been anticipated in all that regarded the general objects of the Society by the President's former addresses, he had selected a special subject, "The Laws of Epidemic and Contagious Diseases"—a subject which might, he thought, be of interest while we now stand on the threshold of an expected outbreak of cholera.

The inquiry divided itself into, 1st. The laws under which epidemic and contagious diseases take their origin, and are diffused. 2nd. The application of a knowledge of these laws to prevent predisposition to such maladies, mitigate their severity, and limit their diffusion. Both were subjects of necessary study for the profession and the people, in order that the intellectual masses of the latter might learn the true philosophy of health and disease, and know when to avoid the meddlesome interference of the bold and fearless empiric, or cease to trust, when nature's resources must fail, the do-nothing practice of the homœopathist. More comprehensive principles and practical rules for preventive medicine were yet requisite; and, in all attempts to investigate the nature and character of epidemic and contagious disease, the observations and opinions of past ages should not be neglected. The characters of epidemic and contagious diseases, including small-pox, measles, whooping-cough, scarlet fever, typhus, plague, yellow fever, and Asiatic cholera, were then given; and their geographical distribution, with their modifications of character, pointed out on a copy of Sir George Ballingall's map of these varied affections. After having described the various conditions under which these diseases originate, are propagated, and decline, Dr. Bird asked whether we could obtain a scientific expression of the nature of the phenomena, and facts regarding them, which might be applicable as sanitary rules of practice in preventive medicine? and having done so, he embodied these phenomena under four different laws, specifying, in his subsequent remarks, the various exceptions which might occur under each. Since cholera and other epidemic diseases would be active, he said, in proportion as the accessory circumstances which favour their origin and diffusion were allowed to remain without a remedy, it was the duty of every wise and paternal government to use its strenuous efforts for the removal of all such. The market sale of improper articles of diet, or meat in a state of decomposition, was to be prevented; good and untainted water ought to be supplied for the population; houses of refuge, or soup-kitchens, established for the poor, and their dwellings ventilated, white-washed, and kept clean; the surface drainage and sewerage of neighbourhoods were to be improved. Finally, he recommended, as a wise precaution in cholera, that no more intercourse between the sick and others should be allowed than might be necessary for comfort, nursing, and proper medical treatment.

The address was listened to with much attention, and warmly received.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, NOVEMBER 3RD, 1853.

RICHARD QUAIN, M.D., President, in the Chair.

PRESIDENT'S ADDRESS.

Dr. QUAIN chose as his subject, "The Advancement of Medical Knowledge". He dwelt on the relative influence which observation and the exercise of the intellectual faculties have on this object. He showed that, on the one hand, mere observations and the collections of facts tended to isolate pathological phenomena, and rather to retard than advance knowledge; whilst, on the other hand, the exercise of reason in the investigation of facts was the principal source whence had proceeded all the great scientific discoveries which had placed human knowledge in its present advanced position. Dr. Quain further showed how materially organic chemistry, physiology, and those branches of physics which treat of light and sound, contributed to our knowledge. He dwelt on the value of societies constituted like the Harveian in collecting and rendering traditional the experience which every day falls to the lot of the busy practitioner, but which, if unwritten, is for ever lost; and concluded by a kindly exhortation to friendship, good feeling, and unity, in the great object of our profession—the mitigation of human suffering.

Dr. Quain's address was listened to with much attention by a full assembly of members. This was the first meeting of the session.

NORTH LONDON MEDICAL SOCIETY.

WEDNESDAY, OCTOBER 12.

RICHARD QUAIN, Esq., F.R.S., President, in the Chair.

PRESIDENT'S ADDRESS.

Mr. QUAIN, in taking the Presidential Chair at the first meeting of this Society, delivered a very instructive address, which has been published. He compared the state of medicine and of medical instruction as it existed a quarter of a century ago, with the improved aids to diagnosis and treatment, and the increased and more convenient opportunities of acquiring knowledge, which are met with in the present day. He also referred to the advantage of societies as a means of keeping pace with the progress of the times.

VEGETABLE PARASITES ON THE HUMAN BODY. BY W. JENNER, M.D.

Dr. JENNER's paper was illustrated by the exhibition of specimens under the microscope. This paper has been published.

WEDNESDAY, NOVEMBER 9.

RICHARD QUAIN, Esq., F.R.S., President, in the Chair.

CASE OF OSTEIOD CANCER. BY W. SEDGWICK, ESQ.

After a review of the history and pathology of osteoid cancer, which, Mr. SEDGWICK stated, had apparently escaped the notice of pathologists, until Müller, in 1843, published a memoir on the subject, accompanied with descriptions of several cases, he commented on the reasons for considering the disease as cancer, and was of opinion that they were fully confirmed by the case which he had recently had an opportunity of observing. He drew attention to the opposite view entertained on this point by Lebert, who had included "osteoids" in the list of benign tumours. After alluding to Mr. Stanley's observations on the disease, and to those in Mr. Paget's recently published *Lectures on Surgical Pathology*, Mr. Sedgwick gave a very full description of the case, which was illustrated with preparations of all the parts affected with the disease.

The subject was a young man, aged 19, formerly a patient in University College Hospital under Mr. Quain, who had amputated the left thigh for an osteoid tumour affecting the lower end of the femur. After remaining free from the disease for nearly three years, the patient's chest became affected (in consequence of taking cold); he spat a little blood during the first two or three days, and had a troublesome cough. Some weeks after appearance of disease in the chest, he came under the notice of Mr. Sedgwick, who diagnosed cancer affecting nearly the whole of the left lung, a small portion only, towards the apex, being free. A tumour was after some time noticed in the right clavicle, and considered to be cancer. After an abstract from his notes of the case during a period of five months, Mr. Sedgwick continued to relate that a few weeks before death, symptoms of the head being affected showed themselves, ending in convulsive attacks of the right side of the body, which continued to appear at intervals till death.

On examination of the body, an osteoid tumour of the size of the fist was found in the posterior mediastinum; and a similar tumour, of larger size, in the right side of the chest. Three or four small tumours, some of them unossified, were found near

the base of the right lung: the tissue of this lung was healthy. The left lung was riddled with cavities, containing purulent matter; the thoracic aorta, for more than three inches, was surrounded by a firm cancerous mass, which on section presented centres of ossification: a portion of a similar mass was found in the vena cava; and the left bronchus was completely blocked up by a partly calcareous mass. A medullary tumour was found in the left hemisphere of the brain. The abdominal and pelvic viscera were healthy.

Mr. Sedgwick adverted to this case as presenting a good illustration of what usually occurs in well marked osteoid cancer; namely, its primary appearance at an early age in the femur, and its subsequent development in the cavity of the thorax. The connexion between osteoid and medullary cancer was to be noticed. After some observations on the development of osteoid tumours, Mr. Sedgwick concluded by remarking on the generally rapid progress of the disease, in which respect the case under notice was an exception, and might be looked upon as an encouraging instance of the success which may occasionally attend an operation for the removal of the primary disease.

The PRESIDENT stated that, as the case had been under his care at an early period, he would call attention to a few of the leading practical points connected with it. When he saw the patient, there was excessive pain, and the glands of the groin were swollen and very tender: but he came to the conclusion that they were affected, not with the specific disease, but inflamed from the effect of the blistering which had been applied before the patient was brought to the hospital. The result proved the correctness of this view, for the pain and swelling in the glands gradually subsided after the operation. The case well illustrated the advantage which may result from an operation for cancer, and at the same time defined the limits of its advantage. The operation did not remove the whole disease, for the disease was a general one, and pervaded the system; it was, in fact, in the blood. But the operation removed the source of pain and distress, of which the patient would have died speedily. It was productive of further benefit; for the local disease becomes in its turn a new source of contamination to the system by absorption; and this additional constitutional taint, which would have resulted, was prevented. In this case, the new deposit which formed in the chest and elsewhere in the upper part of the body, had no connexion with the disease removed from the lower limb.

DISEASE OF THE EAR EXTENDING TO THE BRAIN.

BY JAMES PART, ESQ.

Mr. PART related the case of a clergyman, aged 25, who for a period of five years had suffered from a purulent discharge from the right ear, attended occasionally with great pain. The disease proved fatal suddenly, without the extent of the mischief having been suspected.

The patient, born in India of English parents, came to England when eight years of age. He had always been well fed and clothed, and had never been subjected to mercurial treatment; he had lived a very regular life. He had lost a brother and sister from scrofulous diseases. About five years before his death, after taking cold, and having about the same time two severe falls on his head, he was attacked with acute pain in the ear, followed by a copious, offensive, puriform discharge from the meatus, accompanied by a loss of hearing. He consulted several eminent aurists for this affection, but did not derive any benefit from the treatment recommended. In the summer of 1849, he consulted Mr. Pilcher, who pronounced the case to be acute otitis, with fungus of the right meatus. Under the care of this gentleman, he improved considerably in health, but was constantly taking cold and suffering from a recurrence of his symptoms. He then became subject to fits of giddiness, in which he usually fell down. These were succeeded by vomiting, and great pain in the ear and head. A year since, two small glands behind the ear began to enlarge, and ultimately suppurated; leaving fistulous openings, which discharged freely at times when the flow from the ear diminished, and increased when the latter subsided. He was now compelled to give up his clerical duties. During the last year, he had taken sarsaparilla and iodine. When Mr. Part first saw the patient (July 19, 1852), he was suffering from severe pain in the head, greatest at the back, vomiting, inability to move without excessive pain; he could only lie with the head horizontal to the body. The countenance was heavy, and not symmetrical; he had partial ptosis and turning up of the eyeballs, slight squinting, and the right angle of the mouth was drawn up. There was a swelling in front of the right ear, extending nearly to the margin of the orbit, great tenderness of the concha, with copious puriform discharge from

the external meatus. Behind this were two fistulous openings, communicating with each other. The skin was cool, except on the forehead, which was very hot; the hands and feet were cool; the pulse 68, full; the tongue was coated, protruded towards the right side; he had considerable thirst; his bowels had been constipated for three days; the urine was scanty and high coloured, and he had hesitation in passing it. He answered questions slowly and imperfectly; his manner was strange, morose, and inconsistent. By acting on the bowels freely, and the administration of saline diaphoretics, a certain amount of amendment was obtained, which continued up to the 25th, six days from the time when he was first seen by Mr. Part. As he had passed restless nights, suffering great pain, muriate of morphia was administered at night, which secured him sleep. On the 23rd, as he was suffering intense pain, a large blister was applied to the nape of the neck, which gave great relief to the pain in the head. From the 25th the patient gradually became worse, and grew restless, continually desiring to change his room; his speech and deglutition became more and more impaired; he had difficulty in micturating, and at last complete retention, requiring the introduction of the catheter. The swelling in front of the ear having increased in size, an opening was made into it by the late Mr. Bransby Cooper, who was called in with Dr. Babington; but only a small quantity of pus was evacuated. The pain increased; the tongue became more coated; he was now roused with difficulty; he could not be moved, and the evacuations were passed involuntarily in bed. On the 2nd of August, slight tetanic symptoms set in; the erector muscles of the spine assumed a state of opisthotonos; and he died on the morning of the 3rd, at 4 A.M.

Examination of the Body, eight hours after death. On cutting through the integuments over the swelling in front of the ear, a cavity as large as a hazel nut was met with; and, communicating with this, was another, beneath the temporal muscle, as large as a walnut. Both were filled with a soft cheesy substance. A probe passed into this first cavity struck against the dura mater lining the squamous bone. On opening the head, the dura mater was found greatly injected outside and pink within, and was adherent over the whole surface of the temporal bone, but thickened in the right middle lateral fossa. When this membrane was removed, the whole of the petrous bone, the basilar process of the bicipital, as far back as the posterior third of the foramen ovale, and the large wing of the sphenoid, extending inwards to the middle line of the skull, were ascertained to be degenerated into a soft cheesy mass, similar to that contained in the above mentioned cavities. A probe entering the opening behind the ear passed easily till it appeared in the foramen ovale; and another, introduced into the meatus, appeared through the petrous bone. The malar bone was entirely destroyed, and the mastoid process of the temporal completely occupied by disease. The ventricles contained three ounces of bloody serum; the arachnoid was much injected, and between it and the pia mater was a layer of very yellow pus, extending along the base of the brain; it was greatest in quantity on the anterior surface of the medulla oblongata, down the front of the medulla spinalis as far as the view could be obtained. In the middle lobe of the brain was an abscess containing upwards of an ounce of very fetid greenish pus; and a second abscess existed in the middle of the posterior lobe, containing a similar kind of pus. The section of the cerebral substance presented an unusual number of bloody points. No similar deposit was found elsewhere in the body.

Mr. Part alluded to a paper by Mr. Toynbee, read before the Medico-Chirurgical Society in 1851, recording forty-one cases of fatal cerebral disease, originating in disease of the tympanic cavity, in most of which discharge from the external meatus had for many years been almost the only symptom. He made an analysis of the symptoms and morbid states found in those cases, comparing them with those in the case under notice, and concluded, by calling attention to the importance of attending to cases of this description in the early stage, when the discharge, often unattended with pain, is the only symptom which the surgeon or physician has to guide him.

This case elicited an animated discussion.

MEDICAL SOCIETY OF LONDON.

SATURDAY, NOVEMBER 5TH, 1863.

JOHN SNOW, M.D., Vice-President, in the Chair.

PATHOLOGY AND TREATMENT OF CHOLERA. By JOHN ROSE CORMACK, M.D. [Dr. Cormack's paper, which was read only in abstract, is published in the *ASSOCIATION JOURNAL* of last week.]

Mr. Ross recommended nitrate of silver as an astringent in cholera. He had used it in about eighty cases towards the close of the last epidemic. [Vide *Medical Times*, 15th Sept. 1849.] Mr. Ross was inclined to think that cholera is, as the author had argued, similar to an intermittent fever.

Mr. DENDY thought that the paper contained the most judicious observations on cholera which he had ever listened to or read. He differed, however, from the author regarding the pathology and treatment of the disease. [Laughter.] He meant to say that in some points he disagreed with Dr. Cormack. He considered cholera and intermittent fever to be analogous diseases; but he could not believe it to be correct to regard diarrhoea and cholera as identical, or as stages of the same disease. He objected to external heat. Patients had sometimes been boiled and baked to death. He (Mr. Dendy) usually directed the body to be first washed with vinegar and water, then with salt and water, and well rubbed to induce warmth, after which flannel wrappings were used. He directed the doors and windows to be kept open to promote the free inspiration of oxygen. It had been said that in some of the worst cases of cholera, in which the patients were knocked down blue, there was no serous flux. There might, he admitted, be no external flux; but in such cases the serous fluid was always to be found in the stomach and intestines, particularly in the colon.

Mr. R. R. ROBINSON agreed with the author as to bad cases getting well when recovery could not be ascribed to the special treatment which had been adopted. But the question was in what proportion do such recoveries take place, and in what ratio are the recoveries increased under particular modes of treatment. He thought that the treatment recommended by the author was generally judicious; but it was a great error, he conceived, to disparage the calomel plan, which, he believed, had been more successful than any other. There were three causes from which cholera patients were principally lost; viz. the collapse or direct action of the poison, exertion when too feeble to bear it, and spasm. He quite agreed with the author that many persons suffered from the cholera poison who did not present any of those symptoms which were usually regarded as diagnostic of cholera.

Dr. CRISP said that cholera first appeared in 1817. He had, like the author, studied the literature of the subject; but he had arrived at different conclusions. He (Dr. Crisp) maintained that cholera was a new disease, *sui generis*, and that it had no analogy to ague, either in its symptoms or topography. Little information, he thought, was likely to be obtained by the system of observation by district societies advocated in the paper. Certain plans of treatment ought to be tried in hospitals, by a commission under government. He would suggest that three appropriate wards be set apart in one or more of our hospitals, and three modes of treatment be steadily carried out in each hospital, under competent direction and observation.

Dr. WEBSTER agreed with nearly everything which had been advanced by the author. He thought that Dr. Crisp's objections to the ague doctrine were quite untenable; and among other facts he mentioned that ague was often confined to one side of the Tiber, and prevailed on one side of a street in Rome, when there was not a case upon the other side. Dr. Webster then referred to various historical facts and to the writings of the older physicians, to show that cholera was not a new disease.

Mr. HENRY LEE spoke of the transfusion of blood and the use of injections into the circulatory system in cholera. He thought that the fluid ought to be introduced by an artery rather than by a vein; and he had fully made up his mind to select the radial artery, should he be called upon to introduce blood or any medicinal fluid into the circulation of a cholera patient.

Dr. SIBSON inquired upon what grounds Mr. H. Lee preferred an artery to a vein?

Mr. H. LEE replied that, from the capillaries intervening, no danger could arise from the air which might unintentionally be thrown in along with the fluid. From numerous experiments upon animals, he was convinced that almost any quantity of blood might be safely thrown into the system by the radial artery.

Dr. CORMACK said that time would not allow him to discuss the calomel treatment of Dr. Ayre with Mr. Robinson. There was, however, he thought, no conclusive evidence in its favour, and he inclined to think that there was proof of inordinate doses of calomel exhibited during collapse, having proved poisonous during early convalescence. Not having had any experience of Dr. Ayre's method, he (Dr. Cormack) had not spoken of it in his paper, in which he had, after all, such a superfluity of topics as obliged him to condense exceedingly. The objections of Dr. Crisp had, he (Dr. Cormack) thought, been answered by Dr. Webster. Dr. Cormack referred to the prevalence of

neuralgic affections, with a well marked periodic type, as having, in his experience, characterised the rise and decline of the last cholera outbreak, and as having abounded some weeks ago, when cases of serous diarrhoea were not uncommon.

NORTH STAFFORDSHIRE MEDICAL SOCIETY.

This Society held its first anniversary meeting on the 10th instant, at the Athenæum Rooms, Stoke-upon-Trent. It already numbers twenty-five members, and during the year has held four meetings. The objects contemplated at the formation of the Society, viz., to afford means of friendly intercourse between the medical practitioners of the district, improvement in medical science by the reading of papers, the detail of cases, and discussions thereon, and the protection of their general interests by endeavours to suppress the evils resulting from the practice of unqualified persons, have all been carried out to a satisfactory extent.

The meeting was well attended, most of the leading medical men of the Potteries and Newcastle being present.

Dr. Wilson delivered an able and interesting address, on his retirement from office as President.

The following gentlemen were chosen officers for the present year:—*President*: Robert Garner, Esq., Stoke-upon-Trent. *Vice-President*: S. P. Goddard, Esq., Longton. *Treasurer*: B. Boothroyd, Esq., Hanley. *Secretary*: Joseph Walker, Esq., Burslem.

Several morbid specimens and some surgical instruments were exhibited.

A letter from Dr. Charlton, of Newcastle-upon-Tyne, relating to the recent outbreak of epidemic cholera in that district, was read.

It is intended to hold a special meeting for the consideration of Epidemic Cholera, on the 24th instant, to which medical men who may not be members of the Society are invited.

ASSOCIATION INTELLIGENCE.

MEDICAL BENEVOLENT FUND.

At the last monthly meeting of the Committee in October, the Treasurer reported that since July 1st, the sum of 187:15:6 had been received in subscriptions, and £38 in donations; the expenses had been £125:16:8; the sum now in the hands of the Treasurer being £12.

The Treasurer also reported that there were vacancies for two annuitants of £15 each. These vacancies were filled up by the election of a surgeon, aged 73, who is in great distress, and in bad health; and of the widow of a medical man, aged 63, who is entirely dependent upon her children, of whom one is a cripple.

The number of annuitants at the present time is eight, of whom six are in the receipt of £15 each, and two of £20 each.

The following cases have been relieved:—

I. The widow of a medical assistant, to whom the Treasurer had advanced two guineas, to assist her in entering upon a situation. Voted £2:2.

II. An Irish medical student, now in London, the son of a medical man: his health is so impaired that he cannot follow any avocation, and he is in distressed circumstances. Recommended by Sir Jas. Clark and Dr. Forbes Winslow. Voted £5.

III. The wife of a surgeon who went to Australia five years ago, and has not since been heard of. He left his wife and four children, who have endeavoured to support themselves, but they are now in great distress. Recommended by Mr. Ince, Dr. Inman, and Dr. Hall of Hounslow. Voted £10.

IV. The wife of a medical man residing at Birmingham; has several children to support, and near her confinement. Husband intemperate, and earns nothing. Relieved several times previously. Recommended by Dr. Russell, of Birmingham. Voted £5, to be placed in Dr. Russell's hands.

V. The daughter of a medical man in great distress. Voted £5.

VI. A surgeon lately residing in Bath, where for seven years he had endeavoured unsuccessfully to make a practice. Has a wife and six children, and is anxious to emigrate. Recommended by Mr. Norman, Mr. Soden, Mr. George, and Mr. Barrett. Voted £10, to be devoted to the purposes of emigration.

VII. A practitioner in the east end of London, who has been in practice for forty years. He has a wife and three children dependent upon him, and the income from his practice is not

more than £90 a year; he is now suffering from ill health. Recommended by Dr. Ramsbotham, Dr. Cobb, and Mr. Self. Voted £10.

VIII. A medical assistant with a large family in very straitened circumstances; relieved on several previous occasions. Voted £5, to be placed in the hands of Mr. Bacet.

EDITOR'S LETTER BOX.

MILITIA SURGEONS.

LETTER TO THE EDITOR.

SIR,—The ASSOCIATION JOURNAL, devoted as it is to the interests of the general body of Practitioners, will not, I believe, be thought to be improperly intruded upon, if a portion of its pages be allowed for a short consideration of the present state of Militia Surgeons.

Previous to the year 1829, the surgeons of militia were upon the permanent staff, receiving permanent pay, of, I believe, 6s. a day; subsequently to the year 1829 this was discontinued, as in fact were the permanent staffs, with the exception of the adjutant, and perhaps a sergeant or two in each regiment.

Upon the reëmbodiment of the militia in 1852, the surgeon was again made one of the staff, but only received pay for the month of training. By the recent orders of July 1853, the surgeon is to attend all the staff (including of course the adjutant); their wives and families, at twopence per head per week, throughout the year.

The militia of England is presumed to be officered by men of independent means, country gentlemen, or others, on whom the duty very properly devolves of devoting a portion of their time to the purpose of training a body of men, who in case of need should assist in the defence of the country, and with whom, if necessary, they would take the field.

After the monthly training, unless a necessity arises, these officers have no further duty for that year.

There are, however, duties of a more permanent character, and those performing them are placed upon the staff with permanent pay. Now the surgeon's duty is continuous, and extends throughout the year: he has to examine the men that are constantly required to fill up vacancies, and to attend the staff, composed of middle aged men (who from their previous services and habits are liable to disease), as well as their wives and children. This necessitates permanent residence and permanent duties.

Why has he not permanent pay? Next year, we are told, some of the regiments are to go into barracks, or camps, as was the case this year with the East Suffolk, when an absence of some weeks from the surgeon's ordinary professional occupations must occur.

The way, in fact, that the medical officers of the militia have been treated, is only another instance of the exaction of duties from the profession without any adequate reward. The appointment is, in effect, an honorary one; the surgeon is ingeniously placed in the same category as the country gentleman, only that with the one the duty is temporary, with the other continual, for the twopence per head per week is simply ridiculous.

Why, you will say, are these appointments retained? Because a feeling prevails that the surgeon must before long be placed upon permanent pay. But I can assure these sanguine individuals, that upon a memorial on this subject being lately presented to the Home Secretary, by one of our body, an answer was returned that it was not the present intention of the Government to do so, and that it was the *first complaint* they had heard on the subject: and the inference evidently drawn (very agreeable to official quietude) was, that our *silence* gave *consent* to the present state of things.

The only way to act in a matter of this kind is by a collective memorial; and to effect this, a meeting of militia surgeons should be held in London. I may, however, trouble you again upon this subject. I am, etc.,

A MILITIA SURGEON
AND MEMBER OF THE ASSOCIATION.

November 11th, 1853.

METEOROLOGY.

LETTER FROM T. HERBERT BARKER, M.D., TO THE EDITOR.

SIR,—It is solely for the purpose of pointing out a few incoherencies and contradictions, which might possibly mislead some of your readers, that I venture to make a few observations

upon Dr. Burder's letter on Medical Meteorology in your last number. That gentleman writes that it is "important that investigations on this branch of science should be conducted upon sound principles, lest valuable time be wasted upon fruitless researches, and the progress of knowledge retarded by the hasty adoption of erroneous conclusions."

It is the most anxious wish of your *corps* of meteorological observers to conduct their investigations "upon sound principles"; and it is in vain that I look for proof that these investigations are not conducted upon such principles, or for any suggestions of *sounder* principles than those which have been adopted. Hitherto we have arrived at no "conclusions", and it is our intention to adopt no conclusions but those based upon a strict and legitimate induction from *facts*.

It is not to be expected that any scheme of meteorological and medical record should at once rise into perfection: time and great care are required to complete the arrangements. We greatly need the supervision of some one profoundly acquainted with meteorological science. This finishing stroke we hope to accomplish ere long, and we may then safely defy the detection of any discrepancies.

With regard to the principle upon which our record of diseases and deaths, in connection with daily meteorological observations, is conducted, your correspondent appears to be singularly unhappy in his objection to it. Every one in the least acquainted with the subject, and with the *desiderata* in this department of medical science, with whom I have had any conversation or correspondence, agrees with us that this is the *only principle upon which we can procure any data worth possessing*, and that it is the only plan upon which we can obtain any useful inductions whatever.

Any one can perceive at a glance that no conclusion can be deduced from the record of a single case of puerperal convulsions occurring at 11 A.M., but when twenty, or fifty, or a hundred cases shall have been recorded, *some valuable facts may possibly be gleaned from the simultaneous meteorological observations*. Your correspondent objects to recording the time of the seizure of the disease, because meteorological observations are not inserted every hour; but surely it is better that they should be recorded twice, or even once daily, than that only the weekly means should be inserted. It is a very strange kind of logic which would prefer *weekly* rather than *daily*, or *twice daily* observations, because it is impracticable to make *hourly* observations. If the weekly means could be a "close approximation to the truth", it is fair to infer that daily, or twice daily, observations will be a still *closer* approximation.

If your correspondent were practically acquainted with meteorology, he would know that barometric and thermometric changes are not ordinarily so sudden and abrupt, but that observations twice daily will give ample guidance for correct conclusions, and very "close approximations to the truth".

The paragraph rather slightly referred to was based upon very extended observations, and was only inserted as a specimen of the kind of research required. It was specifically mentioned that these conclusions, based upon Dr. Moffat's researches, would require to be reexamined; and we are now doing that which will either confirm or disprove, not only these, but many other problems which can only be solved by extensive observations. These were merely given as specimens of what may be accomplished by our scheme, not as final conclusions.

The table, which your correspondent has "tried in vain to understand", I shall be most happy to explain, if he will only let us know what is incomprehensible to him.

It is very evident that Dr. Burder enters but very slightly into the spirit of our scheme when he terms it "ill digested". It had engaged the attention of many minds for a long time; it cost much time, thought, and labour. Of course it could not be perfected at once. It was merely a beginning; but the promoters of it have been amply rewarded by the hearty reception with which it has met. Very many are sanguine of good results from it; and some of your correspondents have expressed themselves in the highest terms: especially would I refer to Mr. Richardson's letter, published some weeks ago. Many gentlemen have privately offered to cooperate with us; and as more space cannot now be devoted to the publication of observations in the JOURNAL, they are now engaged in keeping private records on our plan.

If your correspondent, instead of urging frivolous objections, will *really suggest anything of value*, and will aid us by his private observations and records, he will serve the cause of science much better. The suggestion of "weekly totals" is no improvement whatever upon the old plan, which has been adopted

so long, which has led to such few results, and which it is high time that we improved in some way or other.

In conclusion, will your correspondent be inclined to assist us with his own meteorological and medical observations, if he is in the habit of recording any; and if so, as a preliminary step, will he have the kindness to inform us what instruments he uses, and if they have been compared with any standard instruments?

I am, etc.,

T. HERBERT BARKER, M.D.

Bedford, Nov. 7th, 1853.

THE WEEKLY METEOROLOGICAL TABLE.

LETTER FROM C. L. PRINCE, Esq., TO THE EDITOR.

SIR,—In consequence of Dr. Burder's remarks upon my barometric observations at p. 976 of the ASSOCIATION JOURNAL, I consider it necessary to state, that my barometer has *not* been compared with a standard, but that I purpose having it sent to London, at an early period, to have its accuracy determined. All my self-registering thermometers have been examined by Mr. Glaisher, and were made by H. Barrow, of Oxendon Street.

I am, etc.,

C. LEESON PRINCE.

Uckfield, Nov. 14th, 1853.

CHLOROFORM IN MIDWIFERY.

LETTER FROM EDWARD W. MURPHY, M.D., TO THE EDITOR.

SIR,—Mr. Bloxam's letter has really surprised me as emanating from a gentleman who claims credit for accuracy of reasoning. The two cases of supposed death from chloroform to which I have referred, Mr. Bloxam insists, were caused by chloroform. 1st, Because no other adequate cause was found to explain them; 2nd, Because the symptoms were those well known to be produced by chloroform.

With regard to the first proposition, it is totally illogical. We do not know all the causes of sudden death after labour sufficiently to authorise such a conclusion; and in one of these cases, no *post mortem* examination was made; all the causes were not looked for. Might air, for instance, have entered through the uterine veins and caused asphyxia? With respect to the second proposition, it is untrue; the symptoms, certainly, were those of asphyxia, but not the asphyxia of chloroform. Mr. Bloxam could not produce a parallel case to either of these amongst all the deaths from chloroform. It was the fact that the symptoms differed so strongly from those caused in the fatal cases of anaesthesia, that convinced me and others that chloroform had nothing whatever to do in causing death in either of these cases.

When Mr. Bloxam has had personal experience of the action of chloroform, and time to study accurately its effects, he will, I am sure, perceive more completely the inconclusiveness of this proposition; and until then, he will pardon me if I protest against the conclusion he has now deduced respecting these cases.

I am, etc., EDWARD W. MURPHY.

12, Henrietta Street, Cavendish Square, Nov. 14th, 1853.

NEWS AND TOPICS OF THE DAY.

COMPULSORY VACCINATION ACT.

Colchester Union, Nov. 9th. At a meeting of the Guardians of this Union, summoned specially to consider the above matter, It was resolved—"That the existing Vaccination Contracts be annulled; and that fresh contracts be entered into with every *duly qualified medical practitioner in the union, who shall notify to the clerk of the union his desire to become a contractor.*"

"The fee for each case of successful vaccination, as first mentioned in the sixth section of the new act, to be 2s., and 2s. 6d. for each case as provided for in the latter part of the same section."

The same plan has been adopted at Sunderland and Broomsgrove; and the Poor Law Boards sanctioned this before it was made public.

VACCINATION A DANISH ADJUNCT TO THE MARRIAGE CEREMONY. In France, a certificate of vaccination is exacted for a multiplicity of things; but the Danish government has devised a still more excellent method for propagating the results of the discovery of Jenner. At the altar, the clergyman presents

the certificate, and, if it be not forthcoming, the bride or bridegroom, or both, as the case may be, must proceed to the vestry to have the operation performed, before the conjugal knot can be legally tied.

MONTHLY JOURNAL OF MEDICAL SCIENCE. This Journal, which has for some time borne on its cover the name of Dr. William Robertson as its editor, is now under the direction of Professor Hughes Bennett, of Edinburgh. Dr. Bennett was the editor of the Journal from 1846 to 1849.

EDINBURGH MEDICAL AND SURGICAL JOURNAL. The arrangements for the New Series of this venerable Journal are now completed: and the first number is to appear on January 1st. Dr. Begbie is to lead off with Gout, and Dr. Matthews Duncan is to support him with Cholera in Pregnancy. Other papers are also announced: and, upon the whole, it may be safely predicted that the old Journal is to be resuscitated in all its pristine power. We learn that there are many who regret that an union was not effected between the Quarterly and the Monthly.

MORTALITY ON BOARD EMIGRANT SHIPS. Advices by the *Canada* state that the packet-ship *Washington* had arrived at New York from Liverpool, with nearly 100 deaths from cholera, and upwards of sixty cases on board at the time of her arrival. The numbers are enormous; but the general mortality on board emigrant ships from Liverpool and other European ports to New York is very large. We give the particulars as under from the *New York Herald*.

Arrival.	Ships.	Where from.	No. of Passengers.	Deaths.
Sept. 9.	Zurich.....	Havre	358	2
" 11.	Lucy Thompson....	Liverpool..	800	35
" 15.	Niagara	"	240	38
" 21.	Charles Sprague....	Bremen	280	45
" 26.	Oder	Hamburg..	237	14
" 27.	Winchester	Liverpool..	463	70
" 29.	Kate Hunter	"	342	1
" 30.	Rhine	Havre	506	24
" 30.	Talleyrand	Hamburg..	210	11
" 30.	Louisiana	"	142	4
Oct. 11.	Harvest Queen	Havre	367	5
" 12.	Copernicus	Hamburg..	192	15
" 14.	Orphan	Bremen	280	4
" 14.	Marmion	Liverpool..	205	34
" 17.	Waterloo	"	294	4
" 17.	James Wright	"	430	1
" 19.	Statira Morse	Glasgow ..	201	2
" 20.	Sir Robert Peel	London ..	407	6
" 20.	Cordelia	Bremen	339	3
" 20.	London	Havre	229	2
" 21.	New York	Liverpool..	400	16
" 21.	Benjamin Adams ..	"	620	15
Total			7701	359

Although the captains in their reports, with one exception, merely mentioned the fact of such a number having died, it is pretty certain that the disease which carried them off was cholera. Several, no doubt, died by the common diseases, but that cholera was raging on board many of the above-named vessels is beyond all question, from the fact that thirty-three persons who were landed in quarantine were suffering from that epidemic.

DREADFUL SUICIDE. The *Cork Examiner* announces the death by suicide of Dr. Bull, of that city. The unfortunate gentleman had been labouring under an aberration of intellect for some time past; and, though a watch was kept over him, he managed on Thursday evening to elude the vigilance of those employed for that purpose, and hanged himself to a tree in his own garden with the military sash belonging to his son-in-law, Adjutant Dagg. The body was discovered in about an hour after the commission of the fatal deed, and, though some medical gentlemen were quickly in attendance, their efforts were of course quite unavailing. Dr. Bull was distinguished for his humanity and for his skill.

SANITARY PROCEEDING UNDER THE FACTORY ACT. Mr. R. Baker, sub-inspector of factories in the West Riding of Yorkshire, preferred informations before the magistrates at the petty sessions at Otley, near Leeds, on Friday, against Messrs. Baldwin, Brown, and Co., of Yeaton, for not having whitewashed air two mills within the time prescribed by law. It appeared at in the middle of September Mr. Baker had visited these mills and found the whitewashing omitted, and that he then

directed it to be done; but on a subsequent visit paid to the same premises a month afterwards, he discovered that though the walls had been whitewashed the ceiling had not. The magistrates decided it was a bad case, and inflicted two full penalties of £20 and costs.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the college at the meeting of the Court of Examiners, on the 4th instant:—Messrs. John Caldwell, Kew Green; John Richard Davern, Royal Hospital, Chelsea; James Allan Currie, Hon. East India Company's Service, Bengal; John Hodgson Waterhouse, Sheffield; James Askwith Ellis, Nant-y-Glo, Monmouthshire; John Ignatius Purcell Williams, Denbigh, North Wales; and Charles Thomas Wickham, Winchester. At the same meeting of the Court, Mr. William Thomas Wilson passed his examination for naval surgeon; this gentleman had previously been admitted a member of the college, his diploma bearing date July 4th, 1845.

FELLOWS admitted after examination at a meeting of the Council, on the 10th instant:—Peter Yeames Gowlland, Finsbury Square, diploma of membership dated January 28th, 1848; William Martyn, Brompton Row, May 6th, 1839; Henry Thompson, Wimpole Street, Cavendish Square, October 4th, 1850.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH:—PASS LIST, issued Nov. 11th, 1853. **SCOTLAND:**—Andrew Mercer Adam, Glasgow; Peter Divorty, Kintore; William Farquhar, Aberdeen; John Grant, Inverness; Andrew Gray, Gallatown; Alexander Guthrie, Forfarshire; David Hood, Forfarshire; Thomas Dick Laurie, Musselburgh; James W. Norris Mackay, Morayshire; James McDonald, Laurencekirk; Thomas Miller, Coupar-Angus; James Mitchell, Edinburgh; Hugh Noble, Edinburgh; Alexander Mercer Renwick, Musselburgh; James Ross, Fetteresso; Walter Scott, Inverness; Thomas Skinner, Edinburgh; William Stockwell, Musselburgh; Robert Tait, Coldstream; Thomas Crichton Taylor, Dumfries; Robert Watson, Montrose.

ENGLAND:—Stephen Hughes Games, Liverpool; Henry Thomas Sylvester, Devizes; Henry Richard Veale, Cornwall.

IRELAND:—David Campbell, Armagh; Edward Croker, Youghall; James Nicholas Dick, Omagh; William McDonald Kelly, Rosecommon; Hamilton Mitchell, Derry; Edward Clements Nicholls, Dublin.

ABROAD:—Robert Graves Burton, Canada; John Robert Cole, Canada; James Cecil Phillippo, Jamaica; Salvator Aloysius Pisani, Malta; Thomas Rudd, Ceylon; George Scott, Dieppe; James Petrie Street, New Brunswick; George Henry Syme, Cape Town.

MEDICAL SOCIETY OF LONDON. The following papers are announced.

Saturday, November 19th. On the Fibrinous Constituent of the Blood in Relation to Disease. Part III: Clinical. By B. W. Richardson, Esq.

Saturday, November 26th. On Internal Metritis and Uterine Catarrh. By E. J. Tilt, M.D.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

ATTWOOD, John, Esq., Surgeon, late of Southampton, on board the *Albemarle*, on her passage to Sydney, New South Wales, on April 7th.

HILTON, John, Esq., F.R.S., Surgeon to Guy's Hospital, appointed Consulting Surgeon to the St. Pancras Royal General Dispensary, in the room of the late Bransby Cooper, Esq.

LUDLOW, S., Esq., formerly of the Bengal Medical Establishment, at Bath, on October 17.

MORISON, T., Esq., of the Montrose Lunatic Asylum, elected Medical Superintendent of the Nottingham County Asylum.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

*AINSWORTH, James, Esq., Consulting Surgeon to the Manchester Royal Infirmary, at Lower Broughton, Manchester, aged 70, on October 28.

LAMBERT, W. J., M.D., of Thirsk, Yorkshire, aged 36, at Brightstone, Isle of Wight, on November 8.

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. VII.—WEEK ENDING 12TH NOVEMBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern above the Mean Sea Level, 115 feet.

Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Degree of Humidity for the Day.	Wind.		Amount of Rain for the Day.	Amount and Class of Frost for the Day.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day in the Grass.	Temperature of the Dew-Point for the Day.		Direction.	Mean Force.					
Nov. 6 S.	29.801	29.941	49.5	47.5	48.1	49.	43.	47.4	0.965	E.N.E.	E.	1	0 — 10	0.215	Br. 3, Di. 3, Fe. Di. 6	Old age (72). Pneumonia. Phthisis with ulcer- ation of the larynx.
7 M.	30.151	30.177	52.3	39.2	45.3	53.2	30.6	44.5	0.945	W.	W.	1	8.5, s. cu.-s.	0.006	Spasm. [vom. 11 p.m.]	
8 Tu.	30.145	30.136	52.8	32.5	42.6	53.	23.	39.2	0.893	S.E.	W.	2	7.5, s. cu.-cu.	0.002	Br. Inf. Pleu. Col. —	
9 W.	30.416	30.393	49.8	36.2	42.6	50.7	27.	38.2	0.846	W.	WSW.	2	4, ci.-s.	0.000	Fe. Vom. 8 a.m.	
10 Th.	30.248	30.178	61.8	31.	41.0	56.	13.7	36.3	0.888	WSW.	WSW.	1.5	0.5, ci.	0.007	Catarrh. Ery.	
11 F.	30.221	30.253	52.3	24.2	37.8	61.	26.5	33.7	0.891	SW.	WNW.	1	5.5, ci.-s. ci.-cu.	0.016	Diarrhea.	
12 S.	30.303	30.165	42.8	26.5	34.2	49.	17.	31.1	0.953	NW.	N.E.	1	4.5, ci. ci.-s.	0.000	F. fr. h.	
Col.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MOFFAT, M.D.

Nov. 6 S.	29.731	29.791	49.5	44.1	46.7	54.0	44.0	45.9	0.954	0	0	0	0	10	Fog.	0.11	Diarrhea. Neu. Neuralgia. Diarrhea p.m. Congestion of the Decay of nature.
7 M.	30.024	30.050	52.6	48.0	50.2	60.5	47.6	45.0	0.842	0	0	0	0	7		0.08	
8 Tu.	29.994	30.066	51.5	42.0	46.7	53.0	35.5	38.5	0.896	SW.	W.	2	1	5		0.00	
9 W.	30.306	30.277	49.0	40.0	44.5	60.5	30.5	39.7	0.803	W.	0	0.5	2	6		0.00	
10 Th.	30.099	30.081	53.5	40.0	46.7	68.5	30.0	41.0	0.708	SW.	SW.	1	1	6	Lu. ha.	0.00	
11 F.	30.099	30.134	49.6	39.5	44.5	59.0	27.0	43.3	0.898	0	0	0	0	6		0.00	
12 S.	30.112	30.020	45.0	32.6	38.7	58.5	20.0	36.0	0.859	0	0	0	0	3	Frost.	0.00	
Col.																	

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

Nov. 6 S.	29.777		50.6	44.8	47.7	45.0	45.7	0.980	E.	E.	0	0	10, ci.-s.	Mist.	0.200	Premature birth. Cancer. Br. Teething, Convul. Disease of heart.
7 M.	29.974		52.2	49.2	50.7	48.9	48.7	0.952	W.	W.	0	0	10, ci.-s.	Mst. so. h.	0.190	
8 Tu.	30.126		50.8	37.4	44.1	54.5	40.1	0.956	S.	W.	0	0	6, ci.-s.	Mst. Lu. h.		
9 W.	30.368		46.6	35.4	41.1	51.9	35.5	0.886	W.B.N.	SW.	0	0	5, ci.-s.	H. Lu. h.		
10 Th.	30.213		48.0	32.9	40.5	58.0	33.3	0.866	SW.	SW.	0	0	3, ci.-cu. ci.-s.	Fr. hazy		
11 F.	30.157		46.4	33.7	40.1	49.5	35.0	0.940	Calm.	Calm.	0	0	5, ci.-s.	H. fr. f.		
12 S.	30.218		40.4	28.4	34.4	55.2	29.5	0.978	NNW.	W.	0	0	5, ci.-s.	H. fr. f.		
Col.																

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BAKER, M.D.

Nov. 6 S.	29.801	29.881	55.0	45.0	50.0	55.0	48.0	48.0	0.873	NE.	NE.	0.5	0	10	Fog.	0.17	Cyn. T. Rub. Rub. Fe. Dy. Col. — vom. Di. Vert. Di. T. Pleurodynia. Fe.
7 M.	30.141	30.151	53.0	48.4	50.9	56.0	49.5	50.2	0.910	SW.	W.	0.5	0	10		0.01	
8 Tu.	30.223	30.158	52.1	38.0	45.0	55.0	41.5	46.4	0.900	SW.	NW.	0.5	0	8		0.00	
9 W.	30.425	30.418	49.9	34.0	41.0	54.0	32.5	38.3	0.805	NW.	NW.	0.5	0	2, ci.	Frost.	0.00	
10 Th.	30.334	30.216	50.0	32.0	41.0	54.0	32.5	38.3	0.805	WSW.	WSW.	0.5	0	1, ci.		0.00	
11 F.	30.191	30.201	49.0	33.0	41.0	49.0	33.0	38.6	0.869	SW.	SW.	0.5	0	6, ci.-cu. s.	Frost.	0.00	
12 S.	30.264	30.154	47.0	30.5	38.7	50.0	32.0	38.0	0.890	NE.	NE.	0.5	0	8, cu.		0.00	
Col.																	

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

Nov. 6 S.	29.90		61.	44.	52.5	67.	48.	51.6	0.888	SE.	W.	0	1	10, s.	Fog.	0.04	Hep. T. Di. Neu. Di. Neu. Cyn. T. Oph. Di. 2. Di. 2, Vom. T. 2. Di. Hep. Epis. Ap. Fe.
7 M.	30.20		54.	44.	47.5	64.	39.	41.8	0.864	SE.	SE.	0	1	8, s. cu.	Fog.		
8 Tu.	30.31		56.	44.	50.	67.	42.	43.8	0.965	NW.	NW.	1	0	10, ci.-cu.	F. Lu. ha.		
9 W.	30.52		52.	39.	45.5	60.	27.	31.6	0.734	N.	W.	0	0	0, ci.	Frost.		
10 Th.	30.42		53.	37.	40.	58.	26.	36.5	0.917	N.	NW.	0	0	6, ci. s. cu.	Fr. Lu. ha.		
11 F.	30.27		51.	31.	39.5	52.	30.	37.8	0.928	N.	NE.	0	0	10, s. ci.-s.	Lu. ha.		
12 S.	30.31		52.	40.	46.	60.	37.	37.4	0.796	NE.	NBE.	1	2	0, cu.	[so. ha.]		
Col.																	

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTER, M.D.

Nov. 6 S.	29.878	29.980	55.	50.	52.0	54.3	49.	50.2	0.960	E.	E.	1	0	8, cu.		0.10	Apoplexy. Bilious vomiting.
7 M.	30.274	30.307	56.7	47.2	51.9	56.2	44.	52.6	0.970	NE.	NE.	1	0	7, cu.			
8 Tu.	30.344	30.327	57.	38.2	45.1	59.2	30.	46.9	0.980	N.	NW.	1	0	8, cu.-s.			
9 W.	30.622	30.586	50.7	30.7	40.7	55.	28.	34.	0.840	N.	NW.	1	0	0, ci.-s.			
10 Th.	30.400	30.330	51.2	34.5	42.8	55.2	31.0	34.	0.915	NW.	NW.	1	0	2, ci.-s.			
11 F.	30.329	30.316	51.5	39.1	45.3	54.5	34.	39.8	0.927	N.	NBE.	1	0	3, cu.-s.			
12 S.	30.313	30.177	49.6	40.6	45.	51.3	38.	40.	0.900	E.	E.	1	0	4, cu.-s.			
Col.																	

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

Nov. 6 S.	29.708		54.5	45.4	50.6	58.0		48.0	0.873	SE.		0.5		9			Typhus. Pneumonia. Pneumonia.
7 M.	30.145		53.0	42.4	49.3	58.0		51.5	1.000	SE.		0.5		5		0.12	
8 Tu.	30.306		53.0	48.4	50.8	58.0		47.0	0.871	NE.		0.5		6			
9 W.	30.520		51.0	37.4	45.5	53.0		37.4	0.858	NE.		0.5		1			
10 Th.	30.402		55.0	31.9	44.3	53.0		40.4	0.927	N.		0.5		2			
11 F.	30.230		52.0	34.4	43.5	52.0		39.4	0.858	N.		0.5		9			
12 S.	30.247		51.0	38.9	46.9	52.0		38.0	0.796	NE.		1.0		4			
Col.																	

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

Nov. 6 S.	29.787	29.876	56.5	54.5	55.5			52.6	0.890	SBE.	SBE.	0		8, cu.-s.		0.319	Di. Cyn. ph. Di. Br. Di. 2, Ch. 4.
7 M.	30.158	30.211	57.5	53.	55.2			53.6	0.891	NBE.	NBE.	0		6, ci.-cu. s.	Dew.		
8 Tu.	30.251	30.229	56.	58.	54.5			52.4	0.916	NE.	NBE.	1		7, cu.-s.	Dew.		
9 W.	30.505	30.471	51.	47.5	49.2			41.	0.734	NE.	NBE.	2		2, ci.-s.			
10 Th.	30.394	30.258	50.5	44.	47.2			42.7	0.807	SE.	NBE.	1		5, ci.-cu.			
11 F.	30.189	30.155	53.	45.5	44.2			45.	0.814	NE.	NBE.	1		6, ci.-cu.			
12 S.	30.160	30.026	52.	49.5	50.7			42.	0.734	NE.	NE.	2.5		5 cu.-s. n.			
Col.																	

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. XLVII.

LONDON: FRIDAY EVENING, NOVEMBER 25, 1853.

NEW SERIES.

ADVERTISING! A PEEP BEHIND THE SCENES!!

THE praises lavished by the press upon a certain pease-meal compound, designated by its vendors Revalenta Arabica, are familiar to newspaper readers. Few, however, may have reflected upon the origin and the price of these praises; and, indeed, till now, the data have not been sufficiently precise for the formation of accurate opinions on these points. We therefore believe that it may interest our readers to read the particulars of an instructive peep behind the scenes, which has been afforded by the *Scottish Reformer's Gazette*, a Glasgow newspaper, distinguished for its uncompromising exposures of quackeries and frauds in every form. In the *Gazette* of Saturday last (19th Nov.), the editor communicates the following history, which is instructive to all who are not so well acquainted as we are with the impure mysteries of puffing and advertising.

Messrs. "Barry, Du Barry, and Co.", the pease-meal gentlemen referred to, forwarded to the editor of the *Scottish Reformer's Gazette* an advertisement, of nearly a column in length, announcing "50,000 cures without medicine, inconvenience, or exposure." They required the insertion of this advertisement upon terms and under stipulations stated in the subjoined letter.

"77, Regent Street, London, 7th Nov. 1853.

"To the Editor of the *Scottish Reformer's Gazette*, Glasgow.

"DEAR SIR,—For the sum of £10, we engage 26 insertions of the inclosed advertisement in your paper, in all editions, to appear regularly once every Saturday, commencing on the 12th instant, or this order is cancelled.

"The above price is to include a copy of the paper, with each insertion, regularly forwarded to us; and one of the 26 paragraphs, Nos. 1 to 26, here inclosed, is to appear simultaneously with each advertisement, till all the paragraphs have appeared, when the series is to be recommenced at No. 1.

"This order to be taken by you conditionally, that you comply with all the above terms; and that no attack upon, or allusion to, ourselves or our goods appear in any other shape in your paper than what we have ordered.

"We enclose a cheque for £5 on account, which please acknowledge.

Faithfully,

"BARRY, DU BARRY, AND CO."

The editor acknowledges the "enclosed cheque", by printing it along with the above letter. It runs thus:—

"Messrs. Alexander Duncan and Co., Glasgow, will please credit the *Scottish Reformer's Gazette*, five pounds on our account.—London, 10th Nov. 1853.

"£5.

"BARRY, DU BARRY, AND CO."

The uniform and fearless honesty of our cotemporary with regard to quackeries might, one might have supposed, have protected him from the offer of a bribe: but we are inclined to think that he only received a circular widely issued to the provincial newspapers, the venality of which is so well understood by deceiving advertisers, as to cause

them to issue their bribes indiscriminately, and as a mere matter of trade routine. We lean to this view of the case, from several offers of a somewhat similar description having been made to ourselves. For example, an advertisement was lately sent for insertion in the *ASSOCIATION JOURNAL*, upon condition that the editor inserted the following *morceau* "in his Notices to Correspondents".

"C. J. The appliance of Mr. — is most useful, and has advantages possessed by no other."

Then, again, a firm of beer merchants, brought us editorial puffs from *medical journals*, of their system of doing business (which system, by the way, has led to an offer of five shillings in the pound) with a demand of similar compliments from us, as the *ASSOCIATION JOURNAL* had been equally favoured with their advertisements. The following is one of the puffs to which we refer.

"BAD BEER OR BAD MEASURE. In the number of this Journal for the 8th of January, in an article entitled "Bad Beer or Bad Measure", we drew the attention of our readers to the size of our beer bottles, and pointed out, that the purchaser of every pint bottle of beer was mulcted in at least one-third of his due, solely to enrich the already too-wealthy brewer, or the well, if not over-paid, retailer. As a remedy for this, we observed, that one of two things must happen. Either the size of the beer bottles must be altered, so as to hold the imperial pint or quart; or, if they are to be allowed to remain as they are, they must pass under some other denomination than is at present used to designate them. We are glad to find, that at least one beer firm, Messrs. Earle, Brothers, and Co., of Duncannon Street, Trafalgar Square, have, in consequence, adopted the plan of selling ale and porter in bottles manufactured expressly for them—made to contain the full imperial measure, so that from at least one house in London the public receive their due."—*Medical Times*, April 10th, 1853.

By declining to sell editorial opinions, we assume no personal superiority over our cotemporaries; but we feel that it is an unspeakable satisfaction to ourselves to be under no commercial thralldom, and amenable only to professional opinion.

Authors and publishers do occasionally, though not very often, cast pecuniary snares for favourable notices. One gentleman wrote thus:—"If you review my work favourably, I intend to advertise it extensively in the *ASSOCIATION JOURNAL*." As belonging to the same class, we may mention the case of a firm of publishers who sent us a printed letter (with their advertisement), calling upon us to quote particular passages of a biography which they had recently published. The circular, which now lies before us, is thus expressed:—

"October, 1853.

"Messrs. — present their compliments to the editor, and will feel much obliged by the insertion in his columns of any of the accompanying extracts from —."

Many newspapers have reviewed the book in question, with a selection from the publishers' catalogue of quotations, adopting the racy headings. This is reviewing made

easy: but we must decline all such equivocal assistance. We hold no venal pen; and as the representatives of a professional society, and not of a commercial company, we reject all offers to buy our praises, and resist every attempt to warp our judgment by helps to reviewing.

Advertising and puffing scandals are unfortunately not confined to tradesmen, and second-rate authors. It grieves us to say that in our day the system of pamphlets and circulars adopted by Coldbatch and other noted London empirics of the last century, has been revived with even more than its pristine effrontery. Members of our profession, of various sorts and conditions (excusing themselves by the paltry plea of fear of injury from the jibes and slanders of unscrupulous writers), have stooped to write and revise their autobiographies and biographies; and in some cases, regarding which we have information, to circulate by hundreds a self-concocted history of self, illustrated by a portrait of self, paid for by self. It would be shallow hypocrisy in us to denounce the minor transgressions of commercial men, and make no allusion to the autobiography system which is now degrading our profession, and so widely corrupting the tone of medical society. It is, we hesitate not to say, unprofessional advertising in its most sickening, most demoralising, and most flagrant form. We have no wish to hurt the feelings of any one; but, at the same time, from the strong representations which have been made to us on this subject, we cannot any longer keep silence; and we are all the more inclined to call attention to autobiographical advertising, as the confessions of culprits and other circumstances have given us some commanding peeps behind the scenes.

CLUBBISM OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE unwholesome clubbism of the Royal Medical and Chirurgical Society was prominently noticed by us upon the occasion of the exclusion of Dr. Murphy from the Council, notoriously upon the ground of his not belonging to the College of Physicians of London. We remarked on the 4th of March (p. 181):—

“It is very clear that matters cannot long continue as at present. The tension of feeling is so great as to require relief; and either a reform or a revolution must soon solve the difficulty. Till the voice of the Fellows be heard in the elections, and in pressing questions of internal discipline, distrust must continue to endanger harmony; and what might under more generous auspices become the freest field in the world for scientific emulation among the professors of legitimate medicine, must continue to be a circumscribed club, labouring under the heavy scandal of permitting the homœopathy of Dr. Henriques and Dr. Gully to remain uncensured, while the want of a London title has been found sufficient to deprive Dr. Murphy of that preferment to which he is so richly entitled by his seniority on the list of Fellows, by his upright character, and by the excellence of his professional position.”

Since these lines were written, we regret to say that no change for the better has taken place. Homœopathy, and other forms of quackery, are winked at and dallied with, and the “protection party” still reigns stern and supreme, meting out its favours and its censures with unbridled hand. The hope once entertained of the Society becoming a free and fair arena for scientific emulation is as remote as ever: the outer gate, and the entrance to the inner council,

are both in the hands of a watch by whom merit is not recognised as the password. That this is not an overdrawn statement, is proved from the following narrative of the facts regarding Dr. Ransom's rejection. We have derived our information from sources which we believe to be both trustworthy and well informed; but from the secret nature of the conspiracy, it is quite possible that in some minor details our account may require correction or supplement. However, as regards the leading features of the case, we can vouch for their accuracy. If it can be shown that an honourable man has not been sacrificed to a dastardly intrigue, we shall be the first to correct our statements, and offer penitence to the accused.

Dr. Ransom, of Nottingham, a doctor of medicine of the University of London, came forward, at the late ballot, as a candidate for the Fellowship of the Royal Medical and Chirurgical Society, recommended by some of its most distinguished Fellows, viz., Professors Sharpey, Quain, Walshe, and Jenner, of University College, and Dr. Sibson. At a meeting of the Council, the question of Dr. Ransom's eligibility was raised, upon the ground that he was an illegal practitioner! After some discussion, it was agreed that he should be asked whether he had any other qualification than the M.D. of London University. Dr. Ransom replied that he had none other. At the next meeting of Council, it was proposed by one gentleman that he should be excluded from the ballot as an illegal practitioner. A warm discussion ensued, in which the prevailing sentiment was that Dr. Ransom's qualification was as good as that of any fellow of the Society; and accordingly it was resolved without a division that his name should be inserted in the balloting paper. Notwithstanding this, a party was secretly organised for the purpose of having him blackballed. So cautiously was the plot organised, that none of Dr. Ransom's friends had the remotest suspicion of what was impending; and Dr. Ransom was rejected. It has since transpired that the adverse votes were diligently and secretly canvassed for by certain managing Fellows of the College of Physicians.

The College of Physicians, as a body, are, we trust, clean from this dirty trick of clubbism. Be that as it may, the circumstances connected with the rejection of Dr. Ransom require to be well investigated. As the case now floats upon the surface of society, it cannot but exasperate the provincial physicians against the proposed charter of the College of Physicians, which extends the jurisdiction of the College from a metropolitan circuit of seven miles to the whole of England. It behoveth provincial physicians to consider well their present position and their prospects under the contemplated charter. The fact upon which they are called on to ponder is this:—A physician, and a very talented and respected member of the profession, has been blackballed at the Royal Medical and Chirurgical Society because he was practising at Nottingham without the license of the College of Physicians of London. Had Dr. Ransom been practising in London there might have been a slight ground for the proceeding, but as the College only holds legal jurisdiction within seven miles of the metropolis, we cannot see even a pretext for inflicting upon him so gross an insult, and through him, slighting the majority of the provincial physicians of England—for the majority of that body are not connected with the institution in Pall Mall.

Again, a scientific society, embracing so large a number

of Fellows of the College of Surgeons, and of general practitioners, ought not to be made the arena for the battles of contending corporations: and a great effort ought to be made to purify its ethics and to emancipate it from the dominion of those who have so degraded and so disgraced it. We trust that Dr. Ransom may again be put up to the ballot; for we have no doubt that the profession would then be shown how guiltless were the majority of the fellows of attempting to fix an unmerited stigma upon a physician who is of unimpeachable reputation as a man of good morals, gentlemanly character, and scientific distinction.

Two evils, then, are rendered painfully conspicuous by Dr. Ransom's rejection:

FIRST:—the intolerance of the managing party in the College of Physicians: and

SECOND:—the existence of the Royal Medical and Chirurgical Society as a clique-ridden club, and not as an arena open to all honourable cultivators of medical science.

MEDICAL STUDENTS.

We feel assured that the proposal made by Dr. GOLDING BIRD, in his letter at p. 1043, for the benefit of medical students, will meet with cordial support in many a home visited by this JOURNAL. In addition to the measures suggested by Dr. Bird, we would urgently direct the attention of the teachers in the different medical schools to the great advantages which would arise from the suppression of late lectures. Medical lectures after dark throw young men unnecessarily upon the streets, destroy all possibility of cultivating studious habits, and notoriously cause many a volatile youth to finish the evening in billiard-rooms or casinos. Upon a future occasion we propose to return to this subject; but in the mean time we very earnestly ask associates, resident in the seats of medical learning, to consider what can be done in the direction pointed out by Dr. Golding Bird.

ASSOCIATION INTELLIGENCE.

PAYMENT OF SUBSCRIPTIONS:—NOTICE BY THE SECRETARY.

At a meeting of the Central Council, held on Saturday, November 10th, 1853, Sir CHARLES HASTINGS, M.D., President, in the Chair.

It was resolved unanimously—

“That the Secretary do strictly enforce the 24th Rule, relative to the supply of the JOURNAL to members who are in arrear.”

The Secretary of the Association begs to call the attention of members to the above resolution, and to the 24th Rule, which is as follows:—

“If any member's subscription remain unpaid twelve months after it shall have become due, the MEDICAL JOURNAL and other publications of the Society shall be withheld from such member till his arrears be paid.”

He begs to inform them that for the future this rule will be enforced; and he hereby gives notice that all members who have not paid their subscriptions for the years 1851 and 1852, will not receive the Journal after Friday, December 2nd, till such arrears are paid; and those members who shall not have

paid their subscriptions for the current year before the 1st of January, 1854, will subject themselves to Rule 24.

The Secretary will be obliged to the Honorary Local Secretaries, if they will be pleased to transmit to him forthwith a list of those members who have paid them their subscriptions, so that he may be enabled to avoid the unpleasantness of making application to gentlemen who have paid.

JAMES P. SHEPPARD, *Secretary to the Association.*

TO CORRESPONDENTS.

MILITIA SURGEONS are requested to forward the iraddresses to L. W., at the ASSOCIATION JOURNAL OFFICE, that they may receive invitations to a meeting which it is proposed to hold next month at Birmingham. We are obliged to postpone till next week the letters we have received on this subject.

ADVICE GRATIS. Letters in our next.

VACCINATION ACT. Letters in our next.

NEWS AND TOPICS OF THE DAY.

HARVEIAN SOCIETY. This Society meets at 64, Edgeware Road, on the first and third Thursdays of each month, from November to June—excepting Christmas week. The following is the business announced for the three ensuing meetings:—

Thursday, December 1st. On Certain Morbid Conditions of the System which may become Cachectic. By Thomas Hodgkin, M.D. [This is intended to be a continuation of a former paper by the author.]

Thursday, January 5th. This being the Anniversary Meeting, the Council Report will be read, and the new officers will be elected.

Thursday, January 10th. On the Uses, Dangers, Doses, and Modes of Administering of certain Powerful Medicines. By John Rose Cormack, M.D.

MEDICAL SOCIETY OF LONDON. The following papers are announced.

Saturday, November 26th. On Internal Metritis and Uterine Catarrh. By E. J. Tilt, M.D.

Saturday, December 3rd. On the Pathology and Treatment of Swelled Testicle. By J. L. Milton, Esq.

Saturday, December 10th. Pale Urine considered as a precursor of Disease. By R. Drutt, M.D.

Saturday, December 17th. Source of Hæmorrhage in Partial Separation of the Placenta. By F. W. Mackenzie, M.D.

MEDICAL BENEVOLENT COLLEGE. On Sunday last, the claims of this National Institution were very ably advocated by the Rev. W. Harrison, M.A., who preached a most eloquent and impressive Sermon to a crowded congregation, amongst whom were present H.R.H. the Duchess of Cambridge, and the Princess Mary. The powerful appeal of the reverend gentleman was liberally responded to. We have pleasure in stating that other clergymen have kindly promised to preach in aid of the funds of this Institution. Agreeably with the laws of the College, Mr. Harrison, and Mr. Hamilton, in whose Church the Sermon was preached, will be constituted Honorary Life Governors.

ERRATUM.

In Mr. Ansell's "Facts and Opinions relating to Tuberculosis," No. II, in the ASSOCIATION JOURNAL for October 14th, at page 895, column 1, line 2 from the bottom, for "sixteen years," read "ten years".

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention and revised proofs ought invariably to be sent to Putney.

[*News and Topics continued at page 1044.*]

ORIGINAL COMMUNICATIONS.

FACTS AND OPINIONS RELATING TO TUBERCULOSIS, WITH COMMENTARIES.

By HENRY ANCELL, Surgeon.

NO. III.

A SERIES of statistics, under the title "*Decennium Pathologicum*", has been published by Dr. T. K. Chambers in the *Medical Times and Gazette*. It consists of the results of all the *post mortem* examinations made in the mortuary of St. George's Hospital during ten years, from December 31, 1840, to December 31, 1850, and is intended, especially, as a contribution towards the pathology of chronic disease. The subject of tuberculosis is complete, although the papers are still continued in the *British and Foreign Quarterly Review*. The philosophical spirit and classical tone which characterise this work give me the assurance that its author is anxious for discussion and inquiry as to the nature and bearing of the facts developed, and the deductions drawn from them; and that, after the very great labour he must have bestowed, it will be gratifying to see the subject of it canvassed, although, on some points, difference of opinion may be elicited.

The circumstance which first strikes the attention, on perusing that portion of the series relating to tuberculosis, is the sense in which Dr. Chambers employs the term. In the first place, it is taken for granted, that the word is understood in the same sense by a "practical majority" of those who use it; and in enumerating the deaths "with" tuberculosis, the presence of tubercle, ascertained *post mortem*, is adopted as the test of its existence. Tuberculosis is also a "morbid action", capable of receiving future elucidation from chemistry and the microscope; and its effects on the viscera and the constitution at large are mentioned, "the lungs being the chief object of its attacks." The cases comprised in the term, as employed by Dr. Chambers, include both the medical and surgical cases in which tubercle was found after death. It thus includes cases of lumbar abscess, diseased bones, and other scrofulous affections; excluding all such as had proved fatal without the deposit of tubercle. According to this definition, a scrofulous disease of a joint is a case of tuberculosis, provided a few tubercles have been deposited in the lungs or any other structure; but a similar case, occurring, for instance, in the offspring of consumptive parents, with well marked predisposing signs of a tuberculous habit, and all the symptoms of constitutional disease, is not a case of tuberculosis, if tubercles do not exist after death.

The "Tuberculosis" of Müller, Rokitansky, and others, is the "Tuberculous cachexia" of Sir James Clark. The latter describes it as "a morbid condition of the system, which precedes and attends tuberculous disease." Lebert employs the word in the same sense, and remarks that "in general tuberculosis, a true ulcerous diathesis, though not one depending immediately on tubercle, takes place." Louis very frequently describes tuberculous ulcers, not produced by tubercle, in phthisical subjects.*

Without dwelling on the propriety of the use of the word, in an etymological point of view, I have adopted it in my work, in the sense in which I found it employed by these practical writers, only that I have treated of it strictly as a morbid condition of the blood; and, having advanced what I believe to be irrefragable proof, that scrofulous affections and tuberculous affections own the same parentage, I include within its meaning the diseased condition which precedes and accompanies scrofulous ulcerations, and all scrofulous local affections. It will thus be seen that "tuberculosis" comprises all those diseases grouped together by the Registrar General (as I think, very properly,) under the designation of "tubercular diseases", without reference to the actual existence of tubercle. We well know, that a vast majority of scrofulous subjects develop tubercle before death, although, in a minority, this morbid

deposit is absent; the disease being essentially the same in both cases. According to the test of the existence of tuberculosis, furnished by pathological anatomy, and adopted in the "*Decennium*", an individual who dies from the effects of amputating a scrofulous limb, if no tubercle were found *post mortem*, would not be regarded as affected with tuberculosis; although, by deferring the amputation for a very short period, tubercles would assuredly develop themselves. Although tubercle is the true constitutional element of tuberculosis, it is not, and cannot be regarded, as the only test of the existence of the disease.

Dr. Chambers is himself unable to adhere, in all cases, to this practical test of tuberculosis; since, when we arrive at his enumeration of the tuberculous affections of the kidneys, we find fifteen cases of "scrofulous degeneration." Three occurred in subjects without tubercles in the lungs. The remark occurs, that "these large masses, constituting the form of disease called 'scrofulous degeneration', have such a different appearance from the small, hard, shot-like tubercle, that were they not the consequence of the same diathesis" (the italics are my own), "one could hardly believe in the relation between them."

Again, the eighth paper contains an enumeration of "*Brain Diseases without Cerebral Tubercle in Tuberculous Persons*"; and we are informed, very truly, that besides those cases where actual deposit is developed in the head, there are many instances of morbid cerebral action occurring in patients affected with tuberculosis, some of which "appear really connected with the diathesis itself." It is shewn statistically, that idiopathic inflammation, of the membranes at least, is almost peculiar to the tubercular diathesis. But, again, the test of the existence of the diathesis is the existence of tubercle in some other organ, although not in the brain. Can it be doubted that idiopathic inflammation of the brain, thus shewn to be peculiar to the tubercular diathesis, may, and frequently does occur, without the deposit of tubercle in any other organ? Treating of a disease which forms so large a portion of the experience of every practitioner, I generally avoid any appeal to my own; but on this point I may state, that having from the commencement of my practice taken an especial interest in the cerebral affections of infants, and examined every case *post mortem*, when allowed to do so, it has occurred to me, again and again, to meet with the pathological results of inflammation of the brain and its membranes as the cause of death, without a single tubercle in any organ. I have known two and three children of the same tuberculous family die of cerebral affections, in some of whom tubercles existed in the brain or elsewhere, while, in others, not a trace of the deposit could be detected in any structure; and I am satisfied that the experience of others must be similar.

In the instance first given, it is virtually admitted that "scrofulous degeneration" of the kidney depends upon the same diathesis, the same "morbid action", as tubercle; and the question arises, why should not scrofulous degeneration of the knee, ankle, or elbow-joint, and of other glands and viscera, be so regarded? In the second instance, it is admitted that idiopathic meningitis is almost peculiar to the tubercular diathesis; and yet, according to the distinction drawn by those who understand the word tuberculosis, in the practical sense as tubercle, the occurrence of a few tubercles in the spleen, or some other organ, which can only be known after the death of the patient, determines whether it is or is not to be regarded as a case of this disease.

I make these remarks with no view to diminish the importance of Dr. Chambers's labours, the results of which I regard as of the utmost value, but simply for the sake of a right understanding of the subject. In the use we make of the statistical facts relating to tuberculosis contained in these papers, we have then to bear in mind that these are not the statistics of phthisis alone, nor of scrofula alone, nor of scrofula and phthisis together: they comprise the deaths from phthisis in its various forms—pulmonary, intestinal, peritoneal, etc.; and from scrofula where tubercle has been deposited; excluding all cases of scrofula, and of

every form or grade of tuberculous disease, in which it is not deposited. They are, in fact, *par excellence*, the statistics of *tubercle*, and include every case in which this morbid deposit was found, whether the death of the patient had been produced by *scrofula*, or consumption, or by any other disease.

In St. George's Hospital, during the ten years over which this series of statistics extends, the number of autopsies was 2,161: males, 1,425; females, 732; and four cases in which the sex was not definitely recorded. Tubercle occurred in 566* of the above number of cases; 396 were males, 167 females, and 3 sex unknown. In the cases with tubercle, the deposit was found—

	Cases.	Males.	Females.
In the lungs alone, in	214	148	65
In the lungs, conjointly with other organs,	303	210	91
In organs and structures exclusive of the lungs,	49	33	11

Of the 517 cases in which, as above shown, tubercle occurred in the lungs—in 117, the deposit was in a solid state, without having undergone any process of softening; 119 being males, 51 females, and 1 sex unknown: in 340, the tubercular matter was softened into vomice; 236 being males, and 102 females: in 3, calcareous matter was found in the lungs, with tubercle in some other part of the body.

From the numbers given, it is deduced that tubercle was met with in 26.1 per cent. of the total number of autopsies. Dr. Chambers attaches much importance to these proportions, and considers that on our dependence upon them hang answers to scientific and social questions of a momentous kind. He regards them as a fair representation of the proportionate number of cases of tubercle occurring in those classes of the population at large from which hospital patients are derived, believing that there is no source of fallacy from which we can infer that the percentage is higher, although there are several circumstances which may render it lower. Of the latter, the chief are—1. By a rule of the institution, patients suffering from consumption are not admissible; 2. The Consumption Hospital at Brompton withdraws a portion of the subjects of consumption from other metropolitan institutions; 3. The number of persons, otherwise healthy, brought into hospitals for severe accidents, tends to augment the mortality with sound viscera above that of the country at large. From these premises, Dr. Chambers infers that the percentage of cases of tubercle in St. George's Hospital may be taken as representing the minimum for the population out of the hospital, which minimum is accordingly about 1 in 3.8 of the total number of deaths.

On taking into account the causes above enumerated as tending to diminish the percentage within the hospital, which causes must operate to a very great extent, the actual percentage for the population at large, according to this test, must be very considerably raised. It would reach, probably, one-third or one-half of the total number of deaths.

The author, as before stated, does not appear to admit the possibility that the proportion of cases of tubercle in St. George's Hospital can be higher than in the same classes of the population at large; and yet, as it appears to me, his own statistics render such a conclusion by no means improbable.

According to the returns furnished to the Registrar-General, the deaths from tuberculous diseases, in the general population, bear the proportion of about 1 in 6.3. In many of the cases that contribute to the sum total of these diseases, tubercle, as we have before pointed out, is absent; and all such cases are excluded from the statistics of tubercle in the *Decennium Pathologicum*. On the other hand, there are many cases in the tables of the Registrar-General, under other nosological designations, as, for instance, diabetes and albuminuria, in which tubercle would occur as a complica-

tion, although tuberculosis was not returned as the cause of death. These latter cases are all included in the statistics of tubercle before us. Looking closely through the nosological list of the Registrar-General, and calculating the number of cases of tubercle which might be added to his sum total of tuberculous diseases, from the proportion in which tubercle has been found as a complication in such diseases, and setting these omissions against the cases in the registry registered as tuberculous diseases, but in which tubercle could not be found, uncertain as such a calculation must be, I still think that, after the earliest period of life, the ratio in the Registrar-General's tables is rather above than below the truth; that is to say, in the general population, the proportion of cases in which tubercle occurs does not exceed 1 in 6.

But there is a circumstance of much more weight, upon which Dr. Chambers relies in support of his position, viz., that the classes from which hospital patients are derived are more liable to tubercle than other classes of the community. I have stated some very important facts (*On Tuberculosis*, p. 455) from M. D'Espine, of Geneva, and other writers, illustrating the comparative frequency of *scrofula* and phthisis in the rich and poor, from which it appears that, in the countries referred to, these diseases are twice as frequent in the latter as in the former. From these facts, I have no doubt that the ratio of deaths "with" tubercle, for those classes from which hospital patients are derived, is higher, in the main, than the ratio above given from the tables of the Registrar-General. This circumstance is in favour of Dr. Chambers's inference. At the same time, I do not believe it sufficient to account for the whole difference. No doubt hospital patients are derived from the various orders of poor; but are they derived from those most liable to tubercle? As respects the *Decennium Pathologicum*, the rules of St. George's Hospital have already, in part, afforded an answer to this question. Independently of this, in the metropolis generally, hospital patients consist of the recipients of severe accidents; they contain also a very large proportion suffering from various diseases produced by the abuse of alcoholic fluids, who are by no means the most liable to death either from tuberculosis or with tubercle. (*On Tuberculosis*, p. 456.) It is to be doubted whether, of the different orders of poor, the poorest and most degraded are more liable to tubercle than some of those in better condition, rarely becoming the subjects of hospital relief, but leading sedentary lives in unwholesome occupations. (*Idem*, p. 464.) Considerations such as these lead me to doubt the propriety of accepting the proportion of cases in which tubercle was found in the mortuary of St. George's Hospital, as a standard for the population generally, even among the classes from which hospital patients are derived.

On looking more closely into the particulars of the occurrence of tubercle in the patients of St. George's Hospital, it appears that, in 171 of the cases contributing to the total number (566), the morbid deposit was met with in the lungs, in a solid state, "without having undergone any process of softening". The subjects of tubercle in this state died, for the most part, either from accidents, or from other diseases differing totally from tuberculosis. There can be no question that the greater number of such cases, whether occurring within or without the walls of a hospital, would be excluded from the Registrar-General's return of tuberculous diseases. Deducting these cases of tubercle in the earliest stage, the number remaining is 395, which diminishes the proportion from 1 in 3.7 of the total number of deaths to 1 in 5.4. Although the circumstances do not, perhaps, justify us in deducting the whole, it is quite clear that the proportion of cases of tubercle in St. George's Hospital, as compared with the proportion of cases of tubercular diseases returned to the Registrar-General, is very materially augmented by this class of cases.

We are thus brought to the question, whether, in the classes of the population which correspond with the inmates of St. George's Hospital, for every five cases of recognised tubercular disease, there are two cases at least returned under

* The numbers in this paper are extracted from a copy of the original papers by Dr. Chambers, corrected by the author, with the use of which he has been kind enough to furnish me, and which he purposes to deposit in the Library of the Medico-Chirurgical Society.

other denominations, in which, if pathological statistics could be obtained, it would be found that tubercles exist. I have already admitted that a certain proportion of such cases must be allowed for; but, falling back on my own observation, with all I can collect as to the frequency of tuberculosis in combination with other fatal diseases, availing myself, also, of the statistics contained in the *Decennium Pathologicum*, I do not think anything like so large a number occurs out of hospital practice.

This point can be determined, statistically, only by a very extensive range of observations both within and without the walls of our hospitals; and, although it should be shown that tubercle occurs as frequently in all our general hospitals as at St. George's, we are not justified in the assumption that it is equally frequent in the same classes of the population out of the hospitals. The grave question here presents itself, whether tuberculosis is not produced under the circumstances associated with a residence in hospitals? The question is not entirely new, although it appears to have met with very little attention. I have alluded to it in my work, and have given some facts from MM. Rilliet and Barthez, tending, as far as children are concerned, to answer it in the affirmative. I have since met with the statement, that, of 4,000 children admitted into the Foundling Hospital at Paris, 3,000, or 75 per cent., die; of which a very large proportion, say two-thirds, are carried off by tuberculosis. In the first of this series of papers is shown the excess of tuberculosis in the army, and that the more immediate observers refer it, in part, to defective barrack accommodation. The inmates of prisons, in all countries, appear to be more liable to the disease than their respective populations. In addition to the reasons assigned by Mr. Simon for the belief that newly formed or "young blood" is most easily rendered tuberculous, I have advanced others to show that, where a large proportion of newly formed blood is circulating in the vessels, even in adults, as after hæmorrhages, fevers, and other causes of deterioration and waste, it is extremely liable to take on the tuberculous transformation, especially under unfavourable circumstances of hygiene. A very few weeks is sufficient to produce tuberculosis in healthy animals under such circumstances: and it may establish itself in the sickly or convalescent even more rapidly.

I am the more surprised that Dr. Chambers has not admitted that the frequency of tubercle in St. George's Hospital may in part be the result of hospital residence and regimen; since, in remarking upon its frequency in the foreign hospitals for children, he states that it is doubtful how far the circumstance may not originate in the unfavourable conditions under which the patients are placed, stating, very justly, that, if it own this origin, such institutions are not the criterion by which to judge of the liability of children at large. Dr. Chambers considers that these unfavourable conditions arise from the vast and incautious scale on which the public care of young children is undertaken on the continent, alluding, I presume, to overcrowding. Our general hospitals may not be so chargeable with the error of overcrowding, although the congregation of twenty or twenty-five sick persons constantly in one room is no unimportant affair; but it must be remembered, that overcrowding is not the only circumstance connected with hospital residence which calls for consideration.

I have designated this as a very grave question, and as such I regard it. It bears upon the propriety of establishing hospitals for infants and young children, also of long continued residence in hospitals, for the treatment of chronic diseases, even in adults, and the period they ought to remain in hospital after acute diseases; it is also one of the most important considerations in reference to the proper management of patients, in all cases, during protracted convalescence.

Of the 566 cases of tubercle, it was found in 27.7 per cent. of the male, and 22.8 per cent. of the female subjects—a difference, the author thinks, entitling us to a decided opinion of a real excess of liability in the male sex, "in the world in general"; and this tendency Dr. Chambers regards

as dependent on the nature of the morbid process, and on the essential differences of the sexes. During the same decennium, the number of cases of tuberculosis pulmonalis (phthisis), in London alone, returned by the profession to the Registrar-General, was 68,315; and, for the whole of England and Wales, it could not be less, in round figures, than 500,000. These figures exclude a very large proportion of cases of scrofula, tabes mesenterica and hydrocephalus, and may therefore be received as very much within the real number of cases in which tubercle occurred in the general population. The ratio per cent. of the number of cases of tubercle met with at St. George's Hospital, to the cases of phthisis alone in London, is thus only .8, or less than a unit. The ratio per cent. to the cases of phthisis, in England and Wales, cannot amount to .1. The difference in the liability of males and females, as indicated by these 566 cases, is 4.9 per cent. By what rule then, is a difference of 4.9 per cent.—of less than 1 per cent. of the total number of cases—to be received as the exponent of a difference in the total number of cases occurring in London; or a difference of 4.9 per cent. of 1 per cent. as a fair criterion of the relative liability of males and females over the whole of England and Wales?

In the medical report of the Consumption Hospital, which extends over six years, a difference of about 23 per cent. was also found in favour of the greater liability of males; but, in making a sum total of all the *in* and *out*-patients of this hospital, affected with phthisis, during the six years over which the report extends, and of all the cases of tubercle observed at St. George's Hospital during the ten years, each reduced to the mean of one year, and comparing them with the number of cases of death from phthisis in London during one year, they amount barely to 11 per cent.; and for England and Wales they cannot amount to 1.5 per cent., showing that even this number of cases (4,924) is totally inadequate to justify a conclusion on this point.

The author does not afford any proof that the patients of St. George's Hospital, who furnish the cases of tubercle, are a fair example of the population generally who become tuberculous, or that there are no circumstances that can operate specially in producing an excess in the male sex in one locality, and the female sex in another. If it were not that Dr. Chambers's view is supported by certain records showing an excess of males in several large cities, against which there are facts which militate in the other direction, we should be thrown upon the doctrine of chances; that is to say, we could only admit the bare possibility of the proportions in the whole mass being as they occurred in the hospital, on the assumption that we know nothing to the contrary.

I have elsewhere entered very fully into the question of the relative liability of the sexes to tuberculosis, and have brought a great variety of statistics to bear upon it. In some localities and populations, and according to some authorities, the liability was found to be in excess in the male sex; in other instances, and on a larger scale, in females. In 1847, the proportion of deaths of each sex to the population of England and Wales (17,124,038), returned to the Registrar-General, was—

	Males.	Females.
From tubercular diseases,	1 in 252.1 ...	1 in 251.7
From phthisis,	1 in 373. ...	1 in 310.

The greater difference in phthisis, as compared with tubercular diseases in the aggregate, arising partly from the greater liability of males to different forms of scrofula. I see no reason, from the statistics of St. George's Hospital, to modify the conclusion I then arrived at; viz., that there is *presumptive evidence of the female sex operating in a slight degree as a predisposing cause of the disease*; but that *sex* can have little influence, since, in some localities, the disease prevails most in the male, in others in the female sex: and sometimes, when the investigation has been made in the same place at different times, the results first arrived at have been subsequently reversed.

In the next place, the author, proceeding upon the assumption that the male sex is most liable to tubercle,

arrives at the conclusion, that in this sex the lungs acquire this liability less than the rest of the body. This general inference is drawn from the fact that, in the autopsies wherein the lungs presented tubercle, there was a much smaller preponderance of the male over the female sex, than where the lungs were excluded. "A woman is less likely than a man to become tuberculous; but, if she does become so, her lungs are more likely to suffer than those of the other sex." This seems to show, the author proceeds, "that the remarkable liability of the pulmonary organs, in both sexes, is not due to any social or physical circumstance to which males are most exposed", but is dependent on the nature of the morbid process, and the essential differences of the sexes; and it excludes climatic influences, variations in temperature, and humidity, to which men are certainly the most exposed, "as causes of tubercle in those organs which of all internal viscera are most laid open to these changes."

I have elsewhere taken great pains to establish the important etiological distinction between the causes of tuberculosis as the constitutional disease, and the causes of local disease in the subjects of this general or constitutional disease. Now, whether we regard the aggregation of tubercle in the lungs, especially, as part and parcel of the constitutional disease, and as a natural, although it cannot be regarded as a necessary effect of its causes, or whether we regard the localisation in a particular organ as an accident produced by some cause superadded to that of the original disease, the inference, that the liability of the pulmonary organs is dependent on the nature of the morbid process, and is not due to any social or physical circumstance to which males are most exposed, does not appear to me to be valid. As respects the constitutional disease, I have referred, for instance, to a great number of well authenticated facts tending to show that deficiency of exercise has an etiological claim at least equal to that of any other reputed cause, taken singly. The frequency of tuberculosis in sedentary females, and among those engaged in sedentary occupations, is a case in point. This is surely both a social and a physical circumstance. If the conclusion applies only to the determination of the aggregation of tubercle in a pre-existing tuberculous habit, then again I say that, even admitting the proportions to be as indicated by this limited number of cases, it by no means follows from the premises, for instance, that an unnaturally quiescent state of the lungs, maintained habitually—a physical, and, considering the habits of large classes of the community, male and female, an eminently social circumstance—is never the cause of the lungs especially becoming affected.

Under this head, however, it is agreeable to find that on one point, which may ultimately assume a most important practical bearing, the particular lines of investigation pursued by Dr. Chambers and myself respectively, have led us to analogous conclusions. Dr. Chambers remarks, that the lungs are made for receiving atmospheric air of all descriptions, referring to its qualities of temperature, humidity, and the like; and he thinks there is more evidence for believing that those varieties and vicissitudes to which males are most exposed are rather beneficial to the organs of respiration than otherwise. He treats the idea of a changeable climate, and exposure thereto, being the causes of tubercle developing itself in the lungs, as a supposition, and condemns the too exclusive care often exercised to keep those who have an hereditary tendency to tuberculosis in an equable air, and to defend them from all extremes of heat, cold, and moisture. Many very remarkable facts confirmatory of this view have been elsewhere quoted. The circumstance is confirmed also by the medical statistics of the army and navy, comprised in the second of this series of papers; and it is no less remarkably so by the fact that, of the reported cures of consumption extant, the greater number have taken place under a system of exercise and free exposure to the vicissitudes of the open air in inclement climates.

In my work on *Tuberculosis*, I have given what I conceive to be some very strong statistical proofs of the ex-

istence of a *law of decrement* as to the susceptibility of the human constitution to tuberculosis. This law appears to manifest itself from the age of fifteen or twenty years onwards; and there are also reasons for entertaining the opinion that it is uniform; that is to say, in operation from birth to old age. (Table xix, page 408, *et passim*.) Should such a law be proved to exist, it is one of the highest importance, both in a theoretical and a practical point of view. I accordingly turned with some anxiety to those parts of the *Decennium Pathologicum* which relate to the influence of age, for the purpose of ascertaining whether, in the main, the facts tend to confirm or to invalidate the law.

From Dr. Chambers's corrected copy, I extract the following table:—

TABLE XVIII.—*The ratio per cent., in which Tubercle was found in the 2,161 autopsies at different periods of life.*

Periods of life.	Males.	Females.	Total.
In 94 males and 60 females, from birth to 15 inclusive	27.6	28.3	27.9
In 377 males and 259 females, from 15 to 30 inclusive	36.6	34.3	35.8
In 472 males and 179 females, from 30 to 45 inclusive	28.1	10.5	25.8
In 299 males and 139 females, from 45 to 60 inclusive	24.0	10.0	19.6
In 109 males and 58 females, above 60	11.0	1.7	7.7
In 74 males and 37 females, of unknown age	18.9	29.7	25.2
In total of 1425 males and 732 females, and 4 of unknown sex, of all ages	27.7	22.8	26.1

On examining this table, we find, whether we take the ratio for males or females, or the total per centage, including both, that there appears to be an uninterrupted decrement from the age of fifteen years onwards. As respects the earlier periods of life, if we look to the very high percentage in the above table, and connect it with the fact that, at St. George's Hospital, infants and very young children are rarely admitted for such diseases as tubercular meningitis, tabes mesenterica, and phthisis, and also with the large proportion of deaths produced by these diseases, even during the first years of life, in the population at large, and associate this again with the greater frequency of curable scrofula in early life, we find a remarkable confirmation of the law in question.

It is true that in subsequent tables, where the 214 cases in which tubercle occurred in the lungs alone, and the 303 cases in which it occurred in the lungs together with other organs, are each separately divided, according to periods of life, the law does not appear to hold good with respect to the first group, in the earliest period; but of this circumstance there is a very simple explanation in facts admitted by all pathologists, the exception thereby proving the rule. When tuberculosis, even understood in the sense adopted by Dr. Chambers, sets in with the deposit of tubercle, the tubercles occur in a plurality of organs in the same individual much more frequently in children than in adults. In 312 tuberculous children examined by Rilliet and Barthez, a single organ was tubercular in 48 cases only; and of these 48 cases, the lungs were not the organs affected in the majority.

In the 566 cases before us, tubercle was found in different parts of the body exclusive of the lungs, forty-nine times, or in 8.6 per cent. In an aggregate of 1,136 cases of tubercle in various organs of the body, at all ages, collected into a table from the works of Louis, Lombard, Boyd, Rilliet and Barthez, and Papavoine, and introduced into my Treatise, there were 106 in which the lungs were exempt. This gives 9.3 per cent. These statistics teach us, that in cases of tuberculosis, viewed as a general disease, we are not to look exclusively to the lungs,

at any period of life, for that organic mischief which, if allowed to establish itself, too certainly entails a rapid and fatal termination.

Of the 49 cases in which the lungs were free from tubercle, the frequency with which the other parts were affected is shewn in the following table:—

TABLE XIX.—*The organs affected in 49 cases where the lungs were exempt out of a total of 566 cases of tubercle; distributed in quinquennial periods of age.*

Seat of tubercle.	A.	B.	C.	D.	E.	F.	G.
Kidneys	1	4	5	4	1	—	15
Bronchial glands	1	5	3	—	—	—	9
Peritoneum	6	3	1	2	—	—	17
Abdominal glands	1	2	1	1	—	—	6
Parts of generation	—	1	—	1	1	2	5
Intestinal canal	1	—	4	—	—	—	5
Liver	—	2	2	1	—	—	5
Nervous centres	2	2	1	—	—	—	5
Spinal bones	—	3	1	—	—	—	4
Cranium	—	2	—	—	—	—	2
Parietal pleura	1	2	—	—	—	—	2
Hip	2	—	—	—	—	—	2
Other joints	1	1	—	—	—	—	2
Pericardium	—	1	1	—	—	—	2
Cellular tissue and muscles	—	1	1	—	—	—	2
The shaft of the femur ..	1	—	—	—	—	—	1
Spleen	—	1	—	—	—	—	1
Dura mater	—	1	—	—	—	—	1
Nervus abducens	—	—	1	—	—	—	1
Axillary glands	—	1	—	—	—	—	1
Cervical glands	—	1	—	—	—	—	1

A. In 154 cases of all diseases examined, from 1 to 15.

B. In 636, from 15 to 30.

C. In 650, from 30 to 45.

D. In 498, from 45 to 60.

E. In 167, above 60.

F. In 112, of doubtful age.

G. Total in 2161 cases.

The more prominent particulars relative to those cases in which this morbid deposit was found in the lungs, is shewn in—

TABLE XX.—*The organs affected in 517 cases where tubercle occurred in the lungs; out of a total of 566 cases of tubercle, and 2,161 cases of all diseases examined; distributed in quinquennial periods of age.*

Seat of tubercle.	A.	B.	C.	D.	E.	F.	G.
Intestinal canal	10	71	37	14	—	9	141
Mesenteric glands	17	37	26	9	1	3	93
Kidneys	6	46	26	11	1	1	91
Peritoneum	6	23	8	4	—	1	42
Bronchial glands	10	13	6	2	—	3	34
Nerve centres ..	10	15	3	—	—	—	28
Spleen	6	12	4	—	—	1	23
Liver	5	7	1	—	—	—	13
Bladder and prostate gland	—	6	3	2	—	1	12
Organs of generation, male and fem. (divided below)	—	5	1	2	—	1	9
Heart and pericardium ..	2	3	—	—	—	—	5
Male organs of generation	—	3	1	—	—	1	5
Female organs of generation	—	—	—	2	—	—	4
Axillary and cervical glands	1	—	2	1	—	—	4
Anterior mediastinum	—	3	—	—	—	—	3
Pancreas	—	—	1	—	—	—	1
Cranial bones	—	—	1	—	—	—	1

A. In 154 cases of all diseases, or in 37 cases of tuberculosis of the lungs, from birth to 15 inclusive.

B. In 636 of all diseases, or in 211 of tuberculosis of the lungs, from 15 to 30 inclusive.

C. In 650 of all diseases, or in 155 of tuberculosis of the lungs, from 30 to 45 inclusive.

D. In 498 of all diseases, or in 77 of tuberculosis of the lungs, from 45 to 60 inclusive.

E. In 167 of all diseases, or in 11 of tuberculosis of the lungs, above 60.

F. In 112 of all diseases, or in 26 of tuberculosis of the lungs, of unknown age.

G. In 2,161 cases of all diseases, or in 517 of tuberculosis of the lungs, at all ages.

For a long period it was made a point of practical bear-

ing, and one of some importance, that tubercles are more frequently formed in the left than in the right lung; and the investigations of the author not supporting this dogma, he is somewhat satirical upon those who repeat it. I am happy to find that I am not included in the censure implied. From an examination of the statistics of various pathologists, I arrived at the conclusion that it had not been proved that either lung is more subject to the deposit than the other. Louis and Andral found it more frequently in the left; Hope in the right. Its relative frequency in the present statistics was as follows:—

	Right Lung.	Left Lung.	Both Lungs.
Crude tubercle	29	21	110
Softened tubercle	58	62	219
	87	83	329

So that, as the author remarks, its localization in either lung appears from this series of cases to be independent of its essential nature, and what may be called accidental.

On the other hand, in Dr. R. P. Cotton's work, recently published, I find the following table, in reference to which it should be remarked, that it is a table of cases observed in the out-door department of a hospital, during life, and refers to the epochs at which the histories of the cases were taken. Its accuracy is wholly dependent upon the perfection of diagnosis in the observer.

TABLE XXI.

The Position of Tubercle in 1000 Cases of Phthisis.

	Right Lung.			Left Lung.			Both Lungs.		
	1st Stage.	2nd Stage.	3rd Stage.	1st Stage.	2nd Stage.	3rd Stage.	1st Stage.	2nd Stage.	3rd Stage.
Males	179	28	23	176	40	33	79	16	8
Females ..	112	27	15	146	29	31	48	6	4
Total	291	55	38	322	69	64	127	22	12
	384			455			161		

In these cases the left lung is shewn to be more frequently diseased than the right. In the first period the difference is so small, that it might be regarded as accidental, just as the position of tubercle in this respect, observed after death in Dr. Chambers's cases, appears to be accidental; but in the above table a gradually increasing excess, as the disease advances, is shewn on the part of the left lung, and Dr. Cotton concludes that this points to the great probability that tubercular softening and vomicae are more prone to happen on that side.

These recent statistics appear, then, to confirm the conclusion arrived at, that it is not yet proved that either lung is more prone to the deposit than the other. As remarked by Dr. Cotton, the point is not of the slightest practical value, either to the diagnosis or the treatment; but it is important to place it in its true light in reference to the actual state of science, for there can be little doubt that positive mischief has accrued under this head, by the premature deduction of a general law from the observation of a limited number of cases.

I turned with very considerable interest to the account given of cretaceous tubercle. In 2,161 autopsies, after death from all diseases, it was found in sixty-five cases, that is to say—

In twenty-nine, associated with tubercle in the lungs.

In three, with tubercular disease elsewhere.

In thirty-three, alone in the lungs.

The last thirty-three cases are not counted among the cases of tuberculosis; but the evidence is so strong for their tubercular origin, that Dr. Chambers questions whether they ought not to have been included. One proof is, that in twenty-six cases out of the thirty-three, the deposit was met with in the upper lobes; in two irregularly scattered; and in five in the lower lobes; a distribution improbable for lobular pneumonia. Its distribution among the sexes

was also similar to that of tubercle, which the author considers would be unlikely in two substances wholly unconnected, to which may be added the frequency with which it was found with tubercle in the same individual; and we can hardly fail to consider it, "almost in every case, a proof of the former existence of the morbid deposit."

I am glad to meet with this confirmation of an important conclusion arrived at from other evidence, since it has been objected, that too much reliance has been placed on this chalky deposit as a proof of the curability of tubercular disease in an organ.

Dr. Chambers gives five "*suppositions*" to account for the origin of the cretaceous matters, and maintains that there is nothing to render either of them untenable; a tolerably sure proof that we are in the dark upon the subject.

The cretaceous matter in the lungs was associated with tubercle in the following manner:—

Mixed up with tubercle, twenty-one times.

In the walls of vomicae, five times.

In one part of the lungs, with vomicae elsewhere, twice.

With tubercle in the opposite lung, twice.

With tubercle in other parts of the body, but not in the lungs, three times.

The proportion of cases in which cretaceous tubercle was found to the total number of autopsies, was as nearly as possible 3 per cent.

Nothing has excited more discussion than the question of the inflammatory complications of tubercle in the lungs; nor has anything, probably, had a more direct bearing on practice than the views generally entertained as to the nature and origin of the morbid deposits met with in connexion with tubercle. One of the most useful results of these statistics will be, especially when derived from various sources, so as to admit of being collated and compared, that they must add materially to our knowledge of the circumstances under which such complications occur, and also aid our investigations of the relations which subsist between tuberculosis and other diseases. The length to which this paper has extended renders it necessary to defer entering upon this part of the subject.

Dr. Chambers's papers contain numerous tables showing the relative frequency of tubercle in different organs, in either sex, and at various periods of life, with the deductions at which he has arrived. I consider that the author has done great service to the pathology of tuberculous diseases by placing these facts on record, and that their value will increase as science progresses. The exception I have taken to general deductions from the proportions observed in the larger divisions, as from the ratio of cases in the male to those in the female sex, (viz. that the author is working upon minute fractions of the total number, and without any certainty that the examples before him are, in all essential respects, representations of the mass,) induces me to pass over both the proportions and the deductions, where the numbers are still smaller. But in extracting some of the more salient points, and thus freely commenting upon them, I trust I shall succeed in directing the attention of others to the whole series. One object I have in view is, to point to the necessity of publishing periodically, not only the pathological observations made at St. George's Hospital, from which this series is derived, but those of every similar institution in the kingdom. The least thoughtful reader will also arrive at the conclusion that some conventional usage should be adopted, for the purpose of carrying out such statistics on a uniform and well considered plan and nomenclature. If this were accomplished, practical conclusions, founded on facts, would soon supplant conjectural opinions; and, at least in some parts of the science of medicine, we might hope to arrive at *axioms* upon which to found our reasonings.

Norfolk Crescent, Hyde Park, Nov. 1853.

LITHOTRITY: EXHIBITION OF CHLOROFORM.

By WILLIAM THOMAS BELL, Esq., M.R.C.S., formerly House Surgeon to the London Hospital.

JOSEPH RICHARDSON, aged 62, a sailor, came under my care in July 1853. He was of moderate stature; his complexion was sallow, his countenance haggard and care worn, and expressive of extreme pain; his hair was grey; his habits of late years had been extremely temperate; for the greater part of his life he had worked as a sailor, but lately for farmers in this neighbourhood. He dated the commencement of his symptoms from three years back. Within the last six or eight months, his symptoms had been extremely aggravated. He had constantly passed blood, and thick muco-purulent matter. He also had prolapsus ani; and for the last few months had been unable to ride in a chaise, or sit upon a chair for many minutes together. After walking a short distance, he would be seized with a constant desire to micturate, attended by great pain. The urine was alkaline, and strongly ammoniacal.

On sounding him, the stone gave the impression of being soft, and fitted for lithotritry, should the urgent symptoms yield to treatment. This consisted in the administration of the following remedies:—

R Sodæ carbonatis gr. x.
Misturæ acaciæ 3 ij.
Tincturæ hyoscyami ℞xv.
Aque puræ 3vj. M.

Fiat haustus cum spiritus ætheris nitrici ℞xx. sextis horis sumendus.

R Tincturæ opii gtt. xxx.
Spiritus ætheris nitrici gtt. xxv.
Misturæ camph. 3x. M.

Fiat haustus sedativus horâ somni sumendus.

Perfect rest in bed, with a light, nourishing, unstimulating diet, was enjoined. The bowels were freely opened daily. After persevering in these remedies for about ten days, his symptoms so far subsided, and the urine assumed a more healthy character, as to allow the operation to be performed on July 13. He suffered a good deal of pain during the operation, which continued to a trifling extent during the day. The stone was readily seized, and gave way freely under the lithotrite. The usual preliminaries were of course attended to prior to commencing the operation.

Forty-eight hours afterwards, he had a little fever, accompanied by lumbar pains, which soon passed off. He took barley-water *ad libitum*. During the night subsequent to the operation, he passed a large quantity of stone.

Three operations were performed after this; but the extreme excitement prior to and at the time of the operation, produced such violent spasmodic and uncontrollable action of the muscles in the neighbourhood of the bladder, together with those of the extremities, that the performance of the operation was almost impossible. Under these circumstances, we determined upon administering chloroform, to produce partial anæsthesia. It was accordingly administered by our assistant Mr. Pritchett. The fifth and following operations were thus performed under chloroform, which had the effect of keeping him quiet, though at the same time in a "partially" conscious state. In this way, the operations were rendered comparatively simple.

September 10, about ten weeks after the patient had first consulted my father and myself, we carefully sounded the bladder, and could not feel the slightest remnant of stone. His symptoms being entirely relieved, we determined upon sending him home.

Nov. 19th. His general health had so far recovered, that he was able to undertake a journey on foot of seven miles without inconvenience. Although a difficulty occasionally presents itself in perfectly emptying the bladder, this, I think, may be attributed more to an enlarged prostate than to remains of the stone.

REMARKS. This patient presented such aggravated symptoms, that it appeared almost impossible to perform

lithotriety, unless his urgent symptoms were allayed. He had a capacious urethra, with enlarged prostate; a greatly dilated and rugous bladder. One symptom in his case strongly indicated the existence of stone; viz. that of being able to feel the stone move from side to side as he turned in bed.

This case has been brought prominently before the profession, with a view of advocating more strongly the administration of chloroform; for without its aid the operation could not have been repeated so as to complete the cure. The great point in its favour is, that it is only required to be exhibited to the extent of producing "partial" anæsthesia; and, to the best of my belief, chloroform may be administered thus far without the least fear of fatal consequences. (This is an invaluable point in the reduction of dislocations in certain constitutions.) In this case nine operations were performed. The composition of the stone was triple phosphate of ammonia and magnesia; its weight was three drachms and a half.

The carbonate of soda relieved very much. It is a very valuable remedy in cases of stone; and is extensively used in such cases by the surgeons at the London Hospital.

Great Grimsby, Lincolnshire, November 12, 1853.

CASES OF CHOLERA, WITHOUT COMMENTS.

By JOHN GROVE, Esq.

CASE I. Edwin D., aged 14 years, went to bed in perfect health and spirits on the night of October 31st. At 4 A.M. November 1st, he was seized with an attack of diarrhoea. His first evacuation was so copious that (according to his own statement) it nearly filled the chamber utensil. He is errand boy to a druggist. He complained of bellyache and relaxation in the morning on going to shop. His master gave him a warm dose of rhubarb: after this a teaspoonful of paregoric. Being no better from these remedies, he gave him one ounce of Board of Health mixture; half to be taken immediately, and to be repeated at 2 P.M. if necessary. At 4½ P.M. the boy's mother applied at my surgery, saying that her son had been purging and vomiting all day, and was very bad. The evacuations, she said, were like water, only with white flakes; and he was suffering severe pains in his belly and legs.

I ordered that he should be kept warm by means of hot bottles to the body and extremities, and administered the sulphur mixture, with a small quantity of liquor opii sedativus.

At 6½ P.M. a messenger came to say he seemed somewhat better. Up to this time I had not seen the lad, in consequence of being required urgently in another direction.

At 8½ P.M. a messenger arrived to say that the lad was not so well. I went immediately to see him. He was perfectly pulseless; his countenance was sunken and livid; his lips were blue; he had dark areolæ around the eyes; his hands and feet were purple, and the skin shrunken. There was no sweat. The voice was peculiar, resembling the falsetto. He had vomited and was purged just before my arrival; both of these evacuations were like arrowroot or rice-water. He complained of cramps, and required his legs to be constantly rubbed. Thirst was urgent. He passed no urine. I administered the sulphur mixture, with two minims of liquor opii, and waited half an hour; I then gave him another dose at 9 P.M. These were both retained; but he was moved twice before I left, at 9½. Evacuations were the same.

At 10 P.M. a messenger came to say he had not vomited since I first saw him, but the bowels had been moved twice. I now allowed a small quantity of soda water; as he begged incessantly for cold water to drink.

11½ P.M. There had been no sickness since 8½ P.M. The bowels continued loose, the stools being the same in character. The mother had substituted a bed-pan instead of getting him out of bed, because the cramps were so severe when he was moved off the bed. The surface was now

much warmer; the pulse was perceptible at the wrist. The voice was slightly improved. The eyes were still as sunken, and the dark areolæ as pronounced as before. The spasms of the abdomen were not nearly so severe. He complained bitterly of thirst. I directed him to take sulphur mixture without opium every two hours. Soda water and arrowroot water cold, in limited quantities, were allowed as drink. The warm applications to the surface were continued.

Nov. 2, 6½ A.M. He had had a restless night, but slept at intervals. The bowels had been open four times. He was sick at 2 A.M., 4 A.M., and 6 A.M. I visited him at 8 o'clock. The countenance was somewhat improved. The dark areolæ remained. The cheeks were sunken, and the face pinched; still there was a more healthy hue on the skin. Pulse 80, weak. The skin was warm. He had continual sighing. The cramps were much less severe, and only occasional. The evacuations remained the same. The medicine was continued. During the night the medicine had not been administered as frequently nor in the doses ordered.

12½ noon. He had had no sickness since 9 A.M. The bowels continued relaxed. He had had short sleeps at intervals, the eyelids only half closed. His countenance was better. The surface was warm. He was restless; and had not passed any urine. He evacuated the bowels in his bed. His pulse was 108. Thirst continued.

3 P.M. He had been sick half an hour previously, rejecting the medicine. In other respects, he remained the same. Pulse 100.

7½ P.M. He had not been sick again; the bowels were still relaxed. His lips were now florid; yesterday at this time they were quite blue. Pulse 96. I ordered a table-spoonful of beef-tea to be taken occasionally.

10 P.M. The bowels had not been moved since 7½ P.M.; nor had he been sick. No urine had yet passed. He had taken beef-tea twice, and liked it much. He had dosed for short intervals more tranquilly, with the eyes closed. When awake, he tossed his arms about, and sighed very much. He was directed to continue the medicine every two hours.

Nov. 3, 6½ A.M. The father came to my house, bringing with him the first urine (3ij) which had been passed since Tuesday midday. An interval of thirty-six hours had elapsed; for this occurred at 12½ on Wednesday night. The bowels were still loose; there had been slight sickness once; and he had taken half a pint of beef-tea during the night.

9½ A.M. He lay on his side in a tranquil sleep, and had been so for three-quarters of an hour. The countenance was rather flushed. The dark areolæ of the eyes were subsiding. He had had one motion of the same character since 7 o'clock. Urine had been passed several times. Pulse 90. He was not roused by the manipulation. I left him asleep, after waiting thirty minutes, ordering a continuance of the medicine and beef-tea as before, with alum-whey *ad libitum*.

2 P.M. He continued much the same, but was very delirious two hours since, and could not be kept in bed.

9 P.M. The face was very flushed. The tongue, which had never presented any remarkable appearance, was now florid and dryish. He had slept two hours, with the exception of a few minutes, when he turned in bed. He had passed urine abundantly, and had but two motions since 2 P.M.: the last, though but slightly stained, had for the first time a fæculent odour. Pulse 80, of moderate strength. He complained of great exhaustion, and extreme soreness and weariness of extremities; also more or less of pain in the region of the stomach, of which he had complained at every visit I paid him. He vomited once, after too large a draught of whey. The medicine was ordered to be taken every four hours.

Nov. 4. The following is the history of the night of the 3rd, from the father's notes. He had a slight motion at 9½ P.M.; went to sleep at half past; awoke at 11, and had some whey. There was then slight wandering. He went to sleep at quarter to 12; and awoke at 1 A.M., and took medicine. He had a motion, much improved, at 1½ A.M.; he took some beef-tea; at 2½ A.M. he had a little soda water, then fell asleep, and slept till 4 A.M. He took a wineglass-

ful of beef-tea, fell asleep immediately, and slept till 5½ A.M. The bowels were moved; he took medicine; then dosed, and moved again at a quarter to 7 A.M. He did not ask for drink above once during the whole night.

11½ A.M. The countenance was improving. There were blotches on the cheeks like ecchymoses. Pulse 72. There was slight thirst and headache. The bowels were still loose. Urine was abundant. The pupils were natural.

9 P.M. He continued much the same. Pulse 72. The skin was not particularly hot; the tongue was clean. He complained of great soreness all over the body, and slight headache. He had slept at intervals during the day. He had had six motions since 11½ A.M. He had eaten a piece of biscuit, and a little toast soaked in beef-tea. The medicine, whey, beef-tea, etc., were continued.

Nov. 5, 9½ A.M. He had passed a very tolerable night, and had no wandering. He had had six motions since nine last night; they were now unequivocally tinged with bile. He complained of intense soreness and headache. The pupils were natural. The urine was abundant. Pulse 72. Tongue clean. Thirst moderate. A drachm of compound tincture of cinchona was ordered to be taken three times a day in water.

8 P.M. He had had six motions since my last visit. The pulse was still 72. The tongue was clean. The skin and head were cool. He had had some disposition to eat. He amused himself this afternoon by looking over some favourite books. Half a drachm of compound tincture of camphor was added to each dose of the bark.

Nov. 6. There was nothing worthy of remark, except that the evacuations had assumed a perfectly bilious appearance.

Nov. 7. He had a perfectly healthy stool to-day, and took a light nourishing diet with relish.

Nov. 12. He was gradually gaining strength.

On the 9th, a rose-coloured eruption made its appearance, which extended pretty generally all over the body, and declined on the fourth day. It had the appearance of typhoid fever eruption, as was also remarked by Dr. Cormack, who saw the case.*

CASE II. Charles D., aged 7, brother to preceding, had relaxed bowels all day on the 5th November, which the parents did not know until evening, when the child appeared very ill, and he told them he had been many times in the day. Having medicine in the house, his mother gave him a dose of sulphur mixture, and he went to bed at 9 P.M. He slept till three, when he had a call from the bowels, and was sick. He then took another dose of the sulphur mixture. In half an hour he fell asleep, and slept till 8 A.M. He was then again relaxed and sick.

At 10 A.M., Nov. 6, I was requested to visit him. His mother had dressed him; the little fellow was sitting in a chair, with his head reclining against its back. His lips and hands were livid and cold. The dark areolæ around his eyes were very pronounced. He had had a motion, and was sick just before I arrived. These evacuations were characteristic of the disease. He passed no urine.

I saw him at 1 P.M., and at 7 P.M. His urgent symptoms had abated. He was neither so sick nor so relaxed, but the evacuations were the same. He had severe pain in the abdominal region, but no cramps of the legs.

10 P.M. There was more general warmth of surface. The countenance was better; his bowels were now nearly quiet. He said he felt better, and that the pain in his belly was gone.

Nov. 7th. 9 A.M. He had had a very restless night, with delirium, constantly getting out of bed, and wanting to put on his clothes. He had rejected everything that he had taken during the night. At 5 A.M., he fell asleep, and slept till eight o'clock. He then had a dose of medicine, which he retained. His bowels had not been moved after my visit last night, until this morning. In this evacuation

there was a little colour. The first urine was passed this morning at 4 A.M.: he had not previously passed any for twenty hours. It amounted to about an ounce and a half, of sweet odour, and pale yellow colour.

5 P.M. He had been asleep nearly all day, and had no sickness. One feculent evacuation had passed.

Nov. 8th. He was nearly convalescent.

The father of these children was attacked suddenly with sickness and diarrhoea. He took a full dose of the medicine, and went immediately to bed. In a few hours, he rose perfectly well.

CASE III. Sarah C., aged 27, was perfectly well on Nov. 6th. At 3½ A.M., on Nov. 7th, she was seized with bowel complaint. She described her sensations as "a boiling in her inside". The bowels were relaxed a great many times on this morning. She went out for a walk, thinking it might do her good; and was out an hour and a half. When she returned, she was very giddy and relaxed. She went to bed at 7 P.M., and slept till eleven, when she was roused with pain and relaxation, and did not sleep after this. The bowels were relaxed all the night, without pain.

Nov. 8th. She continued relaxed all the day.

Nov. 9th. She could scarcely rise from her bed in the morning to attend to her children, as she felt so exhausted. At 9 A.M., she sent to a druggist for medicine. Before the messenger returned, she was very sick. The Board of Health mixture was sent. Every dose was rejected, and the bowels continued relaxed all day. The evacuations, as described, were quite characteristic.

At 3 P.M., she had severe pains in the shoulders, back, and chest, which came on like cramps. She had slight cramps in the legs.

The above is the history of the case before application was made to me, in part obtained subsequently from the woman herself, and in part from the messenger who came to my house at a quarter past five. This person said she was now very dark about her eyes; her lips were blue; she was cold; her feet and hands were blue and cold. She vomited and was purged at short intervals, and had cramps in her legs. I gave the sulphur mixture, and ordered a dose every quarter of an hour. In three hours and a half, the messenger returned, saying that the bowels had not been moved since the first dose of the medicine was taken, but the sickness continued. Her appearance was much improved; and, under the use of bottles of hot water, warmth had returned to the surface. I continued the medicine. I ordered the female attendant to report to me at half-past ten. She did not come.

Nov. 10th. 9 A.M. The attendant arrived, saying that the bowels had not been moved all night, but that the sickness was still distressing. In all other respects, the patient was better. I ordered a neutral effervescent mixture to be taken every quarter of an hour, and medicine to be continued every two hours.

I first visited her at 12½. She was lying in a very exhausted state, with a feeble pulse and sunken countenance. She had been sick but once since half-past nine, and said she felt considerably better. She had not passed any urine since 4 P.M. yesterday.

7 P.M. The sickness and diarrhoea had returned. She had passed about an ounce of urine. The evacuations from the bowels were faintly tinged.

9½ P.M. The messenger said that she was better. Ordered to continue the medicine.

Nov. 11th. 10 A.M. The sickness did not entirely leave her till eleven o'clock last night, when she fell asleep, and slept till 1 A.M. The bowels had been relaxed four times during the night, without pain. She was not so thirsty. The motions were improving. The urine was very small in quantity, and not more than an ounce during the night. She was now passing the most of her time in short snatches of sleep.

Nov. 12th. Noon. She was dosing comfortably. Her pulse was feeble, 90. Thirst was moderate; there was no sickness; the bowels had been moved; the evacuations were nearly natural in colour.

* Was not this a case of typhoid fever with the choleraic type? The designation of the case is, however, of little importance, as its history is so well and so fully given by Mr. Grove.—EDITOR.

Nov. 13th. She was in a very feeble state, but had no unfavourable symptoms.

Nov. 14th. She was taking bark, and getting on well.

NOTE. Many cases of diarrhoea, with and without vomiting, have occurred during the last six weeks, all of which have been treated by sulphur; in some few cases, a small quantity of opium has been administered in conjunction with the sulphur; but I am inclined to think, from a more extended experience, that it might be omitted altogether.

Some persons have doubted whether the cases reported as successfully treated by sulphur were true cases of cholera: the above histories, however, may possibly remove this doubt.

Wandsworth, Nov. 16th, 1853.

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ESSAI SUR L'EMPLOI MÉDICALE DE L'AIR COMPRIMÉ. Par le Docteur CH. G. PRAVAZ. pp. 377. Paris: 1850.

[MEDICAL USE OF COMPRESSED AIR. By Dr. C. G. PRAVAZ.]

IN the ASSOCIATION JOURNAL for September 9th, we inserted an interesting article by Mr. POYSER on the treatment of chronic and other diseases by baths of compressed air. We have now before us a work by the late Dr. PRAVAZ of Lyons, in which the subject is more fully discussed.

The first chapter contains some preliminary observations on the mechanism of respiration in relation to atmospheric pressure. From his own observations, and those of other writers, the author concludes—

1. That the extent of forced inspiration or the development of the lung increases with the pressure of the atmosphere, up to a certain limit, which in general seems to be determined by the vigour of the individual.

2. Atmospheric pressure ceases to favour the expansion of the respiratory organs, when it begins to exceed the constantly decreasing difference which exists between the efforts of the inspiratory muscles and the elasticity of the walls of the thorax.

In the second and third chapters, the influence of atmospheric pressure on the chemical and physiological phenomena of respiration, and on the circulation, are examined.

In chapter fourth, the author examines the nature of the physiological phenomena observed in the ascent of high mountains, and in balloon ascents. Dr. Pravaz passes in review the observations of Dacosta (who, in the fifteenth century, was the first to apply the name of *mal des montagnes* to the affection under consideration), Bouguer, Saussure, Sherwill, Clarke, Rey, Pidwell, Mlle. d'Angeville, MM. Bravais, Martins, and Lepileur, Humboldt and Bonpland, Boussingault and Colonel Hall, Gérard, Blanchard, etc. We translate from this chapter the author's conclusions as to the cause of the affection. They may be compared with those of Dr. Speer, given in his paper on "Mountain Sickness", published in this Journal for January 21st and 28th.

"Dr. Brachet has very well explained the breathlessness and absolute exhaustion which are experienced after the least effort in a highly rarefied atmosphere. . . . According to the view of Liebig, an immediate consequence of the production of muscular action is, that a part of the muscular substance loses its vital properties, and is detached from the organ. At the same time that it undergoes this change, it fixes oxygen, and is then eliminated from the system in the form of carbonised or azotised compounds. The condition necessary for the continuance of the muscular efforts is then the introduction of a sufficient quantity of oxygen into the system. If this element is deficient through rarefaction of the atmosphere, the oxidation of the metamorphosed tissues is impeded, and the metamorphosis itself is arrested; rest alone, by accumulating in the organism, notwithstanding the imperfect respiration, a proper quantity of the eliminative gas, can re-establish the essential condition for the exhibition of the muscular force. This is what is observed in the ascent of high mountains, where it is sufficient to rest for some minutes to recover the power of proceeding, when this power has seemed entirely lost.

"Sometimes the necessity of furnishing to the system a sufficient quantity of oxygen, in order to maintain voluntary and involuntary motion, and the cerebral functions, is not satisfied by rest. Sleep then seizes on individuals who are plunged in a very rarefied atmosphere; and it may be considered as a resource of the conservative power of life, to reserve the small quantity of oxygen absorbed, for the production exclusively of the movements of the heart and chest, without which life would soon cease.

"There is a symptom of mountain-sickness which, under all latitudes and at different temperatures, appears more constant than others, and increases in tolerably exact proportion with the altitude which is arrived at. It is the congestion of the mucous membrane of the mouth, nostrils, and eyes, and of the brain.

"This will be understood when we reflect that one of the exciting forces of the circulation in the veins, and therefore in the capillaries, decreases in proportion as we are elevated above the level of the sea. The higher the altitude we reach, the less actively the blood will be attracted towards the right cavities of the heart, and the more will this fluid tend to engorge parts where the respiratory act is most commonly felt most powerfully. . . .

"The force of impulsion of the left ventricle, and the greater calibre of the arteries ascending to the head, are the only individual circumstances which may cause, at equal altitudes, a variation in the tendency to hæmorrhages and to apoplexy, which is produced in high mountains by the weakening of one of the powers which concur in bringing back the venous blood to the central organ of circulation.

"Mountain sickness presents another symptom whose frequency appears to be also in proportion to the altitude; for it is especially in the ascent of the Cordilleras and Himalaya that it is observed. This symptom, which no one has hitherto attempted to explain on physiological grounds, is manifestly produced by an impediment to the circulation in the portal venous system: it is characterised, in fact, like congestion of the liver and abdominal viscera, by vomiting, cramps of the stomach, and intestinal pains." (pp. 80-3.)

In chapter fifth, we find a consideration of the physiological effects produced by the condensation of the atmosphere. The construction of the diving-bell is intimately connected with this subject; and we hence find reference to the diving-bells of Sturmius, Halley, and Spalding, and a copy of a letter addressed by Dr. Hamel to Professor Pictet of Geneva, giving an account of a descent in a diving-machine near Dublin.

The results of condensed air in mines and in the diving-bell have so far been considered only as accidental results; but, in 1783, the Society of Sciences at Haarlem proposed the following questions:—

- "1. Describe the apparatus most fitted for making experiments on condensed air in the most convenient and certain manner.

- "2. Examine, by means of this apparatus, the action of condensed air in different cases; for example, on animal life, on the growth of plants, and on the inflammability of different kinds of air."

Dr. Pravaz observes that no practical answer had for many years been given to these questions:

"It is only in late years that the solution of the questions proposed more than sixty years ago, has been perseveringly followed out; and it is to Dr. Junod that we are indebted for taking the true initiative in these researches."

In a memoir on the effects of the condensation of the air on a healthy man, presented to the Academy of Sciences in 1834, Dr. Junod wrote:

"When the natural pressure of the atmosphere is increased by one-half, the following phenomena are observed. The membrana tympani being pressed towards the internal ear, becomes the seat of an uncomfortable sense of pressure, which is however gradually dissipated as the equilibrium is re-established, probably by the introduction of the condensed air into the cavity of the tympanum through the Eustachian tube. The respiratory act is performed with new facility, the capacity of the lungs for air seems to be increased, and the inspirations are deeper and less frequent than ordinary. At the end of a quarter of an hour, an agreeable heat is felt in the interior of the chest. The circulation appears to be modified; the pulse is frequent and full, and is compressed with difficulty; the calibre of the vessels

ficial vessels is diminished, and may even be completely effaced, that the blood, in returning to the heart, follows the course of the deep-seated veins. The intellectual faculties are excited; the imagination is lively; the thoughts are accompanied with peculiar pleasure; and, in some persons, a sort of delirium or intoxication is manifested. The muscular system partakes in this increase of activity; the movements are easy and energetic, and appear more certain. The functions of digestion and secretion (especially of the saliva and urine) are performed with ease. One would say that the weight of the body is sensibly diminished; at least, such is the sensation experienced by a person shut up in a condensing apparatus."

It appears that the merit of first applying condensed air in the treatment of disease is due to Dr. Junod. The rest of the chapter is occupied with a discussion of the different results obtained when the whole body is immersed in a bath of condensed air, and when only a part is so treated; and with a brief description of the physiological effects of the compressed air-bath.

Chapters six to fifteen are devoted to a description of the treatment of the following diseases by compressed air: phthisis in the first and second stages; Pott's disease, and certain diseases of the hip-joint; rickets; deformities of the spine and chest (as a preventive, or rather tardative, in the early stage); chlorosis and anæmia; different kinds of deafness; chronic congestion of the brain and spinal cord; dyspepsia, and other affections connected with the pneumogastric nerve; and poisons, either introduced from without or generated within the body.

The paper of Mr. Poyser, to which we have referred, renders it unnecessary for us to dwell longer on this subject. We would only recommend the work of Dr. Pravaz to the attention of those who may be desirous of examining for themselves the efficacy of the plan of treatment which it advocates.

PATHOLOGICAL AND PRACTICAL TREATISE ON EPIDEMIC CHOLERA: ITS HISTORY, CAUSES, VARIOUS FORMS, AND TREATMENT. By O'B. MAHONEY. pp. 190. London: 1853.

The author had extensive experience of cholera in Ireland, during the epidemics of 1832 and 1849; and has thus been enabled to make a useful contribution to our knowledge of the disease. The principal topics considered are: 1, the history and exciting cause of epidemic cholera; 2, its proximate cause and pathological effects; 3, its predisposing cause; 4, its definition; 5, its symptoms; 6, its prognosis; 7, the appearances after death; 8, the treatment; 9, illustrative cases; and 10, means of prevention.

Passing over the pages devoted to the history and pathology of cholera, we arrive at the author's definition of the disease, which is as follows:

"**DEFINITION OF EPIDEMIC CHOLERA.** Vomiting and purging of sero-lymphous matter; spasms or cramps of the muscular fibres, particularly the muscles of the extremities; general prostration of the vital energies; universal collapse. After a few hours' reaction, or insensibility, coma, and death."

The account given of the appearances of the body after death is not of much value, as no notice is taken of the diversity of appearances caused by the diversity of the stage of the disease in which the patient has died. One general description is given as applicable to what is to be seen in the bodies of all cholera patients.

The most interesting part of the volume is that in which the treatment is considered. The observations on this subject are arranged so as to apply to the different stages of the disease, which are designated: 1st, choleraic invasion; 2nd, cholera; 3rd, cholera with collapse; and 4th, the sequelæ of cholera. It is judiciously remarked:

"Cholera is a continued series of morbid conditions constituted of distinct phases, each well characterised by definite symptoms, and requiring, according to certain associations of circumstances, frequently opposite modes of treatment. A search after specific remedies would therefore only give evident indications of a reckless intrepidity, totally incompatible with a just estimate of professional character, and of a woeful lack of a

due regard to the safety of the community. It is well known to those who steadily addict themselves to the pursuit of truth in any line of thought, that disturbance and disappointment frequently arise, notwithstanding their utmost efforts to the contrary, from the incessant intermixture of erroneous ideas allied to the subject of which the mind is labouring to make itself master, and which take them from the principle of mental association: therefore it is of the first importance in the investigation of cholera to exclude altogether the notion of a specific, and to steadily keep before our mind that this disease must be subject to the same laws of pathological inquiry as are applicable to every other malady, the peculiar characteristics of cholera consisting in the intense severity of the symptoms, and in the rapidity with which the morbid changes occur." (pp. 131-2.)

We cannot sanction the author's use of the lancet in the first stage—or in any stage—of cholera, even though the practice is only recommended for "robust persons with a full and frequent pulse".

The following passage seems a fair specimen of the sort of facts upon which calomel in large doses is recommended.

"It is generally conceded, that calomel and opium in conjunction best assist in restoring the healthy functions of the several organs. This combination, in the proportion of five grains to one, ten to two, or even fifteen to three grains of opium, may now be administered, and repeated if the first dose be rejected, or if otherwise necessary. The efficacy in this stage of two grains of opium and ten of calomel is positively great, when preceded by turpentine frictions, etc., and immediately followed up by an enema composed of ol. terebinth. ʒij; ol. olivar. ʒj; aq. calid. ʒiss." (p. 81.)

We feel thoroughly satisfied in our own minds that the turpentine frictions and turpentine enema may be trusted to without the five or fifteen grains of calomel, and we believe the opium may be generally used much more sparingly.

Turpentine and creasote are favourite remedies with Mr. Mahoney in cholera; and at this we are not surprised, for they have only to be fairly tried to be found reliable in most cases. Calomel is always kept in view by Mr. Mahoney; and this drug is constantly getting the credit of what seems to be clearly due to other medicines, particularly to creasote and turpentine. To arrest the serous discharges, he chiefly seems to prescribe this mixture—

R Creasoti, et
Acid. acet. ʒij.
Sp. vini rect. ʒss. M. f. solutio.

Speaking of this solution, he says:

"From eight to twenty drops may be given in an ounce of any aromatic water, or of camphor mixture, every two hours or after each time the patient vomits."

"Every one must be aware of the difficulty sometimes experienced in allaying the violence of the sudden vomiting without nausea, of cholera patients, which so rapidly prostrates the strength. This solution of creasote and acetic acid, as we have observed above, admirably fulfils this indication; it excites no nausea, nor any other unpleasant symptom. Its action seems to be moderately excitant, antispasmodic, sedative, and perhaps styptic, allaying the burning sensation at the epigastrium, imparting an agreeable feeling of warmth in the stomach and bowels of the patient, and restraining the mucous surfaces; thus checking simultaneously both the vomiting and purging. That it acts directly as an astringent we are not prepared to affirm; but that it operates with efficacy in arresting the sero-albuminous discharges, poured out upon the mucous surfaces of the alimentary canal, we do not entertain the remotest doubt. We have, in short, repeatedly successfully treated cases of this type or stage of the epidemic with the creasote and acid solution, after one full dose of calomel and opium; but more frequently we have applied the terebinthine appliances conjointly." (pp. 90-91.)

Tannin, matico, nitric acid, acetate of lead, nitrate of silver, and various other medicines were prescribed by the author under particular circumstances. Without entering into details, we give the formulæ of two mixtures which he used in cholera.

R Decoct. matico ʒviij.
Pulv. tanninæ gr. xij.
Tinct. opii ʒj.

Vel

Rx Acidi nitrici dil. ʒij.
Mist. camph. ʒviii.
Tinct. opii ʒj.

One ounce of these mixtures, it is stated, may be taken every third hour.

Speaking of *cholera with collapse*, he advises calomel, but not in the poisonous doses advocated by some authors. Calomel, opium, and assafœtida, is a favourite combination. He says,

"When the constitutional effects of mercury were produced on a patient subjected to the mode of treatment detailed, we had remarked that rapid convalescence usually followed. Should diarrhœa precede the attack, and if the serous fluid be passing in quantity from the bowels of the patient, notwithstanding the employment of the terebinthine enemata,—the creasote solution, the full dose of calomel and opium, and the counter-irritations,—the enema ought to be repeated, with the addition to it of one drachm of tincture of opium; and the following powders substituted for the pills of calomel, opium, and assafœtida, if cramps be absent:

Rx Chlor. hydrarg. gr. ij.
Ext. opii gr. 4.
Pulv. tanninæ gr. iij.
" aromat. gr. iv. M. F. pulvis."

Four of these powders are to be made up; and one is to be given every second hour in some aromatic water, with six or eight drops of the creasote solution already described. Mr. Mahoney prefers these powders "for many reasons to acetate of lead": but he says,—

"Acetate of lead, when administered in large doses, in combination with opium and acetic acid, is sometimes of use in the cases just indicated. We have tried acetate of lead in scruple doses, dissolved in distilled vinegar as enemata, with some advantage in these cases; but prefer the terebinthine preparations." (pp. 99, 100.)

Nitrate of silver is thus mentioned:

"When there has been reason to apprehend the presence of ulceration low down in the colon and rectum, which is indicated by a feeling of pain or uneasiness referred to the part, the evacuations from the bowels being sudden and impetuous, we have used enemata composed of from six to twelve grains of nitrate of silver dissolved in four fluid ounces of distilled water, with seemingly considerable advantage. Should the pain be aggravated by this, it will be desirable to follow it immediately with an emollient or an opiate enema." (p. 126.)

To review thoroughly this little volume would be to write a treatise on cholera. We will, therefore, only say that in the glance which we have taken at it, we have not been able to do as much justice to the author as we could have wished. His experience is instructively communicated; and the volume is one which cannot be perused without profit.

PERISCOPIC REVIEW.

TOXICOLOGY.

POISONING BY ACONITE: RECOVERY.

Dr. PUTNAM stated the following case on February 14th, 1853, to the Boston Society for Medical Improvement. It is thus reported in the *American Journal of the Medical Sciences* for July, p. 69.

"The patient swallowed by mistake, a teaspoonful of the saturated tincture of aconite at seven, A.M. Not being fully aware of the danger, she merely took a seidlitz powder. In fifteen minutes, she had retching and burning pain in the stomach. Ipecacuanha was immediately administered, by which she was freely vomited. The skin was at this time cold: the pulse was 100, feeble, and regular: the fingers were spasmodically extended: convulsions of the whole body were frequent, but of short duration: the mind was not particularly affected. Friction with ammonia, mustard, etc., were assiduously employed, and copious draughts of arrow root, with occasionally brandy and water, and spirits of sulphuric ether, were given. Three hours afterwards, she continued to complain of burning pain in the stomach and bowels, (but it was not so severe,) of pain in the throat, thorax, and lower part of the spine. She

had almost incessant retching and spitting, irregular and spasmodic respiration, and the pulse feeble, 120, intermitting after every second stroke. She had just had one general convulsion, lasting about five minutes, and there were frequent slight spasms of various parts, especially of the fingers. The pupils were dilated, but contractile on exposure to strong light. The mind was clear. Tinct. opii ℥xx were prescribed to be given occasionally. Immediately after taking the laudanum she became more comfortable; the spasms and other symptoms being less severe. At night, the symptoms had become regular, and on the next day she was apparently well."

FATAL POISONING BY ACONITE ROOT TAKEN IN MISTAKE FOR HORSE RADISH.

About a fortnight ago, an inquest took place at Bristol, in a case of the above description. We copy the following account from the *Times*.

"Some time since, Mr. Joseph Russell, a wine merchant at Bristol, died, bequeathing, among other legacies, one to a distant relative, named also Joseph Russell, a bookseller, residing at Chard, Somersetshire, and who during the past week came to Bristol respecting it. On Sunday last [8th Nov.] he dined with one of his brothers, a coachmaker resident in Bristol, and he partook of some roast beef, he at the time being in excellent health. He remarked that roast beef was nothing without horseradish, and his brother's wife stated that there were some horseradish roots in the garden, and the servant was sent to dig up one. The root was scraped in the usual manner, dressed with vinegar, and placed on the table; both his brother and the deceased partook of it, but said at the time it must be very bad horseradish, as it did not possess the usual flavour. Mrs. William Russell, disliking horseradish, did not partake of it. Soon after dinner, Joseph Russell complained of a peculiar tingling sensation in his hand and arms, and this feeling rapidly increased till he said he felt it creeping round his neck. His brother replied, "Oh, perhaps the dinner has disagreed with you; let us take a walk and you will be better." They accordingly went towards Hillgrove-street, where the third brother resided, and on the way the brother William complained of a similar sensation, though in a slighter degree. The symptoms in Joseph became more alarming, and, on reaching his brother's house, he sank into a chair, exclaiming, "I am poisoned, for I feel one side of me dead already." Brandy was given him, and medical aid instantly procured, but he rapidly sank, and died in about an hour afterwards. The other brother, who had taken much less of the supposed horseradish, was much affected, but is now recovering. On an examination it was found the root was the *aconitum napellus*, wolf's-bane, or monk's-hood, which, particularly at this season of the year, strongly resembles horseradish, but which is a strong narcotic poison. An inquest has since been held upon the body of the deceased, and a verdict was returned of "Died of strong narcotic poison, *aconitum napellus*, taken in mistake for horseradish."

FOUR GRAINS OF EXTRACT OF BELLADONNA, AND FOUR GRAINS OF OPIUM, SWALLOWED WITHOUT DETRIMENT BY A CHILD NINE YEARS OLD.

A case of which the above is a summary, reported by Dr. COALE, is given by the *American Journal of the Medical Sciences* for July, p. 69.

"The child swallowed two suppositories, each containing two grains of the above mentioned narcotics. It went to sleep not long after: the mother awoke it at the end of four hours with much difficulty, when very free vomiting ensued, producing great exhaustion. The drugs were taken at noon, and at seven P.M., the child seemed only a little fatigued and sleepy. It had eaten dinner immediately before swallowing the poison, and Dr. Coale suggests that this may have retarded absorption."

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

NEW METHOD OF ADMINISTERING SULPHATE OF QUININE.

In the *Revue Médico-Chirurgicale*, for September 1853, we find a notice of an article by Dr. BERTELLA on a new method of administering sulphate of quinine. This plan consists in combining with the quinine an equal quantity of tartaric acid, which has the effect of not decomposing the salt, but of rendering it more soluble, and of causing absorption to take place more readily. He gives at a dose three grains of disulphate of quinine and three of tartaric acid. The dose at the commencement is from six to twelve grains of each.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 8TH, 1853.

JAMES COPLAND, M.D., F.R.S., President, in the Chair.

PRESIDENT'S ADDRESS.

The PRESIDENT, on taking the chair, congratulated the society on the commencement of this its fiftieth session, and on the publication of the thirty-sixth volume of the *Transactions*. He trusted that during the ensuing session the more experienced fellows of the society would still give their countenance and support to the meetings, and enter into the discussions which often formed a very important part of their proceedings. He had hoped that early in the session, a sufficient number of papers would be sent in to engage the attention of the society, but he regretted to say that so few had been received, that it was necessary that he himself should introduce one on the present occasion. In a society like this, holding justly so high a position in the estimation of the public and the profession, second to none in usefulness, and only to one in rank and age, it was, in his opinion, most desirable that all expressions of approbation or disapprobation on the reading of a paper, or on the observations made, should be avoided. They should be received with respect; but without any outward expression.

CERTAIN PATHOLOGICAL STATES OF THE BLOOD, ESPECIALLY CHARACTERISING MANY DANGEROUS DISEASES.

BY JAMES COPLAND, M.D., F.R.S., PRESIDENT.

The author observed that the alteration of the blood in severe and malignant forms of disease had been discussed by him in his work on *Practical Medicine*, more particularly under the heads of Abscess, Absorption, Blood, of the Causes and Pathology of Disease, etc., and his views of the morbid changes in these disorders had been long before the profession; but he thought, by bringing them before the society in a more practical and connected form, he might direct attention to matters of great importance in relation to the sources of contamination, and the channels through which poisons passed into the blood. The morbid state to which he more particularly directed attention might be termed contamination or vitiation, according as the causes might be external or internal: external agents and influences, as well as internal vital and functional changes, might equally be the sources of this vitiation, or both might co-operate. If a cursory view of the sources of vitiation or contamination of the blood were taken, they would be found to be numerous, varied, and often associated, and to infect or invade the blood by one or more channels.

These morbid states of the blood might arise—*First*, from causes acting on the digestive canal, and the vessels proceeding from this canal; *secondly*, from agents taken in by respiratory action, and through the respiratory surface; *thirdly*, from causes acting upon any part of the external surface or any tissue or part of the frame; *fourthly*, from the arrest or from the impeded or imperfect performance of any depurating or eliminating function; *fifthly*, from the passage of any morbid purulent secretion or excretion into the circulating mass; and, *sixthly*, from the conditions of vital influence, or the organic venous power endowing the heart and bloodvessels, and from the reciprocating influence exerted by the vascular system, and the hæmato-globulin circulating through the system.

Illustrations were given of the operations of the several causes of contamination passing through these channels. The effects of various kinds of food; emanations from numerous sources of pollution; air vitiated by overcrowding; absorption by an abraded, punctured, or incised wound; the passage of sanious, puriform, or other morbid matters, into the circulating current; defective action in, and imperfect discharge of, the several depurating functions, so necessary to the preservation of a healthy state of the blood; and, lastly, influences or agents, extrinsic or intrinsic, which either excite or depress the organic nervous system, reacting on the vascular system, and changing the blood circulating in it. The author adverted at some length to the operation of these conditions on the blood itself, manifested by a destruction or waste of the hæmatoglobulin or red corpuscles. He believed that these changes consisted—*first*, in a metamorphosis of the globules, or a partial vital conversion or decomposition of them; *secondly*, in a portion of the globules or hæmatoglobulin being converted into bile; *thirdly*, by the epithelial cells thrown off by the several emunctories, especially the kidneys, skin, and intestinal mucous follicles, being trans-

formed blood-globules; and, *fourthly*, that they are also partly expended in the elaboration of the genital secretions in both sexes. These were the chief modes or sources of waste. Having referred to Dr. Simon's arrangement and nomenclature of blood diseases, the author passed in review some of the more remarkable and characteristic conditions of malignant diseases arising from blood contamination, and concluded by relating cases in illustration of these conditions.

Mr. STATHAM hoped that the society might hear something more definite as to the meaning which the author gave to the word sanies, and hear how it was absorbed into the system, whether by the lymphatics or by what vessels? Was the pus which we sometimes saw in large quantities in abscesses in the viscera, and which became afterwards absorbed, the same kind of matter as that which produced fever, etc., when it got into the circulation?

Dr. COPLAND replied, that sanies was a generic term which denoted pus in an altered condition, or a depraved secretion from an ulcerated surface. When the ulcer had lost its power of resisting the imbibition of the discharge, this was conveyed into the circulation rather, he thought, by the veins than the lymphatics, and disease was the result. He could not refer to the microscopic characters of the sanious matter to which he referred, but it was a contaminated discharge, and not consisting of healthy pus-globules. It was found in dissection wounds, foul ulcers, etc. Treatment was indicated in the early stages by the appearances which the discharge assumed.

Mr. HOLMES COOTE inquired, what proof we had of what was called purulent infection of the blood. Looking at the fact that observers had failed with the microscope to determine with certainty the nature of the globules found in the blood in these cases, he questioned whether we were correct in assuming that these bodies were really pus-globules. It had, on the contrary, been shown that a portion of a diseased organ might be removed and taken into the circulation, and this independent of what was called purulent infection.

Dr. COPLAND had said that pus had been found in the blood of inflamed veins, but not in the vena cava or right side of the heart; that pus in a changed state introduced into the circulation was carried to the capillaries, and gave rise to the formation of matter in various parts; and that pus was not detected in the blood as pus. He would therefore yield upon the point of the presence of absolute pus in the blood having been proved. In these cases, the pus was changed and the blood was changed. It was not common for large collections of matter, as had been remarked by Mr. Statham, in the liver or other organs, to be carried out of the system by absorption. He had seen such cases, however, and they were not inconsistent with his views; but these cases were very rare, and only occurred when the powers of the system were supported, and the eliminating processes facilitated and encouraged.

[This being a ballot night, and the first meeting of the session, the rooms were crowded.]

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

SESSION XXXIII. FIRST MEETING.

WEDNESDAY, NOVEMBER 16TH, 1853.

JAMES Y. SIMPSON, M.D., President, in the Chair.

ON PEDUNCULATED EXOSTOSIS OF THE LONG BONES.

BY JAMES SYME, ESQ.

Mr. SYME remarked upon the loose and ambiguous manner in which the term exostosis had been employed by authors, and the consequent confusion in which the subject was involved. The opinion which Sir Astley Cooper had hazarded as to the origin of the disease in long bones, that it was due to excessive muscular action, he considered was sufficiently met by the two facts—*first*, that, as in the femur, the exostosis is found by the side of the tendon; and *secondly*, that it occurs on the distal phalanx of the great toe, where such a cause cannot exist. In young people, the tuberosities of the long bones are frequently enlarged, and occasion much alarm. Mr. Syme, in such cases, finds that symmetry is ultimately restored, and advises non-interference. In his opinion, the occurrence of such cases accounts for a large amount of the so-called orthopædic successes. The ordinary exostosis is not unlimited in growth; but, after a certain increase, it is found to remain stationary. A member of the profession, many years ago, presented himself to Mr. Syme, labouring under what he imagined was subclavian aneurism. Mr. Syme, on making the necessary examination, at once recognised the disease to be an exostosis of the first rib, situated close to the insertion of the scalenus anticus muscle. The subsequent history of this patient showed that the disease

did not increase in size. A lady of rank consulted Mr. Syme for a tumour growing into the pharynx, and expressed her wish to have it removed; but, as the tumour presented all the characters of an exostosis, and, from the history, had evidently reached its entire growth, Mr. Syme recommended non-interference.

As to the structure of ordinary exostosis, it presents a thin osseous lamina externally, and cancellated tissue within. It is sometimes covered by a thin coating of cartilage. Sir Astley Cooper's definition of this form of exostosis is very defective, and might apply to any bone of the body; and he includes under it two very dissimilar diseases, viz., simple exostosis, and the fibro-cartilaginous tumour of bone. Mr. Syme regretted to find Mr. Paget, in his lately published *Lectures*, making the same mistake. The two diseases differ *structurally*; the first presenting a simple bony texture, tipped with cartilage; the second, a cartilaginous matrix, with a bony shell. *Pathologically*, they differ: in the first, there is no tendency to increase, while no limitation can be placed to the growth of the second. Lastly, they differ *practically*. While the first may be successfully removed by the division of its neck, the second can only be extirpated by taking away the whole of the affected bone, or by section at a distance from the disease. Mr. Liston failed to make this distinction, and hence recommended amputation in the case of exostosis of the distal phalanx of the great toe—a practice which was always reprobated by Mr. Syme, and is now abandoned by the profession. With regard to the occurrence of the second form of disease in the upper jaw, Mr. Syme early saw the folly of attempting to dig it out piecemeal, instead of removing the whole bone. And as to the priority of having performed this operation, and any merit which might depend thereon, he would merely state, in passing, that he performed it on the 15th of May, 1829; and that an account of the operation appeared in the July number of the *Edinburgh Journal* of the same year. This fact seems to have escaped most authors of students' books, among whom he might mention Mr. Erichsen as the latest. In the case of the humerus, where this fibro-cartilaginous growth is of most frequent occurrence, Mr. Syme had many years ago removed successfully the entire arm for a growth of this kind, which was one of the largest on record. In another patient, where the tumour arose by a neck from the middle of the bone, and was about the size of an orange, the portion of the shaft from which the tumour sprang was included within two incisions, and the whole disease was removed. By the use of leather splints, the use of the forearm was in a great measure preserved.

To avoid confusion, Mr. Syme was of opinion that tumours formed by bone being developed around serous cysts, abscesses, etc., etc., should be named from the causes occasioning the growth.

The disease which formed the especial subject of this paper was most frequently met with on the inner side of the thigh, above the condyle, and at the neck of the humerus. Its neck varied from half an inch to an inch in length, and was always placed obliquely to the shaft. The tumour itself was nodulated, covered with cartilage, and of a pearly lustre, and had no communication with the surrounding parts. In a case which Mr. Syme had met with, where the exostosis was situated on the outside of the femur, similar characters were presented. About twenty years ago, Mr. Syme was consulted by a gentleman who presented an example of the disease in question. He recommended avoidance of violent exertion, and learnt from time to time that the tumour remained stationary. In February 1851, Mr. Syme was requested by Dr. Handyside to see his old patient, and found a very decided change. There was swelling and deep seated fluctuation. A cautious prognosis was given. Rest and a blister, to be followed by gentle pressure, were ordered; and the result was looked forward to with some anxiety. In a short time, all the untoward symptoms disappeared, and the exostosis was found to be in its original state. Another case, which fell under Mr. Syme's observation not long after, sufficiently explained these anomalous symptoms. A servant girl, in crossing from Fife to enter the hospital for the same disease, received a blow, which fractured the neck of the tumour, and detached it. Fearing suppuration, Mr. Syme cut down upon the loose exostosis, and found it lying in a bag of serum. On examination, all was explained; a synovial membrane covered the tumour, and was reflected in the form of a cyst, so that a double covering existed; and in the present case, from the violence applied, serum had been poured out between the layers. The other day, in company with Professor Simpson, he had seen a young lady who had suffered much agony from an exostosis on the inner surface of the neck of the

humerus, pressing upon the axillary plexus. From its situation, it had been deemed incapable of removal; but, on careful examination, Mr. Syme found that its origin could be traced by a narrow neck to the outer and back part of the arm, and, by an incision between the deltoid and the triceps, he was enabled to divide the neck by means of cutting-pliers, and successfully to remove the tumour. In conclusion, Mr. Syme called upon Mr. Lister to read an account of its microscopic examination.

Mr. LISTER here gave a very detailed and lengthened account of the microscopic appearances, which was not easily followed.

Professor MILLER was of opinion that Sir Astley Cooper's classification was not so far wrong; and he certainly thought that the one proposed by Mr. Syme was liable to equal misconception, from its including various kinds of tumours. Mr. Syme had mentioned their division into solid, hollow, and spicular; but under the solid would fall to be included the osteo-sarcoma and the osteo-cephaloma; under the hollow, abscess of bone and spina ventosa; and as to the spicular variety, a specimen had never fallen under his notice. Mr. Miller frankly confessed Mr. Liston's error in regard to the treatment of exostosis of the big toe, but only so far as Mr. Miller had had occasion to see the disease removed again and again on its reproduction; and, in his opinion, this reiterated operation was about as bad as amputation.

As to the priority claimed by Mr. Syme in the performance of ablation of the upper jaw, as a writer of students' books, (a title of which he was in no ways ashamed,) he had always done Mr. Syme justice; but he begged to remind the society that another individual claimed the merit of having first proposed the operation, and that, in Mr. Miller's opinion, was no small matter.

With regard to enchondroma, he had always taught that there were two varieties. One growing from the surface, and admitting of easy removal; the other internal, being developed in the interior of the bone. Of course, the practice differed widely in these two cases.

As to Mr. Syme's statement, that a synovial membrane covered the ordinary exostosis of long bones, he denied the fact of its being a synovial membrane at all. As in the case of other growths, the development of a serous cyst externally was of frequent occurrence; and, as was to be expected, an accumulation of serum took place from any exciting cause. This was no new discovery. Mr. Miller had always described it, and taught it to his students.

Professor BENNETT thought, that a greater similarity existed between the two varieties of tumour than had been acknowledged in the discussion. Their origin was the same. Cartilage was first formed, and subsequently underwent its usual ossific change. In his opinion, the only point of difference was in their seat: the internal and external surfaces of the bone being respectively affected.

The meeting separated after some further conversation, in which Professors Syme, Miller, and Bennett, Mr. Lister, and Dr. Cobbold took part.

EDITOR'S LETTER BOX.

MEDICAL STUDENTS.

LETTER TO THE EDITOR FROM GOLDING BIRD, M.D., F.R.S.

"No man careth for the student of medicine."—ASSOCIATION MEDICAL JOURNAL, p. 1008.

SIR,—Few, who are in any way conversant with the position of the medical student, when attending his duties at the hospitals and schools, could read the letter of "A Medical Student", contained in your last number, without some emotion. It is true that, as a class, they are too generally calumniated by the public, who know nothing of them. Too generally is it supposed that to be engaged in "walking the hospitals" is synonymous with being guilty of every kind of open vice and moral depravity. From an intimate knowledge of the habits and characters of the students of the large school of medicine to which I was for more than twenty years attached, I can bear witness to the many bright exceptions to this supposed general rule. Indeed, the comparatively small number who fell into habits of open vice or serious immorality was really remarkable, when, as is truly stated in the letter which has elicited these remarks, the student is surrounded by most of those temptations into which youth, when unguarded by higher principles, is too prone to fall. That a great change has, during the last ten years,

occurred in the habits and characters of all medical students, is a well known fact. The idle and irregular are put to shame by the examples of their industrious and more zealous fellow-students. The improved character of the medical education, imparted in our hospitals and colleges, has not been without its good influence, as it has left less time for idleness, and has consequently diminished the opportunities for seeking recreation in vicious amusements. But, above all, the influence of religion has been remarkably shown in exerting its hallowed power, protecting the student from those seductions to which, without its shield, he might have yielded. During my own studentship, a pious student would have been subjected to the bitter shafts of ridicule from those who were destitute of religious influences. Now, I am quite sure, he is respected by those who sit by his side in the lecture-room. During the last year of my performing my full duties at Guy's Hospital, out of four clinical reporters who were assigned to me, three were religious young men, two were teachers in ragged or Sunday-schools, one being an active member of the committee of one of the branches of the Church of England Young Men's Society.

Thus much I venture to say in defence of the character of the student of medicine; the type of which, the public, in its ignorance, is too apt to find in the caricatures drawn by the powerful pen of Dickens. There is an ample explanation of the origin of this calumny in the fact I once before had occasion to publicly allude to; that, in the days antecedent to the inauguration of the present effective system of police, when street riots were so frequent, every vagabond with a decent coat on his back endeavoured to arrogate to himself a quasi-respectability by introducing himself to the magistrate as a medical student.

In these remarks, I have confined myself to those *open vices* and *patent immoralities*, which would be visited by the rebuke of the society, into which the student would enter in his family associations. But this is at best a very low view to take of the standard of morality to which the student of medicine, who is daily called upon to mingle with the sick and dying, should attain. The appeal used by the writer of the letter "What can the Association do for Medical Pupils?" is one of the deepest interest. Although he has been led to remark that "no man careth for the student of medicine," he may feel assured that there are numbers of the members of his profession who devote many an anxious thought to their welfare.

When the ASSOCIATION is summoning its committees to consider various questions touching the *morale* of our profession, would it not be well, nay, is it not an imperative duty, to devote some time to the consideration of the grave subject alluded to in the letter of "A Medical Student"? Would not the axe be indeed laid to the root of a gigantic evil—one whence arises much of the bickerings, jealousies, and miserable heart-burnings in the practice of our profession—if something could be done towards the moral and ethical training of our students during the years of their most serious temptations; spent of necessity in the midst of the vices of our large cities and towns?

The "Medical Student" has suggested the general adoption of the collegiate system at all our medical schools; but those who know anything of the absolute inutility of the most stringent college rules in excluding vicious habits, where the heart desires to indulge in them, must be painfully aware that such a system, however desirable for other reasons, must fail utterly in producing the results anticipated by the writer.

From anxious and large experience, I am convinced that no great improvement will ever take place in the ethics of our profession, until the religious training of our pupils is made a matter of solicitude by those whose influence is respected by them, and whose example should guide them. Let me point to the great change which has occurred in the masses of young men in London, by the establishment of the Young Men's Christian Association. I happen to know much of the working and results of this society; and nothing can be more gratifying than to listen to the accounts given of its influence among young men, by those who have large numbers in their employment. This society is chiefly limited to those who are employed as apprentices and assistants in the various houses of wholesale and retail trades; but several members of our profession are among its active members. Only four days ago, I met, in consultation, a surgeon who is secretary to one of its West-end branches; and he informed me that one of its zealous members is at this moment a surgical officer of a large hospital.

I would venture to suggest that some association of a similar kind be commenced, under the auspices and patronage of the Medical and Surgical Association. I am sure there are many of its members who would emulate the zeal and energy of our

London merchants, and others, who conduct the management of the society to which I have alluded. If this were commenced by a small branch for each of our hospitals, or one branch for two or three when sufficiently near to each other, who could calculate the good influences which, by God's blessing, might result to the tone and efficiency of our profession, and the mutual happiness of its members?

Already does the nucleus of something of this kind exist in several of our hospitals. In more than one of them, several of the students meet together on one evening of the week for study of the Holy Scriptures and mutual edification. Only a week ago, some rules were placed in my hands by one of the students of Guy's, adopted at a previous meeting of a small Bible class which existed among them. The following are three of the rules which they proposed for the guidance of the society they were anxious to organise. These rules will shew the spirit that is afloat among some of the students. May it be the privilege of the ASSOCIATION to fan it into a bright light, and not to quench it by neglect!

Rule 1. That a medical Christian association be formed, composed of members of the profession and students.

Rule 3. That the object of this association be to promote spiritual religion amongst its members; and to diffuse the same among all others who come within the sphere of their influence.

Rule 4. That the means employed for these objects be the study of the Holy Scriptures, devotional meetings, addresses, and any other means which may from time to time present themselves.

I would offer an apology for the subject of this communication in a strictly professional journal, had it been any other than the ASSOCIATION MEDICAL JOURNAL. But this Association, in undertaking the great question of medical ethics, has shewn that its supporters regard the moral relations of the members of our profession to each other, and to the public, as a matter of not less vital importance than the improvement of medical science. Never will practitioners of medicine perform their mission so usefully, and with so much mutual happiness, as when permitted to adopt *in spirit* the inspired advice: "Finally, be ye of one mind, having compassion one of another; love as brethren; be pitiful, be courteous: not rendering evil for evil, or railing for railing; but contrariwise blessing."

I am, etc., GOLDING BIRD.

48, Russell Square, Nov. 16, 1853.

MR. KING'S PAPER ON THE FETAL HEAD.

LETTER FROM HENRY S. GAYE, ESQ. TO THE EDITOR.

SIR,—In the JOURNAL of the 4th Nov. there is a paper, on "the Condition of the Fetal Head, etc.," by Mr. King. As I imagine the publication of these original papers is for the purpose of spreading knowledge, and providing data on which may be founded judicious and orthodox treatment, it appears to me that it is desirable, if any ambiguity exist in the meaning of the paper, it should, if possible, be at once explained. Mr. King makes a few assertions which are startling, and advises the adoption of a mode of treatment which I cannot but think hazardous. He says, "This high degree of ossification of the cranial bones of the fœtus, I believe, more frequently renders the operation of craniotomy and destruction of the child necessary than does contraction or deformity of the pelvis." And again: "Instead of the fetal head being found fixed or resting on the brim of the pelvis, as is to be found in all illustrated representations of this operation, we should find it moveable, and the moment we touch it with a perforator it recedes, etc." The first quotation is an assumption requiring confirmation. As regards the second, I imagine few men would be inclined to craniotomize until the head of the fœtus was firm against or impacted in the brim of the pelvis. The next paragraph is odd. "I have never heard the child cry *in utero*; but I have heard one make a most frightful noise after the head has been broken down, and the brain smashed by the operation of craniotomy, while the body was still lying in the passage. Fortunately the bed clothes drowned the sound, but it produced such a very peculiar sensation on the tympanum of my ears, and the gentleman that was with me, that neither of us will ever forget it."

May I, with all due submission, ask Mr. King, What is meant by the foregoing? Does Mr. King wish to give to the profession as an original discovery, that although he does not assert that a child cannot cry *in utero*, yet, with a broken head and a smashed brain, a fœtus can give utterance to a frightful noise?

Again, does Mr. King wish to assert that the use of the

stethoscope, to ascertain the life or death of the child, is *awful practice, and trifling with a valuable life intrusted to one's care!* Must we pay no attention to the size of the pelvis, nor to the stethoscopic diagnosis, in cases of a high degree of ossification of the foetal head?

Must we plunge our fingers into the vagina, run the tips of them against "a high degree of ossification," and as quickly let the perforator take the place of the finger? I do agree with Mr. King in thinking that the labour bed is not the place, nor the time, for *practising* the ears to sounds, or *preparing* ourselves to become stethoscopists: but is that any reason why a practised and perfect ear should not be combined with a ready and educated finger? True, we have "to muster all our moral courage to make up our minds to coolly and deliberately take away the life of a human being;" therefore are we not to satisfy our minds that we are possibly not doing anything of the kind, but merely removing an inert and lifeless mass? According to Mr. King, all that is required "is a certain amount of self command and moral courage, with a thorough knowledge of the vaginal passage, the pelvic cavity, and the situation of the uterus, a nurse, a female friend, and a friend to back one."

Mr. King has performed craniotomy fifteen times; according to his own showing, it must several times have been on account of the highly ossified condition of the head of the child. The notes of such cases would be most interesting; the thickness of the calvarium, the state of the sutures, etc. The records might be valuable addenda to our obstetric knowledge, especially as at present the general opinion is, that when the head is very large, the bones are seldom much ossified. In the case Mr. King refers to, of the head having been fractured at birth, the fracture, I should have imagined, was the natural result of a child's head coming into violent contact with a hard floor.

I am, etc., HENRY S. GAYE.

Taunton, Nov. 7th, 1853.

COMPLETE ALOPECIA.

LETTER FROM JOHN BARCLAY, M.D., TO THE EDITOR.

SIR,—Another case of alopecia is described in the enclosed letter to me from a member of the Association.

"DEAR SIR,—I have just read with much pleasure your account of a singular case of alopecia at page 902 of our JOURNAL.

"A similar instance occurred to myself here some years ago, in a patient at the Salop Infirmary. The man (who, I fear, has been dead some years) was then beyond the middle period of life, had a pale exsanguine look, was evidently feeble, and had not, so far as I can recollect, a single hair anywhere. The hairs of the scalp, pubes, chest, axillæ, and even the eyebrows and eyelashes, had disappeared. I wish I had taken as full notes of the present and former habits and health of the man as you have done; but what I have remembered is much at your service if you are collecting cases. There was certainly no obvious cause for the deficiency.

"I am, etc.,

"HENRY JOHNSON, M.D.

"Shrewsbury, Oct. 15th, 1853."

The case which I published in the JOURNAL of October 14th, and those of Mr. Morris (October 21st) and Dr. Johnson, are the only ones with which I am acquainted. I am sorry that no available hint as to treatment has yet been elicited.

I am, etc., JOHN BARCLAY.

Leicester, Nov. 14th, 1853.

ADVICE GRATIS TO MEMBERS OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

LETTER FROM JOHN CHURCHILL, Esq., TO THE EDITOR.]

SIR,—I think you must agree with me, that the manner in which you introduced my name into a leading article in the last number of the ASSOCIATION JOURNAL, demands some notice from me.

The character of a publisher is public property, and it is right that his "doings," if wrong, should be subject to censure. On the same principle, his name and reputation must not be allowed to be unjustly trifled with.

I regret, Sir, that in reply to observations which the Editor of the *Medical Times and Gazette* made in his editorial character, you have introduced my name, and in a manner which leads to the formation of a very low estimate of the dignity of an editor's position; for that gentleman, you imply, would allow me to write or dictate a leading article, simply because I am publisher of the Journal. My character is not of yesterday; for more than twenty years I have been before the profession

as a medical publisher; and I hope I may be permitted honestly to add, that by my enterprise I have contributed to the advancement and improvement of its literature.

I have, as publisher of several periodicals, been happily and most agreeably associated with many gentlemen occupying influential positions in their profession, and I appeal to them thus publicly, if I ever in any one instance attempted to interfere with or influence their opinions? I may take this opportunity of adding, that I have never asked for a favourable or biased review of any book I have published: and I appeal to you, Sir, as your publisher while you were Editor of the *Monthly Journal*, to confirm the truth of this statement.

The fact is, I know nearly as little of what each current number of the *Medical Times and Gazette* will contain as you, Sir; and I can affirm, that the article in question was not mentioned to me, nor did I know of its purport until after the number was published.

I am, etc.

JOHN CHURCHILL.

Princes Street, Leicester Square, Nov. 23, 1853.

[Mr. Churchill's letter is elicited by thanks rendered to him for gratuitous advice given in the *Medical Times* (which is his property) to members of the Association. It appears that Mr. Churchill considers the editor the only party to whom thanks are due. So be it. All thanks, all praise to the editor of the *Medical Times*, for gratuitously advising the Provincial Medical and Surgical Association to stop its journal. From respect to Mr. Churchill we publish his letter; but in doing so, we must state that the topics to which he refers were not mooted in our leader. We only spoke of gratuitous advice. EDITOR.]

NEWS AND TOPICS OF THE DAY.

[Continued from page 1029.]

THE LATE JAMES AINSWORTH, Esq., F.R.C.S.L. Our obituary of last week recorded the decease of this gentleman; but he has filled a position both in society and in his profession in Manchester, which demands a passing notice here. Mr. Ainsworth was descended from an old Lancashire family, originally of the township of Ainsworth, a member of which married the only daughter of Winkley, by the heiress of Plessington, and so acquired that property in the reign of Richard II. In later times, the Ainsworths were connected by marriage with the Hopwoods, of Hopwood, and possessed property at Spotland, in the neighbourhood of Rochdale. At Plessington Hall, the arms are still visible over the arched stone entrance. The name and arms of Ainsworth are also in the glass of one of the windows at Kersal Cell (Miss Atherton's). Of this ancient family, several distinguished themselves in various walks. Henry Ainsworth (who was born at Plessington in 1560, and died in 1629), the traveller, celebrated Hebraist, and biblical commentator, author of *Annotations upon the Five Books of Moses* (1627), and many other works, was one ancestor; being the second son of Laurence Ainsworth, of Plessington, gentleman, by Dorothy, daughter of Thomas Grimshaw, of Clayton. Another, not less celebrated, was the grammarian and lexicographer, Robert Ainsworth, F.A.S., author of the well known Latin Dictionary (first edition, 1736), and other works: he was born at Woodgate, Eccles, in 1660, and died in London in 1743. Jeremiah Ainsworth, the father of the gentleman whose recent decease has called forth this brief notice, was an accomplished scholar, and well known as a mathematician. He was on very intimate terms with Sir Thomas Egerton, afterwards created Earl of Wilton. Many references have recently been made to this Mr. Ainsworth, in *Notes and Queries*, with relation to the history of the rise of science in this county; for he is regarded as the founder of a school of Lancashire mathematicians.

The late Mr. James Ainsworth was born in Manchester, on March 5th, 1783; he was consequently in his seventy-first year. He was educated at the Manchester Free Grammar School, during the rule of Mr. Lawson, as head or high master; Messrs. Durby, Pedley, and Holt, being the other masters; and, after leaving the school, Mr. Ainsworth was a private pupil of the eccentric but able teacher, the Rev. Joshua Brookes. About the year 1798, when he was only 15, Mr. Ainsworth went to the Infirmary as an apprenticed pupil; there being an express stipulation in his indentures that he should be allowed a portion of the day to go and take his lessons. This time he devoted to the study of the Latin classics—a taste for reading which he retained to the close of his life. After completing his apprenticeship, he was for some time a clerk at the Infirmary, and acted as house apothecary for nearly a year, during a period when fever was raging to a fearful extent. He took

the complaint, which nearly proved fatal to him. At this time, the eminent Charles White (whose biography has yet to be written) was one of the surgeons to the Infirmary: and amongst Mr. Ainsworth's most intimate acquaintances and friends were Dr. Ferriar and Mr. Benjamin Gibson; and later in life, Mr. Ainsworth was appointed executor and guardian of the only child of the latter—a celebrated oculist in his day. Mr. Ainsworth subsequently became a student at the University of Edinburgh, contemporaneously with Lord Brougham, with whom he was at that time on intimate terms. When he had finished his medical education, he was, from his recognised ability, invited to join the grandfather of the present Dr. Henry, in partnership. Mr. Henry is well known as the inventor of the calcined magnesia and other chemical preparations still held in high estimation. Mr. Ainsworth was a very intimate friend of the late Dr. Edward Holme and the late Mr. Robert Thorpe, surgeon: the latter commencing his professional career at a much later period than Mr. Ainsworth. In the year 1800, when only 23, Mr. Ainsworth was elected surgeon to the Infirmary. He is stated to have been the first to commence anatomical lectures in Manchester, which he begun in conjunction with the late Mr. Ransome, surgeon; and he may therefore be regarded as the originator of what has since become the Royal School of Medicine and Surgery, Pine Street. It is worthy of notice, as one of the "small beginnings", that Mr. Ainsworth converted the hay-loft over his stable into a lecture theatre. He was most indefatigable and enthusiastic in the pursuit of professional knowledge, and an exceedingly skilful manipulator. Some of his preparations, we are assured, are not to be surpassed, even at the present time. As an instance, we may mention an injected preparation of a large mastiff dog, in which all the principal arteries of the body (with the sole exception of the aorta) had been successfully secured by ligature, without destroying the animal's life, and which, it is believed, was the first instance of the internal iliac artery being successfully tied. Mr. Ainsworth was always esteemed one of the ablest operators of his day. In consequence of declining years, he resigned his office of surgeon to the Infirmary some time ago, and was then elected one of the consulting surgeons to that institution, the duties of which honourable post he continued to discharge up to the close of his life. He was one of the founders of the Natural History Society, and of the Botanical and Horticultural Society, and always took a strong and deep interest in the well being and progress of both these societies, and in the museum and the gardens which they established. He was elected a member of the Manchester Literary and Philosophical Society in January 1805, so that he had been enrolled nearly half a century, and was, with one exception, the oldest of its surviving members. In conjunction with the late Mr. Thomas Fleming and others, he was one of the revivers of an old Manchester club, which is still continued, and which in its day was famous, under the appellation of "John Shaw's", from the name of the landlord, who is said to have enforced early hours upon his guests by the cracking of a large horsewhip at a fixed time. This club, of which Mr. Edmund Buckley is now president, and which still numbers three or four surviving members, may be regarded as the only link between the social and convivial institutions of "Old Manchester" and those of the present day. Mr. Ainsworth's hospitality is well known; his charity had the best attributes—it was large and catholic, while it was most unostentatious, and indeed carefully kept from the knowledge of the world at large. Mr. Ainsworth expired at his residence, Cliff Point, Lower Broughton, on Friday, October 28th. He has left a widow and one son, Dr. Ralph Ainsworth.

CORONERS' INQUEST:—IMPROPER TREATMENT OF CHOLERA BY AN AGENT OF COFFIN, THE HERBALIST. On Tuesday, Nov. 8th, an inquiry was concluded before Mr. Baker, at the Cock and Hoop, Church Street, Mile End New Town, on view of the body of George Burt, aged 27, a City ostler, lately residing at 13, Dunk Street, Whitechapel, who died of an attack of cholera, having been treated by an agent of Coffin, the herbalist, named John Stephens, who carries on the business of a greengrocer in Ratcliffe Highway.

Mary Anne Stephenson said that she was living with the deceased, who always had a good state of health up to Friday week. He on that day came home between seven and eight o'clock in the evening, complaining of severe pains in his stomach. He had been drinking hard for a fortnight, and on that (Friday) evening he stated that he had drank off a pint of porter. She gave him twopenny-worth of ginger-brandy, after which he went to sleep for a short time. He continued in

severe pain till two o'clock in the morning, and during that time his bowels were repeatedly open. She then went for Stephens, an agent of Coffin, who attended. He gave deceased some powders, which he said he was to take every quarter of an hour. He also prescribed a mixture. He left and called again between ten and eleven o'clock on the Saturday morning. When he came, he looked at the deceased. He remarked that he could do no more for him, and went away. As he was going down the stairs, she observed deceased to be dying. She called to Stephens, who returned. When he saw that the deceased was dead, he took the mixture away.

Mr. Alexander M. Champneys, surgeon, 5, Church Street, said that he saw the body of deceased about noon on Saturday last, lying on a bed. He opened the body to ascertain the cause of death. He found the brain rather more congested than natural, and there was inflammation in the upper part of the stomach. He removed this from the body, and sent it to Dr. Letheby, at the London Hospital, for an analysis of the contents. He discovered a large quantity of rice-water fluid in the intestines.

Mr. Rich, registrar, said that Stephens wished to certify that deceased died of cholera; but as he (Mr. Rich) knew he was not qualified, he refused his certificate.

The Coroner observed, that he believed there was a power somewhere to prevent unqualified persons administering medicines.

Dr. Letheby stated that the Apothecaries' Company could interfere.

The Coroner said that some steps ought to be taken to prevent ignorant persons practising in the medical profession. Here was a man who was a greengrocer, prescribing medicines; and the day previous, he held an inquest on a child who was being treated by a female for paralysis, who was an agent of Coffin, and the wife of a journeyman baker.

Dr. Letheby, being sworn, said that he was the lecturer on chemistry at the London Hospital. He examined the stomach, and found red marks and marks of irritation upon it. A quantity of a brownish powder was adherent to the coats of the stomach, which proved to be cayenne pepper and ginger. There were also small portions of broken seeds of the lobelia inflata. He had no doubt that the irritation and inflammation were the effect of the lobelia. This was likely to produce secondary effects; namely, great prostration of the vital powers. In cholera it would, therefore, be most prejudicial, as it would have a depressing effect, and increase the prostration brought on by the disease. This tendency of lobelia is well known to the medical profession. To his knowledge, 22 cases of death have occurred in this country from lobelia; while in America, in all probability, they are much more numerous. Dr. Letheby then referred to the opinion of a late celebrated physician upon the effect of lobelia, which he stated was given in a recent posthumous work of his, wherein he observes that the frequent use of lobelia was a great cause of death. He added, that in the contents of the stomach of the deceased, upon whom an inquest was held, as referred to by the learned coroner, he had found fifteen grains of the lobelia powder.

By the Coroner:—I cannot say that in this case the lobelia was the cause of death, as the deceased may have died of cholera, independent of it. I think it probable that it would accelerate death, because it acts in the way cholera does, by prostrating the system.

Mr. Glover, reporter, having stated that he saw Stephens that day, when he remarked to him that he was then attending fifteen cases of cholera. The cases were in Dunk Street.

The Coroner, in summing up, observed that he had on two occasions sent Stephens for trial at the Central Criminal Court on charges of manslaughter, and that the judges took a view of the cases different from that entertained by his juries. He thought the proper course now would be for him to send copies of the depositions to the Secretary of State for the Home Department, and to the Board of Health, when an Act might be obtained to prevent empirics and persons not qualified from administering medicine.

Verdict—"That the deceased died a natural death, which may have been accelerated by improper medicine administered by an agent of Coffin; and the jury cannot separate without requesting the coroner to lay copies of the depositions before Her Majesty's Secretary of State for the Home Department, and the General Board of Health, in order that the most full measures might be taken to prevent the illegal practice of herbalists and others, not being legally qualified, from administering medicines."

MEDICO-METEOROLOGICAL OBSERVATIONS*Taken for the Association Medical Journal.***No. VIII.—WEEK ENDING 19TH NOVEMBER 1853.****WAKEFIELD.** Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.							Wind.			Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Rain, Snow, Fog, Frost, Thunder, &c., &c., Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.	Mean Force for the Day.	Amount of Ozone for the Day.						
Nov.	in.	in.	°	°	°	°	°	°		a.m.	p.m.	0—6	am/pm	0—10		in.	[Fa. Di. Br.	[vertebra, R.
13 S.	29.883	29.798	43.3	30.5	36.	44.7	24.2	35.9	0.942	NNE.	N.	1		10, s.	Fog.	0.036	Hematu. Neu. Inf.	Dis. of upper dors.
14 M.	29.670	29.602	47.8	27.5	37.2	52.5	20.	35.1	0.949	NW.	NW.	1		9, s. ci.	Fog.	0.000	Br. Ery. Inf. 4. [a.m.	Br. [ure.
15 Tu.	29.592	29.583	41.	28.2	34.2	41.2	31.	35.2	0.957	NW.	E.	1		10, s.	Fog.	0.043	Col. — vom. Neu. 6.	Conv. Decay of m.
16 W.	29.640	29.601	40.	28.7	33.9	42.	19.5	34.6	0.975	SE.	SE.	0.5		10	Fog.	0.000	Inf. [Di.	Disease of brain.
17 Th.	29.719	29.738	42.8	28.7	32.8	52.	15.5	29.6	0.977	W.	NW.	1.5		0	Fr. h.-fr.	0.000	Pleurodynia, Dy. Col.	Convulsions.
18 F.	29.835	29.826	46.8	28.5	37.2	52.7	28.	36.5	0.884	W.	NW.	1.5		4, cu.-s. ci.	Fr. h.-fr.	0.021	Br.	Pulmonary consump.
19 S.	29.839	29.798	50.8	41.5	45.7	52.	35.	40.	0.839	ESE.	SW.	2		10, cu.-s.	[In. coro.	0.094		
Col.	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. **Observer: T. MOFFAT, M.D.**

Nov.	S.	0	0.5	0	10	Fog.	0.00	Toothache, Croup.	Diarrhoea.
13	S.	0	0	0	8, ci. cl.-cu.		0.00	Toothache.	
14	0	0	0	0	10		0.00	Toothache.	
15	0	0	0	0	9, cu. ci.	Sleet.	0.00		
16	SW.	0	0.5	1	2.5, cu.-s.	Frost.	0.20		
17	0	0	0	0	8.5, ci.-s. ci.-cu.	So. ha.	0.00	Diarrhoea, Epistaxis.	
18	SEE.	SW.	1.5	7	7.5, ci. cl.-m.	[lu. ha.	0.00		
19	SEE.	SW.	1.5	6					

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. **Observer: J. W. JEANS, Esq.**

Nov.	29.799	42.4	32.1	37.4	28.5	34.7	0.957	Ebn.	N.	0	0	10, ci.-cu. s.	Misty.	0.008		[week
14 M.	29.577	43.8	38.4	41.1	36.8	38.2	0.975	NE.	wbs.	0	0	7, ci.-cu. ci.-s.	Misty.	0.032	Diarrhoea 2 p.m.	[born in the 3rd
15 Tu.	29.529	40.5	29.1	34.9	28.5	30.5	1.000	S.	S.	0	0	10, ci.-s.	H.-fr. m.			Prem. birth, 19 days.
16 W.	29.570	43.5	34.9	39.2	32.2	34.6	1.000	Calm.	ws.w.	0	0	8, ci.-cu. ci.-s.	Mist	0.007		Traumatic tetanus,
17 Th.	29.650	39.8	31.9	35.8	27.5	31.4	0.913	NW.	w.	0	0	2, ci.-cu.	H.-fr.			[commenced on the
18 F.	29.811	41.7	28.4	35.1	23.5	27.7	0.920	S.	sw.	0	0	3, ci.	H.-fr. l.h.			[12th Nov. at 12 p.m.
19 S.	29.848	45.6	34.7	40.1	31.	34.0	0.871	S.	sw.	1		9, ci.-cu. s.	H.-fr.			

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. **Observer: T. H. BARKER, M.D.**

Nov.	29.864	29.798	47.0	37.0	42.0	50.0	35.0	40.8	0.889	NE.	NE.	1	0	9, cu.	Rain.	0.00	Inf.	
14 M.	29.680	29.628	46.5	37.0	41.7	52.0	37.0	39.4	0.866	NW.	NW.	0.5	0	8, cu.		0.08	Cyn. T. Cyn. Tr.	
15 Tu.	29.628	29.611	41.5	29.0	35.2	44.5	33.5	33.5	0.884	SW.	SE.	0.5	0	10	F. fr.	0.00	Ag.	
16 W.	29.640	29.634	45.0	35.5	40.2	57.5	33.0	37.7	0.873	NW.	NW.	0.5	0	2, s.	Frost.	0.05		Fever.
17 Th.	29.713	29.734	43.0	28.0	35.5	53.0	28.5	29.9	0.742	NW.	NW.	0.5	0	1, s.	Frost.	0.00	Di. 2.	
18 F.	29.888	29.906	43.0	24.5	33.7	48.0	26.5	29.3	0.780	SW.	SW.	0.5	0	1, ci.	Frost.	0.00	Inf.	
19 S.	29.962	29.930	45.0	27.0	36.0	46.0	27.5	36.2	0.840	SW.	S.	0.5	0	6, cu. cl.	Frost.	0.00	Tic. Dol. Rub.	

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. **Observer: C. L. PRINCE, Esq.**

Nov.	29.900		50.	37.	43.5	61.	35.	39.8	0.858	NE.	NE.	1	1	9, cu. ci.-s.		0.01	Ery. Neu. Cyn. P.	
14 M.	29.743		48.	34.	41.	54.	32.	37.0	0.868	NE.	N.	1	3	5, cu. s.			Pneu. [bago.	
15 Tu.	29.683		43.	35.	39.	43.	33.	35.2	0.840	NE.	NE.	0	0	10, ci.-s. n.			Neu. 2. Hep. Lum.	Gastritis.
16 W.	29.710		47.	39.	43.	53.	39.	37.8	0.926	N.	N.	1	1	5, cu. s.		0.14	Conv. Pleuritis, Di.	
17 Th.	29.773		46.	25.	35.5	53.	43.	29.5	0.916	N.	N.	0	0	0, s.			Conv. Fe. Oph.	
18 F.	29.984		40.	22.	34.	55.	20.	25.5	0.817	N.	N.	0	0	0, ci.			Vom.	
19 S.	30.078		48.	25.	36.5	54.	23.	36.7	0.859	N.	SW.	0	10	0, ci. cu.			Di.	

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. **Observer: T. SHAPTER, M.D.**

Nov.	29.915	29.803	46.7	38.6	42.6	46.7	35.7	39.8	0.927	E.	NE.	1	0	7, cu.				
14 M.	29.770	29.713	50.2	37.2	43.7	51.5	32.	40.8	0.927	NBE.	NE.	1	0	5, cu.-s.	Fog.			
15 Tu.	29.684	29.662	44.2	32.	38.1	43.	28.	39.8	0.927	N.	N.	1	0	7, cu.-s.	Ice.	0.05		
16 W.	29.773	29.772	49.	29.	39.	50.	27.	35.6	0.854	N.	N.	1	0	2, ci.-cu.	Ice.	0.01		
17 Th.	29.874	29.890	48.5	24.3	36.4	51.3	21.	27.	0.836	N.	N.	1	0	2, ci.-cu.	Ice, h.-fr.			
18 F.	30.046	30.029	48.	26.5	37.2	49.8	26.2	22.9	0.836	N.	E.	1	0	2, ci.-cu.				[Scarlet fever.
19 S.	30.036	29.969	51.2	42.5	46.8	52.2	42.1	40.7	0.804	sbw.	SW.	1	0	6, ci.		0.09	Albuminuria after	

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. **Observer: B. BARROW, Esq.**

Nov.	29.914		50.0	38.4	44.5	50.0		37.0	0.742	NE.		0.5		5				
14 M.	29.697		47.0	35.4	40.8	48.0		37.7	0.926	NE.		0.5		10	Fog.			
15 Tu.	29.671		46.0	30.4	39.8	48.0		39.6	0.859	NE.		0.5		10				
16 W.	29.685		45.0	35.4	40.1	46.0		38.9	0.926	NW.		0.5		2				
17 Th.	29.788		44.0	28.4	40.1	46.0		36.8	0.917	N.		0.5		8				
18 F.	29.975		45.5	26.4	34.6	45.0		24.6	0.743	N.		0.5		0				
19 S.	30.040		49.0	30.4	40.8	44.5		36.1	0.795	SE.		0.5		2				

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. **Observer: S. E. HOSKINS, M.D.**

Nov.	29.777	29.705	49.	44.5	46.7		40.7	0.804	NBE.	NBE.	1		5, ci.-s. ci.-cu.	H.-fr.			Ch. Br. 2, Torticollis.	Cholera.
13 M.	29.650	29.604	50.	43.5	46.7		40.6	0.776	ENE.	ENE.	0		5, ci.-cu. s.	H.-fr.				
14 Tu.	29.576	29.573	47.	44.5	45.7		41.8	0.864	NBE.	NBE.	1.5		8, cu. n.		0.01			
15 W.	29.700	29.704	49.5	44.	46.7		40.6	0.776	NNW.	NNW.	1		6, cu. n. ci.-cu.		0.125	[Feb. remit.		
16 Th.	29.743	29.790	48.5	41.5	45.		42.8	0.898	NBW.	NW.	0		7, cu. ci. n.	Dew.		Ap. Hem. Epil. noon.		
17 F.	29.955	29.979	48.5	40.5	44.5		36.5	0.672	NBE.	ESE.	1		5, cu. ci.		0.069		Cholera.	
18 S.	30.006	29.951	47.	42.5	44.7		41.8	0.864	SBE.	SBE.	1		3, ci.-cu. s.	H.-fr.		Br. Di. 2.		

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

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NEW SERIES.

GRATUITOUS MEDICAL SERVICES.

Among the various questions of practical reform agitating the professional mind of late years, there is none that has excited greater interest than the one relating to the gratuitous and compulsory unpaid medical services rendered to the public. These services have become so various, so extensive, and so onerous, that they are now by no means incorrectly regarded as an established system. No rational person can doubt that gratuitous medical services to a limited extent, under existing social circumstances, are dictated by an inevitable necessity; but the opinion has gained ground, not only that the practice springing out of such a necessity has been systematised most injuriously, but that the greatest abuses are daily engrafted even upon that which conventional usage has tolerated; and that institutions as well as individuals are prostituting, for venal and self-interested purposes, the sacred name of CHARITY by the voluntary oversight of imposition practised upon them. The continual appeals, not only to ourselves, but to some of our cotemporaries, sufficiently indicate that such an opinion prevails very extensively; at the same time, the letters inserted in another part of this day's journal are sufficient to show that there is more than one view of the subject, and that it involves many grave considerations.

Under these circumstances, there can be no doubt that the Metropolitan Branch of the Association acted wisely in instituting a Committee for the purpose of investigating the subject. The Committee is strictly one of inquiry. It is not our intention, either by a notice of communications received, or otherwise, to anticipate a discussion which can only properly arise after a report has been furnished; but we think it right to assure Dr. BARCLAY, that he is decidedly in error in assuming that the members of the Metropolitan Branch have authorised this step as a "covert attack" upon, or a "crusade" against any class of the profession. The Committee has commenced its difficult and delicate task with the greatest circumspection and prudence. Its report both in a literal and a mental point of view is at present strictly a sheet of blank paper: it will be founded entirely upon the evidence furnished, and we can have no misgiving that the labours so cautiously commenced will be conducted with candour and completed with impartiality. Being intimately acquainted with every step which has been taken by the Committee, it is right that we should make this explanation, lest Dr. Barclay and others should entertain an erroneous impression regarding the nature of its labours.

A schedule of questions is now being issued by the Committee to each member of the Association. The object is to obtain in the first place, facts relating to the nature and the actual amount of the various kinds of gratuitous services rendered by the profession to the public, and, in the next place, facts illustrative of the advantages and disadvantages—the good and the evil—of the system, and of its component parts. The Committee require well defined facts rather than

reasonings. Vague and general statements can serve no useful purpose. The questions in the schedule are numerous; and in one or two instances nearly the same question has been put in more forms than one. This has been done advisedly, that each individual may readily find a heading under which to insert all the information he may have in his power to supply.

In reference to the mode in which this schedule should be filled up, we may just refer to an argument contained in the letter from Mr. KNAGGS. It is assumed, that the practice of medicine differs from that of other professions, since the medical man is called upon "to relieve misfortunes which no human eye can foresee or guard against", and this is an argument in favour of the principle of gratuitous advice. The legal profession, it is stated, has only to remedy abuses which may be prevented. The fallacy of the argument becomes evident, when we consider that the lawyer no more renders his services gratuitously to an individual ruined by sickness, or falling into inevitable misfortunes, than to his richest client; whereas, by a conventional system, the medical man is compelled to give his services indiscriminately to the vicious as well as the virtuous, to those who bring on sickness by their fault, as well as to those who fall into it by their misfortune. Man's miseries as regards his health are not more inevitable than those relating to his social state or pecuniary affairs; and even the divine, charged with the cure of souls (who rarely undertakes his duty gratuitously), has to do with inevitable maladies arising out of the innate evil of man's nature, quite as much as the practitioner of medicine. We make these remarks to show, that general arguments, such as that furnished by Mr. Knaggs, will not afford much aid to the Committee. At the same time, we are far from entertaining the opinion that there is nothing in the argument advanced. The subject is a very interesting one, and we hope Mr. Knaggs will furnish facts exhibiting it in every point of view.

A very general impression exists, that charities are abused by servants becoming the recipients of their bounty. Those who can supply information under this head should state the facts relating to the kind of servitude, the amount of wages received, the situation in life held by the employer, the nature of the illness, etc. It is one thing for a butler to a wealthy employer, receiving from £40 to £60 per annum of salary, to be admitted as an out-door patient to a hospital for an attack of temporary illness, and another, for a servant of all-work to a small shopkeeper, with £6 or £8 per annum wages, and out of employ, to be treated for a chronic disease in such an institution; and yet both classes of cases, and all the intermediate grades, come under the general denomination of "servants". The Committee will not obtain all the information they require by a bare statement of the proportion of servants attended at any particular institution: details must be given.

Again, we are informed, that a kind of erratic philanthropy prevails in different quarters. One doctor never accepts fees from the clergy, others take none from chemists and

druggists, nor from schoolmasters and mistresses or musicians, nor from retired military and naval officers, nor from hotel keepers, governesses, or artists. In some cases we know not whether to designate it as erratic or erotic; an expert accoucheur is said to have made his practice by declining fees from actresses. In all these cases of exemption, the principle on which it is justified, and the rules by which it is guided ought to be clearly stated.

It may be expected that the replies to the questions will enable the Committee to arrive at a statistical statement of the extent to which the certificates to Life Assurance Companies are still filled up gratuitously; and also that they will be enabled to construct a schedule of the cases in which medical men are required to give certificates for public purposes without fee or reward.

It has been said that this question of gratuitous medical services constitutes a principal part of *Medical Ethics*. No doubt, in reference to any rule of conduct to be laid down, ethical principles must be appealed to; and any code of medical ethics must embrace the Christian duty of relieving our poorer brethren without pecuniary fee or earthly reward. As such, the question will engage the attention of Mr. MICHAEL'S Committee. But, important as the subject of gratuitous services is, and extensive in its bearings, it is a mistake to regard it as a principal part of medical ethics. The latter ought to embrace the right rule of conduct, in a moral point of view, of medical men in their important relation to their own body, and to society at large; their duties to their professional brethren; to their patients—rich and poor; at the bedside, as witnesses of domestic life in its privacy, and often the depositories of its secrets; in courts of justice when called upon to bear testimony to wills, or to dying declarations, or to minister to the medical necessities of those charged with, or found guilty of crime; to the reputed or really insane; and in various other relations, in which the moral conduct of the medical man, as well as his professional practice, is liable to be called into question. All this should be compassed by the Medico-Ethical Committee. The Gratuitous Service Committee has to deal almost exclusively with a pecuniary question. It is quite true, that when rules of conduct are laid down, even as regards pecuniary points, ethical principles must be regarded; but before any rule for the practical application of such principles can be arrived at, the facts must be collected and collated; and it is for this latter purpose that the cooperation of the profession is called for at the present moment.

Our space will not admit of entering more fully, at present, into these interesting and highly important topics, and we conclude by expressing a hope that the Members of the ASSOCIATION, and of the profession generally, will give their most efficient aid to these inquiries, by furnishing to both Committees a correct statement of facts in the plainest language, in order that reports may be framed, exhibiting all the points in their true light, and such as may be rendered available in the further discussion of the still wider subject of Medical Reform.

When the Gratuitous Service Committee commenced its labours, it was not contemplated to extend its inquiry beyond the boundaries of the Metropolitan Counties Branch; but it was soon found that a limited investigation would be worse than useless; and it has consequently resolved to collect information from every available source. It will be

necessary to incur an expenditure of about £50, to enable the Committee to accomplish all that it has in view; and as no funds are at the disposal of the Committee, we take this opportunity of recommending all who desire to see the subject thoroughly investigated, to remit to Mr. CHARLES, when they return the schedules, small donations in postage stamps, or by post-office order. We would suggest the transmission of donations varying from one to twenty-one shillings and upwards. If the Committee receive more money than it requires, it is proposed to hand over the surplus as a donation to the Medical Benevolent Fund.

THE INVESTIGATION OF CHOLERA.

In a previous number (p. 1007), we suggested that the manner in which CHOLERA is communicated, of which we are in total ignorance, should be one of the subjects of close investigation in the prevailing epidemic. And we remarked that those who practise in country districts were in circumstances best adapted to trace the evidence of its transmission from individual to individual, or to disprove such a mode of communication.

We then stated that it had been assumed, but not proved, that cholera is not communicated by individuals; and there is another equally unproved assumption,—that there is such a relation between “premonitory diarrhoea” and cholera, that if the one is stopped by astringents and opium, the other will be prevented. It is asserted that the statistics of house to house visitation have settled this matter, and that it has been strictly and rigorously proved, according to the requirements of science, that the mortality of cholera has been stopped by a system of visiting which has brought all the cases of diarrhoea immediately under treatment. Those, however, who have themselves known what house to house visitation effects, and not merely the paper results, will (we feel assured), be the most suspicious of these statistics, the fallacies of which are many. House to house visitation is usually not organised until the disease has produced alarming mortality, and it is not therefore brought into operation until the natural decline of the disease; and the difficulty is in determining whether the diminution of mortality is owing to the premonitory treatment, or to the natural decline of the epidemic. On the other hand, if house to house visitation is adopted early, and the disease in the place does not prove very fatal, it is quite impossible to determine with scientific rigour whether the small mortality is owing to the mild visitation of the epidemic, or to the means used. Again, when cholera is epidemic in a town, few persons comparatively escape slight relaxation of bowels, and numbers have diarrhoea from fear only; so that judicious practitioners in the last epidemic, upon discovering this, gave mere placebos to their patients, who flocked to them in shoals during the panic. All these cases, if falling into raw hands, would swell the list of “diarrhoea” cases, and thus there would be returned an enormous proportion of diarrhoea cases to deaths.

We hold it to be injurious to the progress of sanitary science, to lay down as proved, that the great mortality of cholera may be prevented by the immediate stoppage of diarrhoea by astringents and opium. Such was the dogma propagated

in 1848-9, and it is too well known that the mortality in that epidemic greatly exceeded the mortality of 1832. It is injurious, for it tends to diminish the value of the important principle, that the mortality depends on the foul air which the victims have been breathing, the overcrowded rooms in which they have been living, the dirt on their skins, and in their dwelling houses, and the beer, spirits, and unwholesome food they have indulged in *for a long time previously* to the advent of the disease. If from these causes a man's blood is impure, or his nervous system depressed, or his abdominal viscera congested and loaded, what hope can there be, when he has been subjected to a full dose of the cholera poison, that astringents, by relieving (if they even can do so) one early symptom, will neutralise the full effects of the poison itself? It is an axiom in science, that the cause should be proportionate to the effect, and there is no better evidence of the immaturity of the mind in scientific knowledge than in its attributing effects to causes which are not at all adequate to produce them. The "globulists" and "table turners" are "glaring instances" of this defective power of appreciating scientific evidence.

We believe that house to house visitation is very important, if properly carried out by an efficient medical staff. It brings to light numerous cases of cholera, which would not have been treated at all, or not early enough, and thus gives treatment a better chance: it diminishes the mortality from diarrhoea only, which is always considerable during the prevalence of cholera; and it relieves much anxiety, pain, and suffering. But, in fully admitting its uses, we still hold to the opinion that the house to house visitation and its statistics have not yet proved that cholera is to be prevented by arresting the premonitory diarrhoea by astringents and opium: an opinion introduced by the Board of Health, and, we regret to say, inconsiderately backed by the College of Physicians. The relation of "the premonitory diarrhoea" to cholera is, in the opinion of some able physicians, not yet determined with the accuracy which science demands; and our minds should therefore be kept free from a belief that it is, and some such questions as the following should be the special objects of the investigation of each, when the opportunity occurs: Are there any number of cases of cholera without any premonitory diarrhoea? Is the "premonitory diarrhoea" in any proportion (compared with other cases of diarrhoea) to the violence of the cholera? Has it been possible to stop the "premonitory diarrhoea" in malignant cases, even when seen early? What is the best treatment of the "premonitory diarrhoea"?

We are firm believers in the value of treatment in all stages of malignant cholera, in cases where there is adequate constitutional power; but, from our experience, we believe that the treatment of severe cases, to be effectual, requires an amount of care, of attention, and of perseverance, which cannot be given in large cities and towns, where the patients are very numerous. To suppose this can be effected in house to house visitation, by students of medicine and junior practitioners, who must act on a routine system, in a disease which requires the special adaption of means to the individual case, is to hope more than can be realised.

While we recognise the improved treatment now generally adopted in cholera, and ascribe the greater number of recoveries in a great extent to that cause, combined with the treatment being generally applied for and obtained in an early stage of the disease, we must admit that our best hope

of diminishing the mortality, is in keeping our towns and habitations well drained, supplied with abundance of water, and scrupulously clean; and in a more temperate condition of the labouring classes, who now indulge, to an extent much beyond those above them, in spirit drinking, in swilling bad beer, in smoking tobacco, and in other sensual excesses.

OUR GRATUITOUS ADVISER.

LAST week our Gratuitous Adviser assigned some of the reasons why he recommended the ASSOCIATION to stop its Journal, and use the advertising sheet of the *Medical Times* as the grand organ of professional progress and reform. The Association "was powerful and respected"; but now it has become impotent and disreputable. *Hinc illæ lachrymæ*: hence the lamentations in Princes Street. As the ASSOCIATION JOURNAL "is seldom used by men of great eminence as a medium for the publication of original communications"; as it "publishes reports of societies, and other medical intelligence, long after they have appeared in our columns"; as "it is not a rival" of the *Medical Times*, the *Medical Times* says, LET IT BE SUPPRESSED as a useless publication! This suppression, we are told, would please "many influential members of the ASSOCIATION, who do not think that a weekly journal is necessary for the prosperity of the Association". Our kind gratuitous adviser is, we believe, misinformed on this little matter of fact; but if he will kindly give us twenty names out of our two thousand, who desire no weekly journal in return for their subscription, we shall be as much obliged to him as we were for his first condescension in becoming our counsellor.

Our original notice was simply an expression of gratitude to Mr. Churchill for "advice gratis"; and if our colleagues bear this in mind, they will more easily understand the subjoined article, and better appreciate the nice humour involved in the heading, which humour is in no small degree enhanced to the readers of the *Medical Times* by their being kept in ignorance of the tenor of our remarks.

"THE ATTACK ON MR. CHURCHILL BY THE 'ASSOCIATION MEDICAL JOURNAL'."

"A good story is told of one of our greatest lawyers. When a young barrister, a brief was handed to him in court with a fee, but, on opening the brief, he found it was a sheet of blank paper. A little careful examination, however, led to the detection of the following sentence, scribbled in pencil:—'We have no case. Please to abuse plaintiff's attorney'. Something similar appears to have taken place lately between the Council of the Provincial Medical and Surgical Association, or the Journal Committee, or some one who is responsible to the Association for the conduct of the Journal and its Editor, who must have received instructions something to the following effect:—'The assertion is quite true that the support of the Journal absorbs our whole receipts. It is quite true that the Council are obliged to discontinue the publication of the Transactions. It is quite true that we are obliged to apply for subscriptions to carry on the battle of Medical Reform. You cannot answer this. You have no case. Please to abuse Mr. Churchill.'"

"In the last number of the ASSOCIATION JOURNAL, we accordingly find an article which has called forth the following letter from Mr. Churchill.

[The letter which we printed at p. 1044 of last number, and which contained nothing about our article by which it was elicited.]

"We have but little to add to this. We cannot refrain, how-

ever, from expressing our astonishment at the low opinion the Editor of the ASSOCIATION JOURNAL appears to have of the editorial position. We do not hesitate to say that no high-minded, independent man would ever suspect another of degrading himself to be the organ of any publisher, and that any one who would accuse a brother Editor of allowing a proprietor to act in the manner imputed to Mr. Churchill, must have very different ideas of the duties of the editorial office from those entertained by us. Had any such imputation been insinuated in other publications, we should have passed it over without notice or contradiction; but it is gravely published by one who affixes his name to a Journal that is regarded as the organ of an Association which was powerful and respected. Now that it has sunk to the position of a Society for the production of a weekly Journal, which it is only enabled to support by soliciting for advertisements from Mr. Churchill and other medical publishers; from the proprietors of the Iodine Spa, Stringfellow's battery, the resilient bodice; for M. Bourjeaud's Cautions against his shameless imitators; for notices of the cantharidine tissue, patent trusses, elastic stockings, old port, pale sherry, malt whiskey, pale ale, and various other matters which lead to the entry 'Bad debts' in the Annual Financial Statement of the Council, it is not for us to say how much of its power and respectability have been lost: but as it still numbers among its members men of the highest character and noble reputation, many of the oldest and most influential of whom are active in their exertions to restore the body to its former high position, we say to them, that the imputation cast upon us in their Journal is absolutely without foundation.

"Before concluding, we must say that a Journal cannot be considered as passing from its legitimate province when it comments on the proceedings or position of a public association. We find that last year £200 was voted from the funds of the Association to the Reform Committee, but that this year the Committee is 'to be thrown upon the private generosity of the profession'; that the publication of a weekly Journal has increased the expenditure of the Society until it is 'greater than at any former period,' and cannot be borne unless the income be steadily increased; that the Council are obliged to express regret in announcing, that the Transactions, which have always been a striking feature in the proceedings, in all probability will not be continued, because the expenditure on the Journal is so large 'as to leave little room to hope that a surplus will be left for the publication of Transactions'; that the Society had to pay £870 from its funds for the support of the Journal for six months; that it cannot support its own Journal without the assistance of advertisements; that many influential members of the Association are very unwilling to give up the publication of the Transactions, and do not think that a 'weekly Journal, or a Journal at all, is necessary for the prosperity of the Association'; that the largest Association of our profession has departed from its original objects, and has become a sort of club, for the publication of a Journal, to which the accession of new members is attributed, and which absorbs nearly all its revenue; that this diversion of funds from their legitimate object has led to divisions in the body, and openly expressed wishes from members that their money was otherwise expended, and that those gentlemen who wished to have a Journal should pay an additional subscription for it; and, lastly, that the Editor of their own Journal has acknowledged that the Association has become 'IN OUR CHARACTER OF PUBLISHERS, A TRADING FIRM CARRYING ON AN ACCIDENTAL COMMERCIAL ENTERPRISE!!' When all this is forced upon our attention, it is impossible to pass it over without comment, and we claim the right of making our comments freely, without incurring the charge of doing so from interested motives. There might at first sight appear to be some plausibility in a charge of rivalry; but a little consideration will show, that a Journal which publishes none of the lectures or hospital reports, which are the chief features of the *Medical Times and Gazette*; which is seldom used by men of great eminence as a medium for the publication of original communications; which publishes reports of societies and other medical intelligence long after they have appeared in our columns; and which only circulates among members of the Association, cannot be considered as a rival of ours. We have never regarded it in that light; and we repeat that we have a right to criticise the conduct of the Provincial Medical and Surgical Association; that we do so upon purely public grounds, and with no interested motive whatever; that neither Mr. Churchill nor the other proprietors interfere, directly or indirectly, either with the Editor or with any of the gentlemen who assist him in the editorial department; and that, if any of our remarks should call for a reply, that reply should relate to the facts we adduce,

and the arguments we found on them, and should not consist of unfounded charges against either Mr. Churchill or the Editor of this Journal.

"We sincerely trust that this will be the last time we shall have to write on such a subject, as it is our earnest desire not to enter into disputes with other Journals, but to pursue, steadily and uninterruptedly, our attempts to lay before our readers rather what is important to them than interesting to ourselves, and to make this Journal the repertory of the advancing medical knowledge of the age."

It is evident from the last paragraph of this invaluable document, that our friend did not willingly, but under the constraining influence of love and duty, step aside to recommend an extinguisher being placed upon us. We therefore once more tender thanks to our affectionate gratuitous adviser; and, in doing so, we beg to assure him that he has thoroughly convinced us of our immense inferiority to him, as well as of the small repute of the contributors to the ASSOCIATION JOURNAL, in comparison with those illustrious men who now illuminate the pages of that Journal, which, as we can never forget, once conveyed weekly to the world the lofty ethics of a HEALY.

TO CORRESPONDENTS.

NEW MEMBERS. Gentlemen who wish to be proposed as members of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, are requested to specify to their proposers whether they desire their membership to commence before, or at 1st January 1854. The annual subscription is due immediately on election for the year during which the election takes place, and in advance on every succeeding first of January.

MEMBERS IN ARREARS are particularly requested to read the official notice published last week at p. 1029, as Law XXIV is to be enforced with strictness.

ADDRESSES OF MEMBERS. The printing of the covers of the JOURNAL for next year is about to commence. Members who wish any alteration made in their addresses are therefore requested to make a legible communication without delay to the publisher.

LIST OF MEMBERS. It is not proposed to reprint this list at present; but we intend to give all the corrections of it which we have received, in an early number. Twenty members have joined the Association since the list was published on the 21st of October, so that the total number of members for 1853 is now 1946, of whom 486 have entered since the 1st January last.

VACCINATION. Letters again unavoidably postponed.

MILITIA SURGEONS. Letters in our next.

AN OPHTHALMIC SURGEON has not communicated his name.

AUTOBIOGRAPHIES. An opportunity is likely soon to occur such as E. R. desires. We cannot say more in this place, and therefore request our correspondent to communicate his name in confidence.

ADVERTISEMENTS TOO LATE. After our arrangements for going to press were completed, several advertisements arrived. The long advertisement of new contributors to the Medical Benevolent College will appear next week. Advertisers are particularly requested to deliver long advertisements on Tuesday. Short advertisements are in time up to six p.m. on Wednesday.

COMMUNICATIONS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London: or to the office of the Journal. Letters requiring immediate attention, and revised proofs ought invariably to be sent to Putney.

ORIGINAL COMMUNICATIONS.

ON THE PATHOLOGY AND DIAGNOSIS OF CEREBRAL DISEASES.

By ROBERT HUNTER SEMPLE, M.D., Member of the Court of Examiners of the Society of Apothecaries.

[Read at the Medical Society of London, Nov. 12th, 1853.]

ON a former occasion, I introduced to the notice of this society some Clinical Illustrations of Diseases of the Nervous System; and I then stated my intention, at some future period, to offer some general remarks upon the pathology, diagnosis, and treatment of this class of affections. I now proceed, as far as lies in my power, to redeem that promise, with the aid of such observations as I have subsequently been enabled to make in this very obscure department of practical medicine.

Bearing in mind the limited period allotted to papers like the present, I have no intention to present an elaborate essay upon cerebral diseases; but while grouping together my observations for the sake of clearness of description, I shall carefully avoid availing myself of the works of well-known authors, and confine my illustrations to those cases which have fallen under my own care, and my reflections to those ideas which have occurred to my own mind. In order also to obviate unnecessary prolixity, I shall lightly pass over those subjects which are well understood, and on which little or no difference of opinion exists, and attach a due degree of prominence to those points which have been but little investigated by authors, or on which the opinions of well informed practitioners are divided.

With regard to the PATHOLOGY of cerebral diseases, it must be admitted that the greatest obscurity and difficulty still exist; and it is too frequently a matter almost of impossibility to connect the symptoms observed during life with the appearances revealed after death by the scalpel. But as the term "pathology" includes both classes of phenomena, it will tend to simplify the subject if I confine my remarks, in the first place, only to the appearances observed after death, or, in other words, to the morbid anatomy of the textures.

Before proceeding to the consideration of those alterations of structure which are seen in or upon the encephalon and its membranes, it is of extreme importance to notice the morbid anatomy of the calvarium, which is undoubtedly concerned in the production of many cases of cerebral disease. Independently of those instances of external injury which induce cerebral symptoms, and of which I do not intend to treat, there are morbid changes in the bony structures, occurring spontaneously, which involve serious disturbances of the nervous system.

The following cases will, I think, prove the truth of this position:—

CASE I. A woman in the Islington Infirmary suffered continually from epileptic seizures, and was under my observation for about ten years: the fits were frequent, occurring at irregular intervals, and of a very violent character. In the intermissions between the fits, her health was tolerably good, with the exception of occasional headache; her intellectual faculties were quite unimpaired. She always derived benefit from the local abstraction of blood, and she was therefore on several occasions cupped between the shoulders. Blisters were applied, and kept open in the same situation; purgatives were administered, and a strict antiphlogistic regimen was maintained. Her diet was of the lightest character; no solid food or beer was allowed; and she derived her sustenance entirely from a very moderate allowance of milk, eggs, bread, and thin broth or beef-tea. This treatment was so far successful as to afford her considerable relief; but at length the fits became more and more frequent and severe; typhus supervened, and she died. The following appearances presented themselves at the *post mortem* examination.

The body was plump and well formed, and there was a

layer of fat beneath the skin, about three-quarters of an inch in thickness over the abdomen—a rather remarkable fact, considering the tenuity of her diet. *Head.* The scalp was natural; the skull externally presented no peculiar appearance; and no difficulty was experienced in sawing it through. On removing it, however, and examining it, it was found that there existed a remarkable want of uniformity between the two surfaces of the skull in some parts, owing to thickening of the osseous structure, particularly of the internal table, which, instead of being thin and brittle, was thick and solid. Along the line of the circular incision made by the saw, the skull was of about the average thickness. The os frontis was then sawn through, immediately in front of the coronal suture. Along the line of incision made in the usual process of removing the calvarium, the thickness of the cranium was one line and a half; but the part corresponding to the right frontal eminence was half an inch thick, and the same part on the left side was five lines in thickness. All the prominent bony processes were much increased in thickness and asperity, as the crista galli, the posterior clinoid processes, the bony ridge of the petrous portion of the temporal bone, the ridges on the internal surface of the occipital, etc. The dura mater was congested, the vessels of the arachnoid membrane were also congested, and the membrane itself was opaque and thickened; beneath the membrane there were two or three drachms of serum mixed with blood. The brain was flattened in front, the depression exactly corresponding to the thickening of the internal table of the skull. The substance of the brain was firm, and the grey portion was of an unusually dark colour: but this organ presented no other peculiar appearance. The other organs of the body were carefully examined, but no morbid appearances of importance were observed.

I consider that the epileptic attacks in this case were probably due to the thickening of the internal table of the skull, and the consequent abnormal pressure exerted upon the surface of the brain.

CASE II. In the spring of the year 1850, I attended, in conjunction with Mr. Beaman, of Covent Garden, a tradesman who had suffered severely for a long period from a pain in the front part of the head, and who had likewise experienced one or two epileptic fits. When I saw him, he had long been complaining of a fixed pain about the root of the nose, at the part where the nasal bones unite with the frontal bone. He felt his head rather confused, but his intellect was by no means impaired. When he went out to walk, he was often seized with a kind of giddiness, and this feeling increased so much upon him, that he was afraid to walk out alone. The head was not hot, the pupils were natural, the tongue was moderately clean, the pulse was regular, the bowels were open. He was a stout, healthy looking man, and told me that he had never had syphilis, nor had he suffered from any other disease before. The pain of which he complained, however, and the giddiness and confusion he felt when walking out, distressed him excessively, and made him almost tired of his life. As I could discover no disease of any of the great viscera, I could come to no other conclusion than that the cause of his suffering was probably a thickening of the internal table of the skull covering the anterior and inferior surface of the brain, and that the pressure thus produced upon that organ was the cause of the symptoms. I accordingly recommended four leeches to be applied over the root of the nose and lower part of the frontal bone; I also ordered a pill, containing two grains of calomel with four of compound rhubarb pill, to be taken every night, and four grains of iodide of potassium every four hours in peppermint water. I saw him again in a week, and found that he was slightly improved, but his chief symptoms still remained. I diminished the quantity of calomel, but continued the iodide of potassium. In another week he was still much the same, but he had no recurrence of fits. I increased the dose of iodide of potassium to five grains, and continued the small doses of calomel. In another week, his gums were tender, so that he was unable to eat, and he had con-

siderable salivation. I therefore discontinued the calomel. He was not decidedly improved. I continued the iodide of potassium, increasing the dose to six grains. He continued to use this medicine; and during the summer he went out of town, but returned in September without much improvement. I now saw him again, and found that he still complained of the same symptoms; namely, dull heavy pain at the region above indicated, and giddiness and confusion when he went out to walk. The constancy of the symptoms, their localisation, and the absence of any disease elsewhere, confirmed the diagnosis I had first given, and I determined to persevere in the use of the iodide of potassium in augmented doses. I therefore ordered it in doses of seven grains every four hours. The system became at last so thoroughly impregnated with the iodide, that on applying a little sulphuric acid and starch to the urine, it was at once turned to a deep blue colour. This plan was therefore assiduously continued, although I began to have doubts whether it would eventually succeed; and the patient, although very obedient and tractable, began to be tired of the quantity of medicine which he was obliged to take. I ought to mention that this person was in a very good business, which he was compelled to relinquish owing to his illness.

I lost sight of this case after the year 1850; but on inquiring into the particulars a few days since, I found to my great satisfaction, that the plan I had first recommended had been pursued regularly, and that the patient had gradually recovered. He is now (Oct. 1853) actively employed in business, takes no medicine, is well and hearty, and complains only occasionally of a slight recurrence of his old symptoms.

I think I am not assuming too much in believing that this was a case of partial thickening of the skull, and that the long-continued and persevering use of iodide of potassium produced absorption of the thickened part, and thus relieved the disease.

CASE III. In August 1853, I attended a man who was brought into the Islington Infirmary, and who complained of pain in the head, over the os frontis. In this case, there was decided thickening of the root of the nasal bones, and of the inferior and nasal part of the frontal bone, perceptible to the sight and palpable to the touch. I could obtain very few particulars of this man's history, as he was of the class of persons called "tramps", who wander about from place to place, obtaining their living partly by begging and partly by stealing, exposed for the greater part of their life to the vicissitudes of wet, cold, and hunger. I considered this to be a case of undoubted thickening of the bones, causing pressure on the brain, and I tried the same system as that which is recorded in the last case. I put him upon a course of iodide of potassium, four grains being given every four hours in infusion of gentian. Although this plan was perseveringly pursued, it was not attended with success, for the man gradually became insensible and lethargic, remained quite unconscious of surrounding objects and impressions, and finally died comatose, after having had a copious discharge of blood from the nostrils. On a *post mortem* examination, it was found that the nasal bones, and the lower and nasal part of the frontal bone, were much thickened; and on the surface of the brain corresponding to this region, there was an abscess of about the size of a filbert.*

While alluding to the diseases of the bony structure in connexion with cerebral symptoms, I would allude to a want of symmetry of the two sides of the cranium, which I have occasionally observed in cases of cerebral disease.

Thus, in a case of suicidal mania, terminating fatally in a very short time after most violent paroxysms, in 1851, I found that the two sides of the skull were unsymmetrical in a very marked degree, and the skull looked as if it had been subjected to pressure, which had caused its walls to be compressed unequally. As an example of this want of symmetry, it was particularly observed that the part of the skull which, according to phrenologists, is placed over the organ of destructiveness, was prominent on the left side, and depressed on the right; while the right frontal region was prominent, and the left depressed. And in a case which I examined a few weeks since (Oct. 1853), and in which the patient died suddenly, apparently from effusion of serum in the brain, I observed the same want of symmetry between the two sides of the skull. The left frontal region was depressed, the right elevated; while the temporo-occipital region was projected on the left side, and depressed on the right.

I do not lay much stress on these cases, but I think that they deserve to be recorded; and it is possible that other cases may be found in which similar deviations from symmetry may prove to be associated with disordered cerebral manifestations.

The morbid anatomy of the cerebral membranes is involved in very great obscurity, the most violent symptoms during life leaving often very few traces observable after death; and, on the other hand, appearances usually described as morbid are found unconnected with any cerebral symptoms during life. I have been in the habit of examining the brains after death in all cases whenever practicable, whether the patient had exhibited cerebral symptoms during life or not; and by a comparison of a few of these cases, it will be seen that the appearances observed are very unsatisfactory; and that, without a knowledge of the case before death, the investigator might be easily misled in endeavouring to trace by the scalpel the causes of the fatal event. It is certainly of very great importance that the morbid appearances in the cerebral membranes should be accurately and strictly defined, and that vague description should be banished altogether from this department of pathological anatomy. When we find writers professing to explain, for instance, the pathology of insanity, and telling us that, in a hundred cases, two-thirds exhibited disease of the arachnoid membrane, such disease consisting in "effusions on its surface", "effusions beneath its surface", "more or less opacity", etc., we are tempted to inquire whether these can be properly considered as morbid phenomena at all; or, at any rate, whether they might not be discovered in the heads of any hundred persons taken indiscriminately from a general hospital. The error committed by such writers is, no doubt, due to the fact that, being specialists, they examine only the heads of persons who have suffered from some one form of disease; and the *post mortem* appearances are afterwards adduced in support of their "foregone conclusions".

The best instances of diseased conditions of the cerebral membranes are those observed so frequently in children who die of the malady termed hydrocephalus. In the fatal cases of the acute form of this disease, an abundance of fluid is poured out into the ventricles and into the theca vertebralis; and besides this abnormal effusion, there are very frequently observed masses of coagulable lymph, especially about the base of the brain. Both phenomena are clearly due to inflammatory action; for the heads of children whose brains have not been diseased do not exhibit such conditions. But in adult years, although the symptoms of meningeal inflammation may be very distinct during life, we do by no means uniformly discover after death appearances which are at all in proportion to the violence of the attack. Indeed, it is very difficult to understand why an inflammation, involving only the slender web-like membranes covering the periphery of the brain, should excite such a violent commotion in the mental and physical powers, and should so frequently terminate in death, while a large tumour or an extensive abscess in the substance of the brain may exist for a long period, without materially de-

* In a discussion which took place at the Westminster Medical Society, in 1848, Dr. Cornack, in alluding to the causes of puerperal convulsions, took occasion to notice the views of Rokitsansky, who has ascribed the growth of intra-cranial osteophytes during pregnancy. Dr. Cornack then proceeded to argue that not only might such adventitious growths give rise to convulsions in the puerperal state, but their persistence might also account for epileptic seizures at subsequent periods; and farther, that in both sexes, and in non-*puerperal* states, epilepsy might be caused by bony growths pressing upon the brain. These observations are recorded in the *London Journal of Medicine* for January 1849.

ranging the system or shortening the patient's life. But such are undoubtedly the facts; and, mysterious as the explanation may be, it is certain that the delicate film on the surface of the brain is endued with more exquisite sensibility than all the rest of the encephalic structure. In cases of diseased membranes, it is very difficult to ascertain the exact membrane which is involved; and the arachnoid membrane and the pia mater are so intimately adherent together, that their respective inflammations are almost undistinguishable. It is a curious fact, that although the arachnoid is a serous membrane, like the pleura, the pericardium, and the peritoneum, it is by no means usual (except in the case of children, above alluded to) to find exudations of plastic lymph *between its opposite layers*. The appearance usually observed is an effusion beneath the arachnoid; and this circumstance seems to confirm the view of Rokitsky, who is inclined to regard the pia mater as the chief seat of disease.

The following are, I think, illustrative cases on this point:—

CASE IV. A woman, 68 years of age, is suffering from acute rheumatism in the wrists; the disease attacks first one wrist, then the other; it is treated in the usual manner. She is bled; warm fomentations are applied to the joints; calomel, colchicum, and purgatives are administered. Suddenly, the pain quits the joints, and cerebral symptoms appear; the head is hot, the pulse rapid, the mind is wandering; in the course of twenty-four hours, coma supervenes, and the patient sinks. An examination of the head is made after death, and nothing is revealed beyond the effusion of some limpid fluid in the subarachnoid space, and a vascular appearance of the arachnoid membrane, due probably to inflammation of the pia mater, seen through its transparent texture. The arachnoid membrane is not thickened, and the brain itself exhibits no morbid appearances.

CASE V. A respectable and steady man, in the middle class of life, about 35 years of age, suffers from dyspeptic symptoms, which, however, do not seem of a very severe character, and are treated in the ordinary manner. He becomes, however, gradually worse; his mind begins to be confused, and he takes to his bed; his head is hot, and his pulse is full and strong. A copious bleeding is practised with some degree of benefit, and the blood is buffed and cupped; calomel is then freely administered, but he becomes worse and worse; coma supervenes, and he dies. An examination of the head is made; but nothing is found, after the most careful investigation, but an effusion of transparent lymph beneath the arachnoid membrane.*

Now if we compare these cases, which I think are undoubted instances of cerebral meningitis, with others in which no cerebral disease appeared to exist during life, we shall often find in the latter copious effusion beneath the arachnoid, with decided thickening of that membrane.

CASE VI. A woman, aged 34, was admitted into the Islington Infirmary, labouring under hypertrophy of the heart, with disease of the mitral valves, apoplexy of the lungs, and general anasarca; but without any cerebral symptoms. She died about a week after her admission, and a *post mortem* examination was made. It was found that the morbid appearances in the chest corresponded to the symptoms during life; and the following was the account given of the condition of the cerebral organs. The scalp, skull, and dura mater, presented no peculiar appearance. The arachnoid membrane presented an inflamed appearance, owing to the minutely injected vessels of the pia mater being seen through it; it was also thickened in

a few places. A large quantity of thin serous fluid was found beneath this membrane, also in the ventricles, and in the vertebral canal.

CASE VII. A woman, aged 64, of a sickly constitution, suffered from hypertrophy of the heart and pneumonia, of which diseases she died, but without exhibiting any cerebral symptoms during life. A *post mortem* examination was made, and the diagnosis of the thoracic diseases was confirmed. The following were the appearances observed in the head. The scalp and skull presented no morbid appearance. The dura mater was congested, and the sinuses were full of half-coagulated blood. The vessels of the pia mater seen through the arachnoid were highly congested, and injected to their minutest ramifications. The arachnoid membrane was thickened at the vertex, where it presented an opaque, pearly appearance, owing to the effusion of serous fluid beneath it. The quantity of serous fluid was upwards of three ounces. There was a little fluid in the ventricles; their lining membrane was congested, and the choroid plexuses were oedematous.

I might multiply cases of this kind to an indefinite extent, as I have notes of many *post mortem* examinations, in which the same appearances have been observed. I confess that I formerly laid so much stress upon the phenomena usually described as characteristic of meningeal inflammation, that I carefully noted all cases where the arachnoid membrane was thick and opalescent, and where there was serous effusion beneath it; and I considered that these appearances were due to the existence of arachnitis during life. I am now convinced, however, that all these appearances may be observed, without the necessary pre-existence of any inflammation of the membranes at all, at least in the sense in which that term is applied. I believe that the thick and tough condition of the arachnoid membrane is a very common occurrence, especially as age advances; and that the effusion beneath its cerebral layer is often to be considered either as a *post mortem* change, or as caused by the same laxity of the extreme vessels as gives rise to passive exudations of serous fluid in the pleura, the pericardium, the peritonæum, and in the general subcutaneous areolar tissue.

Now I believe these observations to be of great importance, because there is too great a tendency in the present day to jump at conclusions, and, in the department of pathology, to consider as pathogenetic phenomena appearances which are not truly morbid at all.

If it be asked, then, what are the appearances observed after death, in cases which have died of meningeal inflammation, I reply that they are by no means necessarily well marked. If, indeed, the arachnoid *alone* be the seat of disease, then we should expect to find what we do occasionally find; namely, the results of serous inflammation, the thickening of the membrane, and the effusion of plastic lymph *between its opposed surfaces*; but this is comparatively rare; and in the more common case of subarachnoid inflammation involving the pia mater, the appearances after death may be very inconspicuous. Nor can we wonder that such is the case: for inflammation of the pia mater is *not* followed by effusion of plastic lymph, and the only appearances which we can expect to find would be increased vascularity and the effusion of limpid fluid. But, at or after death, the minute arteries are usually emptied, even although inflammation may have existed during life. Thus, if a person were to die while he was suffering under an attack of conjunctivitis, we might find the conjunctiva very slightly injected, or perhaps not at all; and, indeed, if a person faints, during an attack of conjunctivitis, the membrane is pale while the fainting continues. It is, therefore, by no means extraordinary that inflammation of the pia mater should leave very few traces after death, more especially when the course of the disease has been rapid, and the inflammation has not had time to induce disorganisation of the adjacent tissues.

It is necessary, then, to be extremely cautious in forming our judgment in cases of meningeal inflammation; and a correct result can be attained only by comparing carefully

* I have selected these two out of a number of cases, because I think there can be no doubt in any reasonable mind that they are instances of cerebral meningitis. In the first case, it is distinctly obvious that the inflammation was transferred from the fibrous surfaces of the joints to the cerebral membranes, or, in other words, was an example of what has been called *metastasis*. In the second case, again there is distinct evidence of inflammation within the head, and I think the cupping and buffing of the blood afforded very strong proof that a membranous structure was involved. In the obscurity which attended the case during life, this circumstance struck me as affording the proper clue to the diagnosis.

the symptoms observed during life, with the appearances revealed after death. I believe that the following rule is in accordance with observed facts; namely, if a patient, who is not suffering from albuminuria, have a hot head and a hot skin, vomiting, squinting, delirium; if the blood which is drawn be buffed and cupped; if the patient become comatose and he dies; and if after death there be found increased vascularity of the pia mater, and effusion beneath the arachnoid membrane, then the case is most probably one of meningitis, although the effusion be but small, and the vascularity not remarkable; but if there be an absence of all cerebral symptoms during life, then, even although there be thickening of the arachnoid and effusion beneath it, these appearances do not necessarily indicate meningeal inflammation, nor are we justified in considering them as morbid phenomena.

I pass over the pathology of inflammation of the substance of the brain, of congestion of the brain, of hæmorrhage within the brain, and of softening of the brain, because the time will not allow me to enter fully into these subjects, and because the pathology of the membranes is the subject which now most urgently demands consideration.

The DIAGNOSIS of cerebral disease is a point of very great difficulty, but of immense importance; and, although in numerous cases all treatment is unavailing, yet we are frequently enabled to effect the most beneficial results by appropriate therapeutic means. I have already shewn that formidable symptoms and rapid death, may be caused by a superficial inflammation of the brain, while a deep seated organic disease may excite perhaps no symptoms at all, and may destroy the patient only after a long duration. Again, it must be remarked that the different forms of insensibility are very nearly allied in their general appearance, and yet spring from causes wholly distinct, and require very different treatment. Four persons, for instance, are lying in a police station-house in a state of total insensibility; and yet their stupor, which is the symptom common to all, arises from opposite causes. One is a woman suffering from hysterical coma; a second is a man who is *dead drunk*; a third is poisoned by opium; a fourth is labouring under the advanced stage of inflammation of the membranes of the brain. The first is restored to consciousness by the copious affusion of cold water to the head; the second sleeps off the effects of his debauch in a few hours; the third is cured by the administration of emetics, and the use of the stomach pump; the fourth may be recovered by a large blood-letting. Yet if any of these remedies be applied to the wrong cases, the most deplorable results would ensue: a large bleeding in the hysterical case or the case of intoxication would aggravate the symptoms tenfold in the first, and change the temporary stupefaction into the sleep of death in the second case; the affusion of cold water, and the administration of emetics, would accelerate the fatal event in the case of meningitis. Although these cases are grouped together for sake of distinctness, the occurrence is not an imaginary one; and such instances, though not perhaps occurring all at once, are frequently observed in practice.

Again, two persons, rather advanced in years, drop down insensible, without any previous warning; but one is suffering from softening of the brain; the other labours under vascular congestion of the same organ. Wine, brandy, ammonia, and ether, may possibly restore the one; a copious bleeding is the proper and perhaps successful treatment for the other.

Once more; two persons are delirious and unmanageable; but one suffers from inflammation of the substance of the brain, the other from delirium tremens: the first shall derive the most marked benefit from bleeding, purgatives, calomel, and the local application of ice; the second shall be tranquillised by large doses of opium.

Nor must it be forgotten that the most terrible symptoms indicating brain disease may exist without any structural derangement of that organ at all, and may be due to disease of remote parts. Obstruction in the renal tubes may give rise to symptoms precisely resembling apoplexy; teething in children and abdominal irritation may produce the

most frightful convulsions. It is most essential to distinguish cases of *centric* from those of *eccentric* origin; and the life of the patient too often depends upon the accuracy of the diagnosis. The following is a case in point.

CASE VIII. A child, nine months old, delicate from birth, contracts the whooping-cough, and soon after becomes the subject of well marked and long continued convulsive attacks. The eyes are rolled about in all directions, and a squint is frequently observed; the thumbs are drawn in towards the palms of the hands: the child takes no notice of the objects which formerly interested it. The motions are offensive; the pulse is rapid, and occasionally intermittent. The symptoms continue; the convulsions increase in violence; the pulse sinks; and the sufferer seems to be in imminent danger of being carried off in one of the fits. The child is carefully examined: the head, although hot during the continuance of the fits, is cool in the intervals; the eyes, although irregularly rolled about, are not much affected when turned to the light, and the pupils are neither contracted nor dilated in a morbid manner, but contract on the approach of light, and expand when it is withdrawn. The tongue is not very foul, and there is no vomiting; the pulse, when examined in the intervals between the fits, is steady, but rather weak; the bowels are irritable; the gums are examined, and some points of teeth seem to be struggling through the gums. *The child is not suffering from organic disease of the brain*; leeches are not to be applied to the head, and calomel is not to be administered. The gums are freely lanced; the breast-milk, on which the child has been living, is withdrawn, and well selected artificial food is substituted; chloroform is inhaled to moderate the convulsions; rhubarb and soda are given at regular intervals; hydrargyrum cum creta is occasionally administered; and weak brandy and water is sometimes ordered when the exhaustion is urgent. No improvement is observed for some time; the fits are still very violent, especially after the ingestion of food; but, after a time, the convulsions become less frequent and more slight, and finally disappear altogether.

In a case like this, if the practitioner were to be guided only by the more prominent symptoms, namely, the convulsive actions, he might infer that cerebral inflammation existed; and a treatment based upon that view would undoubtedly accelerate, if it did not cause, the death of the patient.

CASE IX. On the 1st of September of this year, I was called to see an infant, a fortnight old, who was said to be suffering from constant convulsions, which had resisted all ordinary methods of treatment. On examining the history of the case, I found it to be the following:—The lady, who was the mother of the infant, was rather weak, nervous, and hysterical; and, during the early part of her pregnancy, she received a great mental shock from her husband betraying some well marked symptoms of aberration of mind, of which, however, he soon completely recovered. Her labour was a tedious one, but was not marked by any other peculiarity, unless it be deserving of mention that the gentleman who was to have attended her in her confinement was out of town at the period, and she was obliged to accept the services of another practitioner. She recovered rapidly from her confinement; indeed, she thought herself so well, that, contrary to the advice of her medical attendant, she was out of bed in a week. About this time, the infant began to be convulsed, which caused her very great alarm. When I first saw the case, I found the infant convulsed very frequently, but sleeping in the intervals: the eyeballs were thrown about in various directions; and the thumbs were drawn in towards the palms of the hands. I found, however, that the head was not hot; that there was no vomiting; that the tongue, so far as I could see it, was not foul. The skin generally was cool, and slightly moist; the pulse was 120, and regular; the child took the breast-milk with avidity; the motions were yellow, and without any disagreeable odour. On turning my attention to the mother, I found her in a very weak and nervous condition, and walking about the room, although only a fortnight had

elapsed since her confinement. Her pulse was very weak, her face pale, her breasts flabby, her milk thin. I therefore directed particular attention to her state. I recommended her to go back to bed; to drink milk, and occasionally bottled stout; to eat mutton chops; to take quinine; and, as far as possible, to keep her mind at rest. For the baby, I recommended only a little powder of soda and rhubarb to be given occasionally, as I felt convinced that the convulsions were *eccentric*, and not caused by any disease of the brain or spinal cord. I also recommended milk and water with sugar to be occasionally given to the infant. When I next visited the cases, I found that the mother was already better, her pulse stronger, and her mind more composed; but the infant still had convulsions. I now recommended the mother to discontinue nursing; and, as there was a person in the house who had a good breast of milk, I directed the infant to be applied to it, and saw the child drink with avidity. I made no other alteration in the treatment. Three weeks afterwards, I was again requested to visit the case; and the mother, who was much better, considered the infant's condition as hopeless, as the convulsions had continued ever since my former visits, but not quite so frequently. But, after again carefully examining the child, I assured her that it would in all probability recover, and recommended change of air both for mother and infant. I also recommended a mixture for the child, containing a little tincture of *assafoetida*, with *magnesia*, to be given at regular intervals. I did not see the case again; but I am informed by the medical gentleman who had the charge of the case, that my original view had been correct; that the convulsions gradually became less and less frequent, and less violent; that both mother and child went to Brighton; and that no farther medical attendance was considered necessary.

Now, I do not by any means assert that cases like those just recorded are free from danger, or that we are justified in giving a decidedly favourable prognosis; for in very young infants, and in children during dentition, the very violence of the functional disturbance may carry off the patient at once, or wear out the powers of life by its long continuance; but I boldly declare that a correct diagnosis will save many patients whom an incorrect one would destroy. The routine system of applying leeches, giving calomel, and administering purgatives, however useful in cerebral inflammations, is destructive to the patient in functional disorders of the brain; and, in these latter cases, the use of mild alteratives, and strict attention to diet and regimen, will often effect a cure.

As I have confined my remarks chiefly to diseases affecting the skull and the cerebral membranes, and to those disorders which may be mistaken for them, I shall conclude with a summary of the chief points of diagnostic importance.

1. When a person suffers from constant and dull pain in the head, with or without convulsions, the pain being limited to a certain region, the external surface of the head being cool and the pulse regular, the digestive system not much or not at all disturbed, and the intellect unimpaired; if any thickening of the bony structure can be perceived, or if the patient has suffered from syphilis, it may be conjectured as probable that there is thickening of the skull, and that the symptoms are due to that cause. In such a case, a moderate diet should be enjoined; leeches may be occasionally applied; the bowels should be kept gently open; but I think our chief reliance should be upon the internal administration of iodide of potassium in increasing doses, and continued for a long period.

2. When there is pain and heat of the head, vomiting, nausea, want of appetite, foul tongue, derangement of bowels, rapid and full pulse, squinting, delirium, thirst, and subsequent coma, and if the blood drawn be buffed and cupped, there can be little doubt that the case is one of meningeal inflammation.* In such a case, there is no time

to be lost; the warm bath must be used in the case of a child; cold must in all cases be applied to the head; leeches are always necessary: calomel is to be freely administered, and alterative aperients must be given at the same time. By the adoption of such measures many valuable lives may be saved.

3. When the head is cool, the pulse moderate, the tongue clean, the motions healthy, *then*, although there may be the most violent and long continued convulsions, squinting, drawing in of the thumbs towards the palms of the hands, and all other symptoms indicating deranged action of the nervous centres, there is nevertheless an absence of serious centric disease. We may here reasonably hope for a favourable termination by the use of ordinary hygienic means; such as lancing the gums, if the patient be undergoing the process of dentition; attending to the quality of the breast-milk in very young infants; correcting any ascences in the *primæ viæ*; change of air, and the judicious use of stimulants and tonics; and the adoption of all such other means as are calculated to improve the powers of the system in general.

It cannot be urged in too strong terms, that the mere existence of convulsions, however alarming they may appear, does not indicate, *alone*, a serious disease of the brain; these movements are merely the external manifestations of cerebral irritation, and are often caused by circumstances comparatively trivial. On the other hand, it must be remembered that, at all periods of life, the cerebral membranes, especially the *pia mater*, are apt to take on inflammatory action; and that, slight and web-like as this membrane is, and insignificant in appearance as are the lesions which it exhibits to the scalpel or to the microscope, yet upon its integrity or its unsoundness often depends the brightness, the perversion, or the obscurity of the intellect; and that an inflammatory disease of its texture is one of the most frequent causes of death. The most energetic treatment often fails to rescue the patient from the grave; but it is nevertheless of paramount importance to detect the malady during life, and, if possible, to arrest its progress.

8 Torrington Square, November 1853.

AN INQUIRY INTO THE RELATIVE MERITS OF THE INTRA- AND EXTRA-PERITONEAL METHODS OF HERNIOTOMY.

By JOSEPH SAMPSON GAMGEE, Esq.

WHILE working in the Florence Hospital, two years ago, I expressed surprise to my friend Dr. Palamidessi, the assistant clinical surgeon, at finding that, in operating for hernia, no attempt was ever made in that institution to reduce without opening the sac. Hence arose a discussion on the merits of this plan, which resulted in the doctor promising that he would put it to the test when a fitting case presented itself: he accordingly did so, but not without the propriety of his practice being called in question. At this juncture, he called upon me to furnish him all the evidence in my power in support of the extra-peritoneal operation. To comply with this request, I was led to devote considerable time to bibliographical research and analyses of cases. At the close of this investigation, I have been surprised at the unsatisfactory state of knowledge on the subject; the opinions of distinguished surgeons being conflicting, and facts to reconcile them not at hand. Seeing moreover that, so late as 1850, Mr. Hancock deemed the question of sufficient importance to devote to it the greater part of an exceedingly able and elaborate monograph, in which he has enunciated propositions at variance with received opinions, and, in my opinion (I emit it with much deference), not in accordance with established facts, I am induced to methodise a few of the notes which I made in the pursuit of this investigation.

Originally performed in a case of strangulated inguinal hernia in the early part of the last century, by Jean Louis Petit, and subsequently in a considerable number of cases

* I think it is hardly necessary to state that I am supposing the patient to be free from previous disease of other organs; for I purposely exclude these cases of pseudo-cerebral inflammation which may be due to fever, albuminuria, uterine diseases, etc.

by Ledran, the extra-peritoneal method of herniotomy did not gain much repute until 1788, when Monro strenuously defended it, after having put it to the test of even wider experience than had been done by Petit. Sir Astley Cooper, Boyer, and Lawrence, recommended it in particular cases. No further decided impulse was given to its generalisation until 1833, when Mr. Aston Key devoted to its advocacy a monograph so rich in facts and sound surgical arguments, that most English surgeons adopted the innovation, and soon found reason to publish their testimony in its support. Mr. Luke, in particular, has laid claim to be regarded as an advocate of the operation, by the statistical evidence which he has supplied. With a voice so unanimous have the majority pronounced themselves followers of Petit and Monro, that the merit of their operation would appear to be no longer matter of question; but though the rank of dissentients be unimportant in point of numbers, their character renders them formidable: among them are Mr. Syme and Mr. Hancock.

In the third edition of his *Principles of Surgery*, published in 1842, Mr. Syme unconditionally condemned Petit's operation; but in 1851, feeling it requisite to explain the changes which had taken place in his sentiments since the publication of his last edition, he thus alludes to the subject under consideration:—"The late Mr. Aston Key and Mr. Luke, of London, have done much to revive and establish in practice an old proposal for lessening the risk of operations for hernia, by dividing the cause of constriction without opening the extension of peritoneum which constitutes the sac. The advantage attributed to this procedure, is that which may be supposed to result from having the serous membrane entire, and in protecting it from the risk of inflammation; while the disadvantages alleged to attend it are the dangers of wounding the intestine in dividing the stricture, the evils which may arise from reducing the strangulated parts in a state unfit for their admission, and the mischief which may arise from abortive efforts to effect reduction when it is impeded by adhesion or other change of the parts contained within the sac. On the whole, I feel satisfied that, as a general rule, it is better to open the sac; and that the procedure in question should be restricted to the treatment of large hernial protrusions, such as those of the scrotum, and of patients in unhealthy hospitals, where a strong disposition to inflammation of the serous membrane may be inferred from the frequency of erysipelas and phlebitis."* So striking is the difference in Mr. Syme's opinion in 1842 and 1851, that it cannot but be matter of regret that he has not deemed it advisable to state in detail the reasons which have induced it. But, in point of fact, though he has explicitly opposed Petit's operation, even in his last publication, the terms in which he has expressed himself imply a forcible argument in its support. From his admission that in "patients in unhealthy hospitals, where a strong disposition to inflammation of the serous membrane may be inferred from the frequency of erysipelas and phlebitis", it is advisable to perform Petit's operation, it is evident that Mr. Syme believes that by not opening the sac the tendency to peritonitis is lessened. Hence arises a great reason for the preference of Petit's method whenever practicable: peritonitis being one of the great causes, if not the greatest, of mortality after operations for hernia. The advocates of Petit's operation cannot but infer an argument in support of it, from the very fact of Mr. Syme having in any degree deemed it necessary to slacken the force of his opposition to it, after the addition of nine years to his experience, which was already very great when, in 1842, he expressed himself in terms so decidedly adverse; they cannot but see some analogy in cause and probable effect, between this change in Mr. Syme's opinion, and that which took place in Mr. Liston. In 1840,† Mr. Liston stated, that in operating for femoral hernia, when the sac has been exposed, it is to be opened with great caution; and he commented on the recommendation of some, that the sac should

be left undivided, and that the stricture should be relieved by passing the knife on the outside, by observing that the stricture cannot be well relieved unless the neck of the sac is cut, along with the resisting fibres exterior to it. Six years afterwards, he thus alluded to the practice of endeavouring to reduce without opening the sac:—"I have fortunately succeeded in effecting this object in a considerable number of instances, within these few years, and it is a proceeding which I should strenuously advise the adoption of, when nothing contra-indicates it." The result which followed the trial of Petit's operation in Mr. Liston's hands, is precisely that which has attended it since it was first imagined. Opposed on the ground of preconceived opinions, it has steadily gained in repute, in proportion as it has been put to the test of experience.

Mr. Hancock's opposition is far more decided than is that of the Edinburgh Professor. "Opening the sac", he says,‡ "does not increase the danger of the operation; but, on the contrary, is to be preferred as the safer mode of proceeding." So forcibly and ably, and in many respects so plausibly, has Mr. Hancock defended his opinion, that it deserves most attentive consideration. If correct, it is calculated to do much good; otherwise, its adoption must be attended with practical mischief, of a magnitude proportionate to the immense importance of the affection, as a rule in the treatment of which it is propounded.

The array of authorities—Dupuytren, Richter, Hey, Heister, Sir Astley Cooper, Lawrence, South—whom Mr. Hancock cites, as opponents of Petit's operation, is *prima facie* so formidable as to deprive it of all claim to support; but it becomes very much less so when critically examined. Even Mr. Hancock admits that Sir Astley Cooper's opposition was only partial, for he recommended the operation in old and large incarcerated herniæ. But more, Sir Astley, in expressing his belief "that surgeons will employ it more generally when they shall have learned its advantages from experience,"§ pronounced a high encomium on Petit's innovation: for he implied a conviction that the reason why it was not much resorted to in his time was because its advantages were not known, and the ordinary operation was preferred in accordance with previously formed opinions; but so intrinsic was its merit, that it would only become more apparent on more experience, and impel surgeons to adopt the new method by practically convincing them that it was the best. Qualified are also the objections of Heister;|| but what is of even more importance is, that there is no evidence of their being the fruit of experience; they rather bear the stamp of a mere expression of opinion. "Nec mihi nec aliis præstantioribus chirurgis satis placet," is Heister's judgment on this important matter.

True it is that Dupuytren constantly practised the ordinary operation for hernia; and, in thus doing, he entered a practical protest against Petit's operation. But it is fairer to say that he overlooked it, than that he opposed it; for, after diligent search, I cannot find that he either refuted by argument the practical teaching of Petit, Ledran, and Monro, or that he sought to acquire personal knowledge of its value by putting it to the test of experience.

The accession to Mr. Hancock's cause of an authority so deservedly esteemed in practical surgery as was the late Mr. Hey, of Leeds, would indeed be considerable, if, contrary to his usual custom, this gentleman had not argued so manifestly *à priori* on the merits of Petit's operation, that no value can be attached to his objection when opposed to the experience of a large number of the most re-

* Practical Surgery, 1846.

† On the Operation for Strangulated Hernia. By Henry Hancock. London: 1850.

‡ Op. cit., p. 2.

§ I quote the opinion of Sir Astley, from Lawrence on Hernia, p. 277 Third edition.

|| "Has igitur ob causas ut plurimum etiam in malo veteri magnoque timore præstare existimo sacculum potius aperire quam integrum relinquere: eum modum non nisi in recenti malo, ubi nulla adhuc intestinorum corruptio, nulla concretio, nullus abscessus, tuto posse adhiberi: quemadmodum et ipse Garengnotus hanc curationem tunc ad hanc observationem restringit, in altera operationum suarum chirurgicarum editione." Dris. Laurentii Heisteri Institutiones Chirurgicæ, tom. iii, p. 112. Neapoli: 1749.

* Supplement to Principles of Surgery, p. 31.

† Elements of Surgery, 1840, p. 330.

nowned surgeons of the age. The following quotation will, I think, be found ample justification for this criticism:—

"It has been proposed* by respectable authorities to divide the abdominal ring, and reduce the protruding parts, without opening the hernial sac. The reasons given by Mr. Astley Cooper and Mr. Lawrence appear to me unanswerable. But, in ordinary cases, I think the advantages proposed by it are not to be set in competition with its dangers. The operation itself, as far as I am able to judge, must be much more difficult; the epigastric artery, when the operation is properly performed, is in little danger; it was never divided in any operation (of inguinal hernia) which I have performed myself, or seen performed by others; and it is by no means certain that the danger in this operation arises from making an opening through the peritoneum. Whereas, not to insist upon the impossibility of reducing the prolapsed parts, which must sometimes arise from the contracted state of the neck of the sac, the increased bulk of the parts, or their adhesion to the sac and to each other,—the uncertainty which must almost always occur of the existence of gangrene in the intestine or omentum (in which case, reduction, without opening the sac, must be considered as certainly fatal to the patient) for outweighs, in my opinion, any advantages that can fairly be supposed to arise from practice."

Richter, another of the great surgeons mentioned by Hancock as an *able opponent* of Petit's operation, is, on the contrary, one of its *most elaborate and most weighty advocates*. So deservedly reputed is he as an authority on hernia in general, and so ably has he discussed this question, that I do not hesitate to quote from him, though at length. He states very fully,† under seven heads, the reasons usually adduced against Petit's method, and adds:—"Such are the objections commonly adduced against this operation. They are imposing, but not, however, so powerful and convincing as many authors deem them. . . . If it be objected, that incipient gangrene may be met with in cases in which, the strangulation being recent, there is little reason to expect it; and that, consequently, we are never in a state of safety in adopting this method, even though the operation be performed early, and before the symptoms have acquired much gravity, I [Richter] answer that, if the surgeon, after having decided on the operation, still makes an attempt to reduce, whether with tobacco-smoke, taxis, or other means, and proves successful (the hernia is reduced without opening the sac, and its contents may be diseased), why should there not in such a case be reason to fear from the taxis what is feared half or quarter of an hour afterwards from the operation? Will the surgeon be blameable, if he succeed in his last attempt? or will a judicious surgeon abstain for this motive? Should not the taxis, tobacco-smoke, and all the other means, be rejected, because they all effect reduction without the sac being opened, and because, from the first day of strangulation, the sac's contents may be diseased. . . . This method of operating is too lightly considered, without any of its advantages being observed. Why is the sac opened in the operation? In order to be able to treat the diseased parts properly, to destroy adhesions, and the cause of the constriction, if it be situated within the sac; but if there be no diseased adherent parts, if the cause of strangulation be outside the sac, why then open it? I see no reason for doing so. Is not opening the sac under such circumstances, to say the least, superfluous and useless? and would it not be advisable to reduce without opening the sac, merely because there is no use in doing so?"

"Petit's method has other real advantages. It renders the operation less complicated; and the more simple an operation is, the more is it safe, easy, and perfect. It prevents the intestines being wounded, for they are not exposed. Finally, the intestines are not exposed to the air;

and no one will deny this being an essential advantage. . . . I therefore think that this plan of operating should not be rejected in all cases, but that, on the contrary, it may be put into practice, under certain circumstances, with advantage."

Mr. Lawrence has very fully considered the arguments in favour of and against Petit's operation. He does not even express himself positively against the propriety of its *general adoption*, but holds it *sub judice*, suggesting some points for consideration before it can be assented to; and sagely remarks, that the question of eligibility between the ordinary course of proceeding and this modification must be determined, like all other practical matters, by experience.* No doubt, however, exists in Mr. Lawrence's mind as to the reality of the advantages attending the performance of Petit's operation in particular cases; accordingly, he teaches, that "the plan of removing the stricture without opening the sac† is particularly applicable to large and old ruptures, especially if the parts should be adherent, as they frequently are in such cases. To separate the preternatural connexions would require a tedious and difficult dissection, with long exposure, and much handling of the viscera; and the violence necessarily inflicted in executing such an attempt renders the subsequent occurrence of inflammation almost certain. In laying open the whole of a large hernial tumour, the exposure of so extensive a surface is a source of great danger to the patient, who, in such cases, is frequently advanced in years, and therefore less able to withstand extensive inflammation and suppuration. We must remember, too, that in large herniæ, which have been long irreducible, the abdomen becomes accommodated to the diminished bulk of its contents; and that either it will not yield sufficiently to receive again the parts which have been long protruded, so that we cannot replace them, or, if we should accomplish the return, it is so painfully distended that the replaced viscera are soon forced out again. Moreover, the ring is so much dilated in those cases, that hernia will certainly reappear; and consequently there can be no expectation of a radical cure from the operation. These reflections will induce us to adopt the practice of removing the stricture without opening the tumour in all such cases."

We have yet to study Mr. Hancock's arguments.

In the belief that peritonitis is one of the great causes of death after operations for hernia, Petit's operation is defended by many, because, not involving wound of the peritoneum, and thus lessening the chances of its becoming inflamed. Mr. Hancock endeavours to dispel the hope of deriving benefit from not wounding the peritoneum, by disproving the general opinion that the occurrence of peritonitis is much to be dreaded. "Comparatively few patients," he alleges,‡ "die of simple peritonitis after this operation. Out of fifty-two fatal cases instanced by Gay, the symptoms of peritonitis alone existed only in eight; and in these the symptoms were so slight as to lead to the supposition that the patients died from the shock to their systems, rather than from the peritonitis. It is an interesting fact, that the amount of mortality is not in the same ratio as the extent of peritoneum and intestine exposed. Cases recorded prove the smaller herniæ to be those which present the most urgent symptoms; and Sir A. Cooper has related that, in the largest hernia he ever saw, having opened the sac, a large quantity of intestine with omentum protruded; but, after dividing the stricture, the adhesions were so great, that he judged it advisable not to attempt their separation; and, from the size of the hernia, it was impossible to bring the integuments over the intestine, which was therefore left exposed to the air; yet nothing untoward ensued; the intestine soon began to granulate, and gradually sprout within the wound; and the patient recovered. Boyer also gives a case which occurred to Petit. Although the stricture was freely divided, and there were no adhesions, yet the gut could not be returned. Petit therefore allowed it to remain in the wound, and

* Practical Observations in Surgery. By William Hey, F.R.S. Second edition. London: 1810. p. 144.

† Not having Richter's original at hand, I quote from the Italian translation of his Treatise on Hernia. Prima traduzione Italiana. Milano: 1802. pp. 146-191.

* Op. cit., p. 290.

† Id., p. 284.

‡ Op. cit., p. 5.

covered it with pledgets of linen. The greater part returned spontaneously into the abdomen, the wound healed, and the cure was accomplished."*

Mr. Gay's table is not, however, so favourable to Mr. Hancock as appears from the above quotation. Though it be true that, out of the fifty-two fatal cases, the symptoms of peritonitis alone existed only in eight, it is very essential to bear in mind that peritonitis existed with other pathological conditions in many more cases: thus, in two cases, it was associated with portions of bowel sloughed and adherent to the ring; in three, the bowels were matted together, with or without sero-purulent effusion, and the strangulated portion of gut was ruptured; in other two cases, lymph was effused, and gangrene threatened. Though in these cases the peritonitis was not the only pathological change, it was in many a primary one—in all, a very serious complication. After studying Mr. Gay's table, I can see no reason for dreading peritonitis after operation for hernia, less than I did before I became acquainted with Mr. Hancock's objection; and I am as much as ever convinced that any plan of operation which lessens the chances of peritonitis is *pro tanto* calculated to lessen the mortality of the operation. The grounds of my conviction are the recorded experiences of many of the most eminent surgeons of all countries, and my own observations. How many are the cases in which the operation is followed by symptoms of peritoneal inflammation, which necessitate the employment of antiphlogistic remedies! How evident in many cases is the ratio between the rapidity of recovery and the activity with which these remedies are employed!

When Mr. Hancock characterises as interesting the fact that the amount of mortality is not in the same ratio as the extent of peritoneum and intestine exposed, and implicitly infers therefrom (as the context proves) that the danger of the operation cannot be in proportion to the chances of peritonitis, and that the peritoneum may be cut with impunity, he loses sight of a fact at least equally interesting and important. He has compared large and small herniæ, as if their size and the extent of the peritoneum involved were the only difference between them; but this is not exactly the case. The difference in danger between large and small herniæ depends upon a cause, in itself so active as to mask the relative effect of opening a large and a small peritoneal sac. The smaller herniæ are of the femoral kind, in which, owing to the anatomy of the parts, the constriction is most valid, and most speedily productive of ill effects. In the case of inguinal herniæ, the larger ones are as a rule the least dangerous, for a similar reason. The parts through which a large quantity of omentum and intestine has been in the habit of descending are stretched and thin, and far less able to strangle tightly, than are parts little altered from their normal position and nutrition. It is perfectly intelligible that the danger should be in direct ratio to the validity of strangulation; and it is the very reverse of paradoxical, to assert that, *ceteris paribus*, a wound of the peritoneum is a cause of danger, and yet that as a rule operations for hernia are fatal in inverse ratio to the size of the sac—to the extent of peritoneum involved.

The cases of Astley Cooper and Petit, quoted by Mr. Hancock, in which large quantities of intestine were left exposed to the air without injury, are interesting as extraordinary exceptions; but it would be no more fair to argue from what happened in them, as to the rule of operations for hernia, than it would be to predicate the effects of gunshot wounds of the stomach, from what occurred in the case of Alexis St. Martin, for the description of which we have to thank Dr. Beaumont, of physiological celebrity.

"The history of strangulated hernia proves by every-day experience that cut peritoneum may be cut with impunity. I am willing to admit that if we cut or irritate healthy peritoneum, we may induce peritonitis, although even this does not always occur; but if we cut inflamed peritoneum, the inflammation does not necessarily increase, especially

when that inflammation results from some exciting cause. An incision thus becomes a relief to the patient; whereas, when made in the healthy peritoneum, we inflict a violence on the part. I believe, and I am supported in this belief by the observations of Sir Charles Bell, that we may cut diseased with greater impunity than healthy peritoneum. The abdominal sections for ovariectomy prove this; the removal of large portions of omentum proves it; the operations for paracentesis abdominis prove it; and the success which attended my case of caecal disease tends to prove it."*

The admission that if we cut or irritate healthy peritoneum we may induce peritonitis, is at least an argument why such cutting should, if possible, be avoided in operating for hernia before inflammation has set in. Granting that removing the cause of the peritonitis is in many cases an effectual cure of it, it does not follow but that, in rare cases, the incision may be a sufficient cause of aggravation to counteract the benefit which accrues from relief of the constriction. The abdominal section for ovariectomy, the removal of large portions of omentum, and the operation for paracentesis abdominis, prove that in these particular forms of disease there is very little chance of peritonitis following the use of the knife; but they in no degree tend to subvert the common sense suggestion that once the peritoneum has become the seat of inflammation, this may be perpetuated and aggravated by the operation of another mechanical cause (an incision) when the first one (constriction) has ceased to operate.

Mr. Key's admission that the inflammation after the operation for hernia spreads from the bowel, and not from the incision in the sac, is regarded by Mr. Hancock† "as a conclusive proof that the danger and inflammation result from the violence inflicted on the gut itself by the strangulation; and that opening the sac, and thereby laying bare the abdominal cavity, has literally nothing to do with the fatal termination." The conclusiveness of the proof is fairly questionable; for though it might be just to infer from Mr. Key's observations that opening the sac does not injure it or the parietal peritoneum, it is unjust to allege that opening the sac does harm to nothing, and that the violence inflicted on the gut itself by the strangulation is the sole cause of the danger and inflammation. It is in accordance with general surgical experience to hold, until facts shall have proved the reverse, that the inflammation occurring in, and spreading from the peritoneum covering the bowel, is partly at least the result of its exposure to the air and manipulation entailed by opening the sac, and therefore that it is advisable to avoid opening the sac, unless other reasons call for it. Strenuously as Mr. Hancock insists on the impunity with which the peritoneum may be cut into in cases of strangulated hernia, it is impossible to say how he would account for the immense difference in the ratio of mortality, when the strangulation can be removed by the taxis, and when the knife is called for. Allowing that the very fact of operation being needed is proof of the greater seriousness of the case than when the taxis suffices, one cannot help regarding incision into the peritoneal sac as a most dangerous step in the operation, certainly not a harmless one.

Proceeding with the reading of Mr. Hancock's paper, we find at p. 25: "My objections to Petit's operation are, that it is not applicable to all cases." He goes on to relate as unfit, cases of strangulation by omentum and by bands within the internal aperture, and cases of gangrenous intestine. As to the two first classes of objectionable cases, let me observe that the taxis would be tried in them. In some it would fail, and then probably Petit's would fail also, and no harm be done. If it succeeded in reducing, and produced disastrous after consequences, the one method would be as objectionable as the other; and yet we presume Mr. Hancock himself would try the taxis, for he could not tell the nature of the strangulation. As to the cases of gangrenous intestine, the great majority can be diagnosed by the rational signs

* On Femoral Rupture, its Anatomy, Pathology, and Surgery: with plates. By John Gay. London: 1849, p. 79.

* Hancock, op. cit., p. 6.

† Op. cit., p. 7.

prior to operation; and it is only in a very few indeed that there would be danger of returning disorganised gut.

"Again, if this mode of operation is not intended to apply to cases in which the stricture exists in the neck of the sac, its sphere of action is very limited; and so far from becoming a method of general adoption, it will be found to apply, according to Dupuytren, to merely one case in nine in inguinal, although in femoral hernia its application is more extensive."*

But the fact that the sphere of action may be limited is not an argument why the benefit derivable from it should not be availed of in that sphere, however small it may be: because we cannot have the whole good, are we to refuse a part of it?

Mr. Hancock admits, that his objections to Key's or Petit's operation apply to a certain extent to the employment of the taxis; but he adds: "There is this distinction between the taxis and the operation, that in the case of the former, should the symptoms recur or continue, we feel that we have merely employed a preliminary proceeding, and therefore can at once proceed to operation, and ascertain the cause of mischief. We have here performed only one operation, and the patient sustains the shock and dread of merely one operation; but the case is widely different where we have already operated, and the symptoms still persist. We are led to imagine that we have done all that the case admits of—that the persistent symptoms depend upon the injury sustained by the gut. We treat the patient accordingly; much valuable, and under the circumstances most invaluable, time is lost; and should we at length make up our minds that something more should be tried, we are obliged to recommend a second operation to our unfortunate patient, with the humiliating feeling, through our selecting the wrong mode of proceeding in the first instance, we have increased his sufferings, whilst we have materially diminished his chances of recovery." Thus arguing, Mr. Hancock leaves open the question, whether, in a considerable number of cases, Petit's is less dangerous than the ordinary operation for strangulated hernia, and he objects to the former because it may sometimes fail. But the fact of a comparatively slight operation not being sufficient in all cases, but possibly requiring ulterior proceedings of a more serious nature, is *per se* no reason why the patient should not have the benefit of the milder method. Very different from Mr. Hancock's were Mr. Liston's reflections in this point.† "The attempt (to perform Petit's operation) can do no harm; it causes little or no delay; and if it is not successful, the sac after all is opened, and the operation completed. If it does prove successful, the surgeon's mind is relieved of an uncommon load of anxiety."

Mr. Hancock's criticism on the statistics of the two operations furnished in Mr. Gay's work on femoral hernia has tended in some degree to lessen its apparent weight, as evidence of the superiority of Petit's over the ordinary method; for he has shewn, that in fifteen unsuccessful cases in which the sac was opened, death occurred from circumstances, the fatal nature of which would not have been avoided by leaving the sac intact; still, Mr. Hancock feels bound to acknowledge that Mr. Luke has been most successful, and that his statistics are in favour of Petit's operation. Now, Mr. Luke's statistics are undoubtedly those which claim the most respect; for their number is far more considerable than that supplied by any other surgeon; equally unparalleled is the precision with which they are given.

As yet, however, statistics are very far from being sufficiently numerous for the decision of the question. And here I feel the necessity of observing, that in the numerous discussions to which the more modern operation for hernia has given rise, many have lost sight of the really important question at issue. The point to be determined is not which of the two operations deserves absolute preference, the extra- or the intra-peritoneal; but whether the great mortality

of the operation for strangulated hernia admits of diminution by adopting one or the other method, according to the indications in particular cases. If, as a rule, it be unphilosophical and practically mischievous for a surgeon to be wedded to any particular mode of procedure in all cases requiring a given operation, it certainly is not in hernia, the varieties of which are without number, and may presumably be benefited by adapting the means of cure to the speciality of the case.

The experience of the great majority who have tried Petit's operation almost amounts—and this more from the manner in which it has been attained than from its extent, though this be vast—to demonstrative proof that by its performance in appropriate cases the fatality of strangulated hernia will be greatly lessened; and it is certainly quite sufficient not only to encourage, but to demand further investigation, in order that we may arrive at a correct knowledge of the cases in which one or the other operation is peculiarly applicable.

Palazzo Corsi, Florence, Nov. 5th, 1853.

REMARKS ON THE EMPLOYMENT OF THE WATERS OF KREUZNACH.

By E. H. SIEVEKING, M.D., F.R.C.P., Assistant Physician to St. Mary's Hospital, etc.

[Read before the Harveian Society, Nov. 17th, 1853.]

THE German looks upon his mineral springs as the fountains of health, and considers an annual trip to Carlsbad, Marienbad, Wiesbaden, or one of the numberless watering-places of fatherland, of as great and essential importance to the enjoyment or preservation of life, as John Bull regards his three weeks' autumnal visit to Margate, Brighton, or Ryde. It is one of the many traits that preserve the general resemblance of the two great branches of the Anglo-Saxon tree on this side of the Atlantic; and it is evident from the description of Saratoga and other watering-places, by N. P. Willis and kindred spirits, that the cousinhood of North America are fully alive to the value of these temporary migrations. They do not belie their relationship even in this particular. We do not see that the French, or the Italians, or the Spaniards, quit their homes annually, as a matter of course, to obtain a renewal of health. They are more *gleba adscripti*, and are satisfied with that share of mental and bodily vigour which their permanent place of residence can afford. We need not grudge them this passive contentment. We claim as our birthright the desire for improvement, the onward-striving which pursues higher and better objects, whether in moral, in sanitary, or in political relations; and we think it a privilege legitimately to follow out everywhere the great laws of nature, by which we are told to advance not only as logs on the tide of civilisation, but as bold and manly swimmers, cleaving the waves by the might of a good arm upheld by a living faith. We seek health as one of the great boons of Providence; we seek it, not in frivolous excitement, but in that intercourse with nature and her most lovely or her grandest works, which, above all other restoratives, gives balm and solace to the sufferer.

Geographical position and opportunity have in this, as in many other points, determined the selections which the German and the English each make. Their mode of living and their character undoubtedly render a different regimen necessary in disease; and hence it is not to be wondered at that they each show a preference for a peculiar kind of medication. The vicinity of the bracing atmosphere and water offered by the sea-coast in every part of England, our love for maritime scenery, for shipping and aquatic sports, tempt the Englishman more, and seem more congenial to his beef-eating constitution, than the sulphureous springs of Harrowgate, and the antirheumatic thermæ of Bath. He inclines to regard the latter agencies on a par with the *bouillon* of French cookery, or the *ptisane* of the Gallican

* Op. cit., p. 41.

† Practical Surgery, p. 553.

pharmacien, good in their way, but decidedly unsuited to his cayennised palate. The German, on the other hand, knows nothing of the sea or of shipping; he cannot appreciate the majesty of a storm; nor, all musical though his taste, does he discern the music in its roar. He prefers the mountain forest, with its rivulet and cascade; the broad lime-tree walks, and the wood resounding with the note of the nightingale; he likes his beef boiled to strings, and he prefers his physic well diluted with water, in the shape of a mineral *brunnen*, which he drinks by the quart, under the close superintendence of His Royal and Imperial, Royal, Ducal, or Countly Upper Medical Bath-Counsellorship, the portly Physician and Comptroller-General of Blank-Blank.

The good effects and decidedly medicinal character of many of the mineral springs of Germany are undeniable. Much may be ascribed, and is justly due, in the curative influence they exert, to the change of scene, and absence of the cares of work-day life; but many of the waters are exported; and the volcanic cuisine in which they have been prepared, mysterious as it may be, enables them to produce palpable effects under circumstances which forbid those effects from being ascribed to anything but the dose exhibited. The chemist cannot account for these facts; for doses of the constituents obtained from the druggist, that would produce no results, when exhibited in the combination offered by nature's cookery, often are followed by very marked and indisputable effects. To take a single instance; Pullna water, a favourite and mild purgative, contains as its main constituent sulphate of soda. The dose sufficient to produce a decided effect with an adult is a couple of ounces; these contain altogether but about ten grains of sulphate of soda and magnesia, besides minute quantities of other salts. It follows, that the mode of combination is a point of great importance to determine the efficacy of a remedial agent; and it may serve as a therapeutic hint, that the prevailing desire to simplify our remedies, and to reduce our prescriptions to a single drug, is one not based upon the example shown us by nature herself. Moreover, it may teach us respect for the wisdom of our ancestors, who, in many respects, understood the art of compounding medicines much better than we do, though they may have been ignorant of the atomic theory, and the laws of chemical combinations.

Since the introduction of steam vessels, and the publication of Sir Francis Head's amusing volume on the *Brunnens of Nassau*, Englishmen are as familiar with most of the watering-places that lie in the route from London to Frankfort, as the Germans themselves. Fortunately, however, for the latter, the London season detains its victims until long after the great majority of invalids have gone through their prescribed course; so that they are not interrupted by the sons of Albion. We therefore rarely see the waters in full operation, or enter into the reality of a German watering-place, with all its minutiae of drinking and abluion, of diet and regimen; with its gipsy parties and musical reunions, its welcomes and leave-takings. Our acquaintance is consequently but of a superficial character, and is likely to continue so, unless the medical profession of this country make balneology a subject of study, and thus allow it that scientific importance which it legitimately demands.

Recently, attention has been directed to a watering-place which belongs to the range of the Rhine excursionists, and which promises to become a place of much resort with our countrymen, on account of the powerful efficacy of its waters—the Springs of Kreuznach.

Kreuznach is a small town in Rhenish Prussia, situated in the valley of the Nahe, a tributary of the Rhine, which receives it at the well known site of Bingen and Bishop Hatto's far famed Tower. A drive of an hour and a half along vineyards and cornfields, skirting the adjacent hills and the river, conveys the traveller from Bingen to the springs. These are of very ancient repute, on account of their yielding a large produce of chloride of sodium, which is obtained from them by the ordinary process of evaporation; this leaves behind it a residue known as *bittern* or *mother ley*.

Both the water in its native state and the residuary matter are employed for medicinal purposes; but it is only the former which is used both for external and internal administration; the latter is almost exclusively employed, diluted, as an external remedy. There are several springs, which vary somewhat in composition and temperature; they all possess a temperature peculiar to themselves, and demonstrating the volcanic character of the soil; and all contain chloride of sodium as the main constituent, with other chlorides and compounds of iodine and bromine.*

The spring known as the Elisabeth Quelle is the most in request for medicinal purposes, as the most powerful. Its temperature is 55° Fahr. throughout the year; the fresh drawn water is perfectly clear and transparent, with a slightly yellowish tinge, and of a salt, bitterish taste; a few bubbles of carbonic acid gas are visible; the water soon becomes dull; numerous small brownish flocculi form and are precipitated, and do not disappear for several days, until the precipitate is completed. The analysis of this water by Bauer, as given in Professor Osann's great balneological work, shows sixteen ounces of the water to contain above ninety grains of mineral constituents, distributed in the following manner:—

Chloride of sodium	-	-	72.922
Chloride of potassium	-	-	0.971
Chloride of lithium	-	-	0.075
Chloride of calcium	-	-	13.276
Chloride of magnesium	-	-	0.351
Bromide of sodium	-	-	0.307
Iodide of sodium	-	-	0.003
Carbonate of magnesia	-	-	1.351
Carbonate of strontia	-	-	0.683
Carbonate of baryta	-	-	0.299
Carbonate of iron	-	-	0.199
Carbonate of manganese	-	-	0.009
Alumina	-	-	0.021
Silica	-	-	0.313

90.686

The specific gravity of the water is 1.004.

The process by which the chloride of sodium is extracted from the water necessarily alters the relation of the constituents found in the *bittern*; while it removes almost all the chloride of sodium, it leaves those elements to which the peculiar effects of the Kreuznach waters are particularly ascribed in a much more concentrated form. This *bittern* or *mother ley* is the semifluid residue found in the evaporating pans; it presents a brownish yellow colour; it is translucent and clear, and has a soft soapy feel; its sp. grav. is 1.307 to 1.314. It smells like marine algæ, and has an intensely pungent and acrid taste, which is not effaced from the lips and tongue for some time after it has been applied. It is very deliquescent—a property which renders its transportation in anything but china or glass vessels impossible, as it gradually oozes and makes its way through all porous materials, and through the strongest casks and earthenware jars. It is rarely employed in the concentrated form, but mainly as an adjunct in ordinary water baths, or with the water of other mineral springs. Of late, the *bittern* has been still further evaporated to dryness, in which state it forms an amorphous light brown mass, of which I present a specimen to the society. Its taste and properties are the same as those of the *mother ley*, but it offers the advantage of being much more portable. The following is an analysis of the *mother ley* by Osann. He found sixteen ounces to contain 2625.72 grains, or about one-third of solid matter, distributed in the following manner:—

Chloride of calcium	-	-	1577.71
Bromide of calcium	-	-	388.72
Bromide of potassium	-	-	92.82
Chloride of magnesium	-	-	38.44
Bromide of sodium	-	-	154.10
Chloride of sodium	-	-	60.34
Chloride of potassium	-	-	17.30

* To those interested in the topographical and medical history of the German watering-places, we can recommend the *Lectures on the Mineral Waters of Kreuznach*, by Dr. Sutor, and published by Parker in 1851, as containing a large amount of information.

Alumina and suboxide of iron - -	35.66
Crenic and apocrenic acid, and two peculiar resinous matters, with traces of iodine - - -	216.16
Water of crystallisation and loss -	44.50
	2625.72

The quantitative analysis of the mother ley varies in almost every examination that is made, owing to the accidental variations of condensation, and fortuitous changes produced by the process of extracting the common salt; but all agree in showing the presence of a large proportion of bromide of calcium. An analysis given by Dr. Prieger, in a work entitled *The Mineral Waters of Kreuznach*, published by Mr. Churchill in 1846, exhibits a considerable difference in the relation of the constituents; it is as follows:—

Bromide of calcium - -	24.12
Chloride of calcium - -	9.20
Bromide of magnesium - -	0.48
Iodide of magnesium - -	0.18
Chloride of potassium - -	0.80
Chloride of sodium - -	1.28
Water and loss - -	63.85
Total - - -	100.00

Mr. Blyth, the dispenser of St. Mary's Hospital, has had the kindness to make a qualitative analysis of the bittern exhibited, and confirms the fact of its containing bromine. He has also found chlorides of calcium, sodium, and magnesium, but no potassium, and a trace of iron. His tests do not demonstrate the presence in this specimen of any iodine; but we have shown that the absence from our specimen of bittern does not necessarily prove the absence of iodine from the water, or from other bittern. I exhibit, by Mr. Blyth's aid, the test for bromine and iodine made by Mr. Henry's beautiful process, in the following manner:—100 grains of the bittern are dissolved in distilled water, and precipitated with a slight excess of acid nitrate of silver; the precipitate is then well washed, and carefully collected; it is then mixed with metallic zinc and sulphuric acid—both pure—taking care to have a good excess of zinc. When the effervescence has ceased, the salt of silver is decomposed, and the filtered liquor will contain sulphate, chloride, iodide, and bromide of zinc, if these elements be present. It is then evaporated to a small volume, and introduced into a narrow bottle; a cold solution of starch and some ether is added, and then some freshly prepared chlorine water is dropped in carefully; the whole is shaken together, and allowed to stand; if iodine is present, it will be precipitated as iodide of starch, while the bromine will be taken up by the ether, and will float at the top. In the bottle before you, you observe the brown ethereal solution at the upper part, indicating the presence of bromine; while the starch at the bottom retains its translucent whiteness, no iodine being present.

After the foregoing statement of the chemical nature of the Kreuznach waters, and of the residuary bittern, we shall be prepared to examine the medicinal effects; and it will be justly inferred that its action is allied to that of sea-water. Kreuznach has indeed the reputation in Germany of being *kur- & xph* the antiscrofulous spring. It is a powerful tonic and stimulant of the lymphatic system, and is peculiarly beneficial in torpid states of the constitution, and diseases based upon such a foundation. Scrofula, in all its forms of early or adult life, with the secondary maladies that spring from that prolific source, finds an antagonist of undoubted power in the Kreuznach waters. The chlorides and iodides are the very remedies which, in other combinations, we are in the daily habit of prescribing. We here find an additional antiscrofulous agent, the bromide of sodium and potassium, which manifestly increases the therapeutic effect of the other constituents. Accordingly, the nosological list—the bill of fare of the Kreuznach physician—which is found most readily to yield to the administration of Kreuznach water or bittern, comprises scrofula and tuberculosis in every variety, manifest or latent, as swellings of the external glands; diseases of the eyelids

and eyes, or the external meatus; scrofulous and atonic affections of the mucous membranes of the respiratory, alimentary, or urogenital tracts; hence also leucorrhœa, and various forms of uterine affections connected with malnutrition, are diseases well adapted for the application of this remedy, generally or locally. Chronic swellings of the bones, caries, tumor albus, are not only benefited by the waters, but yield more rapidly than to the ordinary mode of treatment. The Kreuznach waters have been also found very beneficial in scrofulous cutaneous eruptions, and in atonic states of the kidneys and bladder. The list of diseases is long; but it is rendered so rather by the refinement of science, than by that natural pathology which teaches us that there is essentially but little difference between these affections, beyond the accidental localisation of the same depraved tendency. Hence let no one say that we laud these mineral waters as a specific or a panacea: they are antiscrofulous remedies with which we are familiar, but in a guise under which they have not been hitherto known to us. We may, however, not unreasonably extend the application of the Kreuznach waters to numerous affections not necessarily allied to the scrofulous constitution; the influence of warmth applied to the entire surface in the shape of a medicated warm bath, of warm vapour inhaled in breathing, of enemata, or of the vaginal douche, is curative or restorative in a variety of ailments, especially when combined, as it will be at a place devoted to the search of health, with appropriate regimen and diet.

The value of iodine compounds given internally, or applied to the surface; the remedial power of warm baths, especially when containing chloride of sodium, has been demonstrated in numerous diseases characterised by, or inducing, degenerations of the tissues. We all know their efficacy in chronic rheumatism and its sequelæ, in secondary syphilitic affections, in atonic gout, and lead or mercurial poisoning. Their action is manifestly by stimulating the capillary circulation of the cutaneous surface, or of the kidneys; or, as Mr. Melsens has shewn in reference to lead poisoning, by a direct eliminative effect upon the noxious element. The morbid states alluded to, and their multiform complications, therefore come legitimately under the influence of the Kreuznach waters; and the progressive reputation they have enjoyed since Professor Liebig first shewed them to contain bromine, is fully borne out by the experience of ordinary therapeutics. It is not my object at present to enter into minute detail with regard to the medicinal powers of the waters in the protean forms of disease alluded to, but I may be allowed to direct attention to the remedial efficacy of the Kreuznach waters, in a species of malady in which hitherto the ordinary drugs at our disposal have failed to achieve a cure: it is the more a pleasant duty, as in recommending the Kreuznach waters for this special purpose, we do so on good evidence, based upon *a priori* grounds, which our knowledge of their chemical constitution affords, and upon the results of the practical experience of an eminent physician, Dr. Prieger, jun.* Moreover, the maladies to which we allude extensively affect those orders of society which would possess the means of visiting a foreign watering place; and, while conferring a boon on such sufferers of the higher classes, we may hope to induce some of our colleagues to employ remedies similar in constitution to the Kreuznach bittern, and thus to determine whether or not, by following the example shewn us by nature, we may spread the advantages that must otherwise accrue to but a very limited number among a more extended sphere. I may remark parenthetically, that the concentrated bittern itself has recently been imported by the German chemists Hilgenberg and Schacht of Houndsditch. They find it most convenient to keep it in solution; but it is probable that by means of a suitable arrangement, and by the employment of well stoppered glass bottles, the dry salts might become more generally accessible, as the bulk of the solution renders its transport difficult and

* Ueber Hypertrophie und die harten Geschwülste des Uterus und seiner Anhangs, so wie den Einfluss des Kreuznacher Wassers auf dieselben. Von Dr. Oscar Prieger: 1863.

costly. I am also informed that Messrs. Taylor of Vere Street have taken steps to procure a supply of the bittern.

To return: the affections to which I have alluded as not having hitherto been amenable to treatment, are fibroid tumours of the uterus and ovaries, and other hypertrophic conditions of those organs. It appears from the cases recorded by Dr. Prieger, jun., in an interesting pamphlet recently published, that under the use of the Kreuznach waters they may be softened, reduced, and even entirely dispersed. There is nothing in the structure of the tumours which renders such a result improbable. Until they have become very large, they are freely traversed by blood-vessels, the agents of all advancing or retrograde metamorphoses; and as long as the organic connexion between the morbid growth and its matrix is freely kept up, we may reasonably hope that our dynamical remedies may exert an eliminating effect, provided we can hit upon an agent likely to stimulate the system in a manner proportionate to the existing disease. Any one who will take the trouble to go to the museum of St. George's Hospital, and examine some injected specimens of uterine fibroid tumours, will find that they may be plentifully supplied with blood-vessels. The more extensive their growth, the more they seem to be placed beyond the pale of the organisation; and they gradually become, like foreign bodies, a source of mechanical irritation, or passive obstacles to the organic functions: they then necessarily cease altogether to react upon internal remedies. But I hold that the structure of these fibroid tumours is a further explanation of the comparative facility with which they yield to the resolvent action of the Kreuznach waters. They are, as I have attempted to show elsewhere, essentially an hypertrophic condition of the true uterine tissue, differing from it by that metabolic power which gives a morbid impulse, but identical with it in those points which the microscope and chemical reagents reveal. I the more confidently put forward this view, as I find it corroborated by a recent writer in the Reports of the Pathological Society for 1852-3. Dr. Bristowe there demonstrates in a most satisfactory manner, that the so-called fibrous tumour is absolutely identical in point of structure with the walls of the uterus, whether examined in the unimpregnated or impregnated condition.

The evidence which Dr. Prieger, jun., brings forward in proof of these tumours being amenable to treatment by the Kreuznach waters, is of a character to demand our serious attention. Those who will study his paper, will be constrained to conclude that he thoroughly understands his subject, and that he is not led away by that species of enthusiasm which frequently prompts the administrators of favourite remedies to regard them as agents of a universal efficacy. His diagnosis is cautious and well founded; and he gives us accurate statistical details of his experience.

The results of the application of the Kreuznach waters in eighty-six cases of hypertrophic states and fibroid tumours of the uterus and its appendages, which have been under his care, are as follows:

Thirty-one were entirely cured; of these, two were hypertrophy of the entire uterus; sixteen, partial hypertrophies of the uterus; six, fibroid tumours of the uterus; and seven, tumours of the ovaries. In each case, no trace of the disease remained at the conclusion of the treatment.

Twenty-nine were partial recoveries; the troublesome symptoms having been removed or ameliorated, and the swelling or tumour having been much reduced. Of these, three were hypertrophy of the entire uterus; four, partial hypertrophy of that organ; nine, fibroid tumours of the uterus; five, fibroid tumours of the ligaments; six, ovarian tumours; and two, ovarian tumours complicated with hypertrophy of the uterus.

Nineteen cases were benefited so far that the continued growth of the morbid formations was arrested, without any or but a trifling reduction in size. Of these, two were hypertrophic states of the uterus; eight, fibroid tumours of the uterus; four, fibroid growths of the uterus; and five, ovarian tumours.

Seven cases presented no change whatever either in the size of the tumours, or in regard to the morbid symptoms.

The method pursued and the duration of treatment by the Kreuznach waters necessarily varies according to the duration and extent of the disease, and according to the constitution of the individual. One remarkable and well authenticated fact regarding its influence upon the organism, is the continuance of the peculiar action it has set up, long after that action has been initiated, and the remedy has been discontinued. Dr. Prieger has repeatedly observed that after the conclusion of the course in August or September, the progressive diminution of the local affection continues until the following spring. Thus in a lady who had employed the baths for eight weeks, on account of an ovarian tumour, previous to the 1st September 1851, Dr. Prieger was unable to perceive a notable diminution of the tumour when she quitted Kreuznach, nor could her own medical attendant in the following January detect a marked change; still, a few months later, the tumour was found to be much reduced, and she had made use of no remedies in the interval but an occasional local application of the Kreuznach water.

We have alluded to the different modes in which the Kreuznach waters are exhibited. A few more detailed remarks on the subject may be acceptable. When administered by the mouth, the water may be taken by itself, or combined with milk, whey, or other mineral waters, and either warm or cold; the quantity varies from one to six beakers, or from a few ounces to two and more pints; it is taken in the morning at short intervals, and moderate exercise is enjoined during the potations. The baths are commonly employed tepid at a temperature of about 90° F.; at the commencement of the course the patient is ordered the use of the water only, while its power is subsequently and progressively increased by the addition of more or less of the bittern. Dr. Prieger* informs us that it is usual to commence with one quart, or about 4 lbs. of the latter for baths for adults, while a less quantity, proportioned to the age of the individual, is used for children. If the inspissated bittern be employed, we should use from one to two pounds for the bath of an adult. The increase in the quantity of bittern in the baths must be gradual; and in the same way, after the climax has been reached, it is progressively diminished; "for the whole object," to use Dr. Prieger's words, "of this management would be destroyed by a too quick reduction of the effective power, and before the accustomed irritation of the skin" (a species of critical eruption) "had subsided." The bath is rarely used more than once a day, or for more than from five to twenty minutes at a time; its action is accelerated by friction of the affected parts, or of the whole body. Rest is enjoined after the use of the bath in very delicate individuals, while gentle exercise is recommended to those of a corpulent or more robust habit. The topical applications vary equally in strength and duration according to the constitution of the individual patient; and when applied as gargles, as enemata, or as vaginal injections, we must necessarily use some judgment in regulating the minutiae of temperature, concentration, and frequency of exhibition.

My own personal experience of the advantages derivable from the waters of Kreuznach has hitherto been so limited, that I should not have brought the subject under notice, if I had not been provided with more extensive evidence than my practice has supplied. So far, however, as it goes, it confirms the statements of the authors quoted. In our case of a gentleman in whom an atonic condition of the genito-urinary system, accompanied by azoturia, had been brought on by indiscriminate medication for gonorrhoea, and where steel, quinine, and similar remedies, had failed to produce a cure, a course of the Kreuznach waters, followed at my suggestion, effectually removed all morbid symptoms. In another instance, a young lady, whom I saw in consultation with Mr. Toulmin of Clapton, and who had been suffering from a long standing chronic tumefaction of

* The Mineral Waters of Kreuznach, etc., p. 21. By Dr. Prieger.

the condyles of the femur, was restored to perfect health by a six weeks' visit to Kreuznach, and a careful attention to the rules laid down by Dr. Prieger, junior. I have recently had occasion to recommend the use of the Kreuznach bitter in the case of a young lady in whom the ordinary exhibition of iodides externally and internally failed to remove a very sluggish glandular tumour of the neck. Its brief employment, however, and the subsequent removal to the sea side, does not enable me to quote the case as one of cure. I mention these cases rather with a view to proving that my remarks proceed from a conviction of the extreme value of the Kreuznach waters and the bitter, than for the purpose of strengthening the arguments of men of larger experience. It appears that the bitter has been employed somewhat extensively at an infirmary for scrofulous children, erected by Mr. Sidney Herbert in Wilton, Hants. If so, it would be desirable that the results of its effects should be made known to the profession, as we might thus be enabled to form a more conclusive estimate of its remedial powers apart from the effect produced by the change of scene and air when patients visit Kreuznach itself. If members of the Harveian Society should have acquired any experience on the employment of this remedial agent, I should be happy to find that these cursory observations succeed in eliciting their views on a subject which I have ventured to introduce to their notice perhaps with less completeness than it demands, but with an earnest conviction of its importance in a scientific and directly practical point of view.

3, Bentinck Street, Manchester Square, Nov. 18th, 1853.

ON THE VALUE OF NITROUS ACID IN THE TREATMENT OF CHOLERA AND CHOLERAIC DIARRHOEA.

By R. H. WHITEMAN, Esq.

Now that cholera has again invaded us, and members of the profession are everywhere considering the best tactics to be adopted to successfully grapple with the disease, it is impossible to value too highly any therapeutic measure that can be proved in the least degree serviceable in arresting the more formidable symptoms. In the valuable and interesting paper by Dr. Cormack, lately read before the Medical Society of London, and subsequently published in the *ASSOCIATION JOURNAL*, there occurs the following remark:—"Mr. Whiteman, of Putney, informs me he finds nitrous acid so prompt and so satisfactory a remedy in epidemic diarrhoea, that he trusts to it in preference to any other medicine." The following observations are intended to convey a somewhat more detailed account of my experience of a medicine, which I have now exhibited with the greatest possible success to many hundreds of persons, suffering under all stages of the choleric disease.

The way in which I became possessed of my knowledge of the remedy in question, is soon told. Upwards of twenty years ago, at the outbreak of cholera in 1832, my opinion was asked concerning the probable efficacy of an original prescription, which bore the signature of Mr. Thomas Hope, at that period a medical officer on board His Majesty's Ship *Canada*. I was then in my novitiate, and thinking the chief ingredient in the formula a somewhat extraordinary remedy for a disease which I had been taught to regard as one frequently produced by an excess of acid in the *primæ viæ*, I at once pronounced against it; but was, from the strong representations of its value, and notwithstanding my prejudice, induced to copy the prescription. Shortly after, a very severe and stubborn case of diarrhoea happening to fall under my care, I determined to give the remedy I had noted a trial. The result of its administration to my sinking patient was strikingly favourable—so favourable indeed as to induce me ever after to rely upon it for the arrest of the earlier symptoms of the epidemic, to the exclusion of almost every other medicine.

I may here observe, that both the formula of Mr. Hope,

and the directions with which it was accompanied, are identically the same as those at present used by myself, and of which I shall have occasion to speak more in detail in the course of this paper.

My own experience of nitrous acid, which, as I have shown, is by no means a remedy of yesterday, fully bears out the character given it by its originator; viz., that when exhibited before the stage of collapse has completely set in, it has seldom or ever failed to check the progress of the disease; and that even when collapse has existed for some time, reaction has been established through its agency in a large number of cases, in which it has been administered along with the external application of warmth, and other auxiliaries.

In the summer and autumn of 1849, apart from the cases which occurred in my private practice, I returned to the Board of Guardians, as medical officer of the district, as many as 544 patients who had suffered more or less from the then prevailing epidemic. My belief is, that none of the cases so returned were other than fully developed cholera—cholera in its incipient stage, or diarrhoea of a decided choleraic character; for I quite agree with Dr. Cormack in thinking that, during the height of the epidemic, the choleraic type is impressed upon most diseases, certainly upon all those in which diarrhoea is more or less an urgent symptom.

In quite 350 cases of the 544 returned in the Union books, nitrous acid was prescribed. A great many slight cases amongst the poor and others were administered to at the temporary Dispensary, of which no account was kept; but out of this large number of persons, I had the singular good fortune to lose but *eleven*, or about one in fifty of those attacked.

Had it not been for the assistant, granted me by the Board of Guardians, coming to me with a most decided predilection for the calomel treatment, I believe that many more patients than I have named above would have been placed under the influence of my cherished remedy. Desiring, however, an opportunity of judging of the comparative merits of the several popular modes of treatment that were then being employed, I made no objection to a few cases being fairly submitted to the medicine so warmly advocated by Dr. Ayre; but I cannot say that the general result was at all satisfactory to my mind. The prolonged convalescence of the very few who, in my hands, rallied under, or rather got better *after* the calomel treatment, certainly afforded no encouragement for its adoption in preference to the stimulating, saline, or any other of the many plans then in use.

In the present state of our knowledge of the disease, I have ever held it to be of the first importance to commence the treatment, if possible, before the premonitory stage has given place to the more fatal and dangerous symptoms. If, then, there belonged to nitrous acid but the one property of arresting in the most prompt manner the discharge from the bowels in that stage, I should not be easily persuaded to abandon the remedy for any of those in common use. The acid appears to me to possess, besides its astringent power, the properties of a stimulant in a remarkable degree; and it is a question whether, in addition to the peculiar action which I know it has of quieting the stomach, and of putting a stop to the violent retching, it does not also exert some influence on the palsied pneumogastric nerves in collapse, and by that influence tend in many cases to give the first impulse to reaction. I have recorded in my note-book a recent case of choleraic diarrhoea, in which the stage of collapse had set in some time before I was called upon to see the patient, but in which the administration of but two or three doses of the nitrous acid mixture proved sufficient to restore the natural warmth to the surface. Did space permit, I could transcribe from my notes very many cases of this kind, all tending to show in the clearest possible manner that the acid has some specific influence upon the system in causing an evolution of internal heat.

Whether the action of the mineral acids upon the eco-

mony be of a chemical nature, or whether their effects in cholera are due to mechanical causes alone, I must leave to those to determine who have more leisure, and are better qualified than myself, to institute the necessary experiments. It is possible, nay, exceedingly probable, as Mr. W. J. Anderson has most ably shown (*ASSOCIATION JOURNAL*, Nov. 4th, 1853), that the introduction of a mineral acid into the system may supply a most important aliment (oxygen) to the impure blood in cholera; but I apprehend the astringent properties of such an agent must be referred, in part at least, to other than chemical changes. All sorts of purely speculative opinions as to the cause of cholera are being promulgated at the present time, which it would be worse than useless to discuss; but with reference to those theories which ascribe the disease to certain electrical conditions favourable to its propagation, or to an excess or deficiency of ozone in the atmosphere, all must allow that neither of these views are incompatible with the notion that the immediate cause of the inordinate and abnormal discharge from the bowels may be the irritation of some fungoid growth, or animalcular deposit, upon the mucous surfaces of the alimentary canal. Believing, then, the fungus theory, as advocated by Mr. Grove, to be as tenable as any other with which we have yet been made acquainted, I cannot help entertaining a rather strong impression that, like sulphur, the nitrous acid may possess a powerful detergent action, and by its caustic power tend to the destruction of the fungoid germs in the *primæ viæ*. Whether this be so or not, it is clear that the acid has the effect of controlling the discharge from the bowels in the most prompt and efficient manner, and that too with much less detriment to the subsequent health of the patient than when cretaceous powders, catechu, or opium, have been largely given with the same intention.

It was seldom, indeed, that I was called upon in 1849, to hasten convalescence by the after exhibition of tonics or other medicines; and this I consider one of the greatest recommendations of the acid treatment.

It is an interesting question whether or not the treatment of diarrhœa by acids was known to the ancients. The great father of physic, in one of his aphorisms, has said, that "Acid belchings supervening upon lenteries, where they were not before, are a sign of mending." And again: "Whether this symptom come spontaneously, or be procured by art, it equally cures the distemper." An old author, who wrote at the latter part of the seventeenth century, in commenting upon these aphorisms, remarks: "From hence it may be inferred that Hippocrates supposed acids to contribute to the cure of loosenesses, because those signs of acidity in the stomach, whether they come spontaneously, or were artificially superinduced, generally signified, according to him, a solution of that disease which is attended with crude dejections." Other old authors have noticed a similar mode of treatment; and I believe the vegetable acids, such as the acetic and citric, have found a prominent place in the prescriptions of some of the ancient followers of the great philosopher of Cos.

Notwithstanding the successful issue of most of my cases in 1849, that were treated with nitrous acid, I do not pretend to say that this medicine is a specific against all kinds of choleraic disease; nor do I imagine that it will alone suffice in every case. Unquestionably, in both threatened and actual collapse, external warmth, stimulant cataplasms, enemata of acetate of lead, and other such auxiliaries, will be found most valuable in the majority of cases. Employed in this way, I think I am authorised by facts in viewing the nitrous acid as one of the most valuable remedial agents that the profession possesses; and I am the more confirmed in this opinion, since a number of patients treated by stimulants, calomels, salines, opium, and other popular medicines, either died, or experienced a most protracted convalescence in my hands; whilst those who were submitted to the influence of the nitrous acid, with but one or two exceptions only, recovered; and that, too, without the slightest apparent detriment to the general health.

In ordinary diarrhœa, or diarrhœa unaccompanied by any

of those symptoms which indicate great prostration of the vital powers, I usually precede the acid mixture by a dose of calomel and rhubarb, with the view of removing any scybala that may be retained in the colon.

The acid I have been in the habit of using is of a reddish brown colour, fuming, and of the spec. grav. 1.212. The manner in which I generally administer it is in the form of a mixture, containing, according to the severity of the symptoms, from 3ss. to ʒi of the undiluted acid, in from ʒiv to ʒvi of any of the aromatic waters; and to this I sometimes add, when there is much restlessness and pain, ℥xl of tincture of opium, but I quite as frequently give the acid without the laudanum as with it. The dose of this mixture for an adult is a quarter part for every two, three, or four hours, according to the degree and urgency of the purging and vomiting. Should the first dose be rejected, as it sometimes will be, in spite of every effort of the patient to retain it, another must be given in about ten minutes after; and in this way it must be persevered in until it remains on the stomach, and the diarrhœa is restrained. The best vehicle for its administration is a cup of thin gruel, suffered to become almost cold. It is always advisable to direct the patient to abstain from taking either liquids or solids for at least half an hour after each dose of the mixture; at the expiration of that time, however, constant and small sippings of gruel or tapioca may be ordered with much advantage. Should there be excessive thirst, a grateful draught may be extemporised by adding a few drops of the acid mixture to a small tumbler of cold water. Experience has also taught me to look upon a dose of the mixture taken fasting every other day, as a most valuable prophylactic measure, by no means to be despised by those who may be constantly or only occasionally in attendance on the sick.

Hitherto I have contented myself with communicating my experience of this remedy to my professional friends; and I have much satisfaction in stating, that every one who has been induced to make use of the medicine has reported to me most favourably of it. My Union colleague, Mr. H. Bursey, of Wandsworth, has, amongst others, informed me that he has given it in a number of cases with the most satisfactory results, and adds, that in the choleraic diarrhœa of children he has found it especially valuable.

In concluding this communication, I must confess that the fear of sharing the discredit which deservedly attaches to those who are constantly abusing public credulity, by extolling, through the medium of the press, some wonderful nostrum, has long deterred me from venturing to publish my views upon the subject I have now, I fear, but very imperfectly handled: nor should I, perhaps, have ever penned this paper, had it not been from a wish expressed by many of my friends, that I should make more generally known my experience of a remedy I had found so valuable an auxiliary in the treatment of the formidable disease at present occupying such general attention.

Whilst I fully concur in the opinion of Dr. Cormack, that the advocacy of uniform and empirical methods of treatment may tend to obstruct, to a certain extent, the progress of rational inquiry, I am nevertheless quite content, in the present state of our knowledge of the disease, to have my cherished remedy placed in the category of empirical medicines, if by its agency I can continue to successfully combat the premonitory diarrhœa in almost every case brought under my notice. Let a case assume ever so formidable a character, I consider, that to be able promptly to arrest the serous discharge from the bowels is to gain almost the haven of a successful issue: and, I cannot help thinking, that if practitioners generally would avail themselves of every opportunity of impressing on those who are likely to become their patients, the danger there is in procrastination, and in neglecting to seek medical advice, whilst the disease is readily amenable to treatment, the greatest good would result, and many a valuable life be saved.

In the more advanced stages of the algide disease, and in cases in which collapse has long set in before medical aid is sought, I am free to confess, that the acid treatment is as

likely as any other to fail in causing reaction. Having no faith whatever in the existence of specifics in medicine, it would be empirical in me indeed to extol this remedy as a never-failing one in cholera. I have nevertheless just that faith in it to believe, that none will be found to repent having put it to the test when once they have been induced to employ it in the earlier stages of that fearful malady—a malady, be it recollected, which has in many districts numbered its victims, not as in this and other favoured places, by mere tens and dozens, but by appalling hundreds and thousands.

Putney, Nov. 21, 1853.

BIBLIOGRAPHICAL NOTICES.

THE SCIENCE AND ART OF SURGERY; being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERICHSEN, Professor of Surgery in University College, and Surgeon to University College Hospital. pp. 944. London: 1853.

MR. ERICHSEN holds the position at University College which has been held in succession by Sir Charles Bell, Mr. Samuel Cooper, and Mr. Liston; and his present work shews him to be not an unworthy successor of these distinguished surgeons. The last work which we recollect as embracing in a short compass the science and the practice of surgery, was that entitled *The First Lines of Surgery*, by the late Samuel Cooper; a book from which many surgeons of the present day have derived the soundest information, and which is still the text-book of numerous practitioners. The later works on surgery, written by English authors, have been chiefly monographs on some special department, or have been confined to the purely operative part of the subject, or have been abstracts of the existing knowledge of the science. A place was undoubtedly open for the publication of a comprehensive work on the theory and practice of surgery, written by a practical surgeon, who, deriving his preliminary information from such teachers as Liston, Samuel Cooper, Syme, and Quain, could illustrate his own views by the experience afforded at a metropolitan hospital. This vacancy, we think, has been satisfactorily filled by the work of Mr. Erichsen now before us; which will not only increase his own well earned reputation as an author and a practitioner, but will reflect credit upon the chair which he worthily fills.

The work is divided into three parts. The first division contains a treatise upon the first principles of surgery, including inflammation, and the general rules connected with operations. The second division contains the special history and treatment of surgical injuries, and their effects; such as traumatic delirium, gangrene, gunshot wounds, punctured and poisoned wounds, wounds of veins, injuries to arteries, of muscles and tendons, and of bones and joints; injuries of the head, of the spine, of the lung, and of the abdomen; burns, scalds, and frost-bites. The third division includes the various surgical diseases, such as abscesses, ulcers, mortifications, erysipelas, pyæmia, tumours, scrofula, syphilis, phlebitis, diseases of arteries, of nerves, of bones, of joints, distortions and other diseases of the spine, diseases of the bursæ, of the head and neck, of the jaws, of the throat, and of the breast, hernia, piles, diseases of the urinary organs, as stricture and calculus, and diseases of the male and female generative organs.

The first chapter is devoted to the consideration of increased vascular action as evinced in determination of blood, and in inflammation, with its consequences, suppuration, ulceration, and gangrene; but these subjects, though well described, offer no opportunity for special remark. In the second chapter, the author takes a practical view of operations; and many of his remarks are characterised by sound knowledge and good sense. The following passage is particularly worthy of commendation:—

“Manual skill and dexterity are necessarily of the first advan-

tage to a surgeon, and he should diligently endeavour to acquire the art of using his instruments with neatness, with rapidity, and with certainty: but, desirable as it doubtless may be to be able to remove a limb, or to cut out a stone, in so many seconds; important, in a word, as it is to become a dexterous operator, it is still of far greater importance to become a successful one. The object of every operation is the removal of disease that either threatens the life, or that interferes with the comfort and utility of existence; and the more certainly a surgeon can accomplish this, the better will he do his duty to his patients, and the more successful will he be in his practice. Success, then, in the result of an operation, whether that result be the preservation of life, or the removal of a source of discomfort, is the thing to aim at. To this, dexterity and rapidity in operating are in the highest degree conducive; but there are various other considerations, equally, or still more necessary, the solution of which can only be afforded by an intimate general acquaintance with the science of surgery and of medicine. The diagnosis of the nature and extent of the connexions of the local disease has to be made; lurking visceral affections must be detected, and, if possible, removed. The constitution of the patient must be prepared for the operation; the best time for its performance seized; and, after its completion, the general health must be attended to in such a way as shall best carry the patient through the difficulties he has to encounter, and any sequelæ or complications that arise must be met by, and must be subjected to, appropriate treatment. These, as well as the simple performance of the operation, are the duties of the operator; and on the manner in which these are performed, as much, or even perhaps more, than on the mere manual dexterity displayed in the operation itself, will the fate of the patient depend. It is well known that the results of operations differ much in the practice of different surgeons of acknowledged dexterity; and this variation in the proportionate number of recoveries cannot be accounted for by any difference in the degree of manual skill displayed in the operation itself, but must rather be sought in the greater attention that is paid by some surgeons to the constitutional treatment of their patients before and after the operation, and to their more perfect acquaintance with the general science and practice of surgery. Indeed, success in operative surgery depends greatly upon the selection of proper cases. The practice of operating in notoriously hopeless cases, with the view of giving the patient what is called a last chance, is much to be deprecated, and should never be done. It is by operating under such circumstances, especially in cancerous diseases, that much discredit has resulted to surgery; for in a great number of instances the patient's death is hastened by the procedure, which, instead of giving him a last chance, only causes him to be dispatched sooner than would otherwise have happened.” (p. 45.)

The mode of administering chloroform recommended by Mr. Erichsen is, to pour about a drachm of this fluid upon a piece of folded lint, about two inches square, and to hold it at a distance of about three inches from the nose of the patient, so as to admit the very free admixture of air with the first inhalations.

“After the lapse of about half a minute, the lint is brought nearer to the patient's nose, to within a distance of perhaps an inch, being never allowed to touch: at the same time, a porous towel is lightly laid over the face of the patient and the hand of the operator, so as to prevent the escape of the chloroform vapour, but not to interfere with the admission of air. During the whole time, it is the duty of the administrator to keep his hand on the pulse, and occasionally to examine the pupils of the patient.”

In discussing the question of amputation, Mr. Erichsen prefers the flap-operation, as might be expected of a pupil of Mr. Liston, who, as is well known, invariably employed that method with great success. The advantages which the flap-operation possesses over the circular are, the greater celerity in its performance, the more perfect coaptation of the opposite sides of the wound, and the greater tendency to union of the stump by the first intention.

In the Chapter on Amputations, Mr. Erichsen gives a tabular statement of the results of these operations at University College Hospital, in 140 cases. From this summary it appears, that out of 45 cases of operation required for injury, 31 cases recovered, and 14 died; and out of 95 cases of operation required by disease, 77 cases recovered, and 18 died; thus the mortality per cent. was in the first

category 31, and in the second, 19. In another table, the comparative results are given from some Primary and Secondary Operations at the same hospital. Of 23 Primary Amputations, 17 were cured and 6 died; while of 22 Secondary Amputations, 14 were cured and 8 died, the mortality being 26 per cent. in the first case, and 36 per cent. in the second.

The Special Amputations are the subject of the Fourth Chapter, and they are all illustrated by very good engravings.

The Chapter on Gun-Shot Wounds is not very copious; and Mr. Erichsen, instead of filling his pages by transcribing the views of others, refers his readers to the well known works of John Bell, Larrey, Thomson, Guthrie, S. Cooper, and Hennen.

The Tenth Chapter is devoted to the Wounds of Veins, and the subject of the entrance of air into those vessels is fully discussed. Mr. Erichsen is already known to the profession from having contributed to the pathology of this dangerous accident; and he alludes to the labours of Majendie, Amussat, Cormack, and others in the same newly trodden field.

The Eleventh Chapter treats of the Injuries of Arteries, and this part of the work is very carefully written, and is full of practical details. We are happy to find that Mr. Erichsen advises the use of the tourniquet in all cases where temporary compression of an artery is required. It is well known to those who attended the practice of Mr. Liston, that that great surgeon discouraged the use of this instrument at one period of his career, and based his objections on grounds which were to a certain extent very plausible; but he subsequently ceased to teach this dangerous doctrine, and commonly employed it himself in his later operations. In fact, however skilful a surgeon may be, and however well versed in anatomy may be those whom he selects as his assistants, the systematic discouragement of the employment of so simple and useful an instrument, might be followed by the most deplorable results, if his advice were acted upon by the general body of the profession.

The history of the means formerly employed for arresting hæmorrhage, and of the establishment of the sound views of practice which now prevail in the treatment of wounded arteries, is described at considerable length; and Mr. Erichsen fully agrees with Mr. Guthrie and other modern surgeons, in the necessity for tying both ends of the wounded vessel in such accidents; and supports his views by arguments which are well known to, and we believe are generally acted upon by the profession.

In the Chapter on Fractures, Mr. Erichsen strongly advocates the employment of the starch bandage, which possesses many obvious advantages over the methods of treatment formerly in use, and he discourages the manufacture of special apparatus in this class of accidents.

"I have no hesitation," says Mr. Erichsen, "in saying, that a surgeon of ordinary ingenuity and mechanical skill may be fully prepared to treat successfully every fracture to which he can be called, by having at hand a smooth deal plank half an inch in thickness, and a sheet of gutta serena, undressed sole-leather, or pasteboard, to cut into splints as required."

"The advantages of the starch bandage in the treatment of fractures, as well as in many other injuries and diseases, consist in its taking the shape of the limb accurately and readily, and maintaining it by its solidity; in being light, inexpensive, and easily applied, with materials that are always at hand. From its lightness, it possesses the very great and peculiar advantage in fractures of the lower extremity, of allowing the patient to remain up, and to move about upon crutches, during nearly the whole of the treatment, and thus, by rendering confinement to bed unnecessary, preventing the tendency to those injurious consequences that often result from these injuries; and, by enabling the patient to keep up his health and strength by open air exercise, facilitating the consolidation of the fracture. In addition to this, the patient will often be able to carry on his business during treatment. By employing the starch bandage in the way that will be immediately pointed out, I scarcely ever find it necessary to keep patients with simple fractures of the leg in bed for more than three or four days,

thus saving much of the tediousness and danger of the treatment."

Mr. Erichsen then describes the mode of applying the apparatus at University College Hospital, which consists in surrounding the limb, in the first place, with a roller; then, in the case of the lower extremity, adjusting a many-tailed bandage smeared with stiff starch; over this are laid splints of thick and coarse pasteboard, well soaked in thin starch. A bandage saturated with thick starch must now be applied; and lastly, this is to be covered by another dry roller, the inner sides of the turn of which may be starched as it is laid on. Thirty to fifty hours are generally required before the starch is thoroughly dried, and this process may be accelerated by the application of hot sand-bags: and when the bandages have become dry, the temporary splints are removed, and the patient may be allowed to walk about on crutches.

Our limits compel us to pass over the chapters on Special Fractures and Dislocations, and also those on Erysipelas and Pyæmia; merely remarking that the two former are abundantly illustrated by engravings, and that the two latter well deserve perusal for the care with which the materials have been collected, and the practical views which they develop.

In the Chapter on Tumours, Mr. Erichsen acknowledges the obligations of the profession to Mr. Paget for his valuable researches into these abnormal growths; and the diagnosis of their different varieties is given with great judgment, the reader being recommended not to trust altogether to microscopical examinations, on the one hand, in forming his opinion, nor, on the other, to neglect this valuable aid in distinguishing the malignant from the non-malignant forms. On the whole, Mr. Erichsen considers that the characters of the cancer-cells, especially of the caudate and fusiform corpuscles, and the admixture of these with other cells, are tolerably distinct evidence of malignant disease; but that the ocular examination by an experienced surgeon will materially assist the diagnosis.

The question of operating in malignant disease is treated at some length, and the opinions of Sir B. Brodie and Mr. Fergusson are quoted on the affirmative side; to whose names that of Mr. Paget may be added, who has stated that the average duration of life is considerably greater in those who have submitted to operation, than in those in whom the disease has been allowed to proceed unchecked. Mr. Erichsen farther thinks, that the introduction of anæsthetic agents into operative surgery, has thrown new light upon the expediency of such operations; and that when a malignant growth can be removed without pain, the patient ought to be allowed the chance of adding a few months to his existence. Cancers of the eye and of the testicle, although very unfavourable for operation, offer no chance of relief or cure by any other means, and whenever practicable, excision should be performed.

In the Chapter on Syphilis, which occupies thirty-three pages, we are able to allude only to the practical views which it contains. In the treatment of the primary sore, Mr. Erichsen recommends the application of the strong nitric acid, one application of which he believes to be sufficient to annihilate the specific character of the sore. In the constitutional treatment recommended, we think the majority of English surgeons will be disposed to coincide. After reviewing the arguments for and against the mercurial plan, and detailing the changes of professional opinion in regard to its efficacy, Mr. Erichsen concludes in favour of a gentle mercurial course, which he thinks necessary for the destruction of the syphilitic poison. His views in this, as in many other parts of his work, are founded on practical experience; and those who attended the clinique of the late Mr. Liston and Mr. Morton at the University College Hospital, are aware that the non-mercurial plan was fully tried by those gentlemen; but yet Mr. Erichsen states, that the patients treated in this manner were very frequently the sufferers from secondary symptoms, and often in a most aggravated form. In his own practice he administers the iodide of mercury, in doses of one grain three times a-day, or the

Plummer's pill, in five grain doses twice or three times a-day, or five grains of blue pill night and morning.

In the Chapter on Diseases of the Arteries, the whole subject of Aneurism is very elaborately treated, but our limits permit us only to notice some of Mr. Erichsen's views respecting the comparative value of the method of ligature and that of compression in the cure of this disease. After doing full justice to the Dublin surgeons for the improvements they have introduced into the treatment by compression, Mr. Erichsen leans to this measure as being upon the whole the least dangerous, and not more tedious. Mr. Erichsen says :

"After considering the relative merits of the two plans of treatment, I think we may conclude that, though in some few cases neither method can be adopted, and amputation is the sole resource, yet, that in others, compression can be employed when it would not be safe to have recourse to the ligature; and that in all ordinary cases of femoral and popliteal aneurism especially, compression should be preferred to the ligature, inasmuch as it is not a more tedious, and an infinitely safer method of cure. At the same time, it must not be forgotten that its success depends very greatly on the continuous care bestowed upon the case during the progress of the treatment."

Of the instruments employed for the purpose of compressing the artery, preference is given to that invented by Dr. Carte, which substitutes an elastic force derived from vulcanised India rubber for the unyielding pressure of the screw, and is therefore adapted for accommodating itself better to the shape of the limb, and is less likely to produce injurious compression.

The Section on the Plastic Surgery of the Face, contains a very full history of the operations resorted to for the repair of mutilations in that region: and the Rhinoplastic and Cheiloplastic procedures are illustrated by some interesting cases which have lately occurred in Mr. Erichsen's practice.

The subject of Hernia is very minutely investigated, and we regret that the length to which this review has already run, prevents us from giving any analysis or abstracts from this portion of the work.

The Chapter on Diseases of the Urethra contains, as might be expected, a very luminous account of the symptoms and treatment of stricture. Mr. Erichsen considers the method by dilatation as the most safe and the most effectual means of curing the disease; but he admits that the introduction of caustics is sometimes advisable. He does full justice to the operation practised with so much success by Mr. Syme, and thinks that in well selected cases it is a most valuable improvement in surgical art.

We regret that our limits forbid us from entering farther into the review of this very comprehensive work. If any objection can be raised against it, it may be urged that the arrangement of the subjects might be advantageously revised, with a view to greater condensation and clearness; and this the author will perhaps accomplish in a second edition. There are also some errors of the pen or press, which are quite excusable in so large a work, executed, as Mr. Erichsen tells us in his preface, amidst the laborious duties of hospital and private practice: but the whole work is a most valuable addition to the literature of surgery, and quite on a level with the requirements of the present day.

CHOLERA: ITS NATURE AND TREATMENT. By EDWARD BASCOMBE, M.D. pp. 26. London: 1853.

DR. BASCOMBE urges upon his readers the great value of the alcoholic tincture of nux vomica, as a remedy in cholera. He calls it a *nervine tonic*, and believes that its action is of a peculiar kind, "not interfering, as is the case with the generality of tonics, with the circulation, it not having the effect of precipitating the action of the great pump, the heart, and involving the circulation generally." After the full operation of an emetic—but in what stage of the disease we are not clearly told—Dr. Bascombe prescribes from fifteen to twenty drops of the tincture every third hour in an alkaline mixture, the formula for which we subjoin. From

what is said regarding "acidulation", we presume that the medicine is taken in a state of effervescence.

Rx Carb. sodæ gr. xv.

Nitr. potas.,

Hydrochlor. sodæ, aa gr. v. M.

This powder is given in half a tumbler of aq. menth. sat., "acidulated with hydrochloric acid"; to which add *immediately*, before swallowing, for an adult, from fifteen to twenty minims of the tincture. The mixture without the tincture is to be given "as often as may be considered necessary in the intermediate time." Dr. Bascombe, speaking of the superiority of the tincture of nux vomica over strychnia, says:—

"From long experience, we have found that the alkaloids of the nux vomica, of the cinchona, and of opium, viz., strychnia, quinia, cinchonina, and morphia, are not the only constituents which give those *medicamenta* their medicinal properties; but that their tonic, antiperiodic, and sedative properties, depend in part upon other ingredients, as also greatly upon the combination in which their alkaloids are presented to us by nature."

In this sentiment, we cordially concur.

The author is fully alive to the urgency and to the nature of the danger which is involved in the great serous discharges; but he thinks too exclusively of repairing the mischief thereby done to the blood, and does not inculcate the better, and generally as attainable course, of arresting the flux, which occasions this mischief. He writes as follows regarding this and other points in the treatment:—

"These two substances (*serum and crassamentum*), from their intimate combination whilst circulating, are necessary to each other. Should the diarrhoea, therefore, inordinately drain off the serous portion of the circulating medium, containing the salines so necessary to the blood's fluidity, by which its integrity would be spoiled, the tar-like crassamentum left being unfit for vitality, we must supply its place by not only giving by the mouth, but through the intestines, the saline preparations similar to those so extensively and so successfully used by Dr. Stevens, who was the first propounder of their signal efficacy, as has been confirmed by subsequent experience. These preparations, with the addition, according to circumstances, of the alcoholic tincture of the nux vomica, being assiduously administered, we must patiently await the result of our operations; nature, thus aided by our judicious endeavours to counteract the tendency to death, being sure to do her part in eliminating or overcoming the *virulent influence* for the furtherance of a happy result in the restoration to health.

"As a powerful adjunct to the foregoing treatment, we must not omit the recommendation (which cannot be too perseveringly attended to), namely, of friction downwards, with two parts of lin. saponis and one of ol. terebinth., along the entire spinal column, by which simple means we, by stimulating, give tone to the nerves, so plentifully supplied therefrom, to the thoracic, the abdominal, and pelvic viscera, and which are so immediately implicated. Meanwhile, the patient should be kept warm by proper covering, and there should be a *free admission of air*. As regards nourishment, until the alimentary canal be in a condition to appreciate or assimilate it, we need not have much care. Gelatinous preparations, with beef tea, will be found, however, to be the most appropriate.

"Trusting in this formidable malady to small doses—alterative as they are called—alterative (?) of calomel and opium, is worse than doing nothing—a trifling with human life, independent of the otherwise injurious effects of the opium, it notoriously having the effect of *blocking up* the secretions, especially that of the liver; and as to alcoholic stimulation, I deprecate it as being positively *murderous*; for how often have I witnessed poor wretches, while being drenched with brandy, champagne, gin, etc., crying out for God sake to give them no more, for they were burning up inside! and when they have expired, a *post mortem* (in which I have been sometimes engaged to the number of eleven before breakfast) has exhibited the engorged condition of the abdominal viscera, with the omentum spread out resembling a piece of a soldier's jacket, so infiltrated was it with blood." (p. 24.)

We agree with the author in thinking that *to trust to calomel and opium* is to trifle with life; but we are equally convinced that both of these medicines ought to be given in moderation in a considerable number of cases of cholera. Alcoholic stimulation *in excess* is, we admit, "murderous";

but there are circumstances in which its judicious use preserves from fatal syncope, and affords time for the use of other measures. As to the engorged condition of the abdominal viscera, it is the result of the congestive character of the disease, and of the stagnation of inspissated blood in the capillaries: it is an appearance which is found in those who have been treated without, as well as in those who have been treated with stimulants.

Dr. Bascome gives the following formula for the saline enema referred to in the text:—

R Carb. sodæ et
Nitr. Potassæ, aa gr. x.
Hydrochloratis sodæ 3 ss.
Aquæ menth. sativ. (c. mucilagine) ʒxij. M.

He proposes that this should be administered every half hour (or oftener, if it be retained, and should the case be urgent), at a temperature of 96° or 100°.

The principal point in this pamphlet is the testimony in favour of *nux vomica*. The defect in the pamphlet is the indefinite way in which the condition of the patient and the stage of the disease is explained in connexion with the treatment advised. Practitioners do not require more remedies for cholera; but they stand in need of more wisdom in the employment of those which they possess; and, till authors explicitly describe the exact conditions under which they have adopted certain measures, or under which they recommend them to be adopted, individual experience cannot, we fear, be made available to any great extent for the general instruction of the profession.

CHOLERA AND ITS TREATMENT. By Dr. AUZIAS TURENNE. [Translated by F. BATEMAN, M.D.] 8vo., pp. 12. London: 1853.

The author, without excluding other means of treatment, relies principally upon the use of water. He says:—

"I have often heard of persons attacked with cholera, and who, being without assistance, were induced by a salutary instinct to drink incessantly until cured.

"Experience proves that the action of the choleric miasmata resembles greatly that of a poison. Now, what is the treatment of poison? First. To decompose it, and, if we cannot do that, to eliminate it. Second. To treat the organic disorders produced by its action. Now, we do not know the counterpoison of the choleric miasmata; we ought then to seek their elimination by giving liquid in every possible manner. With regard to organic disorder, they, as well as any violent reaction, are prevented by the sedative and antiphlogistic action of the water.

"When the urine was slow in appearing towards the close of the disease, I have often excited its secretion, by the application of sinapisms or blisters in the region of the kidney. In order to obtain the same result, I have successfully used injections of a small quantity of tepid wine, or tepid alcoholised water, into the bladder, without having occasioned the least cystitis. These injections, by exciting the kidneys to secrete urine, have the same effect on the bladder, as excitants on the stomach, which excite the secretion of bile, as pepper on the mouth, which excites the secretion of saliva. Thus to recapitulate—give liquids, then nourish gradatim with light broth and milk in large quantity, passing then to more substantial nutriment, I recommend especially cold milk, taken in large quantity, as soon as the patient is better."

As to recoveries from cholera, we must always bear in mind that it is a paroxysmal disease; and that the stage of collapse has a tendency to terminate in a return to health, just as is the case with the cold stage of a common ague.

INTRODUCTORY LECTURE at the Opening of the Session of the Chatham Street School of Medicine, Manchester, Oct. 3rd, 1853. By GEORGE SOUTHAM, F.R.C.S. pp. 24. Manchester: 1853.

THIS is a sound and seasonable address. Orthodox medicine is defended, and charlatanic systems exposed. Religion, good morals, and polite literature, are shown to be requisites in the formation of the character of the enlightened and useful medical practitioner. The following is good advice;

and we would extend its application even to the busiest of the busy, for none require more than they do the sustenance and bracing of those mental tonics which Mr. SOUTHAM recommends:—

"There are periods in a professional man's life, especially at its commencement, when his time is not fully occupied. A large portion of it may be devoted to the improvement of his medical knowledge; but the mind requires relaxation, which it seeks from a variety of sources. If he enter into the amusements of the day, he will find they will often interfere with the duties of his calling. But a well regulated mind has such resources within itself, that it can find recreation in solitude from the elegant writings of Addison, Johnson, Milton, and other classic authors; and can appreciate the beauties of Shakespeare without the exciting attractions of the theatre." (p. 8.)

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

SATURDAY, NOVEMBER 12TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

PATHOLOGY AND TREATMENT OF CEREBRAL DISEASES. BY R. H. SEMPLE, M.D. [Dr. Semple's Paper is published at p. 1051, of this number.

A discussion followed the reading of the paper, in which Dr. Fuller, Dr. Theophilus Thompson, Dr. Druitt, Dr. Sibson, Mr. B. W. Richardson, and the President, took part. The difficulty of diagnosis was the topic which principally engaged attention.

MONDAY, NOVEMBER 14TH, 1853. [PHYSIOLOGICAL SECTION.]

WHY DO FLUIDS MOVE ONWARDS IN THE URETER AND THORACIC DUCT? BY B. W. RICHARDSON, ESQ.

Mr. RICHARDSON proposed the question; but he did not attempt to solve it. He thought that the inquiry was novel, and demanded the attention of physiologists. The anatomical relations of the parts, and the dynamical law of gravitation, did not explain the mystery.

DETECTION OF IODIDE OF POTASSIUM IN THE SECRETIONS. BY C. COGSWELL, M.D.

Dr. COGSWELL, by a series of experiments showed that starch with fuming nitric acid is the most delicate test for manifesting the presence of the salt in the excretions.

VOLUNTARY MUSCULAR FIBRE ATTACHED TO AN ADVENTITIOUS GROWTH. BY DR. EDWARD SMITH.

Dr. E. SMITH, exhibited a bony growth in the fibrous tissue of an old pleuritic effusion, which had the rare peculiarity of the true attachment of voluntary muscular fibre. The patient from whom it had been removed was a colonel in the East India Company's Service, and had spent forty years in India. He had also suffered from pectoral affections from the period when he was six years of age. On a *post mortem* examination, the pleura pulmonalis was found attached throughout its whole surface to the ribs and the diaphragm, and this plate, having the size of four inches by five inches, occupied a perpendicular position on the right side, terminating below, near to the diaphragm. The cause of the attachment of the muscular fibres was the point of interest. The muscular fibres were not presumed to be a new growth proceeding from any change in the effused lymph, and since the pleura would intervene between the diaphragm and the intercostal muscles, it was difficult to imagine how any attachment of these muscles could have been effected. It was quite clear, that this growth was not a part of the original attachment of the muscle to a rib; and, assuming that the pleura had been destroyed, and the fibrinous deposit thus permitted to approach the muscular structure, it was not even then easy to show how any true tendinous attachment should connect the body of the muscle with the adventitious structure. Dr. Sibson had attended the *post mortem* examination, and Professor Quekett had examined the structure.

DOG WITHOUT A SPLEEN. BY E. CRISP, M.D.

Dr. CRISP exhibited a dog, the spleen of which was removed two years and a half since, by Dr. Leared, of Finsbury-circus. The animal was in good condition, and did not appear in any way to have suffered from the loss of the organ. The blood, which was exhibited under the microscope, presented no abnormal appearance.

WEIGHT AND FORM OF THE HEART, DIAMETER OF THE AORTA,
AND SIZE OF THE BLOOD CORPUSCLES IN THE VERTEBRATA.

BY EDWARDS CRISP, M.D.

Dr. CRISP brought forward a great mass of valuable facts, and illustrated his subject by numerous preparations and drawings. We regret that we have not space at our disposal for an abstract of this valuable paper, and of the remarks made upon it by Dr. Winn, Dr. Snow, Mr. Richardson, Dr. Chowne, Dr. Leared, and others.

SATURDAY, NOVEMBER 19TH, 1853.

FORBES WINSLOW, M.D., President, in the Chair.

RESECTION OF THE KNEE JOINT.

BY G. M. JONES, ESQ., OF JERSEY.

Mr. JONES stated that he had six times performed the operation of resection of the knee joint. All had been successful except one, which had died from epidemic dysentery. He (Mr. Jones) had brought over two successful cases for the purpose of ascertaining from two or three leading surgeons if the operation ought still to be performed. One patient, 20 years of age, had the bones excised, and the patella removed twelve months ago, and is now able to walk steadily with a stiff knee without limping; to walk six or seven miles at one time, and to mount ladders in carrying on the business of a painter. The disease was strumous. The other is 13 years of age, and had the same operation performed six months ago, except that the patella was not removed. His limb is stiff, and he has now dislocation of the opposite hip joint, but yet is able to move about with the aid of sticks.

The PRESIDENT congratulated Mr. Jones upon the success of his operations; and tendered to him the thanks of the society for his interesting communication.

THE FIBROUS CONSTITUENT OF THE BLOOD IN RELATION TO
DISEASE. BY B. W. RICHARDSON, ESQ.

[We have received this paper for publication.]

Mr. Henry Lee, Dr. Crisp, Dr. Routh, Dr. Camps, and Dr. Snow commented upon and lauded Mr. Richardson's paper.

LIVERPOOL MEDICAL AND PATHOLOGICAL
SOCIETY.

OCTOBER 6TH, 1853.

JOSEPH DICKINSON, M.D., in the Chair.

CASES OF FATAL POISONING BY CENANTHE CROCATA.

BY J. B. NEVINS, M.D.

The actual production of death by our indigenous herbs is not common, though serious effects for a time are frequent enough. The following cases are therefore not without interest.

On the 9th of September, 1853, four children ate some roots which had been dug up in clearing a ditch. They resembled small dahlia tubes, possessed a strong umbelliferous smell, and a bitter, slightly disagreeable taste. They were recognised as being the fleshy roots of the *anathe crocata*, hemlock water dropwort, which is reputed to be one of the most poisonous of our native herbs, and grows abundantly in the sides of ditches, and on damp hedge bottoms, in the neighbourhood of Liverpool, and many parts of Cheshire.

The children ate the roots at 2 P.M., and, about half-past 6 P.M., they were brought to the Royal Infirmary, and admitted under the care of Dr. Turnbull. At that time, one of them, a boy, at the age of casting his milk teeth, was perfectly insensible; the face was livid and turgid. He had previously vomited blood, and bloody mucus oozed from his mouth after admission. The prominent symptom was *violent convulsions*, solely affecting the *flexors throughout the body*. The trunk was powerfully bent forwards; the hands were firmly clenched, even after death; and the jaws were so rigidly closed, that some of the front teeth were broken out in opening the mouth to introduce a stomach-pump. The spasmodic contraction sometimes gave way for a few minutes at a time, but the extensors were never affected. The respiration was spasmodic till death. The pupils were at first contracted, but afterwards dilated until death: they acted very feebly under the stimulus of light. The pulse was almost imperceptible. There were no involuntary discharges. This state continued until death, which occurred about twelve hours after taking the poison. There was no return of consciousness, and the spasmodic contractions continued, with slight intermissions, as long as he lived. There was no vomiting after his admission; and the stomach-pump removed nothing but a portion of a blackberry.

Treatment. Cold was applied to the head, and diffusible stimulants were administered internally.

Quantity Eaten. As well as could be ascertained, he had eaten only one root, about the size of a man's thumb; but he had also eaten "a handful or two of the berries": they were dulcamara berries.

Examination of the Body, thirty-six hours after death. The contraction of the flexors was permanent. The hands were firmly clenched; the skin of the face and hands, and especially of the fingers, was very dark; the stomach and duodenum were empty, and perfectly free from any signs of either inflammation or congestion. There was no effusion of blood, and only one or two insignificant ecchymoses. The veins of the head were very slightly congested. There was no effusion in the cerebral ventricles.

Another child was also insensible and convulsed like the first, and appeared to be equally ill; but he recovered under the use of the same treatment which had been without success in the first case. The next day, he merely complained of some soreness of the stomach. The quantity eaten was unknown.

A third child merely complained of an abdominal pain, and had no cerebral symptoms. It quickly recovered.

Several cases of poisoning by the roots of this plant, eaten by mistake for celery, are recorded in Woodville's *Medical Botany*. "Three soldiers ate, or rather tasted, the roots. Without previous notice or sickness, one of them was seized with convulsions. In spite of almost immediate treatment, he died presently. The two others were soon seized in a similar manner: one of them died; the other recovered, after being bled, and having a vomit, which was forced down with great difficulty, on account of his jaws being as it were locked together. Neither of these two had any sickness previous to the emetic being given."

Eight boys ate plentifully of the roots, which they mistook for water parsneps. In about four hours, one boy became convulsed, and died. Next morning, four others died in a similar manner; a sixth boy became maniacal for several hours; a seventh lost his hair and nails; and the eighth escaped unhurt. Other cases are mentioned, in which convulsions were the chief symptoms; and two only are narrated in which there was vomiting.

It appears, therefore, that convulsions are universally produced by this poison; and that a small quantity of the root suffices to cause death, which generally occurs in about twelve hours. The limitation of the convulsions to the flexors is not noticed in any of the cases recorded by Woodville; but vomiting is specially mentioned as absent in nearly every case. Now, bloody vomiting was a prominent symptom in the first fatal case which I have recorded; but it must be remembered that the child had eaten one or two handfuls of dulcamara berries, which frequently cause vomiting. This was, therefore, a case of mixed poisoning; and probably the vomiting was independent of the *anathe*. In the two cases mentioned by Woodville, in which vomiting was present, nothing is said about any other poison than the roots having been taken; but the sufferers were children. The dulcamara berries are ripe and tempting at the time when these cases chiefly occurred; and it is not improbable that they also might have taken these berries as well as the more deadly root.

Dr. TURNBULL, after some remarks upon Dr. Nevins's paper, stated that, in consequence of the known activity of this herb, he had thought it might possibly be useful as a narcotic in phthisis; and had had an extract made from the root of the *anathe*. It however produced depression and purging, but no alleviation of the cough. He had also employed an extract from the *seeds* of the *phellandrium aquaticum*, which had acted slightly like a stimulant resinous expectorant; but he did not lead the society to think that it had been of much service.

EDITOR'S LETTER BOX.

GRATUITOUS MEDICAL SERVICES: PHYSICIANS AND GENERAL PRACTITIONERS.

LETTER FROM JOHN BARCLAY, M.D., M.R.C.P., TO THE EDITOR.

SIR,—Nearly every medical question has two opposite aspects in which it may be regarded; and in the matter of gratuitous advice, whether at hospitals and dispensaries, or at the houses of medical men, the opinions of one party have been pretty well heard. But the physicians of the provinces, however much, numerically, in a minority, are as much an integral part of the Association as either of the other branches into which the profession has naturally subdivided itself; and I therefore beg you to allow my little protest to be heard against the covert attack which is being made on the body to which I belong, in the crusade which is now going on against the practice which has existed in most places, of physicians giving advice to the poor.

And let me here make it to be most clearly understood, that I speak of *bona fide* physicians. I utterly abhor the unholy traffic between certain so called physicians and druggists. Were they really physicians, members of the College, their admission oath would prevent such disgraceful advertisements as those lately quoted in the Journal; and every well-wisher of the profession must long for some power to be created sufficient to drive such men as the writers of them from out its pale. Further, I do not call him a physician who breaks his fee, and thus enters the lists as a general practitioner, who will take 5s. when he cannot get his guinea: and lastly, to make all clear, I desire to define the "poor" as the really needy, those who cannot, without great and serious deprivation of the necessities of life, scrape together a guinea to pay for advice; and those to whom it is utterly impossible—the victims of the counter-practice of the druggist.

In discussing the subject with a surgeon the other day, he threw a deal of light on the motives of the present agitation. "How," said I, "is a young physician to gain experience, if he do not practise among the poor for many years of his life?" The laconic, but awful reply, was: "There *should* be no young physicians." This I hold to be at the root of the movement; and I think a little investigation will show that the chief complainants are not the so called sufferers, but those who advocate the "one faculty system", and who desire to constitute themselves physicians, and to assume the functions which I hold they should have sought at the hands of the College.

Physicians are paid by fees; the lowest fee is a guinea. If, therefore, only those who can afford to pay a guinea for his opinion are to have it, his practice must be confined to the rich, or the poor must content themselves with some other physician's opinion at a public institution. No one, who goes through the drudgery of seeing out-patients at a hospital, could allow that this would be satisfactory. The young physician is not the man who gets the hospital appointments: on the contrary, his seniors generally do all in their power to prevent him reaching the same vantage-ground as themselves. If he had not the happy resource of relieving the poor, and thus acquiring experience, the wishes of my surgical friend would be realised, and the race and name of physician be together extinguished.

My next assertion is, that the poor should find the medical man a blessing, and not a curse. Illness is in itself almost overwhelming to the man who earns his daily bread by labour. How often have I seen servants, with their £8 or £9 wages, deprived of £2 or £3 of it in a surgeon's bill, which their master or mistress would not pay. It is surprising indeed what the pressure of sickness will squeeze out of a man. The few hoarded shillings, or the pawnbroker's price for some little article of luxury or of show, often find their way into the surgeon's pocket, under the pressure of the County Court, or a threat of being brought within its jurisdiction. Labourers and trades-workers, with their 12s. or 15s. a week, a wife and three or four children to bring up, who pay their midwifery fee of 10s. 6d., which occurs with annual regularity—such men deserve to have advice for trifling ailments from those who are willing to give it, in place of the wretched devisings of the druggist or the quack to whom they are sure to apply. I believe the only effectual blow which can be struck at the pernicious counter-practice of the druggists is to afford every facility for the poor receiving advice of a proper kind. There are probably in every town some two or three medical men struggling into practice, or just barely qualified, whose charges hardly exceed those of the

druggist; but the poor will not employ them until they are so ill as to be laid up at home. For minor ailments, their application is to the physician on his gratuitous day, or to the druggist, or to quacks. There is, too, a class—a very large class—for whom physicians are in the habit of prescribing as a charity, who very often find a very grievous burden in a surgeon's bill. I speak of poor curates, poor dissenting ministers, schoolmasters, clerks; I do not suppose any one will hesitate to admit their claims.

It is my belief that a "practice" is not often made by gratuitous advice. People do not value it so much as what they pay for; and so in after life, when severe illness requires a consultation, probably the very person who has formerly been a charity patient sends for another physician. The tangible reward acquired by the physician is his *experience*, which can only be got by treating a large number of cases. And this experience is what will ultimately tell with the public. They will rather consult the man who has treated 20,000 paupers, than him who has only treated 2,000 ladies and gentlemen. It is not the class whom he prescribes for gratuitously who ever find themselves able or willing to remunerate him; therefore, in relieving their necessities, he does no harm to the general practitioner, but assists and relieves the parish surgeon, the club surgeon, the dispensary, or the county hospital.

I have said that the physician is remunerated by the experience he acquires. He is so, fully; and it is a bargain which both giver and receiver perfectly understand. But there is a far higher and a far nobler gratification for him. It is mocked at, and called cant and hypocrisy; but the feeling is implanted in most human breasts, and it warms as it receives the blessings of the poor—it enables us to enjoy the luxury of doing good. There is also another source of gratification; it is that of having done our duty to the best of our poor ability. The calling of the medical man is the most god-like of all the professions. He is a pure benefactor, and no suspicion can be entertained of his motives: he is a benefactor, and this beneficence is his duty. I lament, sir, that the high calling of the physician should need my paltry aid against such assaults as have lately been directed against it.

The physician should, for his own sake, throw every obstacle in the way of the abuse of his kindness, by inconvenient hours, by close inquiry into circumstances, and the careful discrimination of cases of real need from those of imposture and meanness; and he will often be called on to send cases away peremptorily, at the risk of doing an act of unkindness; but still I hold that it is a part of his duty to relieve those gratuitously who desire his advice, and who cannot pay him his fee; and who are likewise willing to show their sincerity in desiring it by surmounting the obstacles his ingenuity may have suggested to prevent the abuse of his kindness.

The grand mistake of the present day is, that the physician has in too many instances put himself in a position antagonistic and directly competing with the general practitioner. It is nothing else than an abomination for the physician to take so few fees when called in in consultation, that the family is induced to consult him alone on future occasions. When such a thing does occur, it is the physician's duty almost invariably to refuse it; otherwise the general practitioner can never wish to meet him again. On the other hand, the jealousy of the general practitioner is in many, I trust in most cases, uncalled for. Consultations should be friendly meetings for the benefit of the patient, not hostile conferences for the advantage of either physician or surgeon.

Another evil very prevalent is the too great frequency of consultations,—daily, or even twice a day, putting the surgeon in the place merely of the compounder of drugs, and taking the entire responsibility out of his hands. The meetings then cease to be consultations; and the general practitioner feels himself put in an inferior position, which is galling to him.

I believe the much more friendly feeling which exists between practitioners in rural districts and the physicians who reside in the county towns, arises from the feeling of security they have that there is no possibility of the physician becoming his rival in the confidence of his patient. I believe, also, that the more pains the physician takes to secure this confidence to the surgeon, or to restore it when waning (which a word judiciously spoken will often do), the more pleasant and the more frequent will the intercourse become.

I do not believe that ethical rules—except very general ones—can do any good. It is impossible to instil gentlemanly feeling where it is originally lacking. The only law which can guide us into pleasant intercourse with each other is the old golden rule, to "do as we would be done by"; thinking no evil

of our neighbour's proceedings, and taking very good care not to transgress his border ourselves.

I repeat, the physicians are a very small minority; the *bond fide* physicians are not, I suppose, more than one in six or seven of the profession: but I trust there is too much good feeling to allow of any injustice being done to them. Physicians have to wait long for remunerative practice; and, while gaining experience, I do not believe one case in a hundred is taken from the regular surgeon's practice.

In conclusion, I beg to say, I will yield to no one in my anxiety to support the dignity of the profession in all its branches; which is best to be done, not by a paltry struggle after money, but by cultivating a good understanding, not only between surgeon and physician, but also between the patient and his ordinary attendant.

I trust my warning voice may not fall unheard by provincial physicians. Our place is rightly that of consultee: by leaving it, and seeking family practice, we enter the lists with the general practitioner, and make *him* our enemy, who should have been our friend.

Apologising for the space I have occupied; I am, etc.,
JOHN BARCLAY.

Friar Lane, Leicester, November 8th, 1853.

A WORD FOR "ADVICE GRATIS".

LETTER FROM SAMUEL KNAGGS, Esq., TO THE EDITOR.

SIR,—I am not one of those who give "advice gratis"; nevertheless, let me ask you to read this letter, and, if you think fit, to publish it. The columns of the medical press have for a long period been open to an agitation against gratuitous advice, and much truth has been uttered, not however in some instances undisfigured both by partiality of sentiment and warmth of expression. The subject is one of very great importance alike as relating either to individuals, or to the whole body of the profession; and as it seems to me from what has been written, that the root of the evil has not been sufficiently called attention to, I am induced to pen these few lines.

Is gratuitous advice under any circumstances admissible as a matter of principle? Now the only argument of force that has been brought against this, rests in the statement that no other profession will work gratuitously, and the legal is that usually fixed upon as the case in point. Granting this to be correct (which, however, I much doubt), still the instance is not apposite; for the legal profession has only to remedy abuses which may be prevented, whilst the *medical* is called upon to relieve misfortunes which no human eye can foresee or guard against. In deciding this fundamental question, we ought not to lose sight, in over anxiety for ourselves, of the motives which should actuate the practitioner of medicine; he has chosen his profession, it is to be hoped, not from the love of gain, for if so, he has widely erred; not alone from the love of science, for this would be beneath him; but from a desire to occupy a station honourable to himself and useful to society, in which all the higher intelligences of the head, and nobler qualities of the heart, are brought into active employ: in action it becomes his privilege as well as duty to relieve disease, to administer to necessity, and by these means to procure a well merited subsistence for himself and provision for his family.

Without for a single moment questioning the proposition that richly endowed institutions (capable of so doing) ought to remunerate medical men for their services, still we shall all be able to call to mind instances within our own limited experience, where such provision could not be made without materially circumscribing the benefits of the charity; for it should not be overlooked that unless the remuneration bear a fair proportion to the service rendered, the action is gratuitous, though only equivocally so. Surely, in such cases, medical men may be allowed to recognise in the body, as private individuals are free to do without either comment or censure, the call upon their charity, and to give (what stands to them in the place of money) their time and talents to the furtherance of active benevolence. I do not imagine that you, sir, or any of your readers, will hesitate to acknowledge the perfect right so to act, under such circumstances; and therefore I shall assume as a conceded point, that *gratuitous advice is both justifiable and praiseworthy, so long as it is confined to its appropriate sphere!*

Wherein, then, lies the objection to gratuitous advice? Is it not because it is found in practice that the individual who gives his gratuitous services to the institution, and he who gives them at certain hours to the public in the morning, is imposed upon by the recipients of relief, and that thus an already overloaded pro-

fession is impoverished by relief being afforded to those who are really in a condition to pay their medical attendant. It is, therefore, indiscriminate charity which calls for censure, and which it will be well for the profession if possible to arrest.

How is indiscriminate gratuitous advice to be put a stop to? Now with reference to this, the conditions both of donor and recipient require separate consideration, with a view to a correct estimate of the difficulties to be contended with. Thus it will be apparent that the only course likely to avail as regards the *applicants*, is to subject each one to such careful scrutiny by proper officers, as shall effectually prevent persons of good means practising such imposition; and this in most country towns might, I imagine, be tolerably easily and effectually accomplished: our experience shews that we cannot safely rely either upon the honesty of the applicant, or the consideration of the governor who fills up the recommendation for the hospital. But the way to prevent indiscriminate relief being given by medical practitioners, is a point not to be so readily disposed of. If it be correct in principle to give gratuitous advice at all, then has every professional man, I think, an undoubted right to receive his quota both of the benefits and the pleasures resulting therefrom; and surely he has good cause to feel aggrieved if he finds that in the part wherein he resides, a large institution sweeps away those very cases which he would delight to observe, and upon which, if he be young, he should be entitled to expect to build his hopes of practice. May he not well complain, if in the attempt to direct some of those who throng the infirmaries to himself, by offering to give advice at certain hours upon the same terms, he discovers himself stigmatised by his peers, as having done something which he really ought not to do? I cannot enter into the feeling that does practically debar the youthful medical aspirant from settling in the towns of our island, excepting in the stereotyped capacity of son, partner, or house surgeon. The country practitioner is enabled to work onward in his early career (though his gains may not be great), deriving solace from the knowledge of the services he is daily rendering to his poorer fellow-creatures, proving that he is not leading either a motiveless or useless existence. Far otherwise is it with his brother of the town; here is the same willingness to devote his youthful energies to labours congenial to his feelings, even though not directly remunerative to himself; but, owing to the present monster system of monopoly, he must consent for years forsooth, to lie by and rust, unless through interest, or some happy stroke of fortune, he be accidentally precipitated into practice.

But, sir, I have yet to learn, with every respect for the officers of our infirmaries, upon what sound ethical rule they rest their claim to the monopoly of gratuitous advice. It is doubtless desirable both to ensure a high standard, and, for other obvious reasons, that the staff of officers who attend upon the urgent responsibilities of internal hospital practice, should be limited; but why should not every legally qualified practitioner who is willing to give his time, be permitted, at certain specified hours in an appointed place, to see and prescribe for those out-patients who would *prefer* to have his opinion, but cannot afford to pay for it? By such regulation the *great name* would yet be in the greatest request, the deserving patients could be sifted from the undeserving, and the deadliest blow would then be aimed at indiscriminate advice, by purifying the source from whence it sprang.

It may be objected that as the *matériel* is found by the subscribers, they are entitled to dictate the terms upon which the medical officers shall be appointed. This may be very true if the medical services are paid for; but if the profession accords them gratuitously, it is clearly at liberty to specify on what condition they may be so given, and is bound to take care that in thus doing, the interests of the majority of its members are not injured for the sake of the privileged few.

I can understand that those individuals who have succeeded by dint of perseverance and good fortune in obtaining what is termed a good practice, should be inclined not only to retain this for themselves, and transmit it to their children, but also that they should be wishful to close up those avenues which are apt to lead their young opponents into footpaths of dangerous proximity; I can equally well enter into the feelings of disgust and indignation which must fill the breasts of those who are starting in the race of life with high aspirations and "noble thoughts elate," when they for the first time experience the deep injustice of this, to them, almost paralysing system. Could it relate its own workings, it would unfold a tale of shattered hopes and ruined expectations which were once deservedly bright as the beams of the midday sun; it would tell of jealousies and heartburnings innumerable by its means fostered in

the bosoms of those who, but for it, would have been linked in a common brotherhood; a system, devised to carry comfort and assistance to the hearths and homes of thousands of our poorest countrymen, made by its wretchedly unfair organisation an instrument to impede the progress and torture the minds of those who might otherwise be its ablest supporters.

Now, sir, I am free to admit that I do not approve the "advice gratis" system, on account of the difficulty of discriminating the deserving from the undeserving, and the facilities it offers for abuse; and in all cases myself, when I have thought a patient above the station it was intended to include, I have refused to give the advice sought. If the question be freely and fairly met, I for one shall only be too happy instantly to give up the "advice gratis"; but I cannot see how the profession can otherwise expect to arrest or mitigate an evil, which is solely resulting from an internal impropriety of arrangement, which ought never to have been allowed. I am, etc.,

SAMUEL KNAGGS.

Huddersfield, Nov, 1st, 1853.

THE UNPAID MEDICAL SERVICES EXACTED BY THE STATE.

LETTER TO THE EDITOR.

SIR,—I am a very young member of the Association, though a few grey hairs begin to tell me I am not very young in life. I joined the Association, because I wished to see the whole of our profession united. I could bring no one to the ranks but myself, so I brought myself; and I am ready to do my duty as a good and faithful soldier. Yet a soldier, however good and faithful he may be, can do little as an individual; the victory is gained by the concerted action of many individuals. One person may plan a battle; the masses must fight it; but, to win the battle, the masses must act strictly in concert, as one man. Now, it is because our profession have never acted in concert, that we have never won a fight. For the same reason, every year finds us with some new duty or obligation imposed upon us, which new duty we are to discharge gratuitously, for, it is said, the public good. There is no other profession or calling in life so honoured as our own; the services of all others are bought at a price; our money value has yet to be discovered. In the law, from the Lord High Chancellor to the Clerk at Petty Sessions, all are, in their several stations, well paid, and have their duties well defined. In the church, from the Archbishop of Canterbury to the humble curate of St. Germo, all have well defined duties, and, for the most part, they act well in concert; for, however much the church is divided "on particulars", they act well together "in generals"; and, as a body, they are well and largely paid.

But, in medicine, it is the high places, and the customs of those who occupy those high places, that have blighted, are blighting, and, so long as the customs remain unchanged, ever will blight, the prospects and fortunes of our profession. Our metropolitan hospital staff, both surgeons and physicians, together with the staff of all the infirmaries and dispensaries, all the provincial hospital and dispensary staff, are not only discharging duties—duties onerous and most important—gratuitously, but all those offices, both in the metropolis and provinces, are most eagerly sought after, advertised for, canvassed for, and every species and form of personal and social interest is employed to obtain what to the public must seem, from the trouble and anxiety taken in the matter, a perfect medical *El Dorado*. The public do not see why medical men are so eager for those appointments. The public, as a body, know nothing of the fees received from pupils and apprentices to those large institutions; but they do see that, when once appointed to those institutions, the holders of those appointments obtain a wider celebrity, and that they see a vast number of cases, which gives them experience; experience mostly gives tact and celebrity; experience and tact bring the golden harvest.

The number of those who hold hospital appointments is, in comparison to the whole body of the profession, very small; but the effect of the advertising, canvassing, and gratuitous system, is felt by the remotest and most humble village practitioner in our country. It is the poisonous essence in our poor-law medical system. It is the same power that keeps alive the often and justly denounced club system. It is the same power that throws the exclusive medical charge and cost of all between the poor-law class and the club patient on the medical man. Let him refuse his aid, and woe betide him! But let us hear the argument of the squire and rector of his parish. "It is a part of your duty, sir, to attend those poor people. We see Mr.

B. and Dr. S., men of high standing, giving aid to all who ask it, and attending the hospital day by day; and yet, sir, you refuse to see a few poor for nothing. It is cruel, sir, and unjust. Must those poor people die for want of medical care?" In vain you urge your want of means, that the Poor-law Board do not pay you the cost of your medicine, that neither the squire nor the rector support the village club or the village doctor. Refuse the aid sought, and you are denounced. It is the custom of the profession to give gratuitous aid. Mr. B. and Dr. S. give it, and so must you.

Our profession has, too, been much honoured by the legislature; it has imposed on us high and responsible duties, but no pay. Not long since, we were called on, "for the public good", to give, in every case of death, a certificate with particulars concerning it: we are now called on to give certain very precise certificates concerning vaccination—"both gratuitous"; but, from the Registrar General, down to the Registrar of sub-districts, the legislature provides an adequate remuneration for their portions of the same work. But the most paternal care has been taken of the Poor-law medical officer. He contracts to attend duly and punctually upon certain poor persons receiving medical relief; to keep a list of those whom he attends; to transmit the same once a week to the guardians; and to give certain information when required; and for all this he is paid not quite the cost of his medicines. In addition to this, he has, under certain heavy penalties imposed by the lunacy act, to attend upon, punctually, every pauper lunatic in his district chargeable to any parish, and to prepare and sign a list stating all particulars of such lunatic, and transmit the same once in every three months, to the Clerk of the Peace, to the visitors of the County Asylum, and to the Commissioners in Lunacy, and to keep a fourth copy himself. Under the sanitary laws, the medical officer is endowed with extraordinary power, he is to make out a list of all diseased places in his district; to report all dirty places; to visit and inspect all his district, and report the same; to visit from house to house and administer medicine in all cases of diarrhoea, or choleraic disease; and numberless other duties; and all gratuitous. But neither in the whole range of the officials created by the lunacy acts, or the sanitary acts, are there any who are not paid for their services, save her Majesty's Secretaries of State, and the Poor-law medical officers.

The heads of our profession, by the eagerness with which they seek after gratuitous appointments, bring down on those of their brethren, who have to struggle hard for their daily bread, injuries unspeakable. And it is in vain to seek relief from public boards or private bodies, so long as the present blighting customs remain unreformed.

I am, etc.,

A COUNTRY SURGEON.

October 1st, 1853.

ADVICE GRATIS IN PURE AND IN GENERAL PRACTICE.

LETTER TO THE EDITOR.

SIR,—I am fully prepared to acknowledge with you the injustice done to the general practitioner, by the wholesale gratuitous advice system; on the other hand, I cannot shut my eyes to the glaring injustice done to the public by the apothecary who vends his drugs, and whose account is swelled by the amount of physic supplied, which, alas! in too many cases, is prodigious.

Often am I applied to for gratuitous advice, in cases which had they been dieted and judiciously managed, instead of being drenched by the stuff of some apothecary, would have speedily recovered their maladies. Can I, sir, in justice and humanity, refuse my services to such as those who, mulcted of their means and time, implore my aid in despair!

I am no homœopathist; I abominate the delusion and its professors; still so glaring are the evils of the apothecary system, which would be tolerated in no other country than Great Britain, that I would rather be duped by the former than drenched by the latter.

I, for one, shall stoutly resist any interference with the gratuitous advice of the "pure", so long as these glaring evils in the apothecary system are countenanced; to the practitioner of which, I would say: "Thou hypocrite, first cast out the beam out of thine own eye, and then shalt thou see clearly to cast out the mote out of thy brother's eye."

I am, etc.,

JUSTICE.

October 29th, 1853.

FALSE POSITION OF THE MEDICAL PROFESSION.

LETTER TO THE EDITOR.

SIR,—Surely, there never has been a time when the medical profession was more loudly called upon to exert itself to defend and support its own dignity than the present. What with negligence and lukewarmness, and a want of unanimity on the one hand, and a grasping overburthening disposition on the other, we shall ere long deserve the scorn with which we are threatened, if we do not rouse ourselves to repel it. Without attempting to decry others, let us compare the respective positions and prospects of our own profession with those around us. In every other profession there is something to look forward at; some office or station of high rank, honour, and emolument. In the army and navy there are captains, colonels, admirals, generals, peerages, and pensions. The church has its good livings, its canonries, its deaneries, its bishoprics, and archbishoprics. The law has a field for wealth, patronage, and honour, large enough to satisfy the cravings of a cormorant: its offices are innumerable, and its emoluments such, as make a poor medical practitioner's mouth water. There is no office in the state to which he may not aspire; from a town clerk or revising barrister up to a lord chancellorship, or a privy councillor—peerages included. The House of Commons abounds with them; and, for the most part, fortune smiles on them.

What object of ambition is there for a medical man? With an education second to none of any other profession, there is not one single office of high rank, honour, or profit, to which he may aspire, unless he belongs to the army or navy. Look at the medical officer of a poor law union, with a territory of ten, fifteen, twenty miles diameter, to attend to, and a salary that will hardly pay for his horse's shoes. There are medical officers of hospitals, dispensaries, and infirmaries, no doubt; but, for the most part, without a shilling of salary, whilst the labour and responsibility is very considerable. No doubt, it is a very honourable office. So it is to be a bishop or a judge, a canon of a cathedral or a solicitor general; but I doubt if there would be many candidates for these honourable offices if there were no stipend or salary attached.

I have spoken of a medical man's education: let us glance for a moment at what it is. He has passed through the usual routine of school and collegiate instruction, and being grounded in English, Latin, and Greek, French, Italian, and German; he is expected to have a fair knowledge of geography, astronomy, mathematics, and algebra; as well as the principles of optics, acoustics, mechanics, hydrostatics, pneumatics, meteorology, and the causes of the variation of climate, etc. He then proceeds to the subjects more decidedly appertaining to his profession; viz., anatomy, human and comparative, general and microscopic, physiology, pathology, surgery, midwifery, medical jurisprudence, botany, mineralogy, and the *materia medica*, the practice of physic, and chemistry, with its concomitants, electricity, galvanism, magnetism, and the phenomena of light and heat. A medical man in society is expected to understand something of every science and art; and people often judge of his acquirements in his profession by the amount of knowledge he may possess on general scientific subjects. This is natural, and we do not complain of it. On the contrary; the more enlightened a medical man's mind may be, the higher is the range of his intellect, the greater will be his general utility and skill, and the greater will be his own gratification. But this is a gratification entirely his own, earned by the sweat of his brow, by study and mental exertion, and stands in no degree in the place of pecuniary reward. I will venture to say, that the medical profession, as a body, may rank amongst men of the highest and most cultivated intellects in the kingdom; of a refinement of mind, of learning and acquirements, and clearness of perception, that would do honour to any rank or any station.*

These are the persons who are called out at all hours and in all weathers to listen to the disgusting details of every ailment that the dispensations of Providence, or the folly or wickedness of mankind, can produce; to forbear with the peevish, to calm the excited, to face and outface the maniac at the risk of his life sometimes; to have patience with the fanciful, to convince the wrongheaded and obstinate; to be thwarted by stupidity, obstinacy, prejudice, and parsimony; to be treated with ingratitude and neglect when the emergency is past,—yet bear it all with

patience and resignation. A medical man's time is part of his stock in trade, yet some will hold him by the half hour putting cases and trying to get clandestine opinions from him without offering a fee; others will inflict long correspondences on him requiring answers backwards and forwards, frequently on matters in which a lawyer would be the better adviser, only, he would demand his fees each time, but the doctor of course is not expected to charge. And this feeling is become so much a matter of course, that the legislature now think themselves justified in demanding our services without remuneration. We have but just opened the eyes of the insurance offices on this subject, and now the government comes down upon us with this compulsory registration Vaccination Bill. It is in every way so unreasonable in its demands, and so inconvenient in its working out, that it must ere long fall to pieces of its own weight, but we must not aid in building it up. What do we receive either in honour or profit, what do we get out of the coffers of the state, or any other public source, that should induce us to add one tittle, one feather's weight, to the burthen we already bear? On the contrary, do they not exact the uttermost farthing out of our precarious incomes in their income tax? Why then should we be called upon to give gratuitous certificates, or take any additional trouble, without remuneration? I mention these subjects for the purpose of urging upon the profession the necessity for a unanimous and concentrated effort to procure a speedy and thorough medical reform. There is much to be said on the subject; but I have already so far trespassed on your space, that I will only add, that I believe our profession is at present the hardest worked, the worst paid, the least thanked, and the most abused of all the professions.

I am, etc.,

E. X. O. N.

November 5th, 1853.

NEWS AND TOPICS OF THE DAY.

LONDON UNIVERSITY GRADUATES. A numerous attended meeting of the Graduates' Committee of the University of London, was held at the Committee Rooms, on Tuesday evening, Nov. 29th, to consider what course should be adopted with reference to the intolerant proceedings of the members of the College of Physicians, in black-balling Dr. Ransom at the Royal Medical and Chirurgical Society. Dr. Ransom was unanimously elected a corresponding member of the Committee; and we understand that immediate steps will be taken to bring the question of the alleged illegality of the degrees of the University of London before Government, and to take such other steps as will ensure the Provincial Graduates and Physicians from a repetition of further insult from the College of Physicians.

A NEW PERIODICAL:—THE ASYLUM JOURNAL. A periodical under this name, and edited by Dr. Bucknill, has been established by "The Association of Medical officers of Asylums and Hospitals for the Insane." The association found that they were powerless without a special organ of their own, so great was the difficulty of obtaining an adequate attendance at meetings. The editor in his introductory address remarks:—"When the members of an association cannot meet, if no attempt is made to substitute the power of the printing press for that of the assembly, such an association cannot even claim an existence of decrepitude: it must be in a state of complete and absolute palsy." We are told that at the meeting at which the Asylum Association resolved to have a journal of their own, "Dr. Conolly added the weight of his great authority, and spoke with much emphasis of the treasures hitherto hidden in Asylum case-books, likely to become known and useful to mankind through the intervention of such a journal." The *Asylum Journal* contains sixteen pages of matter: and is to be published in the meantime only once in six weeks. It is evidently not intended as a substitute for, or as a rival of Dr. Winslow's Review, but rather as a medium of communication and publication for members of an important society.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

- *COOPER, Henry, M.D., elected Mayor of Hull for the ensuing year.
- *DUNCAN, J. Matthews, M.D., appointed Physician Accoucheur to the Royal Dispensary, Edinburgh.
- WINN, James M., M.D., elected Physician to the Metropolitan Dispensary.

* I say this, notwithstanding it pleases Mr. Charles Dickens and his brother scribes to introduce us, most commonly, in some ludicrous light into their stories—no great compliment to their own professional attendants, whenever they may be.

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. IX.—WEEK ENDING 26TH NOVEMBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern above the Mean Sea Level, 115 feet.

Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.							Wind.		Amount of Rain for the Day.	Amount and Class of Cloud for the Day.	Hail, Snow, Fog, Frost, Thunder, Aurora, and Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.	Mean Force for the Day.						
Nov.	in.	in.	°	°	°	°	°	°		a.m.	p.m.	0-6	am/pm	0-10			
20 S.	29.826	29.942	48.1	26.7	37.	55.1	18.	32.7	0.820	WSW.	W.	1		6.5, ci.-cu.			
21 M.	30.270	30.278	37.1	21.5	28.9	40.	16.	23.3	0.800	W.	W.	1		10			
22 Tu.	30.281	30.184	27.2	20.2	23.5	31.1	12.7	21.1	0.853		E.	0.5		10			
23 W.	30.164	30.181	33.9	27.5	30.3			25.2	0.915	NE.	NE.	0.5		10			
24 Th.	29.911	29.890	35.1	33.5	33.9	33.6	27.	30.8	0.912	ESE.		2		10			
25 F.	29.991	29.912	37.6	30.7	33.7	42.	27.5	34.5	0.983	SE.	SE.	2		7.5, cu.-s. cu.			
26 S.	29.845	29.925	37.9	32.5	34.8	39.	28.	34.0	0.955	WSW.	NNW.	1		9, cu.-s.			
Col.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 200 ft. Observer: T. MOFFAT, M.D.

Nov.																	
20 S.	29.740	29.828	48.0	42.5	45.2	58.0	40.5	38.7	0.802	W.	W.	1	0	5, cu. cl.	0.20		
21 M.	30.117	30.117	46.5	38.4	42.2	58.5	26.5	39.8	0.927	W.	W.	0	0.5	3, cu.	0.00	Conv. 2 a.m. DI.	
22 Tu.	30.073	29.992	51.5	27.0	29.2	46.5	19.0	29.9	0.961	S.	S.	1	1	0	0.00		
23 W.	29.971	29.921	34.0	30.0	32.0	36.5	26.5	32.0	1.000	SSE.	SSE.	1	6	10	0.00	T. DI.	
24 Th.	29.678	29.672	37.5	30.0	33.7	39.0	28.0	37.0	1.000	SSE.	SSE.	0	0.5	10	0.15	T.	
25 F.	29.796	29.628	38.5	29.0	33.7	45.5	26.5	35.0	1.000	SSE.	SSE.	1.5	4	10	0.40	DI.	
26 S.	29.686	29.759	45.5	35.0	40.2	58.0	23.5	40.0	1.000	0	0	0	0	5, cu.-s. cl.	0.10		

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

Nov.																	
20 S.	29.751		45.6	41.0	43.0		37.9	42.2	0.968	sw.	wby.	1		7, ci.-s. cl.	0.014		Angina.
21 M.	30.174		41.4	30.6	36.0		26.1	31.8	1.000	WSW.	W.	0		3, ci. ci.-s.	0.027		Scarlatina.
22 Tu.	30.195		36.1	22.9	29.5		23.0	21.0	1.000	W.	W.	0		5, ci.-s.			Phthisis.
23 W.	30.085		31.1	22.9	28.5		22.0	26.0	1.000	Calm.	Calm.	0		7, s.			Angina, Diarrhoea.
24 Th.	29.885		37.1	29.2	33.1		27.9	29.2	0.852	S.	SSE.	1		10, ci.-cu. ci.-s.		Toothache.	Fever, Scarlatina.
25 F.	29.900		37.5	32.4	34.9		31.2	33.4	0.983	S.	S.	1		10, ci.-s.	0.580		Marasmus 2. Pres.
26 S.	29.714		38.4	37.1	37.8		33.9	37.4	0.992	NW.	NE.	1		10, ci.-s.	0.500		[labour, 7 months, still born.]

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

Nov.																	
20 S.	29.800	29.950	45.5	38.0	41.7	45.0	33.0	40.8	0.863	S.	S.	0.5	0	9	1.00	Rub. Inf.	
21 M.	30.213	30.218	44.5	32.0	38.2	46.0	30.0	34.0	0.840	NW.	NW.	0.5	0	0	1.11	Di. Sc. Fe.	
22 Tu.	30.259	30.166	39.0	25.0	32.0	39.5	25.0	30.0	0.836	NW.	S.	0.5	0	3, cu.	1.00	Pleuritis, Peritonitis	
23 W.	30.158	30.131	32.0	25.0	28.5	37.0	25.0	28.5	0.951	SW.	SE.	0.5	0	10	0.00	[from perforation]	Peritonitis [formation]
24 Th.	29.993	29.908	39.0	26.5	32.7	39.0	28.5	32.0	0.839	SE.	SE.	0.5	0	10	0.04	Cyn. Tr.	
25 F.	30.025	30.007	39.6	32.5	36.0	44.5	32.0	33.0	0.841	Var.		1		7	0.41	Di. Inf. Pleu.	
26 S.	29.740	29.824	39.6	38.0	38.8	40.5	32.0	36.7	0.892	NNW.	NNW.	1.5		8, cu.	0.45	T. Pleu.	Decay.

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

Nov.																	
20 S.	29.941		46.	32.	39.	46.	30.	36.6	0.859	SE.	SE.	1	3	10, s.			
21 M.	30.241		47.	31.	39.	54.	30.	31.5	0.914	N.	N.	0	1	0	0.10	Bilious Fever, T.	
22 Tu.	30.233		50.	30.	40.	61.	27.	35.2	0.878	N.	N.	0	1	0, cu.		Rh. Ac. Fever.	
23 W.	30.205		49.	25.	37.	55.	28.	31.2	0.876	N.	E.	1	3	5		Ophthalmia.	
24 Th.	30.073		45.	32.	37.5	44.	30.	35.6	0.858	S.	SW.	2	4	10, ci.-s. cu.-s. n.		Pleuritis, Hernia Hu-	
25 F.	30.045		45.	35.	40.	51.	35.	35.2	0.878	E.	SE.	1	3	10, ci.-s.	0.30	Cyn. T. [minialia]	Old age, et. 76.
26 S.	29.823		47.	37.	42.	51.	33.	37.6	0.858	W.	NW.	2	2	7, cu.	0.31	Ery. Neu. T. 2.	
																Gastrodynia.	

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTE, M.D.

Nov.																	
20 S.	29.994	30.115	49.2	31.2	40.2	48.9	27.0	41.8	0.929	NW.	N.	2	0	2, cu.-s.	0.00		
21 M.	30.583	30.388	44.5	24.2	34.3	47.7	22.2	33.5	0.915	NW.	N.	1	0	3, cu.-s.	0.00		
22 Tu.	30.321	30.222	45.7	28.2	36.9	46.	26.0	24.5	0.824	N.	N.	1	0	3, cu.-s.	0.02		
23 W.	30.196	30.160	48.5	38.1	43.3	48.5	38.0	37.8	0.926	N.	SE.	2	5	4, ci.-s.	0.12		
24 Th.	29.899	29.844	47.5	32.6	40.0	47.5	29.1	46.0	1.000	S.	N.	3	0	8, n.	0.58		
25 F.	30.130	30.044	50.5	37.0	43.7	50.5	34.5	34.0	0.840	N.	S.	1	2	8, cu.	0.24		
26 S.	29.958	30.008	49.2	31.0	40.1	49.2	26.2	39.8	0.927	NW.	N.	3	0	8, cu.-s.	0.01		

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

Nov.																	
20 S.	29.888		50.0	38.4	45.1	50.0		44.9		SE.		0.5		10	0.03		Two Weeks' Regis-
21 M.	30.287		47.5	35.4	40.4	46.0		37.3		N.		0.5		10	0.03		tration.
22 Tu.	30.292		47.0	28.4	37.3	45.0		35.2		NE.		0.5		10			
23 W.	30.226		46.0	29.4	38.5	45.0		35.4		NE.		0.5					
24 Th.	29.987		44.0	37.4	41.5	44.0		35.1		SE.		1.0					Nov. 8. Pneumonia.
25 F.	30.090		46.0	34.9	39.3	47.0		47.0		NE.		0.5		10	0.80		" 14. Pneumonia.
26 S.	29.787		45.0	34.4	39.6	45.5		45.5		N.		0.5		1	0.47		" 16. Atrophy.

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

Nov.																	
20 S.	29.897	30.013	49.5	44.	46.7		44.8	0.867	SSW.	NW.	1			8, cu.-s. n.			
21 M.	30.270	30.276	48.5	44.5	46.5		39.7	0.775	NNW.	NW.	1			3, cu. ci.			
22 Tu.	30.197	30.115	48.5	43.	45.7		40.7	0.804	NBE.	NBE.	1			5, ci.-cu. n.			
23 W.	30.144	30.093	45.	42.5	43.7		39.6	0.858	NBE.	ESE.	1.5			4, ci.-s.	0.03	Neu. Croup.	
24 Th.	29.896	29.813	46.	42.5	44.2		41.8	0.897	SBE.	SBE.	3			8, cu.-s.	0.027	Di.	
25 F.	30.078	29.992	49.	43.	46.		42.7	0.835	WNW.	WNW.	1			7, cu. ci.-s.	0.694		
26 S.	29.871	29.901	48.5	44.	46.2		44.9	0.933	WNW.	WNW.	3.5			7, cu.-s. n.	0.501	Di.	

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

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NEW SERIES.

MEDICAL STUDENTS.

No one can help being conscious that the position of medical students, from the time they leave the homes of their parents, or of those with whom they have spent the earliest years of their pupilage, has not sufficiently attracted the notice of the profession. The aching heart of many an anxious father can bear witness to the feelings with which the son is first dismissed to his studies in London, or some provincial town. The consciousness that there is no one to take a parent's place, nor to aid in guiding the aspirant for medical honours amidst the dangerous temptations to idleness and vicious pleasures which surround him, adds a bitter pang to the farewell. Every public teacher can bear witness to the number of letters of anxious introduction he receives on the opening of each medical session, from the parents and masters of the new pupils; and how gratefully the promise to extend some friendly care to the student is received.

That there is something radically wrong in the plan of education pursued during the student's hospital studies, is sufficiently obvious from the statistics of Mr. GUTHRIE, to which Mr. PATERSON has directed attention in this number of the ASSOCIATION JOURNAL. The fact that, out of 3,290 registered students, only 1,250 obtained the diploma of the Royal College of Surgeons, is really startling; and that, on an average of three different medical years, one in nine was rejected, is as painful. Here is indeed a subject meriting the most serious attention of our profession generally, but especially of those who are devoting themselves to the education of the rising generation of medical men.

Our correspondent expresses his opinion that "the students are more idle and inefficient than ever". Earnestly do we hope that this is a partial statement. It is certainly opposed to the testimony of Dr. GOLDING BIRD, in his recent letter to the Journal (p. 1042); and his sphere of experience has been ample, although limited, we believe, to Guy's Hospital. When we look at the satisfactory results of the preliminary classical and mathematical examination, to which the Apothecaries' Company has, within the last few years, invited the students at the commencement of their career, no less than to the manner in which so many have passed through the difficult ordeal of the University of London, and have distinguished themselves by obtaining its medals and scholarships, we cannot but hope that there are very many splendid exceptions to the character given by Mr. Paterson to the present generation of medical students.

The more general adoption of the tutorial system in our hospitals and schools would be an unquestionable boon to the students, and as great a benefit to the large number of young physicians and surgeons who remain in attendance at these institutions after the completion of their routine education; and many of whom, with great talents and small means, spend years in the long deferred hope of some over-worked senior making way for them. This indeed leads us

to repeat a question which has been more than once proposed, namely—Whether the tenure of office in a medical school or hospital should continue, as is too often the case, after increasing years or accumulating practice have rendered it impossible for the teacher to devote sufficient time to those who look to him for instruction?

To pass from the professional to the moral and religious training of the students of medicine—It is difficult to overrate the importance of any scheme which may be successful in reminding the student of his responsibilities. The adage of *Nulla religio, nulla fides*, is as true as it is old; and never will medical men perform their mission so usefully and happily as when their talents are purified by Christian love. Then indeed will they learn practically to bear and forbear with each other, and with their patients; and the bickerings and misunderstandings, which now so often unnecessarily strew thorns in the anxious path of a medical career, will lose their power to wound under that influence which teaches them to bear one another's weakness.

A study of the biographies of some of the real benefactors of our profession, of Harvey, Sydenham, Boerhaave, William Hey, Bateman, Jenner, Good, Gooch, Hope, Turner, Abercrombie, John Reid, and of many more, will show that, brilliant as were their scientific attainments, they were rendered still more illustrious by the Christianity they openly confessed. Indeed, to borrow the words of a former correspondent (p. 657), we feel assured that the fearful stigma, *Ubi tres medici duo athei*, is not merited by our profession; and "that the time has gone past when medical men shall hesitate to mix up with their God-like profession a Christian confession."

We feel sure that any attempt to preserve and extend moral and religious influences among students, during their residence at the hospitals and schools, cannot fail to receive the warmest approbation and the most earnest support of our profession. Those who endeavour to carry out these views, may at least count upon the assistance of nearly all who are desirous for the elevation of the status of the medical man, and for the protection of the student against those vicious temptations on which his health, his happiness, and his usefulness are too frequently wrecked.

In conclusion, we would remark that the letters which have been elicited by the appeal published on the 11th of November (p. 1002), sufficiently show the warm interest which is taken in the cause of medical students: and the announcement by Sir CHARLES HASTINGS in this day's number, is evidence that our ASSOCIATION has already recognised the claims upon its sympathy of the rising generation of practitioners.

THE VACCINATION QUESTION AND ITS SETTLEMENT.

THE letters which we publish to-day, and others which have appeared in the ASSOCIATION JOURNAL since the passing of the New Vaccination Act, clearly indicate that

it is beginning to produce the fruits which we predicted—contention and complaint. If the former act was largely productive of these evils, it was natural to suppose that the present “compulsory” act would yield them in still greater abundance. The history of this and other measures shows how difficult it is to protect the profession from adverse legislation, and from the sectional policy and ill directed zeal of its own members. The medical profession, it is admitted, is step by step sinking under the yoke of the Poor Law Boards: and no one tries to stop the descent. This state of matters is apparently both the cause and the effect of apathy; for we can in no other way explain the indifference which prevailed regarding the Lunacy and Vaccination Acts when they were before Parliament last session.

We do not think that any good can result from a reiteration in these pages of opinions regarding Lord Lyttelton's Act. If any satisfactory settlement of the vaccination question can be arrived at, we believe it will be through the agency of a representative Committee of the PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION, appointed after discussion in all the Branches.* The Association loses much, in fact nearly all, its political power, by its want of a representative organisation; and, till we adopt and cherish such an organisation, we shall probably continue, as at present, to waste our energies upon useless and ill sustained sallies. Our troops are numerous; but they have yet to learn the tactics of combined operations.

MILITIA SURGEONS.

THE grievances of the Militia Surgeons have been actively taken up by a Committee of their number, who are now seeking the concurrence of their constituents to convene an early meeting at Birmingham. Communications to the Committee may be addressed to Dr. W. WILLIAMS, Royal Flint Rifles, Mold, North Wales. We hope that the profession generally will support the cause of the militia surgeons, as it is the cause of justice and fair play. The subject is sufficiently explained by the letters in this and a previous number of the ASSOCIATION JOURNAL, so that we need not say more regarding it at present.

INDECENT EXHIBITIONS.

IN the newspapers we have often read Dr. Kahn's invitations to ladies to visit his museum on Fridays, at certain hours, when, as the advertisements state, the other sex is excluded. For example, in the *Critic* of 1st December, we observed the following:—

“Wednesdays and Fridays, from 2 till 5 o'clock, a part of Dr. Kahn's Anatomical Museum is open for ladies only, when lectures will be delivered by Mrs. Leach. On those days, gentlemen will still be admitted from 11 till 2, and from 7 till 10; while on other days, the museum will be open for gentlemen only from 11 till 5, and from 7 till 10. Lectures by Dr. Leach. Admission, One Shilling. Portland Gallery, Regent Street, opposite the Polytechnic.”

From this notice, it was obvious that ladies were publicly invited to view objects, which they could not have the face to look at in the presence of men; but till we received the letter from Mr. Kesteven, which we have published in a subsequent page, we had no idea that this arrangement was so much necessitated by the grossly inde-

cent character of the exhibition. The wax models of Dr. Kahn are very beautifully executed; and in a collection destined for medical students or others engaged in scientific pursuits, most of them might be exceedingly appropriate; but as mere sights for the general public, many of them can only be called filthy—and, as spectacles for women, outrageously abominable.

In the portions avowedly open to females, we find in the catalogue the following and such like entries:—

- “64. Sexual organs of a young female in a state of virginity showing the hymen.”
- “67. A testicle and epididymis injected with mercury.”
- “95. The penis laid open, showing its structure.”

In the “room for medical gentlemen”, the objects are precisely such as would not attract them—and for them the descriptions are neither necessary nor intended. To admit women to this reserved collection upon payment of an extra shilling is very nasty. That our readers may form their own opinions on this point, we copy a page from Dr. Kahn's catalogue—the very catalogue which all visitors, male and female, are invited to purchase:—

“641. The internal sexual parts of the European female in a state of virginity:—*a*, the external labia, or lips; *b*, internal labia, and at their point of junction is a little conical gland, called *c*, clitoris; *d*, the entrance to the bladder; *e*, the entrance to the vagina, which in virginity is partially closed by a membrane, called *f*, hymen, or virginal membrane; whose absence, however, is not by any means a proof of unchastity, as it is sometimes deficient from infancy, and at other times is so slight as to be ruptured by ordinary exertion.

“642. The external female sexual organs, in a state of virginity.

“643. Sexual parts of a Lapland woman, showing the hymen.

“644. Sexual parts of a Hottentot woman, showing an enormous enlargement of the inner labia, through which a ring has been passed for the purpose of preserving chastity.

“645. A Hottentot woman, with pendulous clitoris or natural apron.

“646. A Hottentot woman, with an enormous clitoris. It is said that women of that race purposely elongate the clitoris themselves, and mutually satisfy their sexual propensities.

“647. By this is represented an elongated clitoris, seen in a girl, still living in Munich, and who since the age of eight years has practised Onanism (or self abuse) to such an extent, that the clitoris has become enlarged.

“648. Enormous enlargement of the prepuce of the clitoris, in an English female, also arising from Onanism.

“649. Elephantiasis of the female sexual parts. In this figure is also seen the result of Onanism.

“650. Elongation of the testicle, caused by Onanism.

“651. Head and face of a man who fell a victim to the demoralising and destructive habit of Onanism.

“652. Spinal cord diseased by the effects of onanism, taken from a boy twelve years of age, who died in the hospital in Vienna.

“653. Sexual parts of an individual, who is still living in Paris: the scrotum is split, the penis like the clitoris of a woman, joined to the scrotum without being pierced, the evacuation of the urine is by an opening resembling a vagina, which is seen beneath the sexual parts.

“654. Sexual parts of an individual named Gottlich, born near Dresden, in Saxony; his scrotum consists of two equal parts; instead of the penis there is a species of clitoris, beneath which is found an opening two inches deep, by which the urine is evacuated.

“666. Purulent discharge from the urethra, called gonorrhœa, with curvature of the penis, known by the name of chordee.”

In “the opinions of the press”, appended to the catalogue, we find the following from the *Observer* of June 15th:—

“Almost every officer of the Life Guards and Blues, with many of the non-commissioned officers of those fine regiments, have examined minutely the wondrous structure of the human

* It will be seen (p. 1089) that the Vaccination Act is to be taken into consideration by the Metropolitan Counties Branch, on the 13th instant.

frame, there so elaborately and faithfully developed. During the last week, upwards of two thousand visitors have honoured the museum with their presence; amongst others Lords Loughborough, Seaham, and Adolphus Vane, Sir George Wombwell, Colonel Lygon, and many others of the *haut ton*."

No names of fashionable ladies are given; whence we may infer that the male *haut ton* above mentioned are fully as inquisitive, if not more so, than those whom Mr. Kesteven designates as "the most inquisitive of mortals".

GOLDEN OPINIONS.

In our impression of November 25th we gave some little peeps behind the scenes, as a foretaste of fuller disclosures regarding commercial and professional advertising. We showed that editorial praises were often literally *golden opinions*, and that they differed only from common advertisements in the style of their typography and their locality in the paper. The bribe offered by Du Barry and Co. to the *Reformers' Gazette* having formed the text of our remarks, we now communicate the correspondence which has appeared subsequent to our report of the exposure of that transaction. The false charges and mock morality of the convicted parties are good examples of the weapons with which unscrupulous persons of their class attempt to defend themselves from the shafts of honest editors. Such persons always seek to retire behind actual or threatened slander. Unfortunately, this policy of impudent intimidation silences many a timid foe, as the history of the venal press too abundantly proves.

The fear of being slandered in the *Satirist*, we have heard, brought much wealth to its nefarious proprietors, till at last some bolder than the majority of fashionable men refused to dole out *black mail*, and, regardless of the dirt and filth of the fray, battled with those whose trade was to invent calumnies that they might get a bribe for their suppression. The same description of contest must always be waged when there is a similar enemy to war with. The champions of truth must glory in the imputation of vileness, and reckon detraction as the best tribute to the success of their labours. They must remember that, as far as they are concerned,

This is no world
To play with mamnets, and to tilt with lips:
We must have bloody noses, and cracked crowns,
And pass them current too.

The editor of the *Reformers' Gazette* spurned Du Barry's bribe, and exposed the insulting offer. We naturally praised the *Gazette*—and as naturally Du Barry bullied and slandered it; thus illustrating the proposition we have above enunciated.

Smarting under the exposure of the bribe, the pease meal gentlemen addressed the following letter to PETER MACKENZIE, Esq., the editor of the *Reformers' Gazette*.

"London, Nov. 21st, 1853.

"Editor of Glasgow Reformers' Gazette, Glasgow."

"SIR,—There is a species of bad faith or dishonesty, which it is universally understood that you are acquainted with, and which the text of our advertising order sent you on the 10th November, was intended to protect us against. It consists in an editor or proprietor—after having received the money from London advertisers for insertions in all editions—inserting the announcements in a few copies only, which he calls his first edition, and of which one copy is sent to the London advertiser, to prove the execution of a dearly paid for contract; whilst the advertisement is carefully removed from the main issue of the paper, and which then is called the second edition!

"Persons acting thus dishonestly, are always annoyed when found out.

"We should have taken no notice of your attack upon us in

your second edition of 19th November, had it not been for the deliberate falsehood you therein publish, as to the composition or nature of our food; and which we hereby formally contradict.

"We should fancy that the honest people of Scotland, before they adopt you as their reformer, ought to insist upon your first reforming your own principles for truthfulness and morality, for they certainly require a thorough reform.

"Your wallwishers for amendment,

"BARRY, DU BARRY, AND CO."

Mr. Mackenzie returned the following reply, which, along with the above, he has published in his paper of Saturday, the 3rd December.

"Gazette Office, Glasgow, Nov. 24th, 1853.

"To Du Barry and Co.

"SIRS,—Your audacity is only equalled by your knavery.

"The reply we make to your impudent letter just received is, that we neither touched your money, nor entered into any contract whatever with you, either for our first, second, or third edition, or for any edition whatever. On the contrary, for the last three years, we have invariably declared that we would not admit your advertisements into our columns 'on any terms'. When, therefore, you had the insolence to attempt to bribe us (as to the shame and disgrace of the press you have evidently too often done in other quarters), by sending such orders, and getting such concocted, fraudulent puffs inserted week after week *ad nauseam*, we thought we took the best course with you by simply publishing your own impudent proposals.

"As for our *truthfulness* and *morality*: the first of these inestimable qualities will, we hope, be directed to open the eyes of the public still farther to the fraud and knavery practised upon them by quack impostors now so largely abounding; and as for our *morality*, we have the great satisfaction to know that no part of our character depends for support either on quack vagabonds, or audacious impostors.

"We remain your uncorruptible foes, but sincere wellwishers for amendment and honesty,

"PETER MACKENZIE."

As a sequel to the peep behind the scenes which Mr. Mackenzie has afforded us, it would be both curious and instructive to have a list of all the newspapers in which *quasi* editorial praises of the *Revalenta Arabica* have appeared. Such a harvest of golden opinions would form a tolerable gauge of the immorality of the press, and point out at a glance the names of those papers which are venal.

ORIGINAL COMMUNICATIONS.

REMARKS ON CHRONIC INFLAMMATION.

By C. HANDFIELD JONES, M.B.Cantab., F.R.S., Assistant Physician to St. Mary's Hospital.

It seems worth while to try if any correct discrimination can be made among the various morbid phenomena, which are commonly regarded as the results of chronic inflammation. It is scarcely too much to affirm that this name is a kind of refuge, to which we betake ourselves when we have very little certain knowledge of the causative conditions of a morbid change. Cirrhosis of the liver we suppose to be chronic inflammation of that organ; morbus Brightii is sub-acute or chronic desquamative nephritis; white pericardial patches indicate pericarditis; enormous fibroid thickenings of the coats of the stomach are set down to chronic gastritis; and various chronic changes in the valves of the heart, the cerebral tissue, and bone, are often regarded as produced by the same cause.

To say simply that such or such a change is due to chronic inflammation, means, in strict language, no more than that a process the same as acute inflammation in kind, but of much slower course, has given rise to it. So at least it is defined by our best English authorities. Dr. Williams says, that an inflammation lasting above three weeks is sub-acute, and, if protracted beyond six weeks, is properly called chronic." Dr. Watson asks, "Is acute inflammation

different from chronic in *kind*? No, they differ only", he replies, "in degree. . . . The process is the same, but its features are less strongly expressed. The disease passes through similar stages in both cases, but it travels at a different pace." Dr. Alison speaks in the same terms, but adds an important reservation. He says, "The term chronic is properly applied to those inflammations which tend to the same consequences, and, in many instances, infer the same danger as the acute, but run their course much more slowly, and generally with less urgent symptoms." After remarking, that the sequelæ of acute may be put down as examples of chronic inflammation, he proceeds, "It is proper also to exclude, at present, from chronic inflammations cases where adventitious textures are formed, distinct from the ordinary products of inflammation, although there be much difficulty in distinguishing these forms of disease by their symptoms." Rokitsky extends more widely the demesne of chronic inflammation; he distinguishes four kinds—(1) that in which the process tarries long in each of its stages, even that of congestion taking place very gradually; (2) that in which the inflammation consists in protracted congestion, with retardation of the blood current inclining towards actual stasis; (3) chronic inflammation made up of successive complete attacks of more or less acute character; (4) inflammations producing pus or sanies from internal or external causes, so markedly chronic that they are like a process of secretion. Mr. Paget scarcely mentions chronic inflammation: the only remark I find is, that the acute or chronic character of the process determines the degree in which "the product deviates more or less from the character of the natural effusion or blastematous effusion in the part." Andral, as is well known, rejects the term inflammation altogether, and regards merely varieties of hyperæmia, active, passive, or mechanical. He thinks chronic hyperæmia may be sthenic or asthenic, active or passive. Mr. Wharton Jones, in his *Essay*, does not touch on chronic inflammation.

I am not so presumptuous as to think that I shall completely explain, or even much elucidate, the obscure form of a process itself obscure; but yet I believe I can, by the following observations, somewhat more clearly define the limits which ought to be assigned to it. Acute inflammation occurring as the result of injury in a healthy person is a *typical case*, certainly not that most commonly met with. The main features of this are, (1) hyperæmic afflux; (2) partial and local stasis of blood in the capillaries; (3) impairment or complete arrest of the nutritive actions of the part; (4) exudation of plasma in excess, the more so as the part is unable to use its ordinary proportion. In the typical case, the inflammatory process runs a tolerably definite course, and naturally tends after a time to decline and cease; the exudation being either absorbed, or converted into induration matter, or changed into pus. Now, from this typical condition, most if not all the instances of what is called chronic inflammation depart, in other respects than in being of slower course. Many of them, such as chronic conjunctivitis and bronchitis, are nothing but congestions of atonic vessels, with increased secretion of the mucous membrane: there is no hyperæmic afflux. In others, such as various skin diseases, syphilitic eruptions, and rheumatic inflammations, there is a continual or oft repeated irritation kept up by the determination of a *materies morbi* to the part affected: the exciting cause does not cease to act. In other cases, fluxes from mucous surfaces take place, or perhaps serous effusions, which may have been initiated by inflammation, but remain as secondary results of that process, which has itself ceased. In others, again, the exudation, which takes place interstitially, organises itself into tissue of a low form, and gives rise to the so called unreal hypertrophies. Now, it does seem to me that, in this last instance, a new and most important feature has appeared, one which is absolutely foreign to the typical case of acute sthenic inflammation. In that, the exudation is either wholly reabsorbed, or it is thrown off as pus, or it is partially reabsorbed, and partially remained as a block of induration. In the latter

case, it shows no tendency to grow, to hypertrophy; but, on the contrary, to waste and shrink. We have seen layers of effused lymph on the pleura in course of becoming areolated, and vacuolæ forming in them by absorption, like the holes in the fenestrated membrane; and so the originally solid mass becomes converted into the delicate translucent bands of adhesion with which we are so familiar. Or take the results of inflammatory effusion in other parts. We all know how great is the tendency of organised fibrin to contract and draw together, as seen in the deformities produced by burns, the indentations of even the dense substance of the liver over fibroid cicatrices, and in puckerings of the surface of the lungs from a similar cause. I desire to dwell on the circumstance, that the simple inflammatory exudation does not enlarge itself, and grow, and encroach on the surrounding tissue, but contracts and shrinks together till it becomes, if possible, a mere linear streak. Decidedly, its tendency is to diminish in size.

But let us now take a case of cirrhosis of the liver, such as are not unfrequently met with when the bulk of the organ is not materially diminished. How strikingly *different* is the condition here! On the surface of a section, we may find considerable tracts of fibroid tissue running in among the lobules of the parenchyma, and grouping them together in irregular masses. The quantity of fibroid tissue may equal that of the remaining parenchyma, as in a case I lately examined; or even, as Rokitsky states, may preponderate over it. Microscopic examination shows the fibroid tissue to consist of a kind of fibrifying blastema, imbedding multitudes of nuclei, round or elongated. Now, it is clear that, in this case, there is a growth and development of tissue quite altogether unlike anything that takes place in acute inflammation, or even in such chronic inflammations as those of skin diseases and rheumatism. In fact, the evidences of inflammation are exceedingly questionable, and, so far as hyperæmia is one, are almost wanting. Neither have we any evidences of stasis occurring, and we know that the nutritive actions of the part are not suspended. All that we certainly know is, that exudation takes place, and is organised, in a way that it ought not. Now, I do very strongly demur to calling a change of this kind by the name of chronic inflammation, if the definitions of Dr. Williams and Dr. Watson are to hold good. Neither does the more extended one of Rokitsky at all fairly include it. I would put it to any one, whether there be not much more real resemblance between such a case of fibrous production in the liver as I have described, and the formation of a fibrous tumour in the uterus, than between the former and the result of any unequivocal inflammation. In the fibroid thickening of the walls of the stomach, which may be such as to make them stiff and resistant, it is well remarked by Andral, that the only difference between this state and that of a fibrous tumour is, that the areolar tunic has thickened itself in the one case as *ten locally*, in the other as *two over* a greater extent. Generally, I believe that, in the following instances, viz., cerebral hypertrophy, chronic simple enlargement of lymphatic glands and of the tonsils, Corrigan's cirrhosis of the lungs, the Pacchionian glands, patchy and nodular thickenings of serous membranes, as often seen in the capsule of the spleen, and in thickening and contraction of the cardiac valves taking place without apparent symptoms of endocarditis, the process is not to be regarded as a chronic inflammation, but as an hypertrophy, or new formation, with which there may coexist some, generally a very slight, amount of hyperæmia.

I have said, that acute sthenic inflammation occurring in a healthy person was the type of inflammation; but I am quite aware that it is impossible to draw an exact boundary line between this and the developmental processes that give rise to new products. The types are far apart, but the space between is filled up with innumerable instances of transition from one to the other, in which the distinctive characters become variously blended. This has been recognised and well illustrated by Mr. Humphry, in his *Lectures on Surgery*, published in the *Provincial Medical and Surgical Journal*. He says: "This compartment

of pathology, intervening between inflammation and hypertrophy, to which the term inflammatory hypertrophy may be given, embraces a large number of morbid products which have hitherto remained unclassified, or which have been arranged in such a manner as to convey no idea of their real nature." He distinguishes three classes of cases, in the first of which inflammation lingers on a long time without causing any structural change; in the second, it lingers on in the same way, but is attended with hypertrophy; and in the third, it subsides, after having given a stimulus to the hypertrophy, which then goes on without it. It seems to me in the highest degree probable, that in many of those cases which Mr. Humphry would comprise under inflammatory hypertrophy, there is no true inflammation, but one only of its parts, viz. more or less of hyperæmic afflux. The instance of elephantiasis to which he alludes, seems, from all that we know of its pathology, to be certainly widely different in its real essence from any mere inflammation either of the lymphatics or of the skin. Whatever inflammation may have to do with it, there is, certainly, some other cause infinitely more potent. Were it not so, why should not a severe case of psoriasis, or repeated attacks of rheumatism or gout, or the irritation of diseased bone, or deep-seated cellular inflammation, cause similar hypertrophy? These hyperæmic causes do not produce this effect, because with them there does not coexist that peculiar alteration of the normal qualities of the plasma and the tissue necessary to healthy nutrition, which is the chief factor in the process giving rise to elephantiasis. I would wish to name all these morbid changes in which the character of growth—of new formation—decidedly predominates over that of inflammation, according to their principal feature. I would call them simply fibroid thickenings, or fibro-cellular growths, and thus avoid giving them a name, either merely trivial, or of doubtful correctness. The matter is not one of nomenclature merely; it has important bearings on practice. Suppose a case intrusted to our care in which the liver was found considerably enlarged, projecting below the ribs, and that we have satisfied ourselves that the enlargement depends neither on engorgement with blood, nor on fatty change, nor on bacony deposit. The probability, then, is very strong that it is in a condition of cirrhosis, the fibrous tissue between the lobules being prodigiously increased in quantity. Can we hope by the administration of mercury or iodine to remove this deposit? If it were simply inflammatory, the attempt might be successful; but as it is a growth, one may confidently predict that it would be fruitless if not injurious. The same remark will apply more or less completely to any of the other instances before mentioned.

It seems to me that observers have not sufficiently held in view, although generally admitting as a matter of course, the vast predominance of that unknown force, call it what we please, which determined and still determines that here bone and there muscle, and in another spot nerve, and in another tendon, should be formed. There is some such force, and it is certainly liable to be deranged, and its derangements are just those which are most difficult to rectify. This perversion of the nutritive act (to borrow Andral's phrase) is that which determines the origin and growth of a cancerous, or a fibrous, or any other kind, even of a fatty tumour. It is the same, I believe, which causes the textural changes above enumerated, and some others which might be added, and not inflammation, which of itself and in its best marked form, produces no exudation which is capable of growing and enlarging. It is this property of vegetative increase which makes the removal of new formations and all allied productions so difficult: mere inflammatory effusions we can melt down and get absorbed, but these resist our "sorbefacient" remedies with the same persistence almost as the natural tissues.

The degenerative process which constitutes true morbus Brightii does not quite come under the above class of morbid changes. The best observers are agreed that production of new interstitial tissue constitutes no essential part of the morbid action. Most writers incline to view it as a nephritis

of more or less chronic character; but the great name of Prout can be cited in support of the view that the substratum of the process is something essentially different from inflammation. My own observation has always inclined me to adhere to this opinion. In the enlarged, often mottled, kidney we see simply a derangement of nutrition, producing hypertrophy of the epithelium concurrently with malperformance of its function. The albuminoid cell-growth does not undergo its normal changes; and instead of forming the secretion, it collects in the tubes, either choking them up and distending them, or getting washed out in the stream from the Malpighian tufts. In further stages, or in more rapid degrees, of change, the tubes and epithelium break up into mere detritus. In all this process we see really nothing to justify us in considering it as inflammation. So, also, in the atrophic form, the small dwindled kidney, we find no satisfactory evidence of anything else than a gradually supervening impairment of the nutritive process. The epithelium wastes, and the tissue decays, and collapses; thus far is certain; but how little is there to show that this is dependent on previous inflammatory disease? On the contrary, the frequency of recovery from acute congestion (as that of scarlatinal dropsy) shows that inflammatory and degenerative actions are widely different in their nature and results. The one exhibits the perturbation of healthy action by an intervening cause, the other is the decay of vital power from innate or induced weakness.

The subjoined scheme illustrates the transitions that seem to exist between two of the chief types of disordered nutritive action. In inflammation of acute sthenic character the hyperæmia is a main element, and the exudation is non-vegetative. In cancer (say encephaloid) there is no apparent or necessary hyperæmia, but the exudation is endowed with a vegetative power of most active growth. In simple deposit, as of tubercle or bacony matter, there is neither hyperæmia nor manifestation of vegetative power; the sole morbid change is the deteriorated state of the plasma.

Inflammation.

Acute sthenic.
Subacute.
Chronic.

Tubercle—bacony matter.
Simple deposit.

Encephaloid cancer.
Fibrous tumour.
Fibroid thickening.

Southwick Place, Hyde Park, November, 1853.

AN EXPERIMENTAL INQUIRY INTO THE EFFECTS OF INJECTING PUS INTO THE VEINS OF ANIMALS.

By JOSEPH SAMPSON GAMGEE, Esq.

EXPERIMENT I. Oct. 17th, 1853, 10 A.M. The subject was a perfectly healthy horse; pulse 33; the respiration 10 in a minute. The left jugular vein was opened, and a mixture of two and a half drachms of good pus, with the same quantity of tepid water, were injected into it slowly, and without the animal being in the least disturbed. It was ascertained that the vein continued quite pervious some moments afterwards, by its filling upon pressing on it just in front of the sternum.

12 meridian. No change had hitherto taken place, but the animal had now begun to breathe twenty-five times per minute. The pulse was 42, of good character.

4 P.M. Pulse 60; respiration 30, thoracic.

8½ P.M. Pulse 64; respiration 24. The horse fed well, and appeared in good health.

Oct. 18th, 7½ P.M. The animal fed, and was lively. The respirations were 20, and much less thoracic than last evening. Pulse 68, full, and oppressed. The vein was pervious.

2½ P.M. Pulse 54; respiration 20.

7½ P.M. Pulse 64; respiration 24.

EXPERIMENT II, instituted on the same animal on October 19th. 10 A.M. The pulse was 51, of good character; the respirations were 20, not manifestly thoracic.

10½ A.M. An opening was made into the right jugular

vein, and a mixture of two drachms and a scruple of pus, with an equal quantity of water, was injected into it. A good deal of difficulty was experienced in endeavouring to pass the nozzle of the instrument into the vein; and I infer from the following facts, that, after all, the fluid was only injected into the subcutaneous cellular tissue:—1stly. A swelling immediately appeared below the orifice; 2ndly. The vein distinctly filled above when pressed upon below, which it could not have done if the swelling had been due to its obliteration; 3rdly. The animal, ten minutes after the injection, was not in the least affected by it.

7½ P.M. Pulse 54; respirations 20.

Oct. 20th, 2¼ P.M. Pulse 96; respirations 20. Both jugular veins were pervious. The swelling on the right side of the neck was diffused and sore. A thrombus had formed on the left side, and pus escaped from the orifice.

EXPERIMENT III, performed on an aged grey horse, affected with extensive melanosis of the tail and anus, but otherwise perfectly healthy. Pulse 38.

Oct. 24th, 12 merid. A mixture of two drachms and a scruple of good pus, diluted with an equal quantity of tepid water, was injected into the right jugular vein. I had no sooner done this, and transfixed the lips of the orifice with a pin, than the horse began to heave at the flanks, after which he staggered a few moments, and fell; when down, he breathed laboriously thirty-eight times in the minute, and, with scarcely a struggle, and not more than two minutes' delay, expired.

Some blood, obtained from the orifice in the jugular just before death, presented no abnormal appearances when subjected to microscopic examination.

Secio Cadaveris, 4½ P.M. The jugular vein and the right cavities of the heart were filled with dark coloured currant jelly-like clotted blood. The left cavities also contained a clot, but a much smaller one. Longitudinal section through both the lungs proved them to be intensely congested throughout, but most particularly at the bases; the apices and inferior borders were comparatively free. This cut surface was deep red; a large quantity of dark red blood exuded from it on pressure; the lung tissue thus congested floated on water.

It is important to notice that, from the manner the experiment was conducted, the introduction of air into the vein was impossible.

On examining the blood from the right side of the heart, I discovered on it a very large number of corpuscles, measuring, on an average, one two-thousandth of an inch in diameter, and having nuclei not distinguishable from those of pus-cells. So numerous were they, that it was impossible to count them.

EXPERIMENT IV, instituted on the horse which was the subject of Experiments I and II. Pressure over the lower part of the left jugular vein caused it to fill above, and blood flowed freely; on opening it between its bifurcation and the site of the first experiment on the 17th of October, a mixture of two drachms and a scruple of pus, diluted with an equal quantity of water, was injected into it on the 25th of October. A quarter of an hour afterwards, no change whatever had manifested itself; both in number and character, the pulse continued absolutely the same.

Oct. 27th. Pressure below the orifice, on the right side of the neck, caused the exit of half an ounce of good thick pus.

Oct. 29th. Since the last report, nothing whatever had occurred. The horse had fed, and appeared well, with the exception of occasionally coughing slightly. I ordered him to be destroyed by a blow on the skull, and proceeded to examine the body two hours after death.

Secio Cadaveris. On removing the skin from the right side of the neck, the tissues immediately beneath appeared perfectly healthy; but, on exposing the jugular vein, the cellular tissue around it was preternaturally red, and matted together down to its entrance into the chest, within which all was normal. On slitting open the vein, its coats proved to be of normal colour, smoothness, and thickness, except or about an inch in the situation where the aperture was

made; here a quantity of buff coloured plastic matter occupied about two-thirds of the calibre of the vessel, but the remainder was pervious. The subcutaneous tissues on the left side of the neck were likewise healthy; but, on exposing the jugular vein, it appeared as a white opaque solid body. On cutting it open, its coats were found much thickened, and intimately adhering to a clot, which occupied the entire bore, and gradually tapered downwards to the extent of about four inches, but barely extended half an inch above the orifice: beyond these parts, the vein was perfectly healthy.

The heart contained well clotted blood, and was perfectly healthy.

Both lungs were in the greater part healthy, but both contained abscesses in the posterior lobes. These abscesses were in every respect similar to those met with in individuals who have died from pyæmia: the majority of these were the size of peas, but one was as large as a walnut; its contents appeared good pus to the naked eye, and proved to be such on microscopic examination.

On the diaphragmatic surface of the posterior lobe of the left lung were numerous little tenacious shreds of lymph; but there was no preternatural redness of the pleura, or effusion into its cavity.

EXPERIMENT V, instituted Oct. 20th, on an aged but healthy white pony. An opening was made into the right jugular vein, and, after repeated endeavours to pass into it the nozzle of the injecting instrument, thinking I had succeeded, I injected a two ounce mixture of equal parts of water and creamy pus, but without any apparent effect.

Seven hours later, the constitution was not at all affected; but the neck below the aperture in the vein was slightly swollen, hot, and tender.

EXPERIMENT VI. No new symptom having made its appearance, at 1½ P.M. on the 27th of October, this pony was again experimented upon. A longitudinal incision was made over the course of the left jugular, a little above the middle of the neck; the vein exposed, pinched up with forceps, and opened; after which the nozzle was fairly passed into it, and a mixture of two drachms and one scruple of pus, with an equal quantity of water, injected. This was followed by acceleration of the respiration and pulse, the former of which, while the animal was standing half an hour after the experiment, numbered 30, and the latter 60 in the minute.

EXPERIMENT VII, 4¼ P.M. Respirations being 12, and pulse 60. The orifice made into the left jugular vein in the morning was reopened, and a mixture of one ounce and two scruples of pus, diluted with an equal quantity of water, injected. Ten minutes afterwards, the animal having just before got up, and being then standing, his respiration was 20, and heart-beats 64 in the minute.

28th Oct., 7¼ A.M. The animal continued standing. Pulse 76; respiration 36, laboured, and very decidedly abnormally thoracic. Immediately afterwards the animal was destroyed by a blow on the head.

Examination of the body three hours and half after death. The right side of the neck was scarcely at all swollen, but emphysematous crackling was detected on palpating it. On detaching the integument, the cellular tissue was found infiltrated with fetid bloody serosity from the angle of the jaw all over the side of the neck, in the bend of the elbow, in the deep cellular tissue which aided in connecting the shoulder to the trunk, and on the inner surface of the right foreleg down to the knee. The right jugular vein was filled with a smooth, dark red, non-adherent clot of moderate consistence. On detaching the integument from the left side of the neck, the cellular tissue was seen infiltrated with blood over a space of about two inches around the opening in the vein; beyond this part the subcutaneous tissues were perfectly healthy. The vein contained a common venous clot.

Heart. The right cavities contained a large amount of clotted blood, but there was barely a fourth of that quantity on the left side. On the left surface of the heart, opposite to the interventricular septum, were numerous little red

ecchymotic spots; some of these were bright red, others purplish. Microscopic examination of the blood from the right ventricle did not demonstrate any difference from the blood which was collected from the jugular vein prior to the injection of pus.

The *right lung*, on longitudinal section, appeared very much congested, particularly at the posterior and upper part; less so towards the apex and inferior border. The congestion was not quite so intense as it was in the horse suddenly destroyed by the injection of pus on 24th October, but it was very little less so. In the most congested part, the pulmonary tissue was not at all crepitant; yet it floated on water, even after firm pressure.

The *left lung* was in the same condition as the former, except that the congestion had posteriorly attained even a more intense degree. There were no nodules in either lung; the congestion was uniform.

From these experiments I infer:

1. That when pus is fairly injected into a vein, there is no obstacle to its moving on with the current of blood;

2. That the first organic effect of such injection is congestion of the lungs; which may be so intense as to prove instantly fatal, or be temporarily recovered from;

3. That the abscesses met with in the lungs of individuals who have fallen victims to pyæmia, may be produced by injecting pus into the veins of healthy animals.

Experiments for the purpose of ascertaining the effect of injecting pus into the bloodvessels have likewise been performed by Gaspard,* Trousseau and Dupuy,† Gulliver,‡ Renault and Bouley,§ Alan,|| d'Arcet,¶ Lebert,** Castelnau and Ducrest,†† Sédillot,‡‡ and Lee.§§ The results they have obtained are singularly contradictory; and it would appear as if the progress of time and the addition of experience have only served to augment the obstacles in the way of a definitive solution; for the most recent inquirer, Mr. Henry Lee, arrived at conclusions which tended to subvert those of Castelnau and Ducrest, and of Sédillot, who have particularly distinguished themselves for the number of, no less than for the manner of executing, their experiments. It is remarked by Mr. Lee that "the simple experiment of mixing some pus with healthy recently drawn blood, will at once show that such a combination cannot circulate in the living body. It will be found that the blood coagulates round the globules of pus, and forms a solid mass which will adhere to the first surface with which it comes in contact, and it will be evident that it is not till the coagulum thus formed is broken up or dissolved that its elements can circulate with the blood." Upon this passage I thus commented in a memoir on pyæmia, published in this JOURNAL for March 4th. "To argue, as Mr. Lee does, from the fact that out of the body blood coagulates round pus, therefore such a combination cannot circulate in the living body, is about as warrantable as it would be to predicate from the observation that pure blood coagulates in a basin, it therefore cannot remain fluid in the ventricles of the heart. The fact is, that the circumstances are so materially different, blood in an earthen vessel on the one hand, blood in the living body on the other, that no inference deduced in the one case is applicable to the other." The results of my experiments justify this criticism, and prove that the circulation of pus with the blood is perfectly possible.

Mr. Henry Lee has related seven experiments in which he injected pus into the veins, and they call for careful study. In the first of them (the vith of his series, *op. cit.*, p. 28),

three drachms of pure pus were injected into the left brachial vein of a healthy ass. When the operation was completed, the sides of the vein were brought together with a pin, and the animal was allowed to get up. The vein above the opening could now be felt as a hard unyielding cord, as high as it could be traced with the hand; but upon gentle pressure being made, so as to propel the blood in the course of the circulation, the hardness completely disappeared. Two hours and a half after the operation the pulse, which naturally was 36, had risen to 60; and the respiration, from 12 per minute, had increased to 26. The animal was destroyed two days after the injection.

Post Mortem Appearances. The wound in the left leg opened directly into the brachial vein, which was filled with lymph and a thin pus for a very short distance, both above and below the external opening. Immediately above this, the vein was healthy; nor was there any appearance of disease in any of the other veins of the limb, nor in the veins leading to the heart. The glands in the axilla were swollen. The lungs were found studded irregularly in different parts with circumscribed spots of livid congestion; these existed both upon the surface and in the substance of the lungs: they were generally about the size of a filbert, but in some places they occupied a single lobule, and were accurately circumscribed by its outline.

The result of this experiment, so far from supporting the doctrine propounded by Mr. Lee, is directly opposed to it. What was the cause of the vein above the opening feeling hard immediately after the injection, it is not easy to determine; that it was not due to the formation of a clot, is rendered more than probable by the fact that the hardness completely disappeared upon *gentle pressure*. Certain it is that the effects of pus circulating with the blood were speedily manifested by the acceleration of the respiration, not only absolutely, but also relatively to the increased frequency of the heart-beats. Thus: before the injection, pulse 36, respiration 12; two hours and a half after it pulse 60, respiration 36.

The *post mortem* appearances of the lungs, studded with spots of congestion, obviously the early stage of multiple abscesses, were characteristic of the entrance of pus into the circulation, perfectly concurred with my own experiments, and support the conclusions I have deduced from them.

In the second experiment (Exp. VII of series, *op. cit.*, p. 30), Mr. Lee, on Nov. 23rd, injected about an ounce of pus into the right jugular vein of an ass; the vein immediately became corded, and the blood appeared to have coagulated in the vessel. The operation did not much excite the breathing, but the pulse, which was naturally 35 in the minute, rose to 60.

Nov. 24th. The vein could be traced as a thickened cord as far as the sternum. Respiration 12 (the natural standard); pulse 90.

25th. The parts around the vein were much infiltrated with serum; pulse 50, respiration 12.

26th. The wound in the neck began to suppurate, and an abscess subsequently formed in the course of the vein about midway between the opening and the sternum. The general symptoms continued with very slight variation until the 4th of December, when the animal was destroyed.

Post Mortem Appearances. The jugular vein was found to have become inflamed only in the course of the circulation, and to be obliterated only a short distance below the external opening. The surrounding parts were greatly infiltrated with serum and lymph, and several abscesses had formed in the immediate neighbourhood. The lungs did not present any well defined patches of congestion, as in the last mentioned experiments.

Attentive consideration of the facts above recorded, makes it obvious that the pus was not injected into the vein, but into the surrounding cellular tissue. *a.* Though the pulse was accelerated, the respiration continued natural; this is the reverse of the former experiment, in which there can be no doubt that the pus did circulate with the blood. *b.* The serous infiltration of the surrounding parts noticed during life, and verified after death, with the additional discovery

* Journal de Physiologie, par Majendie, tom. i et ii, 1821-22.

† Arch. Gén. de Médic. tom. xi, 1826, p. 273.

‡ On the Frequent Presence and Effects of Pus in the Blood in Diseases attended by Inflammation and Suppuration. Veterinarian for 1839, p. 42-51.

§ Réc. de Méd. Vét., Mai 1840; et Arch. Gén. de Méd., 3e Série, v, viii, 1840.

|| Gazette Médicale, 1842.

¶ Thèse de Paris, 1842.

** Physiologie Pathol., t. i, p. 313-324.

†† Rechercher les cas dans lesquels on observe les abcès multiples, et comparer ces cas sous leurs différents rapports; in Mémoires de l'Académie Royale de Médecine, t. xii, 1846.

‡‡ De l'infection purulente ou pyæmie. Paris, 1849.

§§ On the Origin of the Inflammation of the Veins, and on the Causes, Consequences, and Treatment of Purulent Deposits. London, 1850.

of abscesses in the immediate neighbourhood, is precisely what occurred in my experiments II and V, in which dissection proved that the pus had been injected into the cellular tissue. The obliteration of the jugular vein, noted by Mr. Lee, is apt to occur from any cause which irritates the vein after an opening has been made into it. Thus, in experiments which I performed last year for the purpose of ascertaining the effects of injecting water and various saline solutions into the circulation, phlebitis occurred in several instances.

These observations are strictly applicable to Mr. Lee's VIIIth experiment; while, according to his narrative of experiments IX, X, XI, and XII, the injection of pus into the circulation was followed by such severe constitutional symptoms as to supply very weighty testimony in opposition to his teaching.

In restricting my analysis to the opinions of Mr. Lee, I have been chiefly actuated by a sense of their importance, based as they are on experimental researches, and opposed to conclusions, which ever since their announcement were regarded as marking an era in the progress of knowledge of the purulent infection. It was impossible to advance a step without admitting or refuting Mr. Lee's statements. To the latter duty, I have been led by careful experiments; the difficulty in conducting which has given me additional cause for respecting and being grateful to Mr. Lee for his endeavours to advance the knowledge of this highly important subject. In extenuation of not having as yet extended these researches, and analysed the opinions of all those who have hitherto engaged in them, I confidently appeal to the kind consideration of those who are acquainted with the nature of these investigations. I feel much pleasure in acknowledging the assistance I have received from my brother John, in the prosecution of the present inquiry.

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PERISCOPIC REVIEW.

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TREATMENT OF ANEURISM AND OTHER VASCULAR TUMOURS BY THE INJECTION OF A SOLUTION OF PERCHLORIDE OF IRON.

During the present year, the attention of French surgeons has been closely directed to a new method of treating aneurisms, viz., that of producing coagulation of the blood in the aneurism by injecting a few drops of a solution of perchloride of iron into the sac. The merit of first bringing this method prominently under notice is due to the late M. PRAVAZ of Lyons. We propose to give an abstract of what has been said and written for and against this method.

History. In a letter to M. Marjolin, published in the *Union Médicale* for May 12th, M. Pravaz gives the history of the treatment.

The author states that, in the year 1828, he commenced experiments on the means of preventing the absorption of poisons. Cauterisation of the poisoned wounds by galvanism appeared to succeed best; this he first tried in cases of bites by vipers and by Indian snakes, and of mad dogs. In his experiments, he observed the readiness with which blood coagulated under the action of galvanism; but it did not occur to him to apply this principle to the treatment of aneurism until M. Velpeau had stated that a coagulum was produced by introducing a needle halfway into a vessel, and there leaving it. This led M. Pravaz, by a series of experiments, to the conviction that galvano-puncture was likely to be a very successful treatment; and he communicated his idea in 1831 to several surgeons. For many years this method remained in abeyance, being merely referred to in works on medicine and surgery; and it was not until 1845 that M. Pétrequin successfully employed galvano-puncture in aneurismal tumour in the course of the temporal artery. M. Pravaz observed with interest the applications of galvano-puncture which were made since 1845 in most countries of Europe. He was led to believe that this method, from the care which it required, from the frequent imperfection of the apparatus, and perhaps from a certain idiosyncrasy in the blood, often failed.

In 1851, he first attempted to produce coagulation by employing voltaic electricity as a means of conveying through the tissues one of the elements of a saline solution placed on the part. This plan had been partly proposed by Strambio in 1847. M. Pravaz thus describes his discovery of the treatment by injection of perchloride of iron.

"In the course of the experiments which I have related, the object of which was either to abolish acupuncture while galvanism was retained, or to reduce the operation to the introduction of a single needle, I observed that perchloride of iron instantaneously caused a solution of albumen to coagulate in mass. Considering, at the same time, that the preparations of iron are generally harmless when administered in a moderate dose, I was led to reflect whether, in place of endeavouring to suppress acupuncture in the treatment of aneurism, it would not be better to renounce electricity, and retain puncture as a means of introducing the coagulating material into the sac. I thought to realise that idea by means of the trocar which is used in the exploration of tumours. Those, however, which are in common use are not sufficiently delicate; and I waited the opportunity of a visit to Paris to have some made fit for the end which I proposed. M. Charrière perfectly fulfilled my wishes in this respect. I obtained also a small syringe, the piston of which was moved by means of a screw, so that the injection was performed steadily and continuously, and could be regulated at the will of the operator.

"On my return to Lyons, I attempted, with the assistance of my son, to produce coagulation of the blood in the carotid artery of a rabbit; but the artery was too delicate to allow the trocar to be easily introduced without transfixing it. . . . I had proposed to recommence my experiments on larger animals, when a severe illness interrupted my researches. They would probably have been altogether suspended, if the stay of M. Lallemand in my house had not both restored me to health and reanimated my scientific ardour."

MM. Pravaz and Lallemand then performed experiments in conjunction, in which M. Pétrequin participated for a time.

"The limits as to quantity which M. Lallemand and myself have determined, cannot be passed without producing symptoms of intoxication, and dissolution of the clot; but the injection of an excessive quantity may give rise to severe inflammation of the sac, consecutive ulceration, and expulsion of the coagulum.

" . . . M. Lallemand and I have estimated the quantity required to coagulate each centilitre (about one-fourth of an ounce) of blood as being three drops. I would even go below this limit; but, in order to furnish a sure guide to the operator, the degree of concentration of the solution of perchloride of iron must be observed."

In an article published in the *Gazette Médicale* for October 1, M. PÉTREQUIN of Lyons claims to share, equally with M. Pravaz, the merit of originating this mode of treatment. He states that, in 1845, he proposed to himself to search for an agent possessing the properties of fluidity, smallness of volume, capability of producing coagulation without carbonising the blood, non-liability to produce excessive irritation, and capability of being absorbed without danger. He also says that, in 1852, M. Pravaz proposed to him to perform a series of experiments with perchloride of iron. They performed some experiments in conjunction; but subsequently M. Pétrequin continued his researches independently; experimenting, however, with perchloride of iron and manganese. He does not, however, appear to have actually employed this agent in the treatment of aneurism.

The mode of operation is thus described by M. Lallemand:—"The method proposed by M. Pravaz consists in coagulating the blood in the vessels by the injection of a few drops of a solution of perchloride of iron at its maximum of concentration. The injection is effected by means of a very delicate trocar, which must be introduced very obliquely through the walls of the artery, by a kind of rotatory movement. To this trocar is fitted a syringe, of which the piston moves by means of a screw, so that the liquid may be injected steadily, and the quantity accurately measured. At the time of operating, the flow of blood in the vessel must be arrested." In the treatment of aneurism, the solution must be introduced into the aneurismal sac, and the artery must be compressed for four or five minutes.

Cases. At the meeting of the Academy of Medicine on the 8th Nov., M. MALGAIGNE read a paper on the treatment of aneurism according to the method of M. Pravaz. The article is published at length in the *Union Médicale* for November 10th. The author passed in review the history of the operation from the reading of a letter from M. Lallemand before the Academy of Sciences up to the present time. He referred to the experi-

ments of Lallemand, Giralès, and Debout, and to the cases of M.M. Raoult Deslongchamps, Niepce, Serre, Velpeau, Lenoir, Soulé, Alquié, Dufour, Jobert, and himself.

We have collected the reports of several cases from the journals in which they were reported; and shall avail ourselves of M. Malgaigne's Essay in the history of others. The whole of the cases from No 1 to XI inclusive, will be found in M. Malgaigne's paper.

CASE I. At the meeting of the Surgical Society of Paris on March 30th, M. LARREY related a case communicated to him by M. RAOULT-DESLONGCHAMPS. The disease was aneurism of the supra-orbital artery, of the size of a small pigeon's egg. It could be emptied by pressure. M. Deslongchamps injected a few drops of the concentrated solution of the perchloride, but at first failed, in consequence of the formation of a clot at the end of the canula. The next day, ten or twelve more drops were injected; and in three minutes the tumour became hard, and the pulsations disappeared. The swelling after this continued to diminish, until, at the end of a month, there was no trace of the aneurism beyond a little redness and slight thickening of the skin. (Abridged from *L'Union Médicale*, April 9, 1853.)

At a meeting of the Academy of Surgery on May 4, M. Larrey read a letter from M. Deslongchamps, in which the subsequent history of his case was reported.

On March 13, in the situation of the aneurism, the skin was a little more red and elevated than on the opposite side. There was also some thickening and induration. On April 15, M. Deslongchamps saw the man, who told him that he had been seized with a catarrh (from exposure to cold) on the 7th; and that he had had violent fits of coughing, which, in two or three days, caused the situation of the tumour to become more red and swollen. He also felt pulsation in it, which increased for a day or two. The cough then diminishing, the swelling and pulsation became less after the patient had worked some hours at his forge (which he had not ceased to do since discharged by M. Deslongchamps). On April 15, M. Deslongchamps sent for him, to ascertain the results of the operation. He then found that, in the situation of, or rather a little to the outside of, the primary affection, there was a flattened tumour, with ill defined edges, and very red, but not uniformly so. On applying the fingers, feeble pulsations were felt, but only on the lower half.

M. Deslongchamps did not think that this was a return of the disease, but merely a result of the enlargement of the collateral arteries, which had taken place in the formation of the original aneurism—in fact, an erectile tumour.

M. Robert at first, and afterwards M. Malgaigne, have doubted whether the tumour first operated on was an aneurism at all.

CASE II. On April 25, a case was related to the Academy of Sciences, which had been operated on by M. NIEPCE. The aneurism was popliteal; five minutes after injecting the perchloride of iron, the tumour became very hard; and, on removing pressure from the femoral artery, pulsation was found to have ceased in the sac. On the next and following days, there was severe inflammation in the parts operated on. On the eleventh day, fluctuation was perceived at the inner side of the tumour, and about two and a half drachms of purulent serum escaped on making a small puncture. On the twentieth day, the place of the tumour was occupied by a hard cicatrix of the size of a nut.

CASE III. At the meeting of the Academy of Sciences, on May 9, M. Lallemand communicated, for M. SERRE of Alais, the particulars of a case of varicose aneurism at the elbow, which had been successfully treated by the method of M. Pravaz. The clot was soon formed; pulsation did not return when pressure was removed from the bronchial artery; and, at a later period, pulsation disappeared in the radial and ulnar arteries. Inflammation, with suppuration, took place in the vicinity of the sac; an eschar was detached from the sac, without producing the least hæmorrhage; and cicatrization advanced rapidly.

M. Malgaigne acknowledges that in cases of M.M. Niepce and Seire—true aneurisms—the method appears to have succeeded. Yet the inflammation and suppuration of the sac in the former case, and the suppuration and sloughing in the latter, show that even these cases are not unattended with danger.

CASE IV. This case is given in the *Revue Méd. Chir.* for October 1853, and in M. Malgaigne's article. A student had false aneurism at the bend of the arm; it had followed a wound made in venesection. It had been present for three months, and was as large as a hen's egg. On May 21, M. VELPEAU carefully injected eight drops of solution of perchloride of iron, procured from M. Burin du Buisson. The consistence of the tumour appeared augmented; but, on removing pressure which had been applied to the brachial artery, pulsation returned. On June 11, ten drops were injected, but without success. The

tumour increased in size and became inflamed: and, on June 18, M. Velpeau tied the brachial artery. After a little trouble produced by ulceration, and discharging of clots from the tumour, the patient was discharged cured, on August 4th.

CASE V. On May 19, 1853, M. LENOIR operated for popliteal aneurism, on a man aged 62. He injected seven drops of the solution of perchloride of iron, without producing any effect on the pulsations. On May 31, sixteen drops were injected without results: and on June 18, twelve drops of M. Dubuisson's solution were used. On June 23, the patient was seized with pain in the affected part, attended with febrile symptoms. The pulsations had since the last injection become much weaker. On June 24, the popliteal region was hot, tense, and very tender; the pulse was 120; the skin very hot and dry; the patient moaned constantly; the superficial veins of the leg and thigh were more distended than usual. The patient was bled, and poultices and mercurial frictions were applied to the tumour. The symptoms went on increasing; extreme prostration and delirium appeared; and the patient died on June 28th.

An examination of the body showed numerous points of ossification on the artery. Blood was effused all round the tumour, and in the neighbouring muscles. The swelling was hard, and was filled with a sanguineous mass, adhering to its walls. The femoral vein, at the level of the tumour, was flattened, and almost impermeable; higher up, it was filled with a sanious fluid, which did not extend into the veins of the pelvis. The pericardium contained some serosity, and presented traces of old pericarditis.

CASE VI. A patient was admitted into St. Andrew's Hospital at Bourdeaux, with aneurism of the femoral artery. M. SOULÉ injected four drops of a solution of perchloride of iron. The tumour immediately became hard. Compression was maintained for a quarter of an hour; when it was removed, pulsation immediately returned. Moderate pressure on the artery was kept up; and, five days after the first operation, M. Soulé injected seven drops. On this occasion, severe pain was produced; the patient could not sleep; the tumour inflamed and increased in size; and complete coagulation could not be obtained. Fearing ulceration and hæmorrhage, M. Soulé tied the femoral artery about five weeks after the last injection. The patient recovered.

CASE VII. In a case of traumatic aneurism, of the size of a cherry, seated on the posterior tibial artery, near the internal malleolus, and from which there had several times been hæmorrhage, M. SOULÉ injected some of the solution, and plugged the wound with some charpie impregnated with it, and applied a compress. In three days, no result having been produced, he opened the tumour, and found that the artery had completely divided. It could not be tied; but pressure by means of plugs of charpie dipped in Pagliari's solution was successful.

CASE VIII. M. ALQUIÉ of Montpellier relates the following case in the *Revue Thérapeutique du Midi*. M., aged 50, accidentally wounded his ulnar artery on June 20, while cutting wood. On July 16, there was a pulsating tumour of the size of a pigeon's egg on the upper part of the hypothenar eminence; it was covered by a small suppurating wound. On the 20th, five drops of solution of perchloride of iron, with five drops of water, were injected: and a compress dipped in the solution was laid on the tumour. The pulsation diminished, but did not entirely cease. On July 21 and 22, there was severe pain, and the pulsations had become stronger. On the 23rd and 24th, erysipelatous redness, accompanied by swelling and tension, extended from the hand to the elbow. The symptoms went on increasing; and, on the 27th, there was an escape of purulent fluid at the seat of the tumour: ulceration was also extending along the forearm. On the 29th, the pulsation in the tumour continuing, and signs of impending rupture appearing, the brachial artery was tied. The pulsation ceased, but reappeared on August 2nd; and on the 7th, copious hæmorrhage took place from the wound over the aneurism. The ulnar artery and a collateral branch were tied at the lower part of the arm. After this, the pulsations were arrested; the tumour diminished; and the patient was discharged cured on September 18th.

CASE IX. M. DUFOUR thrice injected a large aneurism of the right carotid artery. Violent inflammation was produced; the tumour sloughed and burst, and the patient died of hæmorrhage. (*Annales Cliniques de Montpellier*, 10th April, 1853.)

CASE X. M. JOBERT has operated on a patient; gangrene and death supervened. The particulars of this case have not yet been published; it is merely mentioned by M. Malgaigne.

CASE XI. M. MALGAIGNE (*loc. cit.*) relates a case which came under his own care in the Hôpital St. Louis. A workman in a soda-water manufactory, aged 20, was admitted, on July

30th, with traumatic aneurism at the bend of the elbow. M. Malgaigne at first applied pressure without effect; and was deterred from applying the ligature by the fear of producing gangrene, especially as the median nerve had been injured. He then determined to inject the sac; taking the precaution of applying pressure *above*, in order that coagulation might not be prevented by the impulse of the blood sent from the heart; and *below*, that the injected matter might not be carried into the small ramifications of the vessel. He was obliged to puncture the tumour in several places before he could arrive at its interior. He injected five drops; compression being removed, pulsation was not felt in the radial; but in the course of the day it returned. The punctures healed readily; but on the fourth or fifth day the patient complained of severe pain in the interior of the sac; in three days it had become very severe, and the sac was much enlarged, and had a blackish spot on its surface. Fearing that rupture might take place, M. Malgaigne applied a ligature, with some difficulty, from the inflammatory engorgement of that arm. Pulsation immediately ceased in the tumour and in the radial artery. The patient had erysipelas of the arm, and rheumatism in the knees, which were successfully treated by poultices and veratrine. After some days, finding that the tumour did not diminish, M. Malgaigne opened it, and removed a large coagulum, which contained only blood-corpuscles.

In some remarks made with reference to his case (case v) (*Gazette des Hôpitaux*, Oct. 25th), M. LENOIR, after describing the instrument of M. Pravaz, and the manner of using it, said that it did not act so exactly as he could desire. A clot of greater or less density would be formed in the canula of the syringe by the solution of perchloride meeting the blood; and the resistance thereby produced is sometimes so great as to force back the whole of the injection behind the piston. In either case, it would not be possible to form any other than an approximative idea of the number of drops injected.

To remedy the first inconvenience—the obstruction of the canula by a clot—M. Lenoir fitted to the syringe a long canula, capable of being introduced through the canula of the trocar. With this canula, the solution is introduced into the current of the aneurismal sac, without risk of coagulating the blood in the canula of the trocar. To ascertain whether there was any reflux of the fluid behind the piston, M. Lenoir has used a glass syringe, so as to observe all that passes in its interior.

There is, according to M. Lenoir, another difficulty, viz., to be able to introduce the point of the instrument precisely into the blood in the aneurism. In his own case, he failed in at once reaching the blood; and he believes that he introduced the instrument into the fibrinous deposit in the interior of the sac. The repetition of exploratory punctures, he justly observes, might produce inflammation and suppuration of the aneurism. This difficulty of finding the interior of the sac may not always present itself; but M. Lenoir would be inclined, if it should again occur to him, to inject the hemostatic fluid into the part of the artery immediately above or below the aneurism. In this way, there would be only a small quantity injected, a healthy part of the vessel would be operated on, and the same results would be produced.

M. Lenoir also referred to the danger of wounding important structures in the vicinity. In his own case, he seemed to have injured the vein—probably in one of his exploratory punctures; and this was more likely, as the vein was flattened, and adherent to the aneurism, and almost impermeable to blood; hence giving no indication of its locality.

Dangers, Difficulties, and Precautions. In the *Bulletin Général de Thérap.* for May 15th, Dr. DEBOUT, the editor of that periodical, offers some remarks on the subject. He had performed some experiments with the view of determining how much of the solution of perchloride of iron could be used without producing arteritis. He describes the appearances found in a horse, into whose right carotid he had injected seven drops, and into the left fifteen drops. The calibre of the right carotid artery was free, and its lining membrane quite healthy. The left carotid, on the other hand, presented redness, thickening of the membrane, and deposit of pus, with which was mixed the debris of the coagulum.

Dr. Debout points out the importance of *pressure* as an auxiliary, in preventing the coagulum from being broken up by the current of blood. Three or four years ago, he produced coagulation of the blood in a false aneurism at the bend of the arm. Pressure on the humeral artery was not maintained; and the clot was redissolved. Unless pressure is maintained, he believes that, to produce a clot capable of resisting the current of blood in men, it will be necessary to use such a quantity of the solution of perchloride of iron as will expose the patient to the

danger of arteritis. If proper precautions be observed, Dr. Debout is in favour of the operation.

At a meeting of the Academy of Sciences, on May 9th, M. LALLEMAND observed that "the success which had already attended M. Pravaz's method of treatment confirmed him in his opinion of its superiority to all other methods. He was firmly persuaded that the method of injection would produce as complete a revolution in the treatment of aneurism as lithotripsy had produced in the treatment of calculous diseases. The first instruments used in the latter operation were complicated and imperfect; and for a long time successful cases were mingled with severe accidents and numerous reverses; but now lithotripsy is not what it was at its commencement. It will no doubt one day be the same with the method of M. Pravaz."

M. DEBOUT also expressed himself in favour of the operation when performed with proper precautions, such as those to which we have already referred.

M. MALGAIGNE is an opponent of the method. He points out in his paper which we have quoted, that in eleven cases, four died, eleven had severe symptoms, and two were successful. He concludes in the following terms. "With regard to aneurisms, although the possibility of curing them by the injection of perchloride of iron be placed beyond doubt, the successful cases are so rare, obtained at the price of so many accidents, and counterbalanced by so many reverses and even by deaths, that at present I think that no prudent surgeon could expose his patients to the results of such a disastrous mode of treatment."

An animated discussion followed the reading of M. Malgaigne's paper.

M. MOREAU believed that the operation ought to be at once and totally discarded.

M. ROUX and M. VELPEAU agreed that there was little evidence as yet in favour of the operation; but would suggest a more extended course of experiments.

We do not entirely agree with the sweeping condemnation of M. Malgaigne; and would prefer following, and recommending our readers to follow, the more moderate advice of MM. Roux and Velpeau. Yet the operation is one which should not be undertaken without due reflection on its possible dangers, nor until treatment by compression has been tried and found ineffectual. As regards the relative merits of injection and ligature—the former appears at first sight to possess an advantage over the latter, in not involving impediment of the circulation in any collateral branches which may be given off between the aneurism and the seat of ligature.

The principal difficulties in the operation appear to us to be: *first*, to determine the quantity of the fluid which shall, when injected, coagulate the blood, and at the same time set up only a moderate degree of inflammatory reaction in the walls of the aneurismal sac; *second*, to ensure the non-removal of the coagulum. The first of these can only be removed by experiment and experience; and, with regard to the second, we would advise any surgeon who performs the operation of injecting an aneurism, to maintain for some time moderate pressure on the artery above the aneurism—sufficient to moderate the flow of blood, yet not so great as to entirely cut off the supply.

Treatment of Varix. The solution of perchloride of iron has also been employed in the treatment of varix. M. PÉREQUIN has injected the perchloride of iron and manganese in several cases of varicose enlargement of the saphena vein. The effect produced was obliteration of the vein.

In the *Bulletin de Thérapeutique* for September 15, Dr. DEBOUT refers to six cases of varicose veins operated on by M. Desgranges of Lyons. In five, there were no remarkable symptoms; but the sixth patient died, after an attack of inflammation of the whole upper third of the leg.

This plan of treatment is worthy of further investigation. In the mean time, the following remarks, by Dr. Debout, should be borne in mind.

"It is not enough that the operation succeed, and that the patients leave the hospital cured of the disease on account of which they have been admitted. The cure must be permanent. If, after a longer or shorter interval, the disease reappears, the performance of the operation has been a mere waste of labour and time; and it becomes the duty of the surgeon to abandon the plan, however innocent it may appear to be. In the Bicêtre, we have seen a great number of old persons, in whom the obliteration of varices had been in vain attempted. After a greater or shorter lapse of time, they were always reproduced. When the calibre of the vessel is closed at one point, the blood takes another course; distends the small veins. If these anastomoses are not actually developed, so as to reproduce the disease, they

at least serve to convey the blood into the varicose vein below the obliterated portion... In making these remarks, we only wish to call the attention of surgeons to all the elements of the problem which they attempt to solve."

TREATMENT OF VASCULAR TUMOURS BY INJECTION OF LACTATE OF IRON.

In the *Lancet* for August 20, 1853, Dr. BRAINARD of Chicago, U.S., relates the case of a man, aged 34, who came under his care in August 1851, with an erectile tumour in the left orbit. Dr. Brainard tied the left carotid artery, and punctured with hot needles; but these remedies failing, he determined to inject a solution of the lactate of iron. This was done on Dec. 14th, 1852. He thus describes the operation and the subsequent progress of the case.

"A solution of the lactate of iron, of the strength of eight grains to one fluid drachm of distilled water, filtered through paper, was prepared.

"Dec. 14th. I punctured the tumour at its most prominent part with the infiltrating canula, carrying it to the depth of about an inch; on withdrawing the stylet, arterial blood followed. A fluid drachm of the abovenamed solution was immediately thrown in with a small syringe, constructed for the purpose, and the canula withdrawn. The immediate effect was an intense pain in the left temporal region and a flushing of the face, which latter only lasted a few seconds. A chill followed, accompanied with nausea and vomiting. Reaction took place in an hour, but the vomiting continued, and for twenty-four hours all drinks were ejected; pulse 63.

"Dec. 15th. Vomiting continued; the pain was less; the upper lid was much swollen; pulse 65.

"Dec. 23rd. For the last six days, the vomiting had gradually diminished; the pulse was natural; the tumour was less tender, firm, and the pulsation was perceived only at the external angle; frequent lancinating pain was felt in the orbit.

"During the whole of this treatment, both of punctures and infiltration, the head was kept enveloped in bladders filled with a freezing mixture of pounded ice and salt, which was very grateful to the patient. He now began to complain of its being too cold. The heat in the head was reduced to the natural standard, and from the time of the infiltration neither thrill nor sound has been perceived. The veins of the face were much diminished in size, and the pulsation of the arteries reduced to its natural state. A slight pulsation was still perceptible at the external angle of the eye, for which a puncture was made at that point with a hot needle, on January 4th, 1853.

"Jan. 10th. From the time of the last puncture, no pulsation had been perceived, the swelling subsiding. At this time an opening was found to exist on the anterior surface of the globe of the eye, which still remained protruded between the lids. This was followed by severe inflammation of the globe, which lasted several days. The discharge from the opening was at first the humours of the eye, afterwards pus, but no blood.

"June 6th. The patient had been pursuing his ordinary occupation for three months; his health appeared perfectly restored. The left orbit seemed entirely free from disease."

On the comparative merits of the perchloride and lactate of iron as a means of producing coagulation of the blood within the vessels, Dr. Brainard makes the following remarks:—

"If we take into consideration that the solution of the perchloride of iron is a substance foreign to the normal constitution of the blood, and produces instant coagulation when brought in contact with it, whereas the solution of the lactate of iron is composed of elements which enter into the composition of the blood; that when thrown into the living vessels it does not coagulate it, but produces a thickening of the coats and a deposition of coagulable lymph from subacute inflammation; the difference between the two results will be readily understood. It is probable that the solution of the lactate, when thrown into the vessels, immediately undergoes decomposition, the acid combining with the soda of the blood, and the base passing into a higher state of oxydation, in which it naturally exists in that fluid. In no case has this solution, when thrown into the blood or into a vascular tumour, shown a tendency to produce suppuration, but in slow inflammation of an adhesive kind and limited extent. In one case, where it was inadvertently pressed in small quantity into the subcutaneous cellular tissue, instead of into the vein as intended, a hard swelling, having all the appearance of a boil or small carbuncle, was the result; but even this effect will not be produced by it, when used in that manner, unless the solution be in a certain degree concentrated."

TREATMENT OF DISLOCATION COMPLICATED WITH FRACTURE.

In the *ASSOCIATION JOURNAL* for April 29, we noticed briefly M. RICHET's Memoir on the possibility of reducing dislocation of the humerus and femur, when complicated with fracture; and we also gave a full abstract of M. MALGAIGNE's observations on the same subject. We now quote from the *Mémoires de la Société de Chirurgie de Paris*, tome iii, fasc. 4, the following case and observations, furnished by M. Richet.

In September 1851, a man aged 68 years came to M. Richet, with a dislocation of the upper extremity of the humerus, with fracture of the anatomical neck of that bone. He was then in a state of complete intoxication; but the next morning he was able to communicate the following details. He was descending a narrow stair-case, when his foot suddenly tripped and he fell backwards. In this fall, the left shoulder struck the angle of one of the steps; and when the man was lifted up, he could no longer use his arm, which was perfectly serviceable before the accident. This man was very thin, and his limbs were easily examined. In front of and rather lower than the left acromion there was an evident angular projection, at the summit of which was a deep ecchymosis, having a transverse direction; this was the point in which the patient said that he had fallen. Behind and below the acromion was a visible depression, into which the index finger penetrated with facility, proving that the head of the humerus had passed out of the glenoid cavity. Above this depression the acromion formed a well marked projection, particularly when compared with the corresponding part of the opposite side. On carrying the hand into the axilla, it first encountered a hard cord, stretched from the posterior border of the axillary cavity to the anterior, a little obliquely from below upwards and from behind forwards; this consisted of the flattened tendon of the latissimus dorsi. More posteriorly and internally, another thicker projection was observed. By carrying the hand to the summit of the axillary hollow, a tumour was found of an irregularly round shape, moveable, and apparently isolated, for it could be moved in all directions. Suspecting that this tumour was merely the head of the humerus thrown out of its cavity, M. Richet rotated the lower end of the bone, but the tumour was not at all moved, nor was any crepitation perceived. These rotatory movements produced very great pain; and on applying the hand to the angular projection above described at the anterior extremity of the shoulder, it was found to be affected by the rotatory movements impressed upon the inferior extremity of the humerus; this led M. Richet to ascertain that it was formed by the upper end of a fragment belonging to the body of the humerus. It was irregular, with rather well-marked dentations, some of which were entangled with the fibres of the deltoid. The movements of abduction and elevation were impossible; and flexion of the fore-arm upon the arm was effected with great difficulty.

The case was therefore evidently one of fracture of the surgical neck of the humerus, complicated with dislocation of the head of the bone. As the pain in all the muscles surrounding the shoulder-joint produced contractions, which prevented the apposition of the two fragments, the patient was put under the influence of chloroform, to obtain, if possible, a complete resolution of this muscular action, and to enable the examination to be concluded. In less than two minutes, the patient became quite insensible, with complete relaxation of the muscles; it was then easily ascertained, 1st, that the head of the humerus was dislocated into the summit of the axillary hollow, where it formed an irregularly rounded tumour, very moveable, and detached from the rest of the bone; 2nd, that the upper end of the lower fragment of the humerus was displaced forwards under the deltoid; 3rd, that there was another little fragment completely detached, but entangled in the fibres of the deltoid, and which had not previously been detected, in consequence of the contraction of this muscle.

After the patient was restored to consciousness, the lower portion of the bone was easily disengaged from the fibres of the deltoid, and crepitation was then perceived.

On the 12th of September, the patient was again put under the influence of chloroform. Taking advantage of the complete relaxation of the muscles, which ensued in a minute and a few seconds, M. Richet seized the man's arm; and, bringing it forwards and downwards, he disengaged very easily the upper extremity of the lower fragment from the deltoid fibres. The arm was then entrusted to an assistant, and M. Richet grasped the convexity of the shoulder with both his hands, the two thumbs resting on the acromial projection, while, with the four fingers

of each hand directed towards the summit of the axilla, he endeavoured by careful efforts to bring back the head from within outwards towards the glenoid cavity. Notwithstanding the slight hold afforded by the fragment, it was felt to be yielding by degrees, and the reduction was soon completed, without any noise, and rather insensibly than suddenly. After that time the two fragments remained in contact, and the regular rotundity of the shoulder was completely restored.

The next morning an apparatus was fitted, consisting of an axillary pad made of charpie covered with a compress, carried up to the summit of the axilla, in order to prevent any fresh displacement in this part. The fore-arm was bent upon the arm at an acute angle, and the hand placed upon the sound shoulder, so that the lower extremity of the humerus being carried forwards, the upper extremity of the fragment was carried backwards in an opposite direction to that which it formerly took. The contact then appearing to be as perfect and secure as possible, the parts were fixed in this position by means of a bandage, which left uncovered the convexity of the exposed shoulder, in order to allow the observation of any changes which might subsequently occur in this region.

On the 13th of September, the patient had slept well, and the shape of the shoulder was perfectly natural. On feeling the part, a rather considerable effusion of blood was found to have taken place into the articulation, and the splinter formerly mentioned was now perfectly appreciable at the anterior and external part of the shoulder.

On September 4th, and following days, no new symptom occurred. The patient ate well and slept well; but he complained of numbness in the arm and fore-arm.

On October 4th, the effusion of blood had disappeared. The bandage was removed when it was ascertained that the reunion of the fragments was effected, and a simple sling was applied, which allowed of slight movements, sufficient to prevent ankylosis, but not sufficient to break the callus, or even to retard its formation.

On October 30th, the bandages were removed, and the patient had a bath: the callus was perfectly solid, but the movements in the scapulo-humeral articulation were almost annihilated; and it was, in fact, observed, that the movements of the arm were effected by the sliding of the scapula upon the thorax. The patient was, however, recommended to exercise the arm as much as possible.

On November 24th, the patient was still in the hospital; and it was found that there was a very well marked degree of mobility in the scapulo-humeral articulations, which gave hopes of still further power of motion. The splinter formerly described remained still detached and moveable, but, every time it was disturbed, the patient experienced severe pain. The numbness of the arm and fore-arm had almost disappeared.

On June 27th of the next year, the patient came to the hospital for another complaint. It was then ascertained that he had very little difficulty in moving his shoulder; he lifted his arm easily to his head, and executed all the other movements which he was directed to perform, without experiencing the slightest pain. The splinter had disappeared, or at least was hidden among the deltoid fibres, which had become developed by exercise to such a degree, that the rotundity of the shoulder, compared with that of the opposite side, was perfectly normal.

M. Richet, in commenting on this case, comes to the following conclusions:—

1. That, contrary to the opinion universally adopted, dislocations of the humerus and of the femur, complicated with fracture of the extremity of the dislocated bone, may and ought to be reduced immediately; and the fracture, thus brought back to a simple state, should be treated like other solutions of continuity of the bone.

2. That, to perform this reduction, the patient should be subjected to the most complete anæsthesia, in order that the muscular action may be entirely annihilated; and that, of all anæsthetic agents, chloroform appears hitherto to be the best.

3. That clinical experience, reasoning, and experiments upon the dead body, agree in demonstrating that, as the muscular power is the principal, and, in fact, the only obstacle to the replacement of the bone, so, when this is annihilated, it is not necessary to employ a lever of greater or less length to apply to it forces of extension, but that it is then sufficient to exercise directly upon the dislocated extremity pressure which may push back the head of the bone into the articular cavity.

4. That, in the very rare cases in which the fibrous tissues form an obstacle to the replacement of the bone in its cavity, it is to this method of pushing back the head that we must have

recourse by preference, as being more rational and more efficient than extension.

5. That, if the proceeding by extension is to remain as a general method in the treatment of dislocations without fracture, yet we must admit that the proceeding by pushing back will be always, even in such cases, a powerful auxiliary; and further, that alone it is applicable, to the exclusion of extension, in the treatment of dislocations complicated with fracture of the dislocated bone.

SURGICAL USES OF PERCHLORIDE OF IRON AND MANGANESE.

In the article in the *Gazette Médicale* to which we have referred, M. PÉTREQUIN says that perchloride of iron and manganese is capable of being usefully applied to several purposes in surgery.

To *atonic ulcers*, compresses, wetted with a solution of the chloride, have been applied with benefit.

Foul ulcers are cleansed, and their appearance is changed.

The odour of *sloughing* wounds and foetid suppurations is rapidly removed by it. M. Pétrequin believes that it would hence be a highly valuable agent in hospitals, where it is important to remove all foci of infection and miasmatic influences.

The solution of perchloride of iron and manganese is very useful in the treatment of patients who are threatened with *purulent infection* from wounds.

M. Pétrequin states that, since he used this solution to dress stumps after amputation, when the suppuration was becoming foetid, he has not seen a single case of purulent infection among them, and has not lost a patient.

It has also proved useful in certain cases of internal hæmorrhage, and some adynamic affections; and he believes it to be indicated in certain asthenic diseases of the blood.

DIAGNOSIS OF RHEUMATIC ORCHITIS.

In the *Revue Thérapeutique du Midi*, Dr. RAYMOND FAILLOT gives, after Professor Bouisson, the following diagnostic signs of rheumatic orchitis. We quote from the *Gazette Médicale* for Nov. 5.

Inflammation of the testicle, the result of blennorrhagia, arises in the course of a slight discharge, which has already existed for some time: rheumatic orchitis rarely coexists with urethritis. The epididymis is the first part attacked in inflammation consecutive to urethritis; it is not often engorged in rheumatism. In general, inflammation of the testicle affects the organs of only one side; both organs may be at the same time attacked in rheumatic metastasis. Orchitis following urethritis rarely passes in an abrupt manner from one side to the other; the contrary has been observed in rheumatic orchitis. The fever and the severe pains are increased by the slightest pressure in the former disease; in rheumatic orchitis there is no fever, and the pain is not increased by pressure, which shows that the disease is not inflammatory. In venereal (gonorrhœal?) orchitis, all the tissues are attacked; in rheumatic orchitis, the fibrous tissue alone is the seat of disease. In gonorrhœal orchitis, the treatment must be chiefly antiphlogistic; in rheumatic orchitis, the employment of local antiphlogistics is not imperiously demanded.

OPHTHALMOLOGY.

TREATMENT OF SCROFULOUS OPHTHALMIA BY IODINE VAPOUR.

We regret that the notice under this head in our "Periscope" of Oct. 7, should have been printed without the remarks we meant to have appended to it, to the following effect. We consider that the advancing of this proposal proves that the author of it has thoroughly studied neither scrofulous ophthalmia nor the general principles of therapeutics, and we therefore quote it rather in warning than in approbation. We think that there is no more important principle in medicine than this, that no such disease is single (simplex) in its nature, or to be treated by one remedy; but that in almost every malady we have a complication of different pathological elements, which must be analysed in every individual case, that we may meet them with those means severally adapted to combat each. In scrofulous ophthalmia, more conspicuously perhaps than in any other disease, we have this variety; one case is more inflammatory, and must be treated by leeches and antimony, another is to be met by emetics, a third by purgatives, a fourth by quinine, a fifth by belladonna: locally, one case demands soothing, another stimulating, a third astringent applications. Judge, then, of the ophthalmological skill of the man who proposes the highly stimulat-

ing vapour of iodine as the panacea for all! In certain atonic cases we have no doubt it may do good; in many others we have as little that it would do irretrievable harm; and giving the author of the proposal all credit for a faithful record of his experience, we can but wish that it had been a little more extended before he rushed abroad to proclaim it; and that above all he was rightly impressed with the value and necessity of constitutional treatment in these diseases.

PRISMATIC SPECTACLES IN STRABISMUS.

Mr. SPENCER WELLS has addressed to us a note in explanation of his paper on this subject. We regret that in the attempt to be brief we failed to be clear in explaining our views on the matter in our "Periscope" of Oct. 7. The difficulty we had was not in comprehending that the cure is sought to be effected by altering the direction of the rays incident into the eyes, and so the position of the image on the retina; but in convincing ourselves that this will be followed by the desired improvement.

The squinting has originally come on *in spite* of the necessary displacement of the image, and in many cases the impression on the faulty eye is altogether neglected. In a case at present under our care, the patient has but *one* eye, and with this he squints inwards most distressingly, although by an effort the eye can be pretty well abducted. To produce the effect desired, the prism must obviously be arranged so as to throw the image still further from the axis of the eye, and therefore into a *less* sensitive part of the retina, where it is, of course, still more likely to be altogether neglected.

But we are very far from supposing that this theoretical difficulty is conclusive against the new mode of treatment: we only thought that it drove us back upon experience as the true test of its utility; and as we now understand Mr. Wells, he acknowledges that it is in slight cases only, in which, from the very slightness of the deformity, the patient is unwilling to submit to the division of the tendon, and the surgeon to recommend it, that he looks for success from the employment of the prismatic spectacles. In such cases, we think that the above-mentioned difficulties will stand much less in the way, and repeat that we shall rejoice in having a series of cases in proof of the utility of this very ingenious device.

SPONTANEOUS DISLOCATION OF THE LENS INTO THE ANTERIOR CHAMBER OF THE EYE, PRODUCING CEREBRAL DERANGEMENT.

In the *Canada Medical Journal* for January 1853, we have an account of the following case, by Mr. HENRY HOWARD.

Mary M., aged 34, servant, unmarried, admitted November 20, 1852, stated that, since about the 1st of May, she had been suffering severe pain and inflammation in her left eye, which pain had, for about the last three months, attacked the head. It was at periods so severe as to deprive her of her senses, and render her life miserable. For a long time she had had no wish for food, and had had constant attacks of vomiting for the last three weeks. Sight had long since disappeared from the diseased eye; she was certain that her eye never received any injury, and that it was never inflamed before the present attack.

When she presented herself at St. Patrick's Hospital, her appearance was that of a poor, miserable, emaciated creature, worn out by disease and suffering; she was not able to walk without assistance, and was vomiting every few minutes. Her pulse was small and rapid, varying from 95 to 100; tongue furred. On examining her left eye, I found the whole eyeball was inflamed, and the lens, with a small quantity of lymph, lying in the anterior chamber. Believing that the cause of all her sufferings was the pressure produced by the dislocated lens, I determined to remove it at once by extraction, and without delay made a section of the lower half of the cornea, which evacuated the hyopium at the same time that it enabled me to remove the lens with but very little trouble. The after treatment was the same as that adopted after extracting an ordinary cataract: on the twelfth day, the wound of the cornea was perfectly healed, and all the inflammation subdued. From the moment of the operation, there had been no more vomiting; the head symptoms gradually subsided, and completely ceased after forty-eight hours. The eye has now the same appearance as the sound eye, and for the last week sight is gradually returning. The remarkable points in this case are: First, all the cerebral symptoms produced by dislocation of the lens into the anterior chamber of the eye, are such as would be found from tumour in the orbit, causing distension of that cavity, or what would arise from malignant disease of the eyeball. Secondly, the lens being spontaneously dislocated as the result of long continued inflammation, which inflammation must, as a matter of course, pro-

duce destruction of the capsule of the lens, is a strange result of inflammation of that part. From the patient's own account, I concluded that the lens was not dislocated from the commencement of the attack, but for the last three months, which was the length of time she had been suffering from severe head symptoms, and lost her sight.

Of this case we take the liberty to offer the following paraphrase:

Mary M., etc., was admitted suffering under severe "neuralgia ophthalmia" (Jacob) of the left eye, of which the lens was lying in the anterior chamber, though when it got there the history of the case is not sufficiently precise to enable us to say. The hemispheres were intense, and there was constant vomiting, nervous prostration, and emaciation, but no cerebral symptoms. Extraction of the lens was of course at once performed; and, to our satisfaction, was followed by complete disappearance of the inflammation, and some return of sight. The case, though not unusual, is interesting.

THE TREATMENT OF POSTERIOR DISPLACEMENT OF THE LENS.

Mr. Dixon has published in the *Lancet* for October 1, a paper upon this subject, in which he records two cases of dislocation of the lens into the "posterior chamber", by which he means, as the cases show, the chamber of the vitreous body.

In the first case, a lens which had been cataractous for forty years, fell suddenly into the semi-fluid vitreous humour, and was hooked out through a section in the cornea. Much of the vitreous humour escaped; and the eye, though it healed well, remained blind.

In the second case, a lens, dislocated into the anterior chamber by a sudden blow, slipped back through the pupil, and was found rolling about behind it. The lens having been partially broken up, by means of two needles introduced through the sclerotic at opposite sides, was allowed to dissolve for about five months, when the residue was extracted through the cornea, and tolerably good vision preserved.

The cases appear to have been judiciously treated; but there is no particular novelty in the operation proposed. We have performed similar operations, and seen them performed, in like cases, and with rather more success.

DIAGNOSIS OF INCIPIENT CATARACT.

In the young this is easy; but in the old, as Mr. HAYNES WALTON shows in a clinical lecture, of which notes are published in the *Medical Times and Gazette* for October 1, the matter may be more difficult. In old persons the lens usually undergoes a change, independently of cataract, becoming amber coloured, and in this state producing a reflection behind the pupil, which may be mistaken for incipient cataract. The catoptric test Mr. Walton considers as worse than useless in these cases, because the non-cataractous amber coloured lens produces a confusion and dimness of the images, such as may also arise from cataract in its early stage; and therefore our diagnosis must, he thinks, be made with great caution, and chiefly from the powers of vision, the amber non-cataractous lens not hindering the patient from seeing well. As he is usually presbyopic, we should select objects at some distance, and not a printed book, as the tests. We need not say that the frequent coincidence of slight amaurosis with the non-cataractous amber state of the lens, and, on the other hand, the fact that this amber change shades off into true ("glaucomatous") cataract, tends to increase the obscurity of many of these cases, and to show how cautious we ought to be in forming our diagnosis.

MECHANICAL REMOVAL OF OPACITIES FROM THE CORNEA.

In the *Medical Times and Gazette* for November 5th is published a Clinical Lecture by Mr. HAYNES WALTON, on the removal by operation of a particular kind of corneal opacity.

Elizabeth Wheeler, aged 20, had been a patient at the Central London Ophthalmic Hospital since 1845, and, in 1852, was virtually blind, requiring to be led, and unable to perform any act requiring sight. The centre of each cornea, to an extent a little beyond the pupil, was occupied by a dense opacity, slightly raised, and giving in profile somewhat of the appearance of "conical cornea". The form of each was irregularly spherical, with sharp outline; the colour, French white, with dots or mottling. The remainder of each cornea was transparent; otherwise, the eye seemed healthy. When the pupils were dilated, she could see to move about the house alone, but that was all. Her blindness was of about ten years' duration. Mr. Walton determined to attempt removal of this opacity by picking it

away gradually with the miniature gouge described and figured in his work on *Ophthalmic Surgery*. He selected the right eye, picked away at the outer margin of the opacity, detaching some of it, which proved to be superficial. Finding the attempt in so far successful, that the cornea remained transparent in the part operated on, he repeated the process four times, at intervals of a month, operating also twice on the left eye. The result was, that, with the right eye, she could read large type. The woman ceased to attend till the present summer, when he operated twice on the right, and several times on the left eye. Now, the appearance of the eye is so far natural, that it needs a careful examination in a favourable light to detect the remaining opacities. The form and outline of the cornea are normal, and their entire surfaces reflect the light. Vision is nearly perfect. With either eye, she can thread a common sewing needle.

This is a very interesting case, and well calculated to encourage us to give further trial to the operation which Mr. Walton has so successfully practised. It is obvious, however, that the cases in which it will be most successful are those in which the opacity is seated outside of the anterior elastic lamina of the cornea, where it is, in fact, a deposit of lymph in or under the epithelium, to be known usually by its being raised, and prominent from the general convex surface of the membrane. Opacities of the substance of the cornea, as from corneitis, for example, are obviously not amenable to this treatment; and, on the other hand, so far, at least, as our experience goes, they are more frequently cleared away by absorption than the prominent opacities of the outer layer. It is very obvious that an operation of this kind requires a considerable amount of dexterity for its safe execution.

CHRONIC INFLAMMATION AND BLENNORRHEA OF THE LACHRYMAL SAC.

The *Bulletin Général de Thérapeutique* for October contains a paper by M. CHASSAIGNAC, on the treatment of this very common and very intractable disease by injections from the nostril. He recommends a catheter of the form proposed by Gensoul, having, besides the terminal opening, a lateral hole in the convexity, close to the point of the instrument. The fluid is forced by means of a strong syringe into the lachrymal sac, and, on the force with which this injection is made, M. Chassaignac lays much stress.

This is the gist of his paper, disentangled from the usual French verbosity. We have a very strong suspicion that this plan appears better on paper than it will prove in actual practice, inasmuch as the introduction of the lachrymal sound from the nostril is a process very difficult of execution, and very irritating to the subject of the operation. Careful attention to the general health, continued counterirritation over the sac by blistering or nitrate of silver, and, if necessary, the introduction of a style, and injection of the sac and duct from above through the artificial opening, are still, we think, the most trustworthy means of cure.

TRUE OSSIFICATION OF THE LENS AND HYALOID MEMBRANE.

We lately recorded an example of ossification of the vitreous body; another instance of this rare condition of the eye is described by Mr. JOHN KIRK in the *Monthly Journal* for November, and may be well compared with the German case in our last periscope.

A man, aged 50 at his death, and of strumous and syphilitic habit, had lost the sight of his left eye by an injury thirty years before.

The cornea of the right was nebulous, and at some points quite opaque; the deeper structures were not examined.

The left eye was considerably diminished in volume, and of an irregular form; the cornea quite opaque, and marked by numerous cicatrices. The optic nerve was diminished in size. On opening into the posterior chamber, the texture of the sclerotic was found unaltered. The choroid was adherent to a shell of osseous matter occupying the position of the hyaloid membrane. Externally this shell was thin, but up the interior ran a tube continuous posteriorly with the central artery of the retina, while anteriorly it opened against the capsule of the lens. The walls of this tube were very dense, especially behind. The interior was lined by fibrous tissue.

Between this central pillar and the outer wall were numerous spicula of bone. Both the central tube and the spaces between the spicula were filled with masses of cholesterine.

On microscopic examination of the more dense parts, there were found lacunae imbedded in a distinctly fibrous matrix. The

spicula contained numerous well formed lacunae with their branching canaliculi.

The capsule of the lens was quite free from calcareous deposit, although considerably thickened both anteriorly and posteriorly. The lens was smaller than usual, being compressed from before backwards. Both its surfaces were irregular.

The greater part of the lens was intensely hard, but at several points round its margin there remained portions of soft tissue.

On making a section from the margin towards the centre, and examining it with the microscope, the external tissue was found to consist of distinct fibres, arranged parallel to each other. They appeared quite uniform in structure, nor did acetic acid develop nuclei among them. Between these fibres were a number of rounded mineral bodies, becoming more numerous and of larger size as they approached the central mass, near which they often measured one twenty-fifth of a millimetre in diameter. By the mutual contact of such spheroidal bodies, a homogeneous mineral substance was formed.

These masses were of a distinctly crystalline nature, and interspersed among them were a number of well formed crystals, often grouped into masses. Their form seemed to be the rhomb. Both the crystals and crystalline spheroids consisted of a mixture of phosphate and carbonate of lime. The dense central portion of the lens presented lacunae interspersed through its substance, and often arranged in a concentric manner around Haversian canals, which measured a quarter of a millimetre in diameter, and were partially filled up with calcareous matter.

The anterior chamber of the eye was collapsed, and occupied by a small quantity of a membranous matter, appearing to the naked eye very like the loose substance inside a goose quill. Under the microscope it appeared as a clear membrane having a fibrous basis, and quite similar to the elastic layer of the cornea; but on one of its surfaces there were a series of regularly arranged tubercles, which changed their appearance according to the focus. These tubercles appeared in general clear and homogenous, but in many of them a radiating structure could be detected by a careful management of light. This membrane was but little affected by acetic acid.

RHEUMATIC OPHTHALMITIS.

In the *Dublin Quarterly Journal* for November, p. 461 is contained a report by Dr. FRAZER of a case of general inflammation of the eyeball in a young man labouring under cachectic rheumatic fever, complicated with delirium tremens. The onset of the disease was sudden, and its progress very rapid: the patient fell asleep at midnight with his eye free from uneasiness, and by seven o'clock in the morning there was distinct arthritic general ophthalmia; the anterior chamber was quite hazy; the pupil oval and contracted; the iris altered in appearance and colour, and vision very imperfect, though the redness was comparatively slight. The anterior chamber as the inflammation increased, soon filled with lymph, which, however, gradually disappeared under the influence of mercury. In the course of time, all the objective symptoms disappeared, but the eye remained all but quite blind.

From the morbid appearance in this eye, especially the great effusion of lymph, and taken in connexion with the man's "antecedents," we strongly suspected that this was a case of gonorrhoeal rheumatism, and gonorrhoeal iritis.

DISEASES OF THE EAR.

CEREBRAL SYMPTOMS, IN CONNEXION WITH DISEASE OF THE EAR.

This relation of diseases is well known, and we are not sure that in a paper published in the *Canada Medical Journal*, Mr. HENRY HOWARD has materially added to our stock of information on the subject. He gives "four cases of disease of the ear producing cerebral affections, one terminating in death, with remarks." The girl, who died in fits after labouring under otorrhoea, was not inspected, which, considering that such cases are not by any means unusual, might, we think, have induced the author to suppress the record altogether. In the second case there was otorrhoea, with facial palsy, cured under counter-irritation, calomel and quinine, and cod-liver oil. The third case is unimportant; and the fourth we briefly quote:

"M., aged 17, admitted into the Ophthalmic and Aural Ward of St. Patrick's Hospital, November 27th, 1852, stated that for eight weeks she had been suffering with a discharge of matter from her left ear, and that for six weeks it had been accompanied with pain, which had extended to the whole side of her head. She was suffering from giddiness, double vision, and

numbness of the whole of her left side down to her toes. She was quite lame on that side, and could exert but very little power of her arm. All these symptoms had increased for a week before she came to me. The moment I saw her, I observed that there was partial ptosis of the left eyelid. On examining the ear, I found there was suppuration of the middle ear with perforation of the membrana tympani, but I could observe no signs of caries. There was slight tenderness over the upper part of the cervical vertebrae. I put a seton in the back of her neck, ordered her saline purgatives, low diet, and to remain quiet in bed. The next day, on my finding that she had been well purged, I put her upon one grain of calomel and half a grain of quinine three times a day, and had the biniodide of mercury ointment applied behind her ear and to the temple of the affected side. This treatment, with syringing her ear every day with a twenty-grain solution of the sulphate of alum, I continued regularly for ten days, at the expiration of which time the mercurial fœtor was slightly perceptible, and the discharge from the ear ceased. The ptosis, double vision, and giddiness, disappeared, feeling was restored to the left arm, and in a very great degree to the left leg. In walking about the ward of the hospital, very little lameness was observable. A fuller diet was then prescribed. I discontinued the use of the syringe; but to keep up the action of the mercury, I ordered one of the pills to be continued at night. Three days afterwards, the thirteenth in hospital, I was surprised to find her in bed, after having passed a very bad night. Her face was flushed, tongue furred, pulse rapid, with constant twitchings in her left arm and leg. A blister was applied at once to the spine the whole length of the cervical and part of the dorsal vertebrae, the calomel pill was discontinued, and I gave her saline purgatives every four hours, till she was freely purged. Next morning, all these unpleasant symptoms disappeared; I gave her no more medicine. She left me in a week afterwards perfectly well, with the exception of a slight halt or lameness in the left leg, scarcely perceptible to a stranger. I recommended her keeping the seton in for three or four months, and to let me know if she had any return of the disease. A month has passed since, and as I have not heard from her, I presume that she still continues to improve."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 22ND, 1853.

T. A. BARKER, M.D., Vice-President, in the Chair.

PATHOLOGICAL RESEARCHES INTO THE DISEASES OF THE EAR.
BY JOSEPH TOYNBEE, ESQ., AURAL SURGEON TO ST. MARY'S HOSPITAL.

The author gave the results of the fifth series of his researches into the cause of deafness, and presented a list of the appearances shown by *post mortem* examinations of the organs, since the publication of his last paper. He classified his dissections thus:—Ears from deaf persons whose deafness was known, and which had been examined by himself during life, 134; ears from deaf persons, unaccompanied by histories, and not examined during life, 41; ears diseased, but without histories, 226; healthy ears, 207. The author gave a tabular view of the morbid conditions he had seen, referring the more minute description, as regards treatment, etc., to future communications. Further researches had induced him to modify the opinion formerly expressed by him, that deafness seldom depends upon the obstruction of the faucial orifice of the Eustachian tube, inasmuch as a thickened condition of the mucous membrane covering the said orifice is liable to cause obstruction, by preventing the tensor and levator palati from separating the walls of the canal. In many cases of advanced deafness, a diseased condition of the auditory nerve or its expansions was found.

In the sixth series, the author gave in a tabular form the results of the examinations made after death of 1013 diseased ears. The dissections, which were exhibited in a tabular form, were thus classified:—Diseased ears from deaf persons with histories, 136; from deaf persons without histories, 223; from persons without histories, 654; healthy ears, 510; in all, 1523. He mentioned that the existence of a dermoid layer of the tympanum and the general closed condition of the Eustachian tube, have only recently been pointed out. Many important

aural diseases, such as ankylosis of the base of the stapes to the fenestra ovalis, have until now been wholly unknown.

ON INFLAMMATION. BY S. F. STATHAM, ESQ., ASSISTANT SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

The author divided inflammation into sthenic and asthenic. The latter was always due to the presence of a morbid poison, which must be the result of decomposition. The essence of this poison had not been discovered, but its presence was shown by its effects, viz., weakening of the vital forces, increase of the watery secretions, prevention of the formation of fibrin. He remarked its specific effect upon the inflammatory process which it creates and likewise modifies, causing effused plasma to take a less developed form. He described its progress through the body by contiguity, and stated that a special character of the disease consisted in the absence of any prominent local symptom. An account of the phenomena attending pyæmia was given, and the appearances shown by *post mortem* examinations in this disease were described. The author was of opinion that absorption of animal poison was caused by glandular imbibition rather than by venous absorption, and gave the results of experiments on rabbits to prove the correctness of his opinion. He denied the existence of any peculiar odour of the breath accompanying pyæmia. He differed from Dr Jenner as regards the theory of pyæmic fever, stating his opinion that, if the blood had been so polluted as to produce suppuration in an uninjured part of the body, death would have ensued to the patient. General tonic treatment, with local depletion, was recommended as the best under all circumstances.

In the discussion which followed, Messrs. Henry Lee, Erichsen, and Carter, and Drs. Sibson, Schulhof, and Mayo, and the author, took part.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH:—NOTICE OF SPECIAL MEETING CALLED BY THE COUNCIL.

At a meeting of the Council, held on the 6th instant, it was unanimously resolved that a General Meeting of the Branch should be held at 37, Soho Square, London, on Tuesday, 13th December, at half-past three P.M.

FIRST: To consider what steps ought to be taken with reference to the Vaccination Act.

SECOND: To receive and consider the Report of the Medical Reform Committee.

T. OGIER WARD, *Hon. Secretary.*

COUNCIL PRIZES.

LETTER FROM SIR CHARLES HASTINGS, M.D., D.C.L., PRESIDENT OF THE COUNCIL.

Worcester, December 5th, 1853.

DEAR SIR,—I am anxious, through the pages of the ASSOCIATION JOURNAL, to announce to the members of the Council of the Provincial Medical and Surgical generally, but more especially to those who have subscribed to the Council Fund, that, at the last meeting of the Council at Worcester, the prizes for the best Medical Reports, sent for publication in the PROVINCIAL MEDICAL AND SURGICAL JOURNAL, and also the prize for the best Surgical Reports, sent for publication in the same periodical, were adjudged as follows:—

The prize for the best Medical Reports to Mr. Arthur Oakes, M.R.C.S., late of Queen's Hospital, Birmingham, and now residing in that town.

The prize for the best Surgical Reports to Mr. W. J. Moore, M.R.C.S., formerly of Queen's Hospital, Birmingham, but now in the service of the East India Company.

Feeling desirous that this award should be made public, I beg to request your insertion of this short communication in the next number of our JOURNAL.

Believe me, dear sir, yours truly,

CHARLES HASTINGS,

President of the Council.

To the Editor of the Association Medical Journal.

EDITOR'S LETTER BOX.

MEDICAL STUDENTS.

LETTER FROM FRANCIS DAVIES, ESQ., TO THE EDITOR.

SIR,—I was extremely surprised, and not more surprised than pained, at reading Dr. Golding Bird's letter in the JOURNAL of November 25th.

It appears that there is a systematic attempt being made to convert the medical students as a class into an "organised hypocrisy". I have too high an opinion of their good sense to suppose for an instant that they will be led away by Dr. Bird's saponaceous piety. That there are a sufficient number of Mawworms and Cantwells in the profession, is abundantly proved by the number of signatures obtained to the petition against opening the Crystal Palace on Sundays.

As a class, medical students are the most disinterested, generous, and benevolent, in Her Majesty's dominions; and they would be much better employed in studying John Hunter or Percival Pott, than in Scripture teaching, as there are plenty of active and zealous ministers who would do it much better. I hate, abhor, abominate, and detest, the sneak who would worm himself into a family through the instrumentality of religious tracts.

"O heaven, that such companions thou 'dst unfold;
And put in every honest hand a whip,
To lash the rascals naked through the world."

I am, etc., FRANCIS DAVIES.

Persnore, Nov. 28th, 1853.

[We deeply deplore the tone and spirit of this letter. It was not suggested that medical students should invade the province of the religious teacher, but that they should be led to the too much neglected study of the Bible. It is evident that Mr. Davies must be profoundly ignorant of the results of the Young Men's Christian Association; or he would have paused, ere he ventured to brand an attempt to extend the benefits of such an institution to medical students, as an "organised hypocrisy". The application of opprobrious epithets to the 640 physicians and surgeons of London, the 100 of Edinburgh, in addition to a very large number in the provinces, who signed the petitions against what they conscientiously regarded as Sabbath desecration, needs no comment.—EDITOR.]

MEDICAL STUDENTS.

LETTER TO THE EDITOR.

SIR,—I read Dr. Golding Bird's letter on medical students with great satisfaction. His testimony as to the improvement in their character, as a body, must be admitted; and his conviction that such improvement can be only based on religion, and that the right means to promote medical ethics amongst them is by encouraging more systematic religious training, is both wise and good. Such outspoken convictions of men of established repute in physical science,—men of exact minds, trained in weighing evidence, and not mere speculative writers or solemn dogmatists, have a weight and importance of which they themselves are probably little aware. Such do as much good to those of our profession in strengthening their faith if it is wavering, as homœopathic and Mesmeric, and table-turning clergymen do harm in unsettling it, by destroying all confidence in their judgment. If a man believes that any effect at all can be produced by infinitesimal doses on the body, or that tables talk by signs, or that printed verses may be read when enclosed in hazel-nuts, what will he not believe? says the sceptically inclined student who has been trained to estimate physical evidence. And the same individual, who has been inclined to doubt the evidences of Christianity, has this doubt shaken, by finding that one of his own profession, in the prime of his intellectual faculties, which have been diligently employed in physical and physiological investigations, and in that branch of the practice of medicine on which exact chemical experiments are brought to bear, is himself a firm believer in Christianity.

Having a great regard for our JOURNAL, I felt also glad that we have an organ of our own in which such subjects are admitted, not merely out of sufferance, but because they fall in with the very principles which our Association has so much at heart. I have seen in other journals a sneer at this feature of our own; but this sneer I took as the highest compliment, as a proof that this distinctive characteristic was recognized. Dr. Golding Bird states that twenty years ago a religious student

was ridiculed; now he is respected. And is not the same change apparent generally? Are speeches in parliament, and leaders in the *Times*, ridiculed now because they often recognise the distinctive principles of Christianity as all-important even in politics? but, on the contrary, is not the speaker and the writer respected on the avowal? And so it must be with medical journals, if they would gain respect and character. In its due recognition of the religious element of our nature, the ASSOCIATION JOURNAL is, I feel assured, in accordance with the feelings of a very large and an increasing number of our profession.

I am, etc.,

A MEMBER OF THE COUNCIL.

November, 1853.

MEDICAL STUDENTS.

LETTER FROM A. H. PATERSON, ESQ., TO THE EDITOR.

SIR,—I am very glad to see your columns opened to the discussion of the question of medical education. It would be a great boon to future students, if the Association carefully considered and urged on the profession the necessity of some important changes in the present system.

I have had some experience of the collegiate system, having been, nine and ten years ago, a student at the Queen's College, Birmingham. I do not think that the efforts there made to improve the morals and habits of the students were very successful. Sometimes we had young men so bad that they were expelled; but usually, I am happy to say, the students were industrious and honourable men, who were a credit to the College, and superior to the usual run of provincial students. But the general behaviour of those unconnected with the collegiate establishment, and unaffected by its rules, was at least as good as that of the collegians; and the greater number of prizes was carried off by the out-students, as they were called. Dr. G. Bird's letter appears to be a general testimony in favour of the rapid moral and professional progress of medical students during the last ten years; but how will he answer these discouraging statistics, taken from Mr. Guthrie's lecture published in the *Lancet* of Oct. 8th? He says that, in London alone, in 1850-51, 1,044 students registered, and only 370 obtained their diploma; in 1851-52, 1,141 registered, 404 obtained the diploma; in 1852-53, 1,105 registered, and 476 obtained the diploma. Where are all those young men who never pass the College? These numbers include all who pass, but only those who attend the London schools were registered; so that probably not a fourth of the students in town and country pass the College.

Mr. Guthrie goes on to say, "It has been said that the examinations of the College are more severe of late; but this is a great error; for, if any change has taken place, they are less rather than more severe." "The real fact is, students are worse prepared." Mr. Guthrie was President in 1831-32, and then one in fourteen were referred or rejected. He was again President in 1843, and the number was one in eight; while in last session the rejections were one in six.

I need not follow Mr. Guthrie in his remarks on deficient dissecting, or careless, negligent, or inefficient lecturers; for every one who knows anything of the matter must know that these are patent facts. I have quoted so much to show that Dr. G. Bird is mistaken in saying that "the improved character of the medical education imparted in our hospitals and colleges has not been without its good influence." There is no improvement. The students may not be so openly vicious, but they are more idle and inefficient than ever.

Mr. Guthrie regrets the enforced three years' hospital practice, as he says money is lost, morals deteriorated, and no good result has followed the change from two years. Yet surely three years is little enough.

My own belief is, that no good can be done till the students are relieved from their present incubus of lectures. For three years does the student hear an incomplete sketch of such a science as physiology, read over and over, or some old physician favours a class of two with the practice of physic taught by Cullen. I am speaking of provincial schools, several of which I know; and I can assert that in them the lectures are almost universally repeated from notes year after year without variation; that they are given without spirit by the lecturers and listened to without interest by the students; and that nothing so much tends to make a well disposed youth an idle, drunken, ignorant student, as the necessity of spending four separate and separated hours a day in hanging about a dull lecture room.

Some, and among them Mr. Guthrie, seeing these evils, blame the body of lecturers, as I think unjustly. It is the system that is wrong. Anatomy, physiology, physic and surgery are not

things to be learned by talking, they must be studied. If the staff of lecturers attached to a school were diminished one half; and if a list of the more distinguished, but at present half-occupied young surgeons of the town was kept at the school, and every student was obliged to spend two or three hours daily with some one or another of these gentlemen, and to read on those subjects on which he is now lectured; if one tutor took one subject, and another another, and the student was rigidly obliged to divide his work among them, and undergo a weekly examination on each branch at the college or school, by the professor of that branch—we should I think soon have a different account of the examinations at the College of Surgeons.

I am, etc., ALEX. HENRY PATERSON.

Altrincham, Nov. 28th, 1853.

LORD LYTTTELTON ON HIS VACCINATION ACT: THE WANGFORD UNION.

LETTER FROM W. E. CROWFOOT, Esq., F.R.C.S., TO THE
EDITOR.

SIR,—If you consider the following correspondence on the subject of the Vaccination Extension Act of sufficient importance to interest the profession generally, I shall feel obliged by its insertion in your Journal.

The first portion is an application from the professional men in this town to the Board of Guardians of the Wangford Union, in reply to a notice from them, that they were about to elect a public vaccinator for this district. It is signed by all the legally qualified professional men in the town, except the Union medical officer, who declined to sign it. I regret to add, that he alone was elected to the office.

The second is a letter from Lord Lyttelton, which his Lordship has kindly given me permission to publish, and which may perhaps interest the profession, as showing his Lordship's views upon the subject.

I am pleased to find that several Unions have adopted the plan which we had proposed to the Wangford Union; and I trust that the very partial manner in which the Poor Law Guardians are discharging the trust committed to their care, will lead the legislature to interfere, and compel them to contract with all legally qualified medical men. Such a step would at once tend to conciliate the profession to the Act, and at the same time ensure the most efficient discharge of those important duties for which it provides.

I am, etc., W. E. CROWFOOT.

Beccles, Nov. 22nd, 1853.

"Beccles, 7th Nov. 1853.

"GENTLEMEN,—We beg to acknowledge the receipt of your letter, informing us that you will on the 16th instant proceed to the appointment of Public Vaccinators for the Beccles District of the Wangford Union.

"We feel most anxious, as far as lies in our power, to promote the efficient vaccination of the whole population, and thereby, under the blessing of Divine Providence, to produce the mitigation, if not the total extinction, of the small-pox.

"We find that by the 4th Vict., ch. 20, you are directed to contract with any legally qualified practitioner resident in your district. We would venture to suggest that the most efficient means of accomplishing the object which you have in view, would be attained by electing *all* the qualified practitioners resident in the union to the office of public vaccinators.

"By adopting such a course, you will avoid inflicting an act of injustice upon an honourable profession, which could not fail to be the case, if you appointed a single medical officer, and thereby gave him the opportunity of introducing himself into the practice of his professional brethren.

"We therefore beg to offer ourselves as public vaccinators for this district; and

"Have the honour to remain,
"Your obedient servants,
WM. ED. CROWFOOT,
ROBT. DASHWOOD,
HENRY WM. ROBT. DAVEY.

"To the Board of Guardians of
the Wangford Union."

LORD LYTTTELTON TO MR. CROWFOOT.

"Hawarden by Chester, 11th Nov. 1853,

"SIR,—I only got your letter last night; and entirely am of opinion that the only proper course is for the Boards of Guardians to contract with all the legally qualified practitioners who are willing to do so. It is what has been done in my union

(Bromsgrove); and I should be very glad to hear of its being done everywhere.

"The only limitation we have made is, that it is only the union officers who are allowed to vaccinate at the *outlying stations*, fixed by the authority of the Board; leaving the other surgeons to do so at their own houses, at the houses of the poor, or elsewhere. This is only for convenience.

"Your obedient servant,
"LYTTTELTON."

THE VACCINATION ACT.

LETTER FROM JOHN C. BLOXAM, Esq., TO THE EDITOR.

SIR,—Ruricola expresses himself in the last number of the JOURNAL, in reference to the Vaccination Act, very persuasively and very eloquently; but I wish he had addressed himself more to the *merits* of the Act than he has done. I am by no means sure that the tendency of his letter is not to seduce its readers into a false road. I feel, myself, that the act in question is a first attempt at direct encroachment on private rights. I would say on private property; for the time and professional knowledge of the professional man is to be regarded as property with him, as much as land is with others: and, indeed, in one point of view, this property is entitled to be more respected by the state, *as property*, than that of the landed proprietor; because the landowner is more indebted to the state for his possessions, than the medical man is for his. The latter is in no degree beholden to the state for his property. The state has done nothing, so far as I know, to assist the medical student or practitioner in the acquisition of his property. Railways form one of the necessities of the state, as well as vaccination; but what would Parliament have thought of establishing railways, if it had been proposed to take land for the purpose without leave from the proprietor, and without giving him any equivalent for it? And yet the state is clearly far more entitled to make use of the land of the country than of the professional man's time and knowledge.

Ruricola has very well prepared the way by enlisting one's inclinations on his side. I wish he would now make another step in the same direction, and show that we may follow him, free from any feeling of compunction. I should be glad to find that there is nothing out of the ordinary course of legislation in this Act, and that I might act in accordance with it consistently with a due respect for the independence of myself, as well as of my order, and so I dare say would many others.

I think that Ruricola shows that many medical practitioners took a wrong course prior to the introduction of the Bill; but this does not show that the Act is right. The profession, as a body, is not answerable for the selfish or injudicious conduct of a certain number of individuals—supposing that these terms may be fairly applied to the occasion.

It is the usual, and had been I believe the invariable, practice in this country, to effect desirable national objects, without infringing the rights (I do not say interests) of individuals; and such objects are even abandoned rather than incur a sacrifice in this respect.

I am, etc.,
JOHN C. BLOXAM.

Newport, Isle of Wight, Nov. 16th, 1853.

THE VACCINATION ACT.

LETTER FROM J. H. STALLARD, Esq., TO THE EDITOR.

SIR,—Much has been written concerning the injustice of the New Vaccination Act; and the writers, including the Chief Clerk of the Register Office, unanimously agree that there are no means for providing remuneration for the services required of medical practitioners not specially appointed public vaccinators. I am sure you will admit my reasons for doubting this conclusion. Perhaps the suggestion will lead more qualified persons than myself to see whether I am right. According to Mr. Mann, the duties of the Registrar General are "purely administrative"; in the words of clause 11, he is to provide books, forms, and make "*regulations such as he may deem necessary for carrying into full effect the provisions of the Act.*" And in a subsequent part of the same clause, he is authorised to pay the expenses so incurred. It forms a most important part of his duty to frame such regulations as shall ensure the *full effect* of the Act, and, if necessary, to pay for the same. His payments are *not restricted* to the particular items named in the Act. In his charge will be placed the supervision of the whole, and he will require extra clerks, if not personal increase of salary. He will pay the superintendents of districts for the supervision they

exercise, and for the trouble they will be put to; and he is called upon by the Act to pay for all such services as may be essentially necessary for its public administration. It appears to me that the administration cannot be perfect without the cooperation of the medical profession; which, therefore, he is bound to obtain and pay for. I question if medical men could not claim, under the eleventh clause, remuneration for the certificates they render to the local registrars from the Registrar General.

The practical necessity of having a limited number of public vaccinators appears to me most apparent; nor can it be expected that medical men should be paid for vaccinating their private patients: but this ought not to prevent the medical profession from receiving some public acknowledgement for the duties they perform.

I am, etc.,

J. H. STALLARD.

Leicester, October 31, 1853.

THE VACCINATION ACT.

LETTER FROM C. HOLMES, ESQ., TO THE EDITOR.

SIR,—Clerks of unions and auditors of unions, are not styled "union clerks", or "union auditors"; neither do I think "union surgeons" a correct designation for Poor-law medical officers, inasmuch as they are equally (with few exceptions) private practitioners with those who do not hold such an appointment. It appears to me that the article at p. 865 of the JOURNAL for Oct. 7th, was written with the metropolis in view, and that the essentially provincial character of the Association was overlooked. The simple reason why guardians appoint their officers vaccinators, is that they find the duties better performed by a few officers, than when the same salary is divided amongst many (the very plan you adopt in combining the offices of literary and commercial assistant); and the medical officers accept the appointment, because they can perform the duties with much less labour than another person. That there are some exceptions to this rule, is shown by the letter of H. P., at p. 898 of the JOURNAL.

As my only object is the prosperity of the Association, I trust you will pardon my again troubling you.

I am, etc.,

CHARLES HOLMES.

Chipping Norton, October 18, 1853.

THE VACCINATION ACT.

LETTER FROM E. PARKE, ESQ., TO THE EDITOR.

SIR,—I have read the numerous letters on the Vaccination question, and am of opinion with Mr. West, that Government has no right in common justice to compel private practitioners to deliver, *free of charge*, a duplicate certificate to the registrar. Let the matter then be brought to the test at once; and, if any one is willing to stand fire, I for one will contribute £1 towards defraying his expenses; and should those practitioners who feel aggrieved do the same, we shall soon raise a fund amply sufficient for all purposes; and, if beaten, we shall not die without a struggle.

I am, etc.,

E. PARKE.

West Derby, Liverpool, Nov. 1853.

THE VACCINATION ACT.

SECOND LETTER FROM HENRY TERRY, ESQ., JUN., TO THE EDITOR.

SIR,—I have carefully read the whole of the correspondence in your number of yesterday on the Vaccination Act, and I cannot find anything in it to alter the opinion expressed in my letter, viz., that the chief objection to the Bill consists in the imposing the duty to give certificates "without fee or reward". A "Constant Reader" asks who is to remunerate the vaccinator for that class of patients who have hitherto paid from five shillings to a guinea for the operation? I would say in reply, that there is not a word in the Bill to affect this class of patients; and that *private practitioners*, as heretofore, will continue to be paid for the vaccination of their *private* patients. If I understand the act rightly, in rendering vaccination compulsory, it merely provides gratuitous vaccination for those who would otherwise be liable to the penalty, through inability to pay for themselves. The Registrar's Notice differs materially from that given in Schedule C, inasmuch as it states in plain words that the child is to "be vaccinated either by *your own*" legally qualified medical attendant, or by the "*appointed public vaccinator*". I think this fact very materially affects the operation of the Bill

on private practitioners. On this point I have already had some slight experience, living in a large town in which I do *not* hold any union appointment. Some of my *poorer* patients have already applied to me about vaccination; and if I have found them unable to pay the lowest fee which I was willing to take, I have at once referred them to the public vaccinator. Since my previous letter, a *private patient* of mine, in a village where I am public vaccinator, applied to me for the gratuitous vaccination of her infant. I, of course, expressed my surprise that she should condescend to accept of such a boon (although the fact of so doing, either now or under the old act, by no means implies *pauperism*), but that if she insisted on it, and would bring her infant to the station appointed, I had not the power to refuse. Had this person been the patient of any other medical man, he would doubtless have been greatly offended at me; but in this case, as I have already stated, the new act does not differ from the old one, as in both cases, subject to certain special regulations of individual boards, every parent has a right to gratuitous vaccination.

I am, etc.,

HENRY TERRY, JUN.

Northampton, Oct. 29th, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—Will you permit me to add my most emphatic denunciation to the many that weekly appear in the JOURNAL, on the most unjust, but, I hope, likely to be evaded, provisions of the Vaccination Act.

I am delighted with the tone and spirit pervading some of the communications in your late numbers. I earnestly trust that they will be instrumental in evoking a determined spirit of resistance among private practitioners in every part of the kingdom to which it applies, not only to evade the act to the utmost, as it at present stands; but, as a "Country Surgeon" in your number for October 28th, most properly suggests, to pour in our petitions from every town, village, and hamlet, upon Parliament in the next session, making the noble Home Secretary our principal medium.

If this course were adopted with due spirit and energy, backed by the powerful influence of the Council of the Association, it is impossible that this *furtive* and disgraceful enactment should continue to deface the Statute Book any longer than will be required to modify or repeal it. It is an insult to a noble and too generous profession, and most unworthy of this great and liberal nation.

I trust, Mr. Editor, that a form of petition will be immediately got up by the Council of the Association, and printed in the JOURNAL, with all necessary instructions for putting it into due parliamentary shape for presentation, etc. That being done, I am sure it will be unnecessary to call upon every practitioner, as he values his own dignity, the honour of his profession, and the welfare of his patients, to lose not a moment in giving his best and undivided energies towards the repeal or modification of this most obnoxious Act.

As one instance of the probably unpleasant effects attending the working of the Act, I will relate a circumstance of an union medical officer (*proh pudor!*) who, within this last few days, entered the house of a female patient of mine, who was just recovering from a dangerous attack of peritonitis. More in the spirit of a ruffian than of the harbinger of peace and goodwill, he demanded (in language too unfeeling to be described) whose child the sick woman was nursing? On her telling him that it was her own, and had not been vaccinated, he told her he had come to do it. She remonstrated with him, telling him she had arranged for her own medical adviser to vaccinate it. He threatened to take her child from her, and, *mirabile dictu*, chased this feeble creature round the room for that purpose, until she became faint from fear and exertion!!!

Such is one among the many scenes that have to be enacted under this legal abortion.

Fearing I have trespassed too much upon your indulgence,

I am, etc., A.

November, 1853.

THE VACCINATION ACT.

LETTER FROM S. D. LEES, M.D., F.R.C.P.Ed., TO THE EDITOR.

SIR,—Your last number contains many letters urging that Private Practitioners, having no District appointments, should be permitted to vaccinate at the public expense. The Act is

not intended to supersede private vaccination, nor to prevent the profession getting fees from parties able to pay. To throw it entirely open would abolish vaccination fees in the middle and lower ranks. If the agitation could be confined to obtaining a clause to remunerate the practitioner *for vaccinating poor children he had delivered*, that object would probably be gained in the ensuing session; but, to permit other children (not delivered by the operator) to be vaccinated at the public expense, would confer a privilege upon the private practitioner, at present denied to the public vaccinator, whose appointment is for a limited district only; while the private vaccinator would have no limit. The effects would be, that some practitioners, under plea of vaccination, would be constantly encroaching on the private patients of others. The remedy would be worse than the disease, and cause more ill-feeling in the profession than the present Act. The proper way to meet the new Act, and obtain suitable remuneration, is to make one charge to *include delivery and vaccination*. Then, the parents having *prepaid* the vaccination fee to their own attendant, will not seek the crowded surgery of the public vaccinator. Let every 10s. 6d. case be charged 13s.; guinea cases raised to 1l. 6s., and so on in proportion. Females are so particular in selecting their accoucheurs, that they would cheerfully pay the advance fee rather than apply elsewhere. Those medical gentlemen whose patients would change on account of the trifling additional expense, have so slight a hold on the confidence of their patients, that a codicil to the vaccination Act would not mend their position.

I am, etc.,
S. D. LEES.

Ashton-under-Lyne, Nov. 23rd, 1853.

THE VACCINATION ACT.

LETTER TO THE EDITOR.

SIR,—Allow me to beg insertion, in the pages of the ASSOCIATION JOURNAL, for two or three remarks on the injustice of the Vaccination Extension Act, as it bears on those members of our profession who are not engaged in Union practice.

So much has been already written on the subject, that I shall confine myself to the statement of a single fact, amongst many others, in which I have individually suffered. A patient whom I had attended in two or three confinements, accompanied a young friend to my surgery a few days since. On recognising her, I inquired whether she had not a child for vaccination. The answer she gave, was "that she had received a notice from the district registrar, and had consequently taken her child to the Union surgeon, by whom it had been vaccinated. If she had not received the notice, giving her the option of having her child vaccinated at the public expense, she would have brought it to me, and would willingly have paid me for the operation."

On meeting the registrar the next day, I named the circumstance, the particulars of which he admitted to be correct, and referred me to his printed official instructions, which authorise him to supply the parents of all children, whose birth he registers, with a vaccination notice, but leaving it optional with the parents to take the child to their usual medical attendant, or to the district vaccinator for vaccination.

In the former case, the parents would pay the expense; in the latter, the Union. In the former, I should retain my patient; in the latter I should lose him.

Amongst so large a number of such patients, who abound in a country district, the loss to a non-Union surgeon is considerable, for the majority of persons amongst the humbler classes of society are quick-sighted enough to see their own interest, and thankful enough too for the gift of a vaccination fee, and in no case, except through ignorance, will refuse it. The Union surgeon also will be most ready to accept the case; feeling certain that 1s. 6d. earned in his own surgery, with the certainty of payment, is better than 3s. 6d. or even 5s., when the patient has to be visited three times at his own home, and with more or less uncertainty of recovering his fee.

The injustice to the non-Union surgeon is clearly double. He not only loses his vaccination case, and sees it handed over to the Union-surgeon, in too many cases a mere tyro or adventurer, but has to pay a moiety of the expenses out of his own pocket in the shape of poor's rate.

Trusting that the Legislature will, ere long, see the injustice and dishonesty of the Act, and do all in its power to remedy so flagrant an evil,

I am, etc.,
MEDICUS.

November 15th, 1853.

MILITIA SURGEONS.

LETTER TO THE EDITOR.

SIR,—As unity is strength, so is it necessary for all having an interest in the matter, to bear testimony to the truth of your correspondent's statement as to the inadequate remuneration at present afforded to Militia Surgeons, as published in your Journal of the 18th of this month. Our position is there very accurately portrayed—we are permanent servants performing functions sufficiently onerous, but without any permanent remuneration. I think, with your permission, I can depict even a stronger case; but to do this, it is necessary to enter into a few particulars, which I will do as concisely as possible. For the purpose of supplying the requisite number of men to complete our complement against the last training, and now to fill up the places of defaulters and others, it has been considered necessary by the higher authorities to fix certain days, and certain hours, never less than twice, sometimes as often as four times in the week—for the purpose of the surgeon inspecting and passing recruits. For this service he is paid in the following manner: for the first four recruits 2s. 6d. per head; afterwards he receives the ordinary day's pay of a militia surgeon, amounting to 11s. 4d. For this I have sometimes inspected upwards of twenty men in one day. I ought to add, that if no man is approved of medically, the surgeon receives no pay, though his time has been sacrificed in examining.

The allowance of twopence per head a week for attendance and medicine to all members of the staff, their wives and families, is truly ridiculous; the staff being composed, as your correspondent tells you, of middle aged men, oftentimes with constitutions considerably impaired by service and disease, (for it is only within the last few weeks that applicants for appointment on the permanent staff were ordered to be medically inspected). Accustomed to have a surgeon at hand, to whom they can apply for assistance almost at any time, they do not hesitate to seek his assistance on every trivial occasion—such as those having to pay for advice would certainly not. Moreover there is no provision made for cases of midwifery, so I apprehend we are expected to attend these cases for the same pay; are not all these grievances *justly* to be complained of? Is not this a shameful state of things?

It is not only a feeling that such arrangements cannot long continue, which induces the surgeons to retain their appointments under these adverse circumstances, but, having in many cases been compelled to obtain expensive uniforms, they consider *some* remuneration better than a *decided* loss, which their resignation would entail.

The system of "Poor Law Medical Relief" has been sufficiently long a reproach to this country not to render it desirable that any other government appointment should attempt to vie with it in its insufficient remuneration to medical men, and its general inefficiency.

In conclusion, I would say, let the militia surgeons be up and stirring without loss of time; let them act as you have suggested, petition Parliament themselves as a body, and enlist the sympathies of their brother practitioners against an evil that derogates so greatly from the dignity of the profession.

I am very sanguine that, like those of the long oppressed naval assistant surgeons, the evils complained of will, through the powerful influence of the press, shortly be remedied. I am, etc.,

ONE MOST ZEALOUS IN THE CAUSE.

November 21st, 1853.

MILITIA SURGEONS.

LETTER TO THE EDITOR.

SIR,—I am glad to find that your pen has been taken up in the cause of Militia Surgeons. I was very much pleased with an excellent letter addressed to you in your last number, since which a "circular" has been issued from a committee; and it is much to be hoped that those gentlemen who have taken upon themselves the onerous task and trouble will be cordially supported. They propose a meeting, which is indispensable; and the most central position in England ought to be selected. I for one shall be happy to attend and cooperate with them for redress. Having the honour of holding a commission in the Militia, I am anxious to assist all I can; and if you will permit me to throw out a suggestion, through the medium of your Journal, to my brother officers, I shall feel obliged.

The first question naturally to be asked is, How is our present position to be altered for the best? and through what channel? *All matters connected with staff appointments must go through the colonel of the regiment*: our regulations plainly point this

out. The colonel is bound to forward any memorial to the Lord Lieutenant of the County, who will present it to the authorities, the Secretary of State for the Home Department. It is obvious that by these means our *wants* and *grievances* are better made known. The colonel of a regiment is invariably a gentleman of high birth and distinction, with a great stake in the county where he resides (possibly he may be the Lord Lieutenant, and a member of Parliament). The surgeon is well known to him; and, since "*the training*", the colonel is only too well aware of the onerous duty devolved upon the medical officer of his staff. The Militia will now undoubtedly be a permanent force; for, according to the act of last session, each county is to provide stores, and a building sufficiently large to accommodate *one half* of the permanent staff. The surgeon, as an officer, is as requisite to a regiment as an adjutant. Why, therefore, should he not be attached upon the same half-pay while disembodied? In case of an emergency, the surgeon must go, or be "branded as a coward"; and yet, while all is peace, he is left with an inadequate pay, and in time of tumult is obliged to leave his comfortable snug practice, and risk the war.

I cannot possibly believe, with a true and fair representation, that things will be left as they are at present. Let each medical officer see his colonel, and represent matters to him and the Lord Lieutenant of his county; and I am confident, with "a long pull, a strong pull, and a pull all together", success will attend the redress of the Militia Surgeon. I am, etc.,

ONE OF THE SUFFERERS.

Nov. 24, 1853.

THE INDECENCY OF THE EXHIBITION OF DR. KAHN'S MUSEUM.

LETTER FROM W. B. KESTEVEN, ESQ., TO THE EDITOR.

SIR,—I take the liberty of forwarding for your examination a copy of the catalogue of the wax models now exhibiting at Dr. Kahn's Anatomical Museum, in Regent Street. I have marked certain parts of the catalogue, as containing objects unfit for public gaze. It is true, that the part in which they are to be found, is (professedly) for the inspection of medical men only; but, practically, this is the shallowest pretence. The very restriction, unless enforced, operates merely as a stimulus to prurient curiosity. To my personal knowledge, the restriction exists only on the pages of the catalogue. Accompanied by a medical friend, we were admitted without any question as to our calling; and we there saw persons who, from their audible comments upon the objects before them, were clearly not of the medical profession.

Such an indiscriminate admission of the male public to see wax models of the male and female organs of generation under so many pathological and physiological conditions, I hold to be demoralising; but it becomes a still more grave offence against public morals, when we find that females are admitted to view the same models! Gaudy yellow handbills, distributed to passers-by in the streets, set forth that the exhibition is open on Fridays, to ladies only.

Wishing to know how far females were admitted, I sent a respectable woman (a monthly nurse) to ascertain the point: she returned with the information, that she could have been admitted, on payment of one shilling extra, to that part of the museum which in the catalogue is marked as being exclusively devoted to medical men! but as she had learnt what she went to learn, she did not lay out another shilling upon the additional knowledge.

Such a mockery of restriction as this is too transparent—a shilling extra for admission to the chamber of horrors and indecencies, forsooth, on the only day in the week on which the most inquisitive of mortals are admitted *alone* to this exhibition of anatomical models!

Dr. Kahn has some knowledge of human nature beyond what is got by dissecting and modelling.

I ask your opinion, whether all this does not represent something very like an outrage upon public decency? I cannot believe that an English public will very largely patronise such a disgusting exhibition. I have the fullest confidence in the good taste and delicacy of my countrywomen; and most devoutly do I hope that the time is very far distant when English women shall be content to gain superficial anatomical knowledge, at so great a cost as the sacrifice of their characters for modesty.

I am, etc.,

W. B. KESTEVEN.

Upper Holloway, London, Nov. 9th, 1853.

REVALENTA ARABICA QUACKERY.

LETTER TO THE EDITOR.

SIR,—As one fact has a proverbial superiority over a great many arguments, will you allow me, in connexion with the revalenta pease-meal absurdity, to state the following. It shows how medical men are robbed by the prevailing quackeries of the day.

I was writing a prescription for a poor woman this month, in connexion with one of our medical charities. Looking at her, one would think she was of the ordinary class of paupers. It was a simple case of gastrodynia. As to her paying for medical advice, she thought it cruel to mention such a matter. After she got her medicine, she said that she had been recommended revalenta by a doctor!

"Well," I said, "you tried it, did you?"

"Yes," she replied, "several times; but it does not seem to do much good."

"How many times?" I continued.

"Oh, seven or eight times!"

"And what may have been the size of the last *parcel* you got?" I said jokingly: "the size of that hat?"

"Well," she said with the greatest *sang froid* in the world, "as I live a little at the Clapham side of London, about the size of that hat!"

"And what may it have cost, pray?"

"Oh, only twenty-two shillings! but they send such sweet little books, and all the cures and recommendations of the great chemists."

Only twenty-two shillings! and the woman would not give one farthing for the medical advice we are all spinning our brains to be enabled to give. And yet some of our M.D.'s are so suicidal as to recommend this trash. You are doing good work, sir, along with Dr. Golding Bird, in trying to raise the status of medical men. Try and put down quackery, and every one will bless you.

I am, etc.,

M. D.

Kingsland, London, November 29th, 1853.

CONDITION OF THE FETAL HEAD AT BIRTH.

LETTER FROM GEORGE KING, ESQ., TO THE EDITOR.

SIR,—My paper on "The Condition of the Fœtal Head at the full Period of Gestation" has attracted the notice of Mr. Gaye, who appears to think that there is some ambiguity about it which should be at once explained. In writing for the press, I have always endeavoured to express myself in as clear and simple a manner as possible. If, in stating facts, I have not made myself intelligible in my paper in the JOURNAL for November 4th, I will try to make my assertions clearer; but I must confess I do not see that I have much to explain. However ambiguous my ideas on the subject may be, they seem to have startled Mr. Gaye.

In my explanation of what I believe to have been judicious and orthodox treatment of the cases under consideration, I shall have to reiterate much that I have stated before, as well as to repeat Mr. Gaye's remarks, in order to make us both understood. Mr. Gaye says I have "made a few assertions which are startling, and advises the adoption of a mode of treatment which I cannot but think hazardous. Mr. K. says, 'This high degree of ossification of the cranial bones of the fœtus, I believe, more frequently renders the operation of craniotomy and destruction of the child necessary, than does contraction or deformity of the pelvis.' And again, 'Instead of the fœtal head being found fixed or resting on the brim of the pelvis, as is to be found in all illustrated representations of this operation, we should find it moveable, and, the moment we touch it with a perforator, it recedes, etc.' The first quotation is an assumption requiring confirmation." This opinion is formed from practical observation: the confirmation must depend on the experience of others. "As regards the second, I imagine few men would be inclined to craniotomise until the head of the fœtus was firm against or impacted in the brim of the pelvis." Mr. Gaye must bear in mind that my remarks refer to the large highly ossified fœtal head, incapable of becoming fixed, possessing no adaptability to mould itself to the pelvic outlet; and if there had not been much liquor amnii discharged, the uterus would be still buoyant, and would rend with the slightest touch when the pains were off. In these cases, the only treatment is the reduction of the size of the fœtal head. If a practitioner did not feel inclined to craniotomise until the head of the fœtus was firm against or impacted in the brim of

the pelvis, he must expect by his patience to lose his patient; for the head would never yield to the uterine action. Mr. Gaye says, "The next paragraph is odd. 'I have never heard the child cry *in utero*;' but I have heard one make a frightful noise after the head has been broken down, and the brains smashed by the operation of craniotomy, while the body was still lying in the passage. Fortunately, the bed clothes drowned the sound; but it produced such a very peculiar sensation on the tympanum of my ears, and the gentleman that was with me, that neither of us will ever forget it." May I, with all due submission, ask Mr. King what is meant by the foregoing? Does Mr. King wish to give to the profession as an original discovery, that, although he does not assert that a child cannot cry *in utero*, yet, with a broken head and a smashed brain, a fœtus can give utterance to a frightful noise? I must confess I do not quite understand this question. Mr. Gaye must know that, the moment the air rushes into the lungs, the vocal organs may be put in motion, and we have a cry; and I believe that it is quite possible that it may pass through the vaginal passage; and should the presentation be favourable, with the cavity of the chest of a fœtus *in utero*, by which the action of the lungs may be excited, and the vocal organs set in motion, so that a cry might have been heard from that quarter. If Mr. Gaye will take the trouble to look, he will find a case recorded. Surely there can be nothing very odd in my telling the readers of the Journal that I never heard a child cry in such a situation. Without my enlarging on the physiology of the voice, Mr. Gaye will excuse my telling him that the brain has but little to do with it; and it is quite possible that air may find its way into the lungs of a child in its passage into the world; although its cranial bones may have been crushed, and its brains dreadfully mutilated, it may still be alive, to give utterance to a frightful noise. I cannot conceive that there is anything "odd" in my stating that such a thing did occur.

"Again, does Mr. King wish to assert, that the use of the stethoscope, to ascertain the life or death of the child, is awful practice, and trifling with a valuable life intrusted to one's care?" I have stated that I consider, in cases where there is a high degree of ossification of the fœtal head, the child *in utero* would be likely to retain the vital spark longer than the maternal constitution would hold out; therefore, to be waiting for stethoscopic diagnosis, and listening with the stethoscope till the mother became "an inert and lifeless mass", would be, in my opinion, awful practice, and trifling with a valuable life intrusted to one's care.

The next question is a very simple one. "Must we plunge our fingers into the vagina, run the tips of them against a high degree of ossification, and as quickly let the perforator take the place of the finger?" No: before you let the perforator take the place of the fingers, it will be necessary that the fingers should be got beyond the vaginal passage into the cavity of the pelvis; and very often more than the tips will be required above the brim, before the perforator is to take their place. Depend on it, an educated finger will be of much more service in these cases than a stethoscopic ear. I have no notes of the thickness of the calvarium; but I know I could not discover the sutures.

I have now only to notice Mr. Gaye's last paragraph. "In the case Mr. King refers to, of the head having been fractured at birth, the fracture, I should have imagined, was the natural result of a child's head coming into violent contact with a hard floor." Many an osseo-cartilaginous fœtal head has come into violent contact with a hard floor, without being fractured. I believe no fœtal head would be fractured under the circumstances I have mentioned, unless it was in a *high degree ossified*.

I am, etc.,

GEO. KING.

Bath, Nov. 29th, 1853.

NITRATE OF SILVER STAINS.

LETTER TO THE EDITOR.

SIR,—Allow me, through the medium of your JOURNAL, to introduce to the members of the profession a remedy for the unsightly stains of nitrate of silver. The cyanide of potassium, in a solution of the strength of fifteen grains to an ounce of distilled water, gently rubbed upon the stain, will be found to eradicate it almost immediately.

I am, etc.,

W. C.

York, November 22nd, 1853.

GRATUITOUS MEDICAL ADVICE.

LETTER FROM SIR JOHN FORBES, M.D., TO THE EDITOR.

SIR,—I have been for some time intending to address to you a few words on a subject which has obviously engaged a good deal of your attention of late,—I mean the subject of Gratuitous Medical Advice; and I now find that I have delayed my communication until I have been anticipated in much that I had to say, by the letters in your last number, and especially by the admirable letter of Dr. John Barclay. I still, however, hope that you will indulge me, as an old member of the Association, so far as to give me space enough in your pages for the declaration of my individual opinion on a subject which must interest not only every member of that society, but every member of the profession. Even were I to go over precisely the same ground as your able correspondents, I think I might be forgiven, since the subject is sufficiently important to bear even a superfluity of discussion.

It has not been without pain that I have noticed in more than one of your late comments on the subject of Gratuitous Medical Advice, expressions which seemed to me too much in harmony with the hard, utilitarian, tradesmanlike maxims, which, from another source, have, for many years, been tending to lower the tone of generous feeling, and the sense of honour and dignity in the members of our profession. I am willing to hope that in so interpreting your words I may have been misled by an over-sensitiveness on my part; and the rather, because I should feel it difficult to reconcile such a leaning on your part, with your duty to the Association, which has declared "maintenance of the honour and respectability of the profession" to be one of its fundamental objects.

I do not mean to deny that the practice of gratuitous advice has been abused both by the givers and receivers; as what category of mere human dealings is free from error? But I would ask, Is there no abuse on the other side? Have not humanity and the dignity of the medical character been outraged, in an infinitely greater degree, by the monstrous pecuniary charges made by medical men for services to those who *had a right* to claim their aid as members of the noblest and most benevolent of professions? Neither do I say that the existing abuses in the modes of gratuitous relief ought not to be corrected when discovered; but while dealing with the evil, let us beware lest we incur the danger of tampering with the good. It is one thing to free our professional ground from weeds, and another thing to uproot any of the fruits of the seed sown in it by our noble and high-minded predecessors.

My fear, I confess, is, that, in the present crusade against imposition and unfair claims on the part of patients, we may run the risk of doing irreparable injury to the class of men on whom the unfair claims are made; that, in seeking to get rid of what is, at most, but an extrinsic and superficial evil, we may peril what is of the very heart and essence of our professional calling. It has ever been the proud and just boast of the medical profession, that its members do more good to their fellow creatures, without pecuniary remuneration, than the members of any other profession; and God forbid that the day should come when it could make that boast no longer. Better, I say—a thousand-fold better—that we should be all, now and then, imposed on, in having our sympathies falsely excited, and our time unnecessarily engaged (it cannot be *wasted* in such a service), by a few mean men who filch the benefit they ought to pay for—than that we should shut our doors or our hearts against the thousands of the poor and needy who, most unquestionably, *have a claim* for aid from us, both as men and physicians.

And what, after all, is the mighty sacrifice we make, in responding to this appeal of brotherhood, even when the appeal is unwarranted? What, but the giving up of a few minutes of our time (often otherwise unemployed) to the exercise of the very art in which is our delight? If this sacrifice were one altogether unalloyed by any resulting good to ourselves, it surely could only be regarded as slight and insignificant; and when it is accompanied, as it always must be, by the gift of *experience* to the young (as so well stated by Dr. Barclay), and by the consciousness to all of good done to another—be that other deserving it or not—surely the deed must change its name of *sacrifice* to that of *privilege*.

I cannot close this note without a passing reference to that paragraph in your last leader, in which you sneer at physicians who afford gratuitous advice to certain classes of persons whose education and position in society give them the feelings of gentlemen and gentlewomen, but whose limited means incapacitate them, without great personal sacrifices, for the payment of either the "fees" of the physician or the "bills" of the general practi-

tioner. Surely, while penning that paragraph, you must have forgotten some of the most precious lessons in medical ethics handed down to us by our venerable masters and foregoers, else you would never have treated the matter as you have there done. You cannot be ignorant that it was the invariable practice of the physicians of former days, and has still been that of those who, like myself, have been brought up in the old school, to hold as exempt from fee-giving nearly all the classes enumerated by you in that paragraph; and that the practice of the old school is yet, happily, the rule of many of the rising generation. I need no further evidence than the noble letter of my young friend Dr. John Barclay. Heaven forbid that this old fashion, at least, should ever cease to be the mode among British physicians! Allow me to add, that the application by you of the epithet "erotic" to the conduct of gentlemen whose kind feelings may have prompted them to decline fees from poor gentlewomen, whatever might be their worldly position, is not merely ungenerous, but offensive; and I am sure, on referring to the paragraph containing it, you will regret having used the word, and be ready to admit, with me, that even the HOMER of the ASSOCIATION sometimes nods in marshalling his letters in the field.

I am, etc.,

JOHN FORBES.

Old Burlington Street, Dec. 6th, 1853.

[We stated in our last number (p. 1047), that we conceived it to be now our duty to leave the subject of Gratuitous Services in the hands of the Committee of inquiry, as every member of the Association was invited to lay his views before it. We said: "It is not our intention, either by a notice of communications or otherwise, to anticipate a discussion which can only properly arise after a report has been furnished." We certainly had intended not only to cease from discussing the subject ourselves, but also, in the mean time, to close the Journal against letters on the subject. We feel assured, however, that we best perform our duty by making an exception from the rule which we had laid down, to the extent of printing, without comment or reply, the letter of Sir John Forbes. Our aim, in this and all other discussions which arise in the Journal, is to avoid pushing our individual views in a controversial spirit, and, at the same time, to hazard with frankness our own opinions, so as effectively to elicit the sense of the profession. We have spoken; and it is for others to say whether Sir John Forbes has correctly interpreted and fairly judged our sentiments. EDITOR.]

NEWS AND TOPICS OF THE DAY.

CLOSING OF METROPOLITAN BURIAL GROUNDS. By orders in Council, dated the 25th of November, which appeared in Tuesday's *Gazette*, burials must be wholly discontinued from the 6th of December in the parishes of St. Botolph, Billingsgate, and St. George, Botolph Lane; in the church-yards of the parishes of St. Mildred-the-Virgin and St. Mary Colechurch; in the parishes of St. Martin Outwich and of Allhallows-on-the-Wall; in the burial-grounds of St. Michael Bassishaw and Christchurch, Newgate Street, with St. Leonard, Foster Lane; in the churchyard and vaults of St. John, Wapping; in Sheen's New Burial-ground, Whitechapel, in which burials have already taken place; in the London Hospital burial-ground; in the vaults under Holy Trinity, Southwark; in New Bunhill Fields Cemetery, in the part already buried in; in the vaults under the Wesleyan Chapel, Deverell Street; in the City Bunhill Fields burial-ground; in St. Mary, Battersea; in All Souls, Fulham, in that part in which burials have taken place within the last 20 years; in St. Mary, North End, except under certain restrictions; in the Dutch Reformed Church, Austinfriars; in St. Barnabas, Kensington; in the Neckinger burial-ground; in Southwark Chapel and ground; in St. John's, Clerkenwell; in Benjamin Street burial-ground; under Greenwich Road Chapel; under St. Mary, Rotherhithe; in Christchurch, Rotherhithe; in Stepney Meeting burial-ground; in St. John's New burial-ground, Horselydown; under St. Anne's, Limehouse; in Salem Chapel burial-ground; in Enon Chapel burial-ground; under Queen Street Chapel, in St. Anne's, Limehouse; in St. Peter-ad-Vincula; in Old Gravel Lane Chapel burial-ground, in Gibraltar burial-ground; in and under St. Nicholas, Deptford; under St. Paul, Deptford; in and under High Street Chapel; in and under the Wesleyan Chapel, Mary Ann's Buildings; in the Quaker burial-ground; in the General Baptist burial-ground, Church Street; under Holy Trinity, Brompton; in Stockwell

New Chapel burial-ground; in the burial ground of and under the City Road Chapel; in Bunhill Fields burial-ground; under St. Mary's, Stratford-le-Bow; in the East London Cemetery, and under Brunswick Chapel, Stepney; in East Hill burial-ground, Wandsworth; in the ground and under the Roman Catholic Chapel, Moorfields; and in Putney parish church. It is further ordered that burials be discontinued in the churchyard of St. Peter's, Hammersmith, at the end of twelve months; in the churchyard of All Saints, Poplar; of the Roman Catholic burial-ground, Wade Street; in Sheen's burial-ground wholly, and in various other grounds enumerated on the 1st of April next year. Other burial places will be closed within various periods in this and in the ensuing year. Burials in All Souls Roman Catholic Cemetery must be discontinued within five years, and restrictions are placed on the burial of more than one body in one grave in the great majority of those burial-grounds which are allowed to exist in future, the rights of family burial in private graves and vaults being, however, in several instances preserved.

ROYAL SOCIETY. The anniversary of this society was held November 30th, the Earl of Rosse, president, in the chair. His Lordship delivered his annual address; after which the Copley medal was presented to M. Dove, of Berlin, for his work on the distribution of heat over the surface of the earth; and the Royal medal to Mr. Charles Darwin, the eminent naturalist, for his works on natural history and geology. The following office-bearers were elected for the ensuing year. *President*, the Earl of Rosse; *Treasurer*, Colonel E. Sabine; *Secretaries*, S. H. Christie, Esq., and W. Sharpey, M.D.; *Foreign Secretary*, Rear-Admiral W. H. Smyth. *Other Members of Council*, T. Bell, Esq., Rev. J. Booth, LL.D., *W. de la Rue, Esq., *Captain Robert Fitzroy, R.N.; T. Graham, Esq., *W. R. Grove, Esq., J. D. Hooker, M.D., *T. H. Huxley, Esq., H. B. Jones, M.D., G. Newport, Esq., *J. Phillips, Esq., *Sir F. Pollock, *Rev. Baden Powell, *G. G. Stokes, Esq., *W. Tia, Esq., *Charles Whetstone, Esq.

Those names to which an asterisk is prefixed are those of new members of Council.

After the meeting, the Fellows of the Society and their friends dined together, at the Freemasons' Tavern, the Earl of Rosse, President, in the chair.

LIBELLOUS STATEMENTS REGARDING DR. W. O'CONNOR. [Bail Court, Nov. 25. The Queen v. O'Shea and others.] Mr. Sergeant Shee moved for a rule to show cause why a criminal information should not be filed, at the instance of Dr. William O'Connor, against Michael Keating O'Shea, Thomas Clayton, the elder, and Thomas Clayton, the younger, for a libel which appeared in a paper called the *Weekly Telegraph*, published in Dublin. The libel contained statements that the applicant was not entitled to put "M.D." at the end of his name, and imputed, generally, that he was an impostor. The affidavits denied all the imputations in the libel, and stated that, in October 1852, the applicant was examined for three days before the University of St. Andrew's, in Scotland, as a candidate for the degree of M.D.; and that, after such examination, he had been declared to have passed his examination, and he received the degree of M.D.; and the applicant denied that he was a samter about the House of Commons, as imputed in the libel, while he admitted that he occasionally went there to see members. Mr. Justice Crompton said he thought the article libellous; and remarked, that perhaps the object would be attained by publicity. Rule granted.

FEVER STATISTICS OF THE FRENCH GARRISON AT ROME. In a Roman newspaper of the 20th October, we find the following paragraph:—"The influence of fever, which has been more than usually severe this season, is now on the decline. The medical returns of the French garrison for the months of July, August, and September, show the following results:—

Patients in hospital at 1st July	179
Patients admitted during July, Aug., and Sept.	343
Patients dismissed during same period	259
Patients died during same period	45
Remaining in hospital, 30th September	138

The mortality has therefore been three per cent. This result is the more satisfactory, because among the 45 deaths was one suicide, and some chronic cases of phthisis and disease of the heart, as well as some cases of typhoid fever among soldiers recently arrived from France. The deaths from the Roman fever were therefore very few. The cases, though of the same character, were not nearly so severe as those which prevailed among the French troops in Africa."

MEDICAL SOCIETY OF LONDON. The following papers are announced.

Saturday, December 10th. The Modern Philosophy of Cancer. By R. Druitt, M.D.

Monday, December 12th, in the Physiological Section. The Modus Operandi of Narcotico-Irritants. By John Snow, M.D.

Saturday, December 17th. Source of Hemorrhage in Partial Separation of the Placenta. By F. W. Mackenzie, M.D.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH. At the Annual Election Meeting of the College, held on the 1st December, 1853, the following gentlemen were chosen Office-Bearers for the ensuing year:—*President*: Dr. T. S. Traill. *Vice-President*: Dr. James Y. Simpson. *Other Members of Council*: Dr. Robert Christison, Dr. Alexander Wood, Dr. John G. M. Burt, Dr. James Begbie, Dr. John Taylor. *Censors*: Dr. John Hughes Bennett, Dr. David MacLagan. *Treasurer*: Dr. John Taylor. *Secretary*: Dr. Alexander Wood. *Librarian*: Dr. John Brown. *Procurator-Fiscal*: Dr. John Moir. *Keeper of Museum*: Dr. James Stark. *Clerk*: Mr. Kenneth Mackenzie. *Under-Librarian*: Mr. John Small. *Officer*: Thomas Marshall. *Examiners of Foreign Graduates*: Dr. Robert Christison, Dr. T. S. Traill, Dr. Wm. Seller, Dr. John Moir, Dr. Alexander Wood, Dr. William Robertson, Dr. David MacLagan.

UNIVERSITY OF LONDON:—PASS LIST. M.B. Second Examination, 1853. *First Division*:—Henry Briggs, University College; Erlin Clarke, King's College; James Cato De Castro, University College; James Ekin, University College; Evan Evans, University College; John Henry Gould, University College; William Edward Masfen, King's College; William Roberts, University College; John West Walker, St. Bartholomew's Hospital; Thomas Buchanan Washbourn, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the college at the meeting of the Court of Examiners, on the 18th November:—Messrs. Frederick Bromley, Bath; Edward Hemings Snoad, Ashford, Kent; Walter Leach, Martock, Somerset; Edward George, Calcutta; Edward Long, Berkeley, Gloucestershire; Frederick Edgar Cockell, Queen's Road, Dalston; John Maurice, Plymouth; John Birch, Manchester; Charles John White, Storey's Gate, Westminster; John Bishop King, Brighton; and Robert Harmer, Wells, Norfolk.

At the same meeting of the Court, Mr. William Patrick passed his examination for Naval Surgeon.

LICENTIATES IN MIDWIFERY admitted:—James Lovell, Canterbury, diploma of membership dated June 17th, 1853; Charles Dunn, Scarborough, July 4th, 1853; John West Walker, Spilsby, October 11th, 1850; Samuel Argent, Hinchley, July 1st, 1853; John Rains, Bonsall, Derbyshire, May 20th, 1853; Thomas Duncan, Chelsea, October 28th, 1853; John Hudson, Newport, Yorkshire, April 15th, 1853; Henry Thomas Cornelius, Northampton, July 9th, 1850; Thomas Joseph Cookson Powell, Bristol, October 28th, 1853; Frank Powell, Chichester, October 14th, 1853.

APOTHECARIES' HALL:—PASS LIST. Thursday, Nov. 3rd, 1853:—William Valentine Bird, Seacombe, Liverpool; Thomas Booth Brierley, Tattenhall, Cheshire; John Wells Fletcher, Upton-on-Severn, Worcestershire; George Augustus Fulcher; Robert Harmer, Wells, Norfolk; Henry Frederick Marley, Padstow, Cornwall; John Benson Pritchard, York; Silvanus Tucker, Bridport, Dorsetshire.

Thursday, November 10th:—William Boyd Moss; Augustus Charles Short; William Armstrong Smith, Bedford; William Stillman, Camp Hill, Birmingham; William Williams Thomas, Fishguard, Pembrokeshire.

APPOINTMENTS.

[*An asterisk is prefixed to the names of Members of the Association.]

BURD, Henry Edward, Esq., elected Surgeon Extraordinary to the Salop Infirmary, Shrewsbury.

HALDANE, Daniel Rutherford, M.D., appointed Pathologist to the Royal Infirmary of Edinburgh, in the room of Dr. W. T. Gairdner.

*KIRKMAN, William P., Esq., Assistant Medical Officer to the Suffolk County Asylum, elected Assistant Medical Officer to the Devon County Lunatic Asylum, in the room of Dr. John Manley.

*LEONARD, Crosby, Esq., elected Surgeon Accoucheur to the Bristol Dispensary on the 11th November, in room of W. James, Esq., deceased.

*WOOD, Samuel, Esq., elected Surgeon to the Salop Infirmary, in the room of H. E. Burd, Esq., resigned.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

*FOOKES, Robert, Esq., of Stalbridge, Dorset, at 49, Cumberland Street, London, aged 52, on December 1.

FRITH, Richard, M.D., late of the Bombay Medical Establishment, at Counter Hill Villa, Lewisham Road, aged 63, on November 22.

SINGLETON, Joseph W., Esq., Surgeon, at Hill Top House, Leicestershire, on November 12.

THATCHER, John, M.D., at 14, Picardy Place, Edinburgh, on November 30. Dr. Thatcher graduated at Edinburgh in 1805; and in 1816, he commenced to deliver lectures on Midwifery and Diseases of Women and Children. He gradually acquired, and for a long time possessed, a large share of the confidence of the public. Increasing infirmities have for some time past greatly withdrawn him from practice.

WOODWARD, Thomas Charles, Esq., Surgeon, of Penton, near Andover, aged 59, on November 7.

BOOKS RECEIVED.

[*An asterisk is prefixed to the names of Members of the Association.]

ABEL, F. A., and BLOXAM, C. L. *HAND BOOK OF CHEMISTRY.* pp. 724. London: 1854.

*BARLOW, W. F. (the late). *ON FATTY DEGENERATION.* pp. 92. London: 1858.

BRANSTON, T. F. *THE DRUGGIST'S HAND-BOOK OF PRACTICAL RECEIPTS.* pp. 256. Liverpool: 1853.

*BULEY, F. A., Surgeon to the Royal Berkshire Hospital. *CASES OF CHOLERA SUCCESSFULLY TREATED BY HOT WATER APPLICATIONS.* pp. 24. London: 1853.

DICKINSON, William. *UNCONSTITUTIONAL AND ILLEGAL PROCEEDINGS OF THE COUNCIL OF THE PHARMACEUTICAL SOCIETY.* Pamphlet, pp. 48. London: 1843.

DRUITT, Robert, Licentiate of the Royal College of Physicians of London. *SURGEON'S VADE MECUM: A Manual of Modern Surgery.* [Sixth edition.] 12mo. pp. 691. London: 1853.

*FEILD, John J., M.D., and SKEV, F. C. *REMARKS ON THE MEDICAL EVIDENCE given at the Trial of William Bourke Kirwan, for the murder of his wife.* Pamphlet, pp. 15. London: 1853.

GEE, Robert, M.D. *CHOLERA: a Report on the late Visitation in Liverpool.* Pamphlet, pp. 30. Liverpool and London: 1853.

GUY, William Augustus, M.B. Cantab. *HOOPER'S PHYSICIAN'S VADE MECUM: A Manual of the Principles and Practice of Physic.* [Fourth edition.] 12mo. pp. 660. London: 1854 [sic.]

*SOUTHAM, George, F.R.C.S. *INTRODUCTORY LECTURE at the Opening of the Session of the Chatham Street School of Medicine, Manchester (October 3d, 1853).* pp. 24. Manchester: 1853.

SYME, James, Esq., Professor of Surgery in the University of Edinburgh. *DISEASES OF THE RECTUM.* pp. 133. London: 1854.

THE CLERGY AND HOMOEOPATHY. By a Member of the Royal College of Physicians. pp. 32. London: 1853.

*THOMPSON, Henry, M.B. *PATHOLOGY AND TREATMENT OF STRICTURE OF THE URETHRA.* (Jacksonian Prize Essay for 1852.) pp. 424. London: 1854.

*THOMPSON, Theophilus, M.D. *CLINICAL LECTURES ON PULMONARY CONSUMPTION.* pp. 211. London: 1854.

WARD, S. H., M.D. *THE SCIENCE OF HEALTH.* pp. 412. London: 1853.

TO CORRESPONDENTS.

CHOLERA. Letters in our next.

GRATUITOUS MEDICAL SERVICES; CHLOROFORM IN MIDWIFERY; AND THE VACCINATION ACT. We cannot, with the other heavy demands upon our space, insert any additional letters at present on these subjects.

COMMUNICATIONS AND PROOFS FOR THE EDITOR may be sent to the Editor's residence, Essex House, Putney, London.

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. X.—WEEK ENDING 3RD DECEMBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. MONTH and DAY.	Barometer.		Thermometers.						Degree of Humidity for the Day.	Wind.		Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Hail, Snow, Fog, Frost, Thunder, Thunder and Lightning, Aurora, &c. Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.	
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.		Direction.	Mean Force for the Day.							
Nov.	in.	in.	°	°	°	°	°	°		p.m.	a.m.	0-6	am/pm	0 - 10		in.		
27 S.	30.087	30.072	40.9	33.	36.7	40.	26.7	34.8	0.931			1		10	Fog.	0.012	Neu. 5 p.m. Br.	Prem. birth. Perio-
28 M.	29.997	30.006	45.8	39.5	42.4	46.7	34.	40.2	0.949	SE.	SSE.	1		10, s.		0.284	Inf. 2, Qu. 2. [Gum-b.	Conv.
29 Tu.	29.809	29.734	51.8	41.5	46.4	52.	36.5	46.1	0.930	ESE.	S.	1		10, n. s.		0.225	Cyn. L. Inf. 2, Br. 2.	Conv. Paralysis.
30 W.	29.906	29.998	50.8	40.5	45.4	51.	33.	44.7	0.959	SSW.	SSE.	1		10, s.		0.007	Conv. Ang. Pec. Sc. Fe.	Phthisis & Hemop.
1 Th.	29.970	29.926	53.3	35.5	44.2	54.	32.	45.2	0.931	SE.	SSE.	1		10, s. cu. s.			Inf. [Herpes Zoster.	[Old age (94), Br.
2 F.	29.909	29.878	38.1	27.2	32.4	38.2	26.	34.0	0.966	SE.	W.	1		10, s. cu. ci. s.			Vom. 4 p.m. Cr. Boils.	
3 S.	29.886	29.870	30.4	24.7	27.5	30.4	20.	27.6	0.949					10, s. cu.	Fog.		Di. 8 a.m. T. 6 a.m.	
Col.	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. Observer: T. MOFFAT, M.D.

Nov.	27 S.	29.909	29.861	34.0	29.0	31.5	36.0	23.5	33.0	1.000	SSE.	SSE.	1	0	7, cl. ci. cu.	0.00	Diarrhoea 2.	
28 M.	29.829	29.841	47.0	33.5	40.2	53.0	32.5	44.0	1.000	SSE.	S.	0	0.5	2	10	0.10	Di. Neu.	
29 Tu.	29.572	29.525	50.5	42.0	46.2	51.0	38.0	48.0	1.000	SSE.	S.	2	5		10	0.05		
30 W.	29.687	29.846	49.5	46.0	47.7	54.0	41.0	44.9	0.933	0	0	0	0	0	10	0.15	Di.	
1 Th.	29.766		51.0	44.0	47.5	53.0	32.5	49.0	1.000	SSE.	S.	0	0.5	0	9, ci. ci. cu. ci. s.	0.05		
2 F.	29.701	29.679	39.5	36.0	37.7	38.0	25.5	35.5	0.917	SE.	SSE.	1	0		5, ci. ci. s.	0.00	T. 2, Neu.	
3 S.	29.738	29.715	34.0	28.5	31.2	38.0	26.5	33.0	1.000	SSE.	SSE.	1	0		9	0.00		

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. Observer: J. W. JEANS, Esq.

Nov.	27 S.	30.009		40.6	34.4	37.5	33.0	35.4	0.968	S.	S.	0			10, ci. s.	Mist.	0.115	Nov. 26. Ery. 5 p.m.	Decay of nature. Old
28 M.	29.990		43.1	34.2	38.7	31.5	35.5	0.917	S.	S.	0.5				10, ci. s.	Sl. mist.			[age and general
29 Tu.	29.811		47.2	38.1	42.6	37.5	37.0	0.934	S.	SSE.	3				10, ci. s.	Sl. mist.	0.060	Croup 11 p.m.	[debility.
30 W.	29.873		49.8	46.2	47.5	42.3	47.4	0.975	WSW.	SSE.	0				10, ci. s.	Mist.	0.340	Epilepsy 4 a.m.	
1 Th.	29.934		50.4	46.4	48.4	45.5	48.8	0.983	S.	WSW.	0.5				8, ci. cu. s.	Mist.	0.075		
2 F.	29.834		38.4	31.8	35.1	31.0	29.9	0.892	SE.	S.	0				8, ci. s.	H.-fr. f.			Old age.
3 S.	29.837		30.8	26.8	33.3	26.8	29.5	0.877	SW.	SW.	0				10, ci. s. ci. cu. s.	H.-fr. f.			Pneumonia. Di.

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. Observer: T. H. BARKER, M.D.

Nov.	27 S.	30.076	29.962	42.6	38.5	30.5	46.5	32.0	35.5	0.828	NE.	NE.	1	0	7, cu.	0.05			Decay. Inf.
28 M.	29.978	29.970	45.5	33.0	39.2	43.5	31.5	36.9	0.820	SSW.	SSW.	0.5	0		7, cu.	0.00	Vert. Inf.		Sc. Fe.
29 Tu.	29.982	29.907	44.0	37.0	40.5	44.0	38.0	39.1	0.906	S.	S.	0.5	0		9	0.00	Inf.		Cyn. Tr.
30 W.	29.954	29.946	40.5	46.0	48.2	50.0	41.0	43.4	0.959	SSE.	SSE.	0.5	0		10	0.10			
1 Th.	30.005	29.986	47.0	48.0	47.5	49.5	46.7	46.3	0.958	SE.	SE.	0.5	0		6, ci. s.	0.10	Rub. Di. Inf.		Conv.
2 F.	29.921	29.886	40.5	30.0	35.2	43.0	31.0	33.6	0.870	E.	E.	0.5	0		2, ci.	0.00	Sc. Fe. Decay.		
3 S.	29.922	29.916	41.5	27.5	34.5	41.5	29.0	31.5	0.880	SSE.	SSE.	0.5	0		9	0.00			

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. Observer: C. L. PRINCE, Esq.

Nov.	27 S.	30.096		43.	29.	36.	43.	27.	36.7	0.892	N.	NW.	1	3	10, ci. s. n.	Frost.	0.05	Phlegmon. T.	
28 M.	30.175		46.	35.	40.5	46.	33.	35.6	0.858	NW.	NW.	1	1	10, ci. s.				Ery. Neu. T. 2.	
29 Tu.	30.138		44.	36.	40.	45.	36.	30.6	0.708	S.	S.	3	2	10, ci. s. n.				Br. T.	Atrophy, et 5 months.
30 W.	30.058		50.	44.	47.	51.	40.	48.0	0.965	SW.	SW.	2	2	10, ci. s. n.				Bilious Vom. T. Fe.	[na. et 55.
1 Th.	30.110		50.	42.	46.	58.	42.	42.9	0.931	S.	SE.	1	2	5, ci. s. n.				Conv. Epis. Cho.	Atrophy from Mel-
2 F.	29.950		43.	31.	37.	52.	29.	29.5	0.764	SE.	W.	1	4	5, ci. ci. s.					
3 S.	29.973		50.	29.	39.5	57.	27.	36.5	0.917	E.	SE.	1	8	0				Colic — Vom.	

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. Observer: T. SHAPTE, M.D.

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RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. Observer: B. BARROW, Esq.

Nov.	27 S.	30.098		44.0	36.4	40.1	44.0		35.4	0.858	NE.		0.5							
28 M.	30.163		44.0	35.0	40.7	44.0			38.4	0.859	SE.		0.5							
29 Tu.	30.059		50.0	34.4	43.9	50.0			38.4	0.859	S.		0.5		10	0.02				
30 W.	30.017		51.0	40.4	46.1	51.0			49.4	1.000	SE.		1.0		10	0.04				
1 Th.	30.057		52.0	46.4	49.5	52.0			46.4	0.871	E.		0.5		10	0.03				
2 F.	29.874		52.0	35.6	43.4	51.0			35.6	0.797	E.		0.5		3					
3 S.	29.917		51.0	34.9	42.1	47.0			34.9	0.858	SE.		0.5							

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. Observer: S. E. HOSKINS, M.D.

Nov.	27 S.	30.002	30.071	47.	43.	45.			39.7	0.803	NNW.	sbw.	1		7, cu. s.					
28 M.	30.126	30.113	47.	41.	44.				38.7	0.802	sbw.	sbw.	0		6, ci. cu. s.					
29 Tu.	30.011	29.974	46.5	40.5	43.5				41.9	0.897	sbw.	sbw.	2.5		8, cu. s. n.				Cyn. T.	
30 W.	30.019	30.018	52.	42.	47.				50.	0.934	sbw.	sbw.	1.5		8, cu. s.				Di.	Apop. 2 p.m.
1 Th.	29.987	29.892	47.5	46.	46.7				42.5	0.866	nbe.	nbe.	1		5, ci. cu. s.				Di. Ischur. Renalis.	
2 F.	29.794	29.776	44.	42.	43.				38.6	0.859	nbe.	nbe.	0		3, ci. cu. s.				Dys. Inf.	
3 S.	29.873	29.825	46.	39.	42.5				40.8	0.863	nbe.	nbe.	1		4, ci. cu. s.				Inf. 3.	

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. L.

LONDON: FRIDAY EVENING, DECEMBER 16, 1853.

NEW SERIES.

INSTRUMENTS FOR MEDICO-METEOROLOGICAL OBSERVATIONS.

IN reply to several queries respecting the best instruments for medico-meteorological observations, we are now able to offer a few remarks, which we hope will be found useful.

The following instruments may be safely recommended:—Barometer, by Barrow, 26 Oxendon Street, London; Dry and Wet Bulb Thermometers, Maximum and Minimum Thermometers, Rain Gauge, by Negretti and Zambra, 11 Hatton Garden, London.

Excellent, but more expensive instruments, by other eminent makers, might be named; but, as a *set* for the use of meteorological observers, the above will be found complete. The whole are made under the direction of JAMES GLAISHER, Esq., F.R.S., who compares their readings with the standards of the Royal Society, and gives a certificate to that effect, containing the index errors of each instrument. This is most important and essential, as no observations can be relied upon without these errors having been ascertained.

With regard to fixing the instruments, and taking observations:—

Before fixing the barometer, incline it a little downwards, so as to allow the mercury to reach the top of the tube. If the “tap” of the mercury be heard distinctly, the vacuum is perfect; but if the sound be dull and “puffy”, the vacuum is imperfect. Fix the instrument in a good light, so that the ivory point in the cistern, and the top of the mercurial column, can be clearly seen. It must be placed perpendicularly, which can be done by applying the line and plummet sideways and in front; and, if not quite perpendicular when fixed, it can be made so by the adjusting screws at the top of the stem. On reading the instrument, first write down the reading of the attached thermometer; then tap the wooden frame; next, by means of the screw at the bottom of the cistern, put the surface of the mercury so near to the ivory point as to show it and its reflection *just* in contact. Set the index to the upper surface of the mercurial column, just near enough to exclude the light, placing the eye so as to bring the lower edges of the index to coincidence.

The dry and the wet bulb thermometers should be fixed in a shaded place, where the air can have free access. The wet bulb is kept moist by being covered with book-muslin, having in contact with it lamp-wick, which communicates with a small vessel of rain-water. A full description of these instruments will be found in Glaisher's *Hygrometrical Tables*, which may be procured from Messrs. Taylor, of Bolt Court, London.

In fixing the maximum and minimum thermometers, the place chosen must be perfectly shaded from direct sunshine, and protected from rain and local radiation. They should be so fastened as to allow one end to be detached, for the purpose of adjusting the indices.

The thermometer for solar radiation should have a black-

ened bulb, be freely exposed to the sun, and so placed as to be free from any object heated by the sun's rays.

The thermometer on grass should be placed in an open space, freely exposed to the sky, where there are no trees, hedges, walls, or any object that might prevent free radiation.

In reading the thermometers, the observer should avoid breathing upon them, or in any way warming them by the too near approach of his person. It is necessary, therefore, to take the observations *quickly*.

The mode of measuring the quantity of rain will depend upon the construction of the rain gauge in use.

The observer should have access to some trustworthy wind-vane. He must ascertain, by means of a compass, whether the cardinal points are correctly arranged; bearing in mind the number of degrees of declination from the astronomical meridian of the locality.

Certain corrections for capillarity and temperature have to be applied to the barometric observations, which may be ascertained by referring to pp. 81, *et sequent*, of the *Report of the Committee of Physics*, published by Richard and John E. Taylor, Red Lion Court, Fleet Street, London.

The several facts to be deduced from the readings of the dry and the wet bulb thermometers, such as the temperature of the dew point, the elastic force of vapour, the weight of vapour in a cubic foot of air, the degree of humidity, etc., must be done from Glaisher's “Tables”, before mentioned.

We have reasons for believing that the few remarks we have now given will be acceptable to several gentlemen. It is not unlikely, however, that some difficulties will be met with; and some questions may arise requiring solution, particularly in reference to the use of the “Tables” before named. We have no doubt that any of the gentlemen, whose daily observations are inserted in this Journal, will be most happy to afford any information which may be required: indeed, we are already authorised to say, that two of our coadjutors, Dr. MOFFAT of Hawarden, and Dr. BARKER of Bedford, will be glad to answer, in the mean time, any questions addressed to them.

THE MEDICAL REFORM MOVEMENT.

AFTER a brief repose, the subject of MEDICAL REFORM has once more come into the arena of public discussion, as will be seen by the report in another page, of the proceedings of the Metropolitan Counties Branch. It is probable and desirable that all the Branches will, at their earliest convenience, meet to consider the draft of the Bill sanctioned by the Reform Committee, and which is likely soon to be published in the Journal. With this document in view, subsequent debates are likely to take such a turn as will cause them to elicit and impart more information regarding details, negotiations, and concessions than transpired on Tuesday.

The present position of the Draft Bill of the Medical Reform Committee of the ASSOCIATION ought to be borne in mind. It may be stated in a very few words.

The last published edition of the Bill came out on the 10th November, 1852; but the Committee did not then pledge themselves to every detail of the Bill, though they expressed their conviction that its general principles commanded the assent of the great majority of the profession. On the contrary, they solicited comment upon it from the different corporate bodies, and from the different classes of practitioners; and they avowed their wish and their determination to bring it as much as possible into harmony with the general sense of the profession, whilst they kept steadily in view the three principles to which the ASSOCIATION has been so long pledged: viz.

I. UNIFORMITY OF QUALIFICATION.

II. EQUAL RIGHT TO PRACTISE THROUGHOUT THE KINGDOM; AND

III. REPRESENTATIVE COUNCILS FOR THE GOVERNANCE OF THE PROFESSION.

The Reform Committee has been in friendly communication with the Scottish Colleges, and with the College of Physicians in London. They have also received hints and advice from several Branches of the ASSOCIATION. It is the result of all these negotiations and correspondences which is to be considered by the Committee on Monday next at Birmingham. At that meeting, we believe the draft of a Medical Reform Bill will be agreed to, and forwarded to us for immediate publication. We trust that the Committee may continue to receive general support, and that funds may not be wanting to enable them to make the coming campaign one of vigour and of victory. The donations already received are considerable, and the pecuniary assistance announced by Sir Charles Hastings as having been contributed by the Gloucestershire Association is a peculiarly encouraging sign of confidence and co-operation. We trust that all minor differences may be merged, and that a united and energetic demand may be made for such a measure as all will be ready to admit is at least a good instalment of Reform.

If the general sense of the meeting of the Metropolitan Counties Branch be in accordance with the feeling of the profession throughout the kingdom, two things are evident. FIRST, that the silence for some months past must not be taken as an indication of apathy on the part of medical men on the question of medical reform; and, SECONDLY, that the *principle of representation*, more or less extended, must be admitted in a reform bill calculated to satisfy the profession.

During the discussion, a collateral question of great interest and importance was incidentally, though plainly, referred to by Dr. Webster, Mr. Bowling, and Mr. Richardson, viz., the adoption of the representative principle in the constitution of the General Council of our own body. Two of these gentlemen, Dr. Webster and Mr. Bowling, are known and respected as veteran reformers and enlightened practitioners; while Mr. Richardson is a junior member of the ASSOCIATION, and more the man of science than the politician. It would be out of place here to enlarge upon this question; but it would be equally wrong to allow the observations of the gentlemen referred to to pass unnoticed, believing as we do that they refer to a question upon the judicious solution of which depends much of the life, usefulness, and future greatness of our ASSOCIATION.

We ought not to conclude this notice of the meeting of Tuesday, without again reminding our readers, that as the new edition of the Bill is not yet promulgated, the proposi-

tions discussed were of a general kind, and reflected merely the opinions of the gentlemen present upon abstract principles of medical reform. Those who wish for additional information as to the operations of the Committee, or who desire to make donations to its funds, ought to place themselves in communication with its Secretary, G. W. Hastings, Esq., 6, Paper Buildings, Temple.

TO CORRESPONDENTS.

CHOLERA. Letters postponed in consequence of the unexpected length of the Reports of the Edinburgh Medico-Chirurgical Society and Metropolitan Counties Branch.

MEDICAL STUDENTS. We have received a great many letters on this subject. They shall have our earliest possible attention.

NEWS AND TOPICS OF THE DAY.

THE MEDICAL PRACTITIONERS OF THE CHORLTON ON MEDLOCK UNION AND THE VACCINATION ACT. The following memorial to the Poor Law Board, and to the Board of Guardians of the Chorlton Union, was unanimously adopted at a meeting of the profession residing in the before named Union, held on Tuesday, December 6th; Dr. Bowman occupying the chair. The signatures are forty-three in number, constituting six-sevenths of the whole profession within the Union, exclusive of the present district vaccinators.

"To the Honourable the Commissioners of the Poor of England and Wales, the memorial of the undersigned medical practitioners, resident within the limits of the Chorlton Union, respectfully sheweth,—That experience has already demonstrated the Compulsory Vaccination Act to be an inefficient measure, since, whilst it requires medical practitioners to furnish duplicate certificates of successful vaccination, it contains no provision for their remuneration for the trouble such certificates must occasion. Neither has the Act any power to enforce the production of these duplicates; this object being only attainable by an indictment for misdemeanor. The adoption of this course would render the measure still more odious both to the profession and to the public, and would further tend to defeat the objects contemplated by its promoters. That, in the opinion of your memorialists, all the purposes of the Act would be attained by appointing each qualified practitioner a vaccinator, and by paying him for every duplicate certificate of successful vaccination. That, whilst the adoption of this plan would encourage the younger practitioners to vaccinate the children of the poor, it would, by its recognition of the just claim of the profession to remuneration for its labours, lead all classes of its members to co-operate heartily in giving effect to the Act, and thus make the practice of vaccination universal.—E. Tomlinson, William Skinner, Wm. Winn, Farquhar Milne, Thomas Mellor, A. T. Preston, J. W. Wainwright, John D. Ward, Thomas Wild, James Armstrong, Peter N. Roberts, Thomas J. Wilkinson, J. Robb, Robert Hislop, Samuel Whillow, Joseph McKend, Hector Helsham, W. C. Williamson, R. Trafford Whitehead, James Lowe, St. John Wells Lucas, John Dill, Geo. Pettinger, Geo. Wm. Pettinger, H. M. Williamson, J. Wilson, James E. Partington, Geo. Bellasis Masfen, Samuel Crompton, Joseph Peel Caslow, Joseph Murphy, Alex. Wilson, David Bowman, Wm. Lees, Charles James Rix, Wm. Bates, Joshua Barlow, Henry Swift, A. W. Dumville, James Braid, Thomas Wood, Wm. James Wilson, John Aikenhead."

ROYAL COLLEGE OF SURGEONS:—PASS LIST. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the college at the meeting of the Court of Examiners, on the 25th November:—Messrs. Philip Vincent, Camborne, Cornwall; Samuel Delprat, Hon. East India Company's Service, Bengal; William Mason, Ashby-de-la-Zouch; William Roberts, Manchester; Henry Wm. Freer Lomas, Derby; Henry Morris Simmonds, Linsfield, Sussex; John Thomson, Belfast; Alfred Stevens, Hammer-smith; John Joseph Coghlan, Old Cavendish Street; and Edward Dowson, Whitby, Yorkshire.

ORIGINAL COMMUNICATIONS.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE ŒSOPHAGUS.

By C. E. REEVES, B.A., M.D.

CANCER.

CANCER presents some distinctions from ulceration, in the point of the canal which it attacks. No part is exempt; but the lower half seems to present a greater tendency than the upper. Of the thirty-three cases which I have collected from various sources, the upper half of the canal, including the lower part of the pharynx, was affected in thirteen; in the remaining twenty, the lower half was the seat of the disease: in two only was the disease seated in the inferior fourth.

The fibrous and encephaloid forms of cancer seem to be of much less frequent occurrence than the cartilaginous; and Lebert (*Traité Pratique des Maladies Cancéreuses*, 444) makes the same remark on the general absence of fibrous element. He insists that it is rare to meet with general infection of the system with secondary deposits, the disease being generally confined to the œsophagus itself, or the parts adjacent. The same remark was made before by Rokitsansky (*Pathol. Anatomie*), who also observes that the œsophagus is very rarely the seat of secondary disease, and then only when the posterior mediastinum has been diseased. The case of Grisolle seems to have been of this character; and Desgranges (*Journal de Corvisart*, etc., an. x) mentions the case of a man, aged 50, who had on each breast a cancerous tumour of the size of an egg. He began to suffer from dysphagia, to which cough, expectoration, and difficulty of breathing, were soon joined. Some months before death, he brought up a little glandular body of the size of a pea, followed by some very offensive fluid; and he was enabled to swallow solids. Low fever, with night sweats, soon afterwards set in; and he died suddenly, eight months from the commencement of the dysphagia. In the lower part of the œsophagus, some scirrhous tubercles existed in a state of suppuration; the glands of the œsophagus were much enlarged. The right lung was loaded with tubercles in different stages; and the pleural cavity of that side contained fluid.

Males present a greater tendency to this disease than females, almost in the same ratio as in ulceration. In the cases, twenty-three were males, and nine females.

As regards age, men after the 40th year presented a greater tendency than females.

Ages.	Males.	Females.
From 25 to 30	0	1*
30 " 35	1	2
35 " 40	2	2
40 " 45	3	2
45 " 50	3	1
50 " 55	5	0
55 " 60	1	1
60 " 65	4	0
65 " 70	4	0

ENCEPHALOID DISEASE OF THE CANAL.

CASE I. ENCEPHALOID TUMOUR OF LOWER PART OF THE PHARYNX.† M., aged 45, six months before death, began to suffer from pain in the œsophagus, with dysphagia, first of solids, then gradually extending to fluids. The mucous membrane of the mouth and fauces was injected, and covered with white ashy coloured exudation. An obstruction to the introduction of an instrument from a hard body was met with in the lower part of the pharynx. Hectic set in, and at last the patient sank from inanition.

The lower part of the pharynx was the seat of a tumour;

it was red and livid grey in some points, in others white and creamy; it was ulcerated in parts, from which exuded a dark yellow foetid fluid. The tumour had so obstructed the upper part of the œsophagus, that a straw would pass with difficulty.

Dr. Hodgkin (*Lectures on the Morbid Anatomy of the Mucous and Serous Membranes*, lect. xviii) mentions an instance of encephaloid tumour of the lower part of the pharynx, and the first part of the œsophagus. Difficult deglutition existed. The tumour could be felt; it pressed the larynx forward. It was detached, and brought up.

Monro (*Morbid Anatomy of the Stomach and Gullet*) says that his father met with a case of fungoid disease of the pharynx and upper part of the œsophagus. The patient died from starvation. He himself met with an instance in the pharynx.

Baillie (*Morbid Anatomy*) speaks of a case which he saw, where the pharynx and the upper part of the œsophagus were diseased. Its surface was ulcerated. The case is no doubt the one which Monro's father saw.

CASE II. ULCER OF PHARYNX SURROUNDED BY SOFT WARTY GROWTHS: PERFORATION OF TRACHEA.* F., aged 36, had good health until fifteen months before death. She then began to experience difficulty and pain in swallowing. For nine months her symptoms gradually increased; her voice then became rather hoarse, and she had cough, but no expectoration: this was always excited by attempting to swallow. At this time, she had pain on the right side of the thyroid cartilage, increased by pressure, and attended by fulness of the parts. In a few weeks, she had considerable hæmorrhage, which occurred almost daily, and always followed pressure on the thyroid cartilage. The difficulty of swallowing, and the cough excited by doing so, at last became so distressing, that, for fourteen days before death, she was nourished by beef-tea injections.

An irregular cancerous ulcer existed in the pharynx; it had laid open the trachea immediately below the cricoid cartilage, and affected the right thyroid cartilage and arytenoid muscles. The mucous membrane around the ulcer was covered with soft warty growths.

CASE III. ENCEPHALOID DISEASE OF THE LOWER PART OF THE PHARYNX, AND FIRST PART OF THE ŒSOPHAGUS.† F., aged 45, single, in January 1827, began first to experience difficulty in swallowing dry food; and, by the 1st of April, it had greatly increased. When seen, on the 22nd of August, her pulse was 96, with symptoms of hectic. A gum elastic catheter was passed down five inches from the teeth, when it met with an obstruction. On being withdrawn, a little mucus tinged with fluid blood followed, and she was able to swallow a little fluid with great difficulty. Caustic was applied, and nourishing enemata were thrown up. She lost strength, and the dysphagia increased. The caustic produced so much irritation, that it was obliged to be discontinued. She was seized with dysentery, the discharge consisting of blood and sanies, but without pain or tenesmus. She died on the 12th of September.

The whole of the pharynx, from below the arytenoid cartilage, and for half an inch of the first part of the œsophagus, was covered with a yellowish white substance, with an uneven tuberculated surface, varying in consistence from lymph to soft cartilage. It varied in thickness from a quarter to half an inch, and contained many small cavities. The muscular tissue below it was of a pale yellow hue; and a gland situated behind the diseased part of the canal contained some viscid opaque fluid. The disease had so narrowed the canal, that a crow-quill could with difficulty be made to pass. The unaffected portion of the canal was unusually vascular. The heart and lungs were healthy.

CASE IV. SIMPLE STRICTURE; DILATATION, WITH FUNGOID DISEASE AND ULCERATION OF WALLS; TWO OPENINGS INTO TRACHEA; RINGS OF TRACHEA ERODED; ŒSOPHAGEAL GLANDS ENLARGED.‡ M., aged 50, nine months before death, came under Mr. Ward's care for stricture of the

* This person's sister died of the same disease at 27, and her mother at 56. They are not included in the table.

† Dr. Romberg, in Caspar's *Wochenschrift*, 1858.

• Dr. Jeaffreson, *Transact. of the Pathol. Soc. London*, vol. ii.

† Mr. Cummin, *Edin. Med. Chir. Transact.*, vol. iii.

‡ Mr. Ward, in *Trans. of Path. Soc. of London*, vol. i.

œsophagus of twelve months' existence. For three weeks, he derived benefit from the use of bougies; but, the last time that one was used, blood was ejected and pain excited, which subsequently became constant, and led to the suspicion that cancer existed. The dysphagia gradually increased; and, ten days before death, violent dyspnoea came on, with inability to swallow, each attempt being followed by violent spasmodic cough, and the ejection of the fluid taken. His voice sank to a whisper.

In the œsophagus, immediately below the cricoid cartilage, was a narrow ring, so as just to admit the top of the little finger. Here the mucous membrane formed a valvular fold. Immediately below this was a dilation as low as the bifurcation of the trachea. The walls were thick and irregular with cancerous nodules; the mucous membrane was destroyed. Two openings existed, communicating with the trachea on its anterior walls. The fourth, fifth, sixth, seventh, and eighth rings of the trachea were eroded. The glands of the œsophagus were enlarged.

CASE V. ENCEPHALOID ULCERATION OF THE CENTRE; BRONCHIAL GLANDS ENLARGED.* F., aged 60, seen in July 1796, had been suffering six months from difficulty in swallowing. Food was arrested near the middle of the œsophagus; severe pain was excited, and it was returned. The same difficulty extended sometimes to fluids. She was much emaciated, and suffered considerably from low fever. Cough soon set in, with expectoration of purulent matter; and she sank in the following October.

The bronchial glands were hard and swollen; the lungs contained tubercles in considerable number. The œsophagus, for three inches of its extent in the centre, was in close contact with the lung; and here the walls were fungoid and ulcerated.

CASE VI. FUNGOID DISEASE OF UPPER PART OF CANAL; ENCEPHALOID TUMOUR IN THE CHEST; TUBERCLES IN THE LUNGS.† M., aged 64, of generally good health, had been a soldier from 1797 to 1814. For some time he had brought up filamentous mucus by regurgitation, early in the morning, while fasting. He had never suffered from any difficulty in deglutition till six weeks ago, when suddenly, while at a meal, difficulty was experienced. At the same time he commenced to suffer burning pain at two points, after the passage of both solids and liquids. The voice began to lose its tone. The appetite continued good, but severe constipation set in, and the respiration became oppressed. March 8, 1847, he entered the hospital. His face was of an earthy aspect; and there was considerable emaciation. His neck was prominent on the anterior and inferior part, most on the right. Sonorous râles were heard on both sides of the chest. Deglutition of liquids was yet possible; they descended very slowly, with a gurgling noise, at the points where the burning pain existed. On March 9th, an attempt was made to pass a catheter, but without success; and the same result followed the introduction of a bougie, on the 10th, by M. Baillarger. The moment it reached the bottom of the pharynx, severe pain and cough were induced, with expectoration of filamentous mucus. In the evening, the bougie was passed with greater ease and less pain; and it was repeated several times up to the 13th: then it was not introduced until the 16th, when a larger one was passed. In the evening of this day, spontaneous pain occurred at the spot where the pain was complained of in passing the instrument. On March 17th, the instrument passed. On the morning of the 18th, chills were experienced, followed by fever, which continued until death, on the 22nd. In the last days of life, the emaciation became extreme; the voice was nearly extinguished; the tongue brown; and there was an acid taste in the mouth.

At the *post mortem* examination, the œsophagus, an inch and a half down, presented a tumour which narrowed its diameter, covered by smooth, thin, delicate mucous membrane. This tumour projected from a larger one, situated at the entrance of the chest. It seemed to be formed of

tissue, which had all the characters of encephaloid matter: under the microscope. It was in a state of suppuration. Three inches lower down, a fungous ulcer, two inches and three quarters long, and nearly two inches broad: it was surrounded by two or three small tumours, consisting of encephaloid tissue. The vocal cords were thickened; and, near the commencement of the trachea, the same tumour projected. The recurrent nerves were embedded and untraceable. Tubercles existed in a healing state in the lungs.

CASE VII. SCIRRHOUS CONTRACTION OPPOSITE BIFURCATION OF TRACHEA; FUNGOID MASS BELOW.* M., aged 47, had generally good health, until after some mental trouble which affected him much, when he began to suffer from obstruction to the passage of food, which was at last rejected, mixed with mucus, but often thrown up without any difficulty. The dysphagia would suddenly return at meals; and it would be only with the greatest difficulty, and drinking copiously of water, that the morsel could be made to descend. He suffered from a constant sense of oppression in the centre of the sternum; and deglutition increased this symptom considerably. It was believed to be rheumatism, and was treated as such. The benefit which he derived from calomel and cicuta, and other antirheumatic medicines, strengthened this opinion. He died after vomiting blood for twenty-four hours.

The upper half of the canal was found dilated, and containing coagulated blood. Opposite the bifurcation of the trachea a scirrhus body existed, of the size of half-a-crown, and half an inch thick, which had materially narrowed the canal. From this point to within a short distance of the stomach, it was converted into a red fungoid mass, presenting scirrhus at parts; and here the canal had been narrowed to such an extent, that a small quill would with difficulty pass.

CASE VIII. FUNGOID TUMOUR IN THE LOWER HALF OF CANAL; LUNGS ADHERENT.† M., aged 70, entered St. George's Hospital on 22nd November, 1815. He was unable to swallow either liquids or solids, the difficulty existing opposite the cricoid cartilage. His health had been good until two months previously, when sudden and great difficulty in swallowing came on. During the next three weeks, on some days he was able to swallow fluids, and on others not; then he suddenly recovered the power of swallowing; but ten days before admission, the difficulty returned. He was quite free from pain until within the last few days, when weight and pain in the præcordia came on. He suffered more from hunger than from thirst. If he swallowed anything, it remained down for a few seconds, and was then returned. He expectorated a white, bitter, glairy phlegm. The œsophageal bougie was passed without obstruction; and, three weeks after his admission, he could swallow fluids without much difficulty; but his health continued to sink, and a short time before death, which took place on the 31st of January, an abscess formed under the armpit, and gave issue to a pint of pus.

The œsophagus, just where it entered the posterior mediastinum, was three times its natural size, and of a dark purple hue. On being opened, it was found to contain a large, soft, spongy, fungoid tumour. The lungs were both adherent; the rest of the viscera healthy.

The guard of a mail coach‡ had enjoyed good health until six months before his death, when dysphagia set in. He was placed under an alterative course of mercury; but he derived most benefit from the use of the armed bougie, which never failed to remove the obstruction in the canal. Even within the last month of life, he was enabled to swallow solids cut very small.

SCIRRHOID DEGENERATION OF THE CANAL.

CASE I. ULCER IN PHARYNX.§ M., aged 65, had, from an active, sober life, changed to a sedentary one, and at the

* Hufeland's Journal, 1798.

† Gazette des Hôpitaux, 1847. Service de M. Grisolle.

* Heineken, in Hufeland's Journal, Band xxxii.

† Mr. Hammerton, cited in Sir Charles Bell's Surgical Observations.

‡ Howship, Practical Observations on Indigestion.

§ Desgranges, Journal de Corvisart, Leroux et Boyer. An. x.

same time lived freely. An attack of vertigo was experienced; for this he was leeches. Soon afterwards, some slight uneasiness was experienced in the throat, which, in spite of treatment, went on increasing. When seen, his voice had become hoarse and low during three weeks; the submaxillary glands, particularly on the left side, were tumefied; and the motion of the lower jaw was extremely painful; and there was swelling and pain on the left side of the neck. The left tonsil was inflamed and ulcerated, and the back of the mouth participated in the disease. He had frequent cough, and a great excretion of mucus and saliva, amounting to from three to four pints a day. In swallowing, the greatest difficulty was with the first mouthful; if it passed, the remainder seemed to go well. A seton was introduced, and camphor and mercurial frictions were ordered, but to no purpose. At the end of a month, the deglutition had become more difficult; he could swallow only by depressing his head. The voice was more affected. His strength was much reduced. A sanious discharge was mixed with the mucus and saliva. Respiration was short and difficult; and death from suffocation ensued.

The maxillary glands, particularly the left, were much engorged; as was also the thyroid. The left half of the root of the palate was confounded with the pillars and the left tonsil, forming a scirrhus ulcer, which extended down the left side of the pharynx. A hardness also existed, extending from the tonsil down and back to the vertebra. The remainder of the pharynx and palate and uvula were swollen, hard, and inflamed. The epiglottis consisted of a mass of scirrhus disease, attached only by a point to the upper part of the larynx, which was also affected in the same manner; and at the base of the tongue, on the right side, an ulcerated excavation existed. The lungs were healthy; some fluid in the pleural cavities. The heart was small.

CASE II. ULCER IN UPPER PART OF CANAL; ENCEPHALOID TUBERCLES; THICKENING OF THE WALLS OF ŒSOPHAGUS AND TRACHEA.* F., aged 48, was delicate, and in the habit of spitting a large quantity of thick mucus. She became, after much mental anxiety, the subject of dysphagia, with difficulty in breathing, and sense of suffocation. At first these were slight; but, at the end of six months, they became very severe, and pain was experienced under the sternum on the left side, passing up to the shoulder and arm of the same side, and to the spine. The sensation of suffocation was very severe; under any mental emotion or exertion, it became very distressing, and also during the night; it was accompanied by cough, and expectoration of a thick white viscid matter. She gradually got worse; the right side of the neck became tumefied; her voice sank; and, in attempting to swallow, she was obliged to study her position. She at last died in an attack of suffocation.

The glands of the right side of the neck were greatly enlarged; some were of the size of pigeons' eggs, containing some dark offensive fluid. In the trachea, near its division, was a hard thickening of the size of a nut, which narrowed both the cavity of the trachea and that of the Œsophagus. In the last, from the pharynx to below the thyroid gland, an ulcer existed, surrounded by several soft white lardaceous tubercles. The stomach was small.

CASE III. TUMOUR IN UPPER PART OF CANAL; GLANDS ENLARGED; ABSCESS IN THYROID.† F., aged 35, the mother of several children, suffered from great difficulty in swallowing. The attempt to swallow a little milk produced severe pain in the ears, from the efforts necessary to make it descend. With the finger, a tumour could be felt deep in the pharynx. She was much troubled by viscid slime collecting. An attempt was made to introduce a small tube, but in vain. Leeches and blisters were applied.

May 10th (seven days after the use of these measures). She was much worse; she had pains shooting towards the ears, particularly the left. Calomel and sugar were rubbed on the side of the tongue.

May 29th. Her mouth was sore, but there was no im-

provement. A caustic issue was made near the thyroid cartilage; but, four hours afterwards, a severe attack of spasm came on, so as to threaten suffocation. Cold and an opiate gave some relief.

May 31st. There was pain in the epigastrium; and the breath was much affected.

June 7th. The voice and breathing were more natural; and she could swallow better. She had had frequent attacks of spasm.

June 23rd. She was better. She had to make many efforts before fluids could be made to pass from the pharynx into the Œsophagus.

July 12th. Bougies were passed for a week; and she was able to swallow better; yet the trachea seemed more affected. The issues were kept open.

July 16th. She was much worse; the breathing was very troublesome; the air seemed to pass through a constricted passage. She had frequent cough, which produced great faintness.

July 18th. The patient died.

A scirrhus tumour existed in the pharynx and upper part of the Œsophagus; and lower down in the canal were two small masses. The mucous membrane of the glottis and opening of the larynx was thick and dense; two small tumours existed in the larynx, which had so narrowed the canal, that only a small chink existed. The glands of the neck were swollen; and an abscess had formed in one of the lobes of the thyroid gland.

CASE IV. ULCER IN UPPER HALF OF CANAL.* M., aged 61, was seen on the 14th of May. He had indulged freely in spirits for eight years. He had been subject to cough in the winter; this had left him six weeks before he was seen, and was succeeded by difficulty in swallowing solids unless well moistened, and then only in very small quantities at a time. The difficulty had greatly increased, and was attended with constant pain in the throat, shooting up to the ears and jaws, with uneasiness in the lower part of the Œsophagus. The morsel seemed to meet with an obstruction immediately behind the cricoid cartilage; it was arrested there for a short time, and then seemed to pass; but at times it was rejected, mixed with phlegm. The voice continued good. He was somewhat emaciated. A bougie was arrested seven and a half inches from the teeth, producing much irritation, and was followed by the ejection of mucus streaked with blood. Two other attempts were made to pass it, but both failed. On the 19th of May it succeeded, and gave the sensation as if passing through a piece of paper.

May 20th. He was able to swallow better; yet the pain in the ears and præcordia were very severe.

May 28th. He was better. The bougie passed with more ease, but gave more pain, and was followed by the rejection of mucus streaked with blood. The pain in the præcordia was severe.

July 14th. A larger bougie was passed; but, on the 16th, it would not pass, and the pain in the lower part of the Œsophagus was more severe. An attempt was made on the 21st, but it failed; severe coughing and retching being excited. Recourse was then had to the caustic bougie: its use was followed by severe burning pain.

August 29th. The caustic bougie had been frequently used during the month; but the dysphagia had much increased, and the emaciation had made great progress, as also had the pain, and at times blood had been spat up. The disease gained ground; and, on the 22nd of October, puriform fluid was brought up, which increased in quantity, and was mixed with the mucus. On the 25th, all attempts to swallow produced violent convulsive efforts in the stomach and diaphragm: nothing would descend. Death took place on the 5th of November.

The Œsophagus, behind the cricoid cartilage, was nearly obliterated by thickening of its coats. It was ulcerated for the space of an inch above and below the constriction; the ulcers had raised jagged edges, and their surface was covered

* Desgranges, Journal de Corvisart, Leroux, et Boyer. An. ix.
† Sir Charles Bell's Surgical Observations.

* Mr. Jeffrey's Cases in Surgery.

with a soft flocculent kind of slough. The lower part of the canal was more vascular than usual.

CASE V. SCIRRHIOUS DISEASE OF THE CENTRE OF THE CANAL.* M., aged 40, three months previously, began to suffer from pain and uneasiness between the shoulders; this was followed, in the course of a few weeks, by obstruction to the passage of food near the upper part of the sternum, and by great inconvenience from a copious secretion of glairy ropy mucus. Of late, the pain between the shoulders was so severe as to be likened to a red hot poker boring through the spine; at times, shooting along the ribs. It was with great difficulty that a little bread and milk could be got down by pressing the throat with his finger and thumb. A bougie met with an obstruction, eight and a half inches down; great irritation followed its use; but, in a few days, his deglutition became much easier. He soon, however, relapsed, and even milk was with difficulty made to descend. He died.

No *post mortem* examination could be obtained.

CASE VI. SCIRRHIOUS DISEASE OF THE LOWER PART OF THE ŒSOPHAGUS.† M., aged 60, had suffered from difficulty in swallowing for six months. Any attempt to swallow a little water excited a kind of regurgitating effort in the lower part of the pharynx, with cough, a little only seeming to pass; before reaching the stomach, it again met with an obstruction, where it was detained for a few minutes, and then rejected. The obstruction at the lower extremity had been only observed during the last few days.

After death, the lower part of the Œsophagus was found scirrroid. There was no thickening in the upper part of the canal, but, two inches down, indications of inflammation existed, extending to within four inches of the cardiac orifice of the stomach.

SCIRRHIOUS DEGENERATION AFFECTING THE TRACHEA, VERTEBRA, AORTA, AND PLEURAL CAVITIES.

CASE I. SCIRRHIOUS DISEASE OF THE ŒSOPHAGUS, OPPOSITE THE FOURTH DORSAL VERTEBRA; TWO OPENINGS COMMUNICATING WITH THE TRACHEA.‡ M., aged 70, tall and large made, had not enjoyed good health for the last ten years, and for some months past had lost flesh. Three months ago, he experienced, while at dinner, difficulty in swallowing, which had since increased to such an extent, that soft or liquid food only would pass.

When seen on July 10th, 1838, he had no pain, but at times a burning sensation near the centre of the sternum. A probang, a quarter of an inch in diameter, was passed. On the 22nd, he was quite unable to swallow for thirty-six hours; at last, a small tube was passed, and through this food was introduced. In the evening, the power of swallowing returned. A probang was repeatedly passed. On October 17th, it was observed to be covered with slimy fœtid matter, and for several days fever existed, which then declined, and he was enabled to swallow better than he had done for a considerable length of time. In the last week of December, cough came on, accompanied with dyspnoea: food increased the cough much: and severe burning behind the sternum was at the same time excited. The skin was hot and dry; the pulse 108; the tongue coated and dry; and the emaciation great. Even liquids were sometimes rejected. The debility became, on the 9th of January, so great, that he was obliged to keep his bed. Fluids were returned by the cough. The pulse was 110, small; thirst was severe; the bowels acted twice daily. The pulse increased up to the evening of death, the 12th, when it was 120.

The Œsophagus was dilated in its upper part; but opposite the fourth dorsal vertebra, to which it adhered closely, its walls were thickened, and its calibre diminished to one-eighth of an inch by a rough tuberculated substance, for two inches in length, covered by sanious matter. Openings existed, communicating with the trachea.

CASE II. SCIRRHIOUS DISEASE BELOW THE CENTRE, THREE OR FOUR INCHES IN EXTENT, AFFECTING THE SPINE: COM-

MUNICATION WITH THE TRACHEA.* M., aged 56, had been in the habit of drinking freely of spirits. A week before Christmas 1844, he began to experience some difficulty in swallowing, particularly solids. This state continued a month, when, after drinking a large quantity of rum, the difficulty increased, and was accompanied with pain in the epigastrium. He then applied to the hospital, and at the end of a week, by the use of bougies, he was much relieved. A relapse soon took place, and for two months he sought no treatment. When seen, the emaciation was extreme; and he suffered from a constant sense of burning constriction in the Œsophagus, with cough and expectoration of thick mucus, tinged with blood; the thirst was intense; he had headache; and his bowels were severely confined. The pulse was 90; the skin cool; and urine scanty. Swallowing excited severe pain in the centre of the sternum, and, in a few seconds, the morsel was returned by an inverted action; and the little which reached the stomach was often rejected by vomiting, mixed with highly offensive fluid. An elastic tube was arrested near the centre of the sternum. During the last few weeks of life, he was sustained by nutritive enemata. He at last sank from inanition.

The Œsophagus, near its centre, adhered firmly to the spine. For three or four inches of its length, down near where it passed through the diaphragm, it was in a state of scirrroid ulceration. An opening existed, communicating with the trachea. The bronchial tubes were filled with frothy mucus, and the bronchial glands were enlarged and mottled. The bodies of the vertebræ and the intervertebral substance, where the disease was in contact, had begun to be involved.

Aussant (*Diss. sur les Squirrhes de l'Estomac*, cited by Dr. Walshe) mentions a case where death occurred from the spinal cord becoming implicated; the intervening vertebræ were much softened. I have not been able to obtain this work, but a copy of it exists in the library of the Ecole de Médecine.

CASE III. SCIRRHIOUS DISEASE OF THE ŒSOPHAGUS, OPPOSITE THE BIFURCATION OF THE TRACHEA: ABSCESS BETWEEN THE TWO CANALS, COMMUNICATING WITH BOTH: THE LEFT RECURRENT NERVE IN PART DESTROYED.† M., aged 41, a bricklayer, of intemperate habits, had suffered from difficult deglutition during two years. Nine months ago, his voice became altered in sound. Food met with an obstruction in the upper part of the sternum, large quantities of fluid being necessary to assist its descent. Regurgitation often took place, with violent retching and coughing. On the 18th of January, he entered the London Hospital. On the 19th, a small probang was introduced; it met with an obstruction at the lower part of the pharynx; and lower down, a second obstruction was met with, after surmounting which the instrument entered the stomach. Pain was excited, which lasted some hours. He could now swallow food cut up very fine, with thin fluids. The probang was passed several times, but each time the difficulty in doing so was increased. In February, the difficulty in deglutition had increased much; milk and thin puddings were got down with great difficulty, and in very small quantities. The voice was reduced to a loud whisper. His health soon began to suffer; his face became of a bluish tint; the breath was highly offensive; and, by the 14th, nothing but liquids would pass. Soon after this, if fluids were taken, they seemed to remain some seconds, and were then rejected by coughing. Thick mucus collected in the throat, and for three days nothing would pass. A small tube was passed down to the lower stricture, and nutritious fluids injected three times daily. On January 22nd, the skin became hot and dry; the pulse 118; the cough was very troublesome; and the lower stricture was more contracted. On January 23rd, he was much worse; pulse 136. A fit of coughing came on while talking; a quantity of dark fœtid matter was brought up; and he fell back and expired.

The thyroid gland was condensed, and consisted of a

* Howship, Practical Observations on Indigestion.

† Ibid.

‡ Dr. Wyman, American Journal of Medical Science, 1839,

* Mr. Harris, Edin. Med. and Surgical Journal, vol. lxi.

† Mr. Barratt, in Lancet, 1847.

number of nodulations, passing back on the left side, separating the œsophagus from the trachea, and involving the carotid vessels. On section, a dark creamy substance exuded from some, while others gave issue to foetid matter. Between the œsophagus and the trachea, an abscess existed, containing foetid matter, and communicated with both the canals. The œsophagus, opposite the bifurcation of the trachea, was so narrowed as scarcely to admit a goose-quill. The constriction was formed of tissue, which under the microscope showed cancer-cells. The carotid vessels and jugular veins were implicated. The recurrent nerve of the left side ended in a nodule, in the wall of the abscess.

CASE IV. SCIRRHOUS ULCER: OPENING INTO TRACHEA AND AORTA.* M., aged 42, began, in the course of the summer of 1840, to suffer from difficulty in swallowing. He entered the Hospital of Zurich in June 1841. The deglutition of solids had been nearly impossible for some weeks, food being arrested opposite the ensiform cartilage. Liquids would pass only, and in small quantities. At the point where the obstruction existed, severe burning pain was experienced. A probang was passed, but it would not enter the stomach; and severe pain was excited. An attempt was again made, and on the next day he vomited up three pints of frothy blood, and died in an hour.

A carcinomatous ulcer existed opposite the bifurcation of the trachea, of the size of a five-shilling piece; it communicated with the last by an opening of considerable size, and with the aorta by another.

CASE V. ULCER OF LOWER PART OF THE CANAL: PERFORATION OF THE RIGHT PLEURAL CAVITY.† M., aged 60, was of good health, but much affected from losses and anxiety. His digestion first suffered; but, in April 1841, dysphagia first set in, the point of obstruction being near the epigastric region; and by June it had made so much progress, that great difficulty was experienced even to the passage of fluids. A bougie was attempted to be passed, but without success. Several other efforts were made with smaller ones, and at last the obstacle was surmounted; and, by means of a narrow elastic tube, nourishment was for a month conveyed to the stomach. One morning, more resistance than usual was met with, and a large quantity of putrid sanious matter, with a portion of disorganised fleshy substance, which crepitated when cut, was ejected. From this time, the deglutition became easier; and, in a few days, he was able to swallow an egg and soup without difficulty. On August 15th, when swallowing some soup, he was taken with severe cough, attended with purulent expectoration. Any attempt to swallow fluids was followed by great danger of suffocation. Thirst was intense. A tube was introduced, for the purpose of passing fluid into the stomach; but, from the cough and suffocation which it produced, it had evidently entered the chest. A few days after, another attempt was made, and half a glass of drink injected. He immediately fell back: it had all passed into the chest, and it was only with the greatest difficulty that it was got rid of. Enemata alone were used. He died twenty days after, and six months from the first appearance of the disease.

The œsophagus was destroyed for two inches. About an inch and a half above the diaphragm, the ulcer had ragged edges, and was of a livid colour. A perforation existed at this point, which had penetrated the posterior wall of the mediastinum into the right side of the chest.

CASE VI. SCIRRHOUS CONTRACTION; ULCER OF THE LOWER PART OF THE CANAL; PERFORATION OF THE RIGHT PLEURAL CAVITY.‡ A female entered the hospital for surgery, three weeks before death, with all the appearances of cancer, suffering from an almost complete obstruction to the passage of food. She suffered from constant acute pain in the situation of the ninth dorsal vertebra, and here the obstruction existed to the passage of food, which was the moment it reached this point, rejected, with violent, painful,

spasmodic retching. She had constant fever; the respiration was natural. The disease had commenced two years previously: at first it was slight, then had gone on gradually increasing. Opium in large doses alone gave her relief. A bougie was introduced, and a firm obstruction was felt; severe pain followed its use, and recurred whenever the instrument was used. She refused to allow enemata to be administered, and at last sank. The œsophagus opposite the tenth dorsal vertebra was converted into a scirrhus cartilaginous substance; two inches below this point a ragged ulcer existed; at one point all the coats were destroyed, and the wall of the posterior mediastinum was opened into the right pleural cavity. The lung had a small ulcerated point, which had not penetrated the parenchyma, surrounded by lymph. No fluid existed in the cavity. The stomach was much contracted.

SCIRRHOUS DEGENERATION WITH DISEASE OF THE LUNGS.

CASE I. ULCER IN UPPER PART OF THE CANAL; TUBERCLES OF THE LUNGS.* M., aged 68, had good health up to April 1842, eight months before death, when he began to suffer from difficulty in swallowing, which at last increased to such an extent, that first solids, and then liquids, refused to pass. His aspect altered much, and became of a pale straw hue; he emaciated rapidly, and at last died from inanition. A. Berard attempted in vain to pass a tube, for the purpose of introducing food into the stomach. In the œsophagus, a short distance below the hyoid bone, the canal was narrowed so as scarcely to admit a small catheter, by a scirrhus contraction, which enveloped the whole circumference of the canal, and was nearly an inch and a half in length. Its surface was unequal, in some places of a dark grey, and in others of a dirty yellow colour; in its upper part several excavations existed. In the small intestines, near the cæcum, a thickening of all the membranes existed, for about an inch and one-sixth in length; the part was hard, and crepitant when cut, but under the microscope gave no indications of cancerous structure. Some tubercular granulations were also observed in the submucous cellular tissue. The lungs contained tubercles in the crude state. The surface of the cancerous mass, under the microscope, consisted of a mixture of mucous, epithelium, blood-globules, and cancer-cells. The tissue itself consisted of fusiform cells, with but little of the fibrous element.

CASE II. ULCERATION IN LOWER HALF OF CANAL; NARROWING BELOW COMMUNICATION WITH RIGHT LUNG.† M., aged 53, of bilious sanguine temperament, began to suffer, when 40 years old, from disordered digestion from no known cause. Pain was experienced in the epigastrium after eating, with acid eructations; and the food was often returned to the mouth some time after being taken. The mouth was often filled with saliva, like that which occurs before vomiting. Vomiting at last came on; and he was scarcely able to take anything which was not rejected. At the age of 44, he became unable to work, from severe pain in the epigastrium, which extended to the sides and shoulders; and in this state he continued for four years, the vomiting being very severe. He then became better for some months, and was at last able to return to work, but only for fifteen days, when the symptoms returned with redoubled violence, and he was soon reduced to a state of extreme emaciation. Various measures were had recourse to, but in vain. By strict confinement to a milk diet for two years he found himself much better, and he gained strength and the vomiting left him. At the age of 53, in carrying something heavy, he heard something crack in his chest, which was followed by severe pain shooting up to the shoulder. Six months after this, he entered La Charité, considerably emaciated; his face was not altered: the appetite was good, but deglutition of solids was very difficult. The first morsel descended with ease to the middle of the chest, where it became arrested; but the second was arrested at the lower part of the neck. Violent cough came on, and they were returned.

* Peuser, in *Zeitschrift für Ration. Med.*, Band iii.

† Case of Mons. Carrier, cited by Vigla, *Arch. Gén. de Méd.*, 1846.

‡ Mr. Wardrop, in *Lancet*, 1837.

* Lebert, *Physiol. et Pathologie*, tom. ii.

† Martin, *Bibliothèque Médicale*, tom. xxiv.

Drinks, even when swallowed slowly and in small quantities, produced cough, and were rejected in the form of froth; and during the cough he was in great danger of suffocation. There was no fever; but in the evening he had chills. In a few days, however, fever manifested itself, and he gradually sank. The œsophagus opposite the sixth dorsal vertebra was in a state of cancerous ulceration: a short distance below this point it was impossible to pass a pin. The right lung adhered closely to the ulcerated part of the canal; and here an opening existed, which communicated with a cavity holding six ounces of fluid, grey and fetid; its walls were grey and formed of the substance of the lung. The bronchi and trachea contained the same kind of fluid as in the abscess. The stomach was much contracted, and the mucous membrane was of a very deep colour.

CASE III. SCIRRHUS OF THE WALLS OF THE ŒSOPHAGUS; ABSCESS IN THE RIGHT LUNG.* F., aged 44, when seen, 15th Nov., 1832, had been ill six months. Food was returned unaltered, mixed with mucus; and at times, but very rarely, a fluid like coffee-grounds was brought up. She had intense thirst; respiration was free, and the pulse regular; the bowels were very costive. She died on 14th Jan. 1833.

The œsophagus was narrowed from cancerous thickening. Immediately above, an opening existed which communicated with a cavity in the substance of the right lung, which contained an ounce and a half of brown fluid. The walls were irregular with a gangrenous appearance, and the substance of the lung for two inches in extent around it was hard and dense. The œsophagus adhered closely to the right lung.

CASE IV. SCIRRHOUS NARROWING, WITH ULCERATION OF LOWER HALF OF CANAL; CAVITY IN RIGHT LUNG; STOMACH INFLAMED.† M., aged 46, a retired captain of the navy, after experiencing much mental anxiety in 1831, began to suffer from dull pain in the course of the œsophagus, and difficulty in swallowing solids. At first, great part of the canal seemed affected; but later, the disease appeared confined to several points, so that the food was arrested two or three times in its descent, and at the end of a month it seemed to confine itself to the lower part. Here the morsel was arrested, and he was in great danger of being suffocated, to avoid which he drank large quantities of water. At last he was obliged to confine himself to broths. The pain was situated behind the sternum, and was much increased by talking, or coughing, or any mental emotion. Leeches were applied, first to the seat of pain, then to the anus, and strict rest enjoined; but this he neglected, got about much, and spoke frequently in public. He became much worse, the pain radiated towards the vertebral column, and extended to the right side of the chest. This last had a neuralgic character, and followed the course of the intercostal nerves, sometimes passing up along the spine. Under the idea that it might depend on some syphilitic affection, he had recourse to some nostrum. Its use was followed by the discharge of glairy mucus, often insipid, but at times acid. The quantity regurgitated became at last considerable, and the difficulty to the descent of food was so great that only a tea-spoonful of fluid at a time, and latterly often not even this, would pass. The pain at this time became lancinating, and the mucus was at times streaked with blood. Fever also lighted up, but its accessions were irregular. The efforts to get rid of the mucus at last became so painful, that the pharynx was constantly convulsed: it was of a deep red colour, and the tongue became of the same hue. A constant sensation existed in the stomach as if a ball was there, which threatened to suffocate him. Every attempt to swallow excited convulsive motions in the throat and œsophagus, which were propagated to the muscles of the abdomen, and caused them to act as in vomiting. On the 8th of September he began to expectorate phlegm; and auscultation discovered, in the posterior part of the right side of the chest, indications of pneumonia. The face was swollen, and the skin hot; and diarrhoea set in. Respira-

tion became more and more difficult, particularly when he was drinking. On the 10th, the expectoration was highly fetid, grey, and thin. He died on the 11th, retaining his mental faculties to the last.

The right lung was soft, the slightest pressure reducing it to a greenish, black, fetid fluid: this change was most perceptible near the insertion of the bronchial tubes and vessels. A large cavity existed in this lung, which communicated with the œsophagus, with which it adhered most intimately. The œsophagus, in its lower half, was greatly narrowed, and presented a great number of ulcerations, surrounded by pale friable vegetations. Most of these ulcerations were the commencement of small sinuses, nearly all of which ended in a pouch in the posterior wall, formed at the expense of the muscular tissue. This cavity communicated with the one in the lung. The whole of the diseased portion of the œsophagus was softened; and on its being pressed or cut, cerebriform matter exuded. The nerves of the canal showed no change. The stomach presented some red patches; and the duodenum was also injected for a short distance in its upper part. The capsule of the spleen was in some parts cartilaginous, in others ossified.

Chassaignac, in his report on this case, mentions an instance of a similar nature, which fell under his notice at the Hôtel Dieu de Nantes. The œsophagus and the right lung were affected in the same manner.

CASE V. SCIRRHUS OF LOWER PART OF CANAL; ABSCESS IN LEFT LUNG; MIDDLE MEMBRANE OF STOMACH WHITE AND CARTILAGINOUS.* M., aged 50, a surgeon, had indulged freely in drink. In September 1751, he began to experience a pain just above the orifice of the stomach, on taking either solids or fluids; the pain was propagated up the canal, and at last the affection increased to such an extent, that food was rejected. When seen in January 1752, he attempted to swallow some milk, which was returned; and the same occurred with a little water; the rejected matters were mixed with viscid mucus, and the same kind of mucus was brought up in the morning. The pain was referred to a point a little above the ensiform cartilage. On swallowing, it was likened to a sense of constriction, but most frequently that of a worm like motion. He had a great desire for cold drinks. At times, the difficulty in swallowing became so great, that he was obliged to abstain for two or three days: he would then suddenly experience a sensation as if the passage to the stomach was free, and some thin pulpy food would pass; but the obstruction would soon return, and all he took would be rejected. He grew worse; the pain became more severe, hectic set in, and the introduction of drinks into the stomach became impossible. Death ensued on the 18th April.

In the left lung, close to the œsophagus, was a large cavity, containing yellow pus. A scirrhus tumour, of the size of two fingers, existed near the orifice of the stomach; the canal was narrowed for a short distance, but above this it was much dilated. The stomach was empty, and its middle membrane was white and cartilaginous. He had coughed slightly during the last few days of life, but he had complained much of a suffocative sensation.

CASE VI. SCIRRHOID TUMOUR OF LOWER PART OF CANAL; RIGHT LUNG DISEASED; COLLECTION OF SEROPURULENT FLUID.† M., aged 40, had been delicate in childhood; but as he approached manhood had gained flesh and strength. He began to suffer from dysphagia, accompanied by a dull pain at the top of the epigastrium. Six years passed, and dysphagia gradually established itself: he died after a year's extreme suffering. Five or six weeks before death, cough set in: he died from suffocation in a fit of coughing.

The lower extremity of the œsophagus, and the cardiac orifice of the stomach, were both hard and thick, and formed a scirrhus tumour an inch and a half long, like a ring pierced by an opening three or four lines in diameter. The mucous membrane was destroyed. The stomach was healthy.

* Tarleton, Prov. Med. and Surg. Journal, 1843.

† Grisolle, Revue Médicale, 1833.

* Haller, Epist. ab Eruditiss. Viris, Epist. 603 et 611, lib. III. Vigla, Arch. Gén. de Méd., 1846.

† Desgranges, Journ. de Med. Chir. et Pharmacie. An. ix.

The right lung was adherent; its substance was soft, and corroded in great part: its base was ulcerated, and even putrified: posterior to it was a seropurulent collection, two quarts in amount existed.

CASE VII. SCIRRHUS DISEASE THREE INCHES IN LENGTH, BELOW THE CENTRE OF THE ŒSOPHAGUS; THE VERTEBRÆ ENLARGED; MUCOUS MEMBRANE OF STOMACH INFLAMED; PLEURITIS; FLUID IN RIGHT PLEURAL CAVITY.* M., aged 64, had good health until five months back, when from exposure to cold, he began to suffer from cough, but without expectoration. At the end of a month, pain was experienced in the ensiform cartilage, coming on after eating, and attended with difficulty in swallowing. Both these symptoms had become much worse at the end of five weeks. When seen, on September 23rd, emaciation and debility had been severe for the previous two months, and he had not been able to take either solids or fluids; the last passed down without difficulty, but, after two minutes, they were gulped up without difficulty. He had severe cough, with copious expectoration of mucus. The bowels were very confined; the appetite good; the pulse 54; the skin cool and dry; the tongue clean and moist: he slept well.

Sept. 26th. He was able to keep down a little broth. His urine was high coloured.

Sept. 27th. The cough was troublesome, with abundant expectoration.

Sept. 29th. He was able to keep down a little milk. He suffered much from pain in the epigastrium, accompanied with tenderness. Pulse 70. His cough was severe; there was no r le in any part of the chest.

Sept. 30th. He had severe pain since the previous day under the false ribs, after injecting some tea and whey. In the night, the opening of the Œsophagus became free, and he swallowed and retained a large bowlful of milk and stirabout.

For the next twenty-four days, there was little change in his symptoms: one day he retained the food taken, at others not. He was seized in the night with severe pain under the right false ribs, and much tenderness existed at this point: he could not draw a full breath. The cough was severe; the thirst great; pulse 56. The next night, the pain was so severe as to excite a kind of convulsion. He died three days after the pain in the false ribs set in. During this time, he took nothing.

The Œsophagus, two inches above the cardia, was for three inches of its length in a state of scirrhus, in some parts an inch and a half thick, and would only admit of the introduction of a goose-quill. The mucous membrane, above this point, was thickened and soft; below, it was inflamed. The mucous membrane of the stomach was very soft, and its coats were transparent. The spleen was soft. The vertebra and the inter-vertebral substance opposite the diseased part of the canal were enlarged, but not diseased. In the right pleura a pint of fluid existed, which contained shreds of recent lymph, the lower part of the inferior lobe of the lung covered with lymph.

The vomiting after the fluid had entered the stomach, must have been caused by the inflamed state of that organ.

SCIRRHUS DEGENERATION, WITH AFFECTION OF THE LUNGS, ETC.; CANCER, PRIMARY OR SECONDARY, IN OTHER ORGANS.

CASE I. ULCER OF LOWER PART; PERFORATION; CAVITY IN RIGHT LUNG; CANCER OF STOMACH; ENLARGED ŒSOPHAGEAL GLANDS.† F., aged 38, the mother of six children, complained of severe pain in the stomach, which was much increased by food. In the month of June of the same year, a difficulty in swallowing solid food was experienced, and it was often rejected mixed with a large quantity of mucus. By the use of resolvents, she became so much better, that she believed herself cured; but it returned, and made very rapid progress. In this state she was seen by Van Doeveren. All food was immediately rejected by regurgitation, mixed with mucus, and accompanied by severe pain. She seemed to derive some benefit, and gained strength, from

milk diet, cicuta, sulphuret of antimony, and calomel, carried to salivation. But in March of the next year she became worse, and the symptoms made rapid progress. The stomach was much distended with wind, and she had painful acid eructations, as well as fever, with small pulse, and extreme debility. She also experienced in the Œsophagus an obstruction to the passage of food, as if from a collection of mucus. Milk or any other fluid was immediately rejected, and with it a grey substance like corrupted milk, with an acrid odour; and the same odour existed in the mucus. Solids were arrested at this point, exciting the most excruciating pain and anxiety, with faintings. She refused to allow nourishing enemata to be injected, and sank on the 14th of April, 1777, rejecting to the last matter like corrupted milk.

Between the right carotid artery and the trachea was an enlarged gland, nearly cartilaginous in structure, and of the size of a pigeon's egg. The Œsophagus, opposite the ninth dorsal vertebra, was hard and thickened. The right lung adhered to the pleura; and, on attempting to separate it, a cavity was ruptured, from which ran out ashy coloured grumous matter, like putrid milk. A free communication existed between this cavity and the Œsophagus, the borders of which were unequal and gangrenous. Below this point, the canal for two inches was so narrow, that a pen with difficulty would pass. The walls of the stomach were thin; and on the lesser curvature a rather large scirrhus tumour existed, midway between the cardia and pylorus.

CASE II. SCIRRHUS THICKENING OF THE LOWER PART OF CANAL; ALTERATIONS OF THE WALLS; SCIRRHOSIS OF STOMACH AND DUODENUM, PANCREAS, GLISSON'S CAPSULE, AND DUCTUS COMMUNIS CHOLEDOCHUS.* F., aged 26, married, of delicate health, while at dinner was suddenly taken with severe pain in the epigastrium; this confined her to her room for some days, and then left her, but returned at different times. She was seen by Mr. Gaitskell, three months before her death, then suffering from constant aching pain behind the lower part of the sternum, descending to the epigastrium and back to the spine, accompanied by nausea and retching. The pain varied in intensity, but was always better when the stomach was distended with food, the entrance of which was always attended with great difficulty. A bougie was introduced, and a hardness was felt. On its withdrawal, pain was experienced. It was not again passed for a month; then, for the first week, relief was experienced, but afterwards it aggravated the symptoms. Mr. Cline advised the swallowing of a weak solution of sulphate of zinc; but, at the end of three weeks, she became unable to swallow without severe pain and retching. She refused all food; and, after languishing for a fortnight, died, suffering from unquenchable thirst. Both her mother and her sister had died of the same disease—the first at fifty-six; the other at twenty-seven.

The Œsophagus, from the pharynx down to within one inch of the cardia, was white and firm, like ligament. At this point it was scirrhus; and this state extended along the lesser curve of the stomach to below the pylorus. The head of the pancreas, Glisson's capsule, and the ductus communis choledochus participated.

CASE III. SCIRRHUS DISEASE OF ŒSOPHAGUS TWO INCHES FROM DIAPHRAGM; SCIRRHUS OF POSTERIOR PART OF STOMACH, ADHERING TO DIAPHRAGM; ABSCESS IN LOWER LOBE OF LEFT LUNG, COMMUNICATING WITH STOMACH.† M., aged 34, had suffered at times for a year from pain under the ensiform cartilage; some irregularity in diet destroyed his appetite and digestion, and he lost flesh. When seen in November, he was much reduced, with great difficulty in swallowing solids, which, near the orifice of the stomach, produced much pain. Sometimes they passed without difficulty, but were soon thrown up mixed with phlegm. Liquids descended, if swallowed slowly, without difficulty. He had a sense of constriction across the epigastrium, but no tumour or tenderness on pressure; the pulse was good; the bowels were

* Dr. Graves, in Dublin Med. Journal, 1830.
† Bienland de Sana et Morb. Œsophagi. Obs. I.

* Mr. Gaitskell, London Medical Repository, 1812.
† Dr. Taylor, Edin. Medical Essays, vol. II.

constipated. In December, he suffered from symptoms of stone in the kidney for five days. In March, night sweats came on, and he brought up two polypus-like substances, followed by a sharp pain in the breast, which continued for four days. At the end of fourteen days, another polypous substance was brought up; but no pain followed, and the night sweats subsided. In May, he had a slight return of the affection of the kidneys; and, at the same time, he became sensible of a hardness in the left hypochondrium. Soon after this, diarrhoea set in; the stools were whitish; he lost flesh and strength rapidly; and died in the middle of June.

The omentum was everywhere scirrhus, and contained many little abscesses. The liver, spleen, and stomach, were covered with small white tumours. The stomach adhered to the diaphragm by its posterior part, by a scirrhus mass. The intestines seemed a little inflamed, and adhered to each other. The kidney contained a stone. Some fluid was found in the left pleura. The lower lobe of the left lung adhered to the diaphragm; it contained an abscess, containing pus, with some viscid brown fluid. An opening passed from this abscess through the diaphragm into the stomach. The œsophagus, two inches above the diaphragm, was in a state of degeneration like cartilage. The glands at the divisions of the trachea contained calcareous spongy matter, enclosed in a thick membrane.

CASE IV. SCIRRHOUS DISEASE OF ŒSOPHAGUS, THREE INCHES FROM CARDIA: TUBERCLES IN THE LUNGS: LIVER AND PANCREAS CANCEROUS.* M., aged 51, two years before, had had an attack of spasm in the stomach, followed by jaundice, which soon yielded to treatment. In February 1847, his health began to fail, appetite became bad, and he suffered from dyspepsia. At the same time, he experienced severe pain in the centre of the last bone of the sternum, with difficulty in swallowing. When seen on April 5th, there was no pain; the face was sallow and leaden; the tongue clean; pulse weak; dry cough; and much emaciation and constipation. Purgatives and quinine were given. On February 14th, he suffered much from heartburn, pyrosis, and sickness. The difficulty in swallowing was much increased: fluids only could be swallowed. He continued his work, that of a turner, up to the latter part of the month. He died on the 5th of May.

In the apex of the right lung, soft tubercles existed; in the left, the same, with also two small cavities. The œsophagus, three inches from its lower part, was nearly obliterated from cancerous degeneration of its walls. Above this point, the canal was much dilated. The liver contained two tumours, of a cancerous character; and, in the head of the pancreas, two tumours also existed.

CASE V. SCIRRHOUS DEGENERATION OF A GREAT PART OF THE ŒSOPHAGUS: CAVITIES IN THE RIGHT LUNG: CANCER OF THE STOMACH, LIVER, AND PANCREAS.† M., aged 55, had suffered from one and a half to two years, from disorder of the stomach, with difficult digestion. He had got much worse during the last four months; and to which had been added, for some weeks past, pain both in the stomach and in the œsophagus, accompanied with difficulty in swallowing. When seen on the eighth of August, his face was of an earthy hue: emaciation was not extreme. There was deep seated pain in the stomach, not increased by pressure; and also in the œsophagus, particularly in swallowing; the morsel being often arrested and rejected, mixed with acrid mucus. The dysphagia became so severe, that he was restricted wholly to milk. No thirst. Bowels natural. The voice soon became changed in tone, and cough also came on; and there were some harsh sounds in one of the lobes of the lung. Pulse 90, feeble. Under the use of iodine, externally and internally, he improved for a fortnight; but then, from no appreciable cause, the breathing became difficult, and the pain and difficulty in swallowing as before. The quantity of mucus brought up greatly increased, and continued to do so until

death, and was at last mixed with purulent fluid. The difficulty in swallowing increased to such an extent, that even fluids would not pass without great difficulty and severe pain. The pain in the stomach and œsophagus increased in severity. The cough was severe, accompanied with purulent expectoration. The pain in the chest was severe, and mucous râles were heard. The fluid brought up soon had a highly fœtid odour, and he at last sank on the 3rd of October.

Fluid existed in the pleural cavities, and the pericardium contained three ounces of reddish serum. In the right lung, a large cavity existed, containing highly fœtid yellow ichorous matter, and portions of broken down lung. A smaller one, the size of a walnut, existed near the trachea; and in the apex, was a mass of tubercles, of the size of a hazel nut. The œsophagus was as thick as the arm, from fibrous scirrhus degeneration, nearly throughout. In some parts, the walls were four or five lines thick, and irregular. Nearly the whole of the canal was ulcerated, and covered with slimy and ichorous fluid. The muscular coat was affected here and there. Deep excavations existed, and the adjoining tissues were affected. The stomach was empty, and rather shrunken. On the left side of the cardia, a scirrhus mass, of the size of a hen's egg, existed, in close connexion with some degenerated lymphatic glands; and, under its serous coat, small cancerous masses were found, varying in size from a linseed to a bean. They appeared to consist of degenerated lymphatic glands. The liver was large, and contained a great number of whitish yellow cancerous masses, varying in size from a linseed to a pigeon's egg. The head of the pancreas had begun to participate in the mischief.

CASE VI. ULCER IN UPPER PART: ANEURISM OF AORTA: BLOOD IN LEFT PLEURAL CAVITY: TUBERCLES IN LUNGS: CANCEROUS ENLARGEMENT OF GLANDS: CANCER OF LIVER AND PERITONEUM: NARROWING OF PYLORUS.‡ M., aged 54, a bookseller, was seen on November 28th, 1849. Six years previously, he had had an attack of hæmoptysis. The appetite then began to fail; sickness was felt after eating; and he had occasionally vomiting, which had increased in frequency. He had also had pain in the throat, and a sense of great constriction at the upper border of the sternum. He vomited blood, mixed with dark brown masses; not after eating, but generally in the morning, between three and five o'clock, and occasionally in the day time; and it was then preceded by a fit of coughing. Of late, he had lost flesh very rapidly. He vomited after meals, whether liquid or solid; and he also vomited florid blood, with dark clots and dark grumous masses. No cancer-cells could be distinguished. On November 23rd, he vomited half a gallon of florid blood, and on the next day even more. Great tenderness existed in the region of the stomach. A hard lobulated tumour was felt in the right hypochondriac region, measuring four inches transversely, and two inches from above downwards. He had had cough four months. There was dulness in the posterior and inferior part of the left lung. The pulse was 90, rather strong. The heart's impulse was rather increased, otherwise normal; he had palpitation occasionally. The urine deposited lithate of ammonia on cooling. Leeches were applied over the stomach. He vomited less, but the emaciation increased; and at times he vomited large quantities of florid blood. He died on December 15th.

The left pleura contained a pint and a half of blood, which had come through a laceration in the pleura, from an aneurism of the descending portion of the aorta encroaching on the left lung. The pericardium contained six ounces of serum, and the heart was contracted. Between the aorta and the œsophagus, two glands existed, greatly enlarged from cancerous infiltration, immediately projecting into a cancerous ulceration existing in the middle of the last named canal. The lungs contained tubercles. The liver contained a number of cancerous no-

* Mr. Elkington, in *Prov. Med. and Surgical Journal*, 1847.

† Dr. Rittentrop, *Berlin Medicin. Zeitung*, 1846.

‡ Dr. Bennett, in *Edin. Monthly Journal*, 1850.

dules, as also did the peritoneum of the diaphragm and the pelvis. The pylorus was contracted; and this, with the tumour felt during life, which consisted of a mass of cancerous glands, gave rise to the vomiting.

Harrington Square, London, October, 1853.

CHANCRE IN THE URETHRA MISTAKEN FOR GONORRHOEA.

ERRORS IN THE DIAGNOSIS OF A CHANCRE OF THE THUMB, PRODUCED BY ACCIDENTAL INOCULATION, AND FOLLOWED BY SECONDARY SYMPTOMS.

By JOSEPH SAMPSON GAMGEE, Esq.

In the month of February last, I was requested to see a patient with urethral discharge, by a friend who had been treating him for about a fortnight, to no purpose, with the ordinary remedies for gonorrhœa.

I found the glans uncovered, red, and swollen; the prepuce œdematous and also red; but their surface was otherwise dry and perfectly healthy. On pressure along the course of the urethra, a small drop of green thick pus appeared at its orifice. The discharge had from the first been very scanty. In the left groin was a lymphatic gland about three times the normal size. The last mentioned symptom, conjoined with the scantiness and viscosity of the discharge, the considerable amount of inflammation about the prepuce, and a knowledge of the fact that gonorrhœal remedies had proved of no use, led me to suspect the existence of chancre within the urethra; accordingly, on opening out its orifice, a small sore with greyish surface and bright red sharply cut edge was visible just within it.

Had the urethral sore healed before it came under my notice, the secondary syphilitic symptoms which would in all probability have succeeded, would have been attributed by the practitioner to gonorrhœa; and this would have added another to the list of badly observed cases invoked by the disciples of Hunter's doctrine (who hold the virus of syphilis and gonorrhœa to be one and the same) as proof of such identity.

As an additional guarantee of the chancreous nature of the urethral sore, a little of the pus from its surface was inoculated in the thigh, and here a well marked chancre was fully developed about the fourth day.

The primary and inoculated sores were destroyed with nitrate of silver, a mercurial course was prescribed, and the patient was cured within a month.

A few days after I saw this patient, I detected a little fissure at the end of my left thumb, close to the attachment of the nail; it became exquisitely painful, and sensibly affected the general health. It was only after treating it several days without success, that it occurred to me that in the manoeuvre necessary to see the urethral chancre (grasping the glans and separating the lips of the meatus with the ends of the thumbs), it was very likely that a little of the virus had got beneath the free margin of the nail, and there produced a chancre.

At this time, the thumb was much swollen; the sore at its end was covered with whitish adherent slough, except at the edge, which was bright red; the lymphatics on the palmar surface of the forearm, and inner surface of the arm, were corded, and their situation was denoted by red lines on the skin. Two friends, who had from the commencement favoured me with their advice, consented to my proposal to inoculate on the arm some of the discharge from the sore, and destroy it with nitric acid; with the double view of arresting the diseased local action, and ascertaining whether it were syphilitic, and mercurial treatment advisable.

The pain and swelling abated very considerably after the cauterisation, and nothing whatever appeared at the two spots on the arm, where the pus had been inoculated. The last fact was deemed proof of the non-syphilitic nature of the disease, and confirmatory of the opinion my friends had from the commencement entertained, that the sore was

merely dependent upon rather assiduous application, and consequent impairment of health.

When the eschar produced by the nitric acid separated, it left a weakly looking surface, which, in a few days however, improved, as did also the general health and the condition of the arm; the corded lymphatics having almost disappeared. But this was only a temporary change; the sore again became painful, and acquired its suspicious look, with whitish surface, red and sharp cut edge; moreover, it was now raised on a hardened base; the lymphatic cords on the forearm became very manifest; one of the axillary glands enlarged; and seven weeks from the origin of the sore, a well marked copper coloured roseola made its appearance on the palms of the hands and trunk. The problem was now solved, and the moment for decided action arrived. I destroyed the primary sore with strong nitric acid,* and commenced a mild course of mercurial treatment. After the lapse of another week, the skin affection had quite disappeared, the affection of the lymphatics almost so, and the sore had quite healed; but a good deal of induration remained at its base, and pathognomonic sores formed on both tonsils. Both these complications slowly but progressively yielded to corrosive sublimate and sarsaparilla, followed by iodide of potassium.

REMARKS. The study of this case suggests two facts for special consideration—the failure of the inoculation, and the error in not diagnosing the primary sore from its history and anatomical characters.

Were it not that the surgeon who performed the inoculation has frequently practised it successfully, the validity of the experiment might be questioned; but under present circumstances, the failure tends to lessen the value of inoculation, as a means of ascertaining the syphilitic character of a suspicious sore. But it is just to observe that almost invariably, the inoculation of the discharge from a primary venereal surface, does produce a chancre. Indeed, amongst a very large number of experimental inoculations of undoubted chancreous pus, I have only seen one failure besides my own case. That occurred in a young man, the subject of chronic phthisis; he had had a chancre at the frœnum for about three weeks, and it had destroyed a considerable portion of the glans. I performed three inoculations on the same patient with pus from the surface of the sore; they all failed. The primary sore healed after being twice cauterised with nitric acid. Any doubt as to its true syphilitic nature, was removed by the appearance in little more than another fortnight of syphilitic ecthyma in its most severe form.

Apart from experimental inoculation, there were, I now think, sufficient grounds for diagnosing the sore as syphilitic. The idea of my friends, that it was a common sore due to impairment of the general health by hospital work, had no better foundation than their kind hope that it should prove to be such; for it had none of the appearance, either at its commencement or during its progress, of the weakly sores that occasionally form about the pulps of the fingers and roots of the nails in weakly constitutions. Its bright red sharply cut edge, the white adherent slough on the surface, the burning pain, corded state of the lymphatics, the hardened base, conjoined with the fact that, just before its appearance, I had exposed myself to the risk of inoculating the thumb; that the general health was excellent; that when it failed, rest, fresh air, change of scene, and exercise, resorted to for its improvement, had no effect on the sore—appear to have been sufficient grounds for the

* I have been in the habit of giving chloroform in cauterising chancres; but my experience in this case, conjoined with the rather numerous accidents from this anæsthetic of late recorded, which suggest the propriety of only resorting to it when really necessary, and then with the greatest precaution, leads me to question whether in many of these cases the preventive is not as severe as the pain. Certain it is, that I suffered greatly from the chloroform for nearly thirty-six hours afterwards—great prostration, headache, and vomiting; but when, having determined upon the necessity of reapplying the nitric acid, I, in the absence of a friend, in a village on the banks of the Rhone, applied it myself, the pain was severe, it is true, but ceased in a few minutes; and whereas I had not rested for many nights, I fell off to sleep half an hour afterwards, slept soundly ten hours, and was enabled to resume my journey in comparative ease.

diagnosis. Repeated cauterisation until the specific character of the sore was destroyed, and a mild mercurial course, would have been prudent precautionary measures; at least, they would not have been productive of mischief.

Palazzo Corsi, Florence, Nov. 24th, 1853.

BIBLIOGRAPHICAL NOTICES.

MEMOIRS OF JOHN ABERNETHY, F.R.S.: with a View of his Lectures, Writings, and Character. By GEORGE MACILWAIN, F.R.C.S. 2 vols. 8vo., pp. 334 and 370. London: 1853.

THIS is an entertaining work; but we should have been better pleased with it, had it told us more than it does about its professed subject. We are not at all certain that the author is to blame for the meagreness of his details; but the question arises,—Was it necessary to expand his scanty materials into two octavo volumes by sparse printing, and the incorporation of foreign matter? We think that this might have been judiciously avoided. Perhaps, however, many readers may appreciate the work all the more, that it gives a narrative of some striking passages in the history of the pupil and biographer, as well as his sharp and free criticisms upon the abuses of the hospital system in London, and other real or supposed blemishes in the medical polity of the present day. For our own part, while, as critics, we are bound to condemn the discursive character of these volumes, and find fault with the attempt to give, in the form of a biography, matter wholly unsuitable to the legitimate plan of such a work, we must admit that the author is generally lively, earnest, and instructive. Nevertheless, as a biography, the book has not been correctly conceived. Complete success in biographical writing can only be attained by giving a narrative in which the hero is carefully kept in the foreground, and in which he is never veiled or removed from the reader by the interposition of the writer, or of any other monopolising person or thing.

JOHN ABERNETHY was born in Coleman Street, London, on the 3rd of April, 1764, or 1765. He was the second son of John Abernethy, a merchant, who traded under the firm of Abernethy and Donaldson, in Rood Lane, Fenchurch Street. The culture of his childhood was conducted at home; but, at an early age, he was sent to the grammar school of Wolverhampton, where he received the principal part of his education. He had a predilection for the bar; but, in 1779, his father apprenticed him to Sir Charles Blicke, a surgeon in large and lucrative practice, who then resided in Mildred's Court. Speaking of his apprenticeship, Mr. Macilwain remarks:—

"Diligent as he was, we suspect he found little during his apprenticeship, of those attractions which make labour and industry sources of pleasure and enjoyment. As a matter of course he would have been allowed to attend any lectures which were given at the hospital to which Sir Charles Blicke was surgeon, (St. Bartholomew's), and they would bring him in contact with Mr. Pott, who delivered a certain number of surgical lectures there. There were no courses of anatomical lectures given at St. Bartholomew's at that period; but anatomical lectures were delivered regularly at the London Hospital, by Dr. MacLaurin and Sir William Blizard, and afterwards by Sir William Blizard alone. As Sir C. Blicke lived in Mildred's Court and subsequently in Billeter Square, Abernethy would be about equidistant from the two hospitals, both of which he attended. We incline to think that it was in attending the lectures, and perhaps especially those of Sir William Blizard, that he first found those awakening impulses which excited in him a real love for his profession. It was about this time, we think, that he began to have more enlarged ideas of the nature and objects of surgical science; a state of mind calculated to enable him to thoroughly understand and appreciate Mr. Hunter, and to deduce from the principles which he was shadowing forth those relations and consequences which we shall endeavour popularly to explain: principles which, though originally directed to the treatment of so-called surgical maladies, were found equally to affect the practice of medicine." (vol. i, p. 45-7.)

At the London Hospital, Abernethy was in the habit of

preparing the subjects for lecture, which fitted him to enter upon the duties of a teacher at St. Bartholomew's with advantage, when that field was opened to him by the resignation of Mr. Pott as surgeon to that hospital. Sir Charles Blicke, assistant-surgeon, succeeded to Mr. Pott's position; and the vacancy created by the promotion of Sir Charles was filled up, on the 15th of July, 1787, by the appointment of Abernethy. The election was contested by several candidates: at last, it lay between Mr. Jones and Abernethy, when the former polled twenty-nine, and the latter fifty-three votes.

"As assistant-surgeon he had no emolument from the hospital: he had therefore a very reasonable inducement to set about doing that for which he felt himself calculated, and to which he had early directed his attention—namely, to teach his profession. The event showed that he had by no means miscalculated his powers. These proved well-nigh unrivalled. The appointment to St. Bartholomew's, besides other advantages gave him an opportunity of lecturing with the *prestige* usually afforded by connection with a large hospital. He did not, however, give lectures at the hospital at first, but delivered them in Bartholomew Close. There was at this time, in fact, no school, properly so called, at St. Bartholomew's. Mr. Pott gave about twenty-four lectures, which as short practical discourses, were first rate for that period. But there were no other lectures, not even on anatomy, which are essentially the basis of a medical school.

"Dr. Marshall, who was a very remarkable man, and no less eminent for his general ability than for his professional acquirements, at this time was giving anatomical lectures at his house in Bartlett's Buildings, Holborn. In a biographical notice of him in the *Gentleman's Magazine*, in which we read that he was giving lectures about the year 1787, it is incidentally remarked that "in all probability he derived little support from St. Bartholomew's Hospital; for recently, an ingenious young gentleman, Mr. Abernethy, had begun to give lectures in that neighbourhood. Abernethy, who seems to have been always seeking information, certainly attended some of Marshall's lectures; because he would occasionally refer to anecdotes he had heard there. He had thus attended most of the best lecturers of his day,—Sir W. Blizard, Dr. MacLaurin, Mr. Pott, and Mr. Marshall." (vol. i, p. 66-68.)

It would appear that Abernethy lectured with acceptance on anatomy, physiology, pathology, and surgery, notwithstanding an unconquerable "shyness". This shyness we find traces of in various parts of his life; and there seems to be no doubt of its having existed, however difficult it may be to reconcile it with that self-confidence and rude behaviour before patients for which Abernethy deservedly acquired a reputation: and to this, we may add, he owed some of his success. Abernethy's lectures became so popular, that it was at last necessary to provide better accommodation for his pupils.

"The governors of the hospital in 1790 determined on building a regular theatre within the hospital. It was finished in 1791; and Abernethy gave his October courses of anatomy, physiology, and surgery of that year in the new theatre. He had thus become the founder of the school of St. Bartholomew's, which for the approaches it made towards giving a more scientific phase to the practice of surgery, was certainly superior to any other. In expressing this opinion, we of course except John Hunter's lectures for the short time that they were contemporaneous with those of Mr. Abernethy; John Hunter dying in 1793." (vol. i, p. 78.)

After describing Abernethy's attainment of distinction and popularity as a lecturer, Mr. Macilwain enlarges upon the varied scientific pursuits in which he engaged. His *Essay on Lumbar Abscess* is deservedly praised; but we cannot think that Abernethy's treatment of cases of this description is so much "misunderstood" as his biographer supposes; but, even if it were so, we do not think that the proper method of removing this misunderstanding is by the introduction of a discussion regarding it in a work avowedly written for the general public. To enlighten the profession through popular works is to run the risk of being charged with an undue disparagement of the knowledge of our colleagues or competitors. Perhaps Mr. Macilwain has had the conduct of Abernethy too favourably before him when

composing this biography; for we find Abernethy's habit of quoting his book on the *Constitutional Origin of Local Diseases*, to those who consulted him, spoken of as only worthy of imitation; and we even likewise find a recommendation to adopt a more systematic method of writing medically for patients. We certainly do not concur with Mr. Macilwain's views, as expressed in the following passage:—

"Abernethy had a great deal more practice than he or any other man could do full justice to; finding it impossible to make people understand his views in the time usually allotted for consultation, he now referred his patients to his book, and especially to p. 72. This has been made the subject of a great deal of quizzing, and of something besides, not altogether quite so good-natured. For our parts, we think it the most natural thing in the world to refer a patient to a book which may contain more in full the principles we desire them to understand, than we can hope to find opportunity to explain at the time of consultation. We think that if asking a few questions and writing a prescription, (and we are here only thinking of a reasonably fair average time visit,) be worth a guinea, the explaining a principle, or so placing a plan before a patient, that his following it may be assisted and secured, is worth fifty times as much: and it came particularly well from Abernethy, one of whose lessons, and a most excellent lesson too, was the remark:—'That if a medical man thought he had done his duty when he had written a prescription, and a patient regarded his as fulfilled when he had swallowed it, they were both deceived.' As we are convinced that, *cæteris paribus*, success in medical treatment is indefinitely promoted by both patient and surgeon clearly understanding each other as to principles, we think it would be of great use if every medical man who has any definite principles of practice, were to explain them in short printed digests. Nay we have sometimes thought it would be useful to both parties, if in addition to the inquiries and advice given at consultation, a medical man should have brief printed digests of the general nature and relations of most of the well defined diseases: a careful perusal of one of these would help the patients to comprehend the nature and objects of the advice given, tend to the diffusion of useful knowledge, and in time help them to understand whether their treatment were conducted on scientific views, or was merely a respectable sort of empiricism." (vol. i, pp. 315-317.)

With the sentiments expressed in this extract, we trust that very few of our readers concur. For an educated surgeon or physician to appeal to his medically uneducated patients, as to whether their treatment be conducted on scientific views, is to open a wide door to quackery: it is, in fact, degrading the members of our profession to the level of homœopaths, hydropaths, and pill-venders, all of whom circulate "brief printed digests", as baits for money. In fact, if this "digest" system were tolerated, it would soon become as scandalous a method of professional advertising as that now carried on through the circulation of autobiographies. We feel assured that, when the evil tendency of the digest system is pointed out to Mr. Macilwain, he will perceive the propriety of cancelling, in future editions, the passage which we have now quoted.

Abernethy was married on the 9th of January, 1800, to Miss Anne Threlfall. He was a clumsy wooer, and a cold bridegroom. He conducted his courtship as a matter of business; and on his wedding day he lectured as usual at St. Bartholomew's.

In 1816, Mr. Lawrence was appointed Professor of Comparative Anatomy to the College of Surgeons, to the great satisfaction of Abernethy, under whose roof he had resided as a pupil for many years. Ere long, however, they became involved in a painful and protracted controversy, which is described by Mr. Macilwain. Lawrence taught views of life which were looked on as "sceptical": Abernethy earnestly opposed these opinions.

In 1815, Abernethy was appointed Surgeon to St. Bartholomew's Hospital, after having been assistant-surgeon for twenty-eight years. Mr. Macilwain with great propriety denounces the "hospital system", which causes men to wait so long in an inferior position. He was fifty years of age before he was made surgeon, and acquired, in virtue of that position, "an opportunity of taking an active share in the practical administration of the hospital". Hard work

had then told upon him, and the elasticity of youth was gone. Mr. Macilwain says:

"He complained in 1817 of the fatigue of the College Lectures, coming as they did on the completion of a season of the 'mill-round of hospital tuition and practice.' So that, when we mentioned the period of his lectures at the College as on so many accounts the zenith of his career, there was the serious drawback arising from a certain diminution of strength which had never been at best equal to the physical fatigue of his multiform avocations." (vol. ii, p. 214.)

In 1817, Abernethy resigned his professorship at the College of Surgeons; and, on the 15th of July of that year, he received from the "Court of Assistants" of the College the following vote of thanks, by which he was much gratified.

"Resolved unanimously.—That the thanks of this court be presented to John Abernethy, Esq., for the series of lectures delivered by him in the theatre of this College in the years 1814, 1815, 1816, and 1817, with energy and perspicuity, by which he has elucidated the physiological and pathological opinions of John Hunter, explained his design in the formation of the Hunterian collection, illustrated the principles of surgery, and thereby has highly conducted to the improvement of anatomical and physiological knowledge, the art and science of surgery, and to the promotion of the honour of the College." (vol. ii, pp. 322-323.)

In July 1829, declining health caused him to resign his seat at the Examination Board of the College of Surgeons. He died on the 20th of April, 1831. His body rests in the parish church of Enfield, where a plain tablet has been inserted in the wall over his grave.

There can be no doubt that Abernethy possessed uncommon natural talents, and that they were well disciplined and cultivated. His judicious maxims tended to give a wholesome bias to the practice of medicine and surgery; and he undoubtedly deserves an honourable place among those who have assisted to advance medicine from an empirical art to a science based on principles. To Abernethy, then, we would pay the willing homage of admiration and gratitude; but, in doing so, we do not think it necessary to award to him higher attainments in science than those possessed by many of his successors of the present day. There is no truth in a remark which is current in society, that in our day there are no Abernethys and no Astley Coopers. The very opposite of this proposition is absolutely true; for, in place of one Abernethy or one Astley Cooper, we have several in most of our large towns, and, in London and the larger cities, they can be reckoned up in hundreds. The elevation of the great body of the profession, consequent upon the Act of 1815, makes it almost impossible for any medical man to tower majestically over his fellows, as was done in former times. The timid and ignorant apothecaries, who, in virtue of their own shortcomings, had consultations as often as possible, have almost been swept away by the advancing tide of education; and they have been succeeded by a legion of accomplished practitioners, who have won the public confidence, and who, in place of being the mere agents of a superior order, hold themselves to be, and indeed are, competent to grapple with all emergencies. This new order of men manfully resent as an injury to the public the attempt of the College of Surgeons to perpetuate, by extreme laxity of examination, a very inferior grade of practitioners, while from the fellows (the superior grade) they demand higher attainments. In these facts lie the explanation of the circumstance, that while there is an enormous increase in the number of first-class practitioners, there are nevertheless scarcely any physicians or surgeons or general practitioners, who commandingly overtop the rest. This state of things is not an unmixed good. In consequence of the old avenues to fame and fortune being nearly closed, our ambitious youths are driven to sad expedients, and are too often tempted to make shipwreck of their finer feelings, by advertising themselves in connexion with portraits, autobiographies, homœopathy, secret methods of cure, and pseudo-charitable dispensaries. In the hope of getting a living out of the remaining fragments of the ancient feasts of fees by which the older physicians and pure surgeons were regaled, modern aspirants to "pure" and

"special" practice, resort to methods and schemes which cannot be defended. Our only hope is that, as the evils to which we refer have nearly reached their climax of offensiveness, we are (if we may so express it) entitled to look for early amendment. The fact will assuredly at last command attention,—that in consequence of the elevation of the whole profession to a higher platform, the prizes must of necessity be greatly divided: the fame and the fortune of an Abernethy must be broken into many different allotments of fame and of fortune, wherewith to reward a host of urgent and often worthy claimants. It is wise to ponder well these signs of the times; for changes are coming.

We must curb an inclination to follow Mr. Macilwain in his interesting reflections: for them we must refer our readers to the volumes now before us. It is want of time and space, and not of inclination, which causes us here to terminate this notice. Were we fully to enter upon the subjects which the author introduces to our notice, we might easily fill many columns with the discussion of topics of supreme importance in medical science, medical practice, and medical polity. Notwithstanding the blemishes of this work, we think that it is one which will well repay perusal.

THE DECLINE OF LIFE IN HEALTH AND DISEASE; being an attempt to Investigate the Causes of Longevity, and the best means of attaining a Healthful Old Age. By BERNARD VAN OVEN, M.D. 8vo., pp. 300. London: 1853.

DR. VAN OVEN'S work, in its plan and material, bears some resemblance to Hufeland's *Art of Prolonging Life*, and to Dr. Day's work on the *Diseases of Old Age*. It is, however, not simply a copy from these and other treatises; but is a digest of what has been previously written and collected by others, combined with the original reflections and experience of the author. Dr. van Oven introduces himself to his readers in a preface, in which he mingles a description of his qualifications to teach with much becoming modesty. He says:—

"The celebrated Heberden remarked, that the life of a physician should be like that of a vestal virgin, which was divided into three periods: in the first of which she learned her profession, in the second she practised it, and in the third she also taught it to others. I have certainly passed through the first and second of these periods: after several years employed in the study of my profession, I have spent thirty-five years in the practice of it; and, anxious to fulfil completely my vocation, I desire, before I quit the stage, to strike one blow for the good cause, to do something, however slight, to improve the sanitary condition of mankind, to alleviate pain, and oppose the influence of disease. I cannot hope, strictly speaking, 'to teach my profession to others'. The important task of instructing the rising generation of students is most properly committed to a class of men, who, themselves trained to their duties, perform them in a most able and efficient manner; and any one even slightly acquainted with the medical profession thirty or forty years since, and who will compare its condition then with its present state, must bear testimony to the vast improvement which has taken place."

Dr. Van Oven's work is divided into three parts, and an appendix. The first part treats of the "Decline of Life in Health." It contains a sketch of the progress of the organisation of man, from birth to maturity; and special observations upon maturity and the decline of life.

In the second part "Longevity" is considered, with reference to its causes and mode of attainment.

"The Decline of Life in Disease," forms the subject of the third part. The following subjects are considered:—the climacteric period in both sexes; the diseases of age; particular diseases, such as gout, cancer, apoplexy, gangrena senilis, prurigo senilis, tussis senilis, etc.

The appendix contains some interesting statistical tables of persons who have attained ages from 100 to above 150. As the author admits, there are obviously "many errors, and exaggerations, and perhaps some wilful misstatements" incorporated in his tables; but he says: "After having

made a due allowance for all these, enough and more than enough will remain to justify a fair presumption, that human life might endure much longer than it usually does, and to encourage the exertions of those who desire to promote healthful longevity. (p. 277.)

SCIENCE OF HEALTH. By STEPHEN H. WARD, M.D. London: 12mo., pp. 412. London: 1853.

THIS is a very good popular exposition of hygienics. The philosophy of the subject is so abundantly illustrated by facts, as to render the book interesting and instructive to young persons and others unacquainted with physiology. Two short extracts are subjoined.

"COMMON SALT—chloride of sodium, as the chemist calls it—is supposed to furnish by its decomposition the muriatic acid which plays so prominent a part in digestion, and soda, which gives an alkaline character to the bile: it also forms one of the constituents of the blood, and seems essential to different vital processes. It is derived from animal food, milk, and some vegetables. From its importance to, and from the quantity required for the purposes of the animal economy, it is usually added in the free state to animal and vegetable food. Salt is found to be a necessary part of the food of domesticated animals; and many wild animals have been observed instinctively to seek it. Every one has heard of the salt springs in North America, to which the term 'licks' has been applied, in consequence of the wild animals, the deer, and buffalo, resorting to them, and licking the impregnated earth in their vicinity. Karsten, a German writer, says that common salt has generally become a very great necessity, even for the rudest nations. In not a few countries, it is one of the most valuable mercantile commodities. In several countries of Africa, men are sold for salt . . . in the district of Acera (Gold Coast), a handful of salt, the most valuable merchandise after gold, will purchase one, or even two slaves. Mungo Park mentions, that among the Mandingoes and other negro tribes in the interior, the expression, 'he flavours his food with salt', is synonymous with that of 'he is a rich man'. Park experienced, from the necessity of giving up the use of salt, especially when long confined to vegetable food, a longing after salt, such as he was unable to express in words." (pp. 244-245.)

"MOLLUSKS. Of those used for food, oysters enjoy the greatest repute. They are to be procured in the vicinity of the coast in most seas, and are generally found a little below the surface of the water, attached to rocks, stones, or the roots of trees, or lying free upon banks. They are removed to reservoirs or beds, or to creeks, into which the tide flows, and kept for some time, before they are considered in fit condition for the market. The art of thus parking oysters seems to have been familiar to the Romans; and the invention, if such it may be considered, is ascribed by Pliny to Sergius Orata: the oysters of the Kentish coasts were indeed in repute with Roman epicures soon after the invasion by Cæsar. The flavour of oysters is delicate and much admired, and these mollusks have the merit of being well fitted for those of weak digestion. Raw oysters are digested in rather less than three hours, while stewed oysters take three hours and a half to digest. The latter are not only coagulated by heat; but the butter used in cooking them adds to the indigestibility. Mussels and cockles are used as food, but chiefly by the lower classes; they are difficult of digestion, and frequently give rise to nettle rash and other disagreeable symptoms. Mollusks of different kinds form an important part of the sustenance of many savage island tribes, particularly of the natives of Terra del Fuego, and other parts where a higher order of nutriment is scarce. The snail is eaten, and pickled for exportation, in some of the cantons of Switzerland. Dunglison says:—'It was an article of luxury among the Romans. Fulvius Hirpinus, not long before the civil war between Cæsar and Pompey, made several snail parks in his garden, keeping every variety distinct. He had the white snails of Reate, the grey and large snails of Illyricum, the fruitful snails of Africa, and the Solitan snails, regarded as the most famous and excellent of all. They were fed upon a pap made of sweet wine, honey, and flour; and under this diet they became so wholesome and delicate, and were so much esteemed, that they were sold for eighty quadrants the dishful. The white snails are eaten in many places, and are all perhaps wholesome. They are gelatinous and viscid, and are frequently swallowed raw. In this way they have been recommended as a nutritious aliment to consumptive individuals.' (pp. 266-267.)

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 26TH, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

FIBRINOUS PLUGS IN VEINS. BY HENRY LEE, ESQ.

Mr. LEE exhibited the preparation of a case in which the profunda femoris vein, with its branches, was plugged with a mass of fibrin. This had resulted from the introduction of purulent matter into the blood from an abscess on the inner side of the thigh. He detailed certain experiments performed by M. Gaspard, who injected into the right jugular vein of a dog two and a half ounces of thick fetid fluid, derived from the maceration of cabbage leaves in water. Death occurred during the following night.

On *post mortem* examination, the lungs were found of a dark colour, with some black patches, but still crepitant. The left ventricle of the heart presented brown stains; its internal surface was of the colour of lees of wine. The right ventricle contained a hard fibrinous concretion, two drachms and a half in weight, of a light yellow colour, and having the external appearance of grease. It was of the same consistence throughout, and was free at all points, except a small portion which was attached to an inflamed spot on the inner surface of the ventricle. No appearance of the injected fluid could be detected in the clot; it was prolonged into the pulmonary artery, vena cava, vena azygos, axillary vein, and even into the right jugular vein.

Dr. ROUTH remarked, that putrid pus had been injected into rabbits without injury, and that wounds from dissection are usually innocuous. The results mentioned by Mr. Lee must arise from other circumstances, as those of epidemic influences and bodily weakness. Hectic fever does not usually follow the introduction of pus within the system.

Dr. MACKENZIE agreed with Mr. Henry Lee on the question of the obstruction of veins by fibrinous deposition from a vitiated condition of the blood. He did not speak specifically of a vitiated condition of the blood from pus, because this, being a fluid which varied very greatly in its properties, would give rise to very different results in different cases. Speaking, however, of vitiation of the blood generally, he could affirm that, from this cause alone, arrest, stagnation, and coagulation of the blood might take place in the veins, without any primary inflammation of their coats. That some alteration of their lining membrane was induced by the vitiating matter, he had no doubt, although it was difficult to define its precise nature; and he believed that, in consequence of this alteration, the blood, instead of flowing onwards, was arrested and coagulated in the veins. Upon this arrest and coagulation the general phenomena of phlebitis ensued.

INTERNAL METRITIS AND UTERINE CATARRH. BY E. J. TILT, M.D.

Dr. TILT contended, that to subacute inflammation of the mucous membrane of the neck of the womb the term uterine catarrh should alone be applied; by giving it to acute inflammation of the neck, French pathologists had been led to use dangerous injections into the cavity of the womb. Subacute inflammation of the mucous membrane lining the womb was characterised by the usual uterine pains and hysterical phenomena, and by inconsiderable swelling, if any, of the cervix, which was sometimes only painful on lateral pressure, the discharge being rarely muco-purulent, generally mucous, and sometimes sanious. In addition to the known means of treatment, Dr. Tilt advocated the topical application of tincture of iodine to the inner and outer surface of the womb, to be repeated every four or five days. Acute inflammation of the mucous membrane of the body of the womb could not be distinguished from the inflammatory affections of the whole organ; but, in some cases of menorrhagia, this mucous membrane was alone affected, and threw off a false membrane, different from the decidua membranes which have been hitherto described. Dr. Tilt exhibited a morbid specimen, taken from a young woman who died of menorrhagia under Dr. Watson. He thought that future researches would show that there was a chronic inflammation of the body of the womb, in most cases of dismenorrhœa accompanied by exfoliation of the mucous membrane. He then described a form of internal metritis, to which he gave the name of hæmorrhagic, to mark the symptom by which it was habitually accompanied. He illustrated it by a case in which astringent injections, cauterisation of the neck of the womb with the nitrate of silver, as well as internal remedies,

were without avail; whereas, when large doses of morphine, two grains *per diem*, were given to allay pain and calm hysterical symptoms, the sanguineous and semi-purulent discharges were checked, and the patient recovered. Another variety of internal metritis was characterised by the growth of fibro-plastic vegetations on the surface of the womb; these vegetations giving rise to sanguineous discharges and severe uterine symptoms. Dr. Tilt deprecated the use of uterine injections, on account of the uncertainty of their action, either in a similar set of cases, or even in the same patient—admitting, however, that they might, perhaps, be useful in some cases of the fibro-plastic variety. In that disease he recommended the careful introduction of Recamier's curette, a uterine sound a little larger than Dr. Simpson's, somewhat curved at its extremity, and hollowed out under its curvature, so as to remove the vegetations by gentle abrasion. Dr. Tilt had also found this instrument very useful in removing portions of retained placenta, the presence of which were indicated long after parturition, by flooding, by an enlarged body of the womb, and by uterine symptoms. He also showed another large instrument, which had been used by Recamier for the same purpose as the smaller, when the internal neck of the womb was widely dilated by inflammatory action—a circumstance of rare occurrence. He had found another plan of treatment successful in one case of the fibro-plastic variety; viz., after the application of the speculum, to introduce into the cavity of the body of the womb Dr. Simpson's uterine sound carefully surrounded by cotton-wool, saturated with tincture of iodine. The vegetations came away with a sero-purulent discharge after a few days; the operation was repeated, and the patient was in a short time relieved of a sero-sanguinolent discharge, which had lasted for years. Dr. Tilt inferred that tincture of iodine and iodide of iron were the topical applications from which practitioners would derive the greatest assistance in the treatment of uterine diseases.

Mr. STREETER (holding up the large curette invented by Recamier, and exhibited by Dr. Tilt) asked if it was really intended to be introduced into the uterus? It was a most dangerous instrument; and he did not think that it could be introduced, a few days after delivery, for the removal of retained portions of placenta.

Dr. HENRY BENNET did not understand why the mucous membrane of the neck of the uterus was more prone to inflammation than that of the body of that organ. He had rarely met with the latter disease, but believed that it would be indicated by exalted sensibility of the organ, enlargement of the cavity, a patulous os uteri, a sero-purulent or bloody discharge, and a marked reaction on the health. The mere presence of hæmorrhage, or of fibrinous casts, would not prove its existence. The treatment of inflammation of the mucous membrane of the canal of the cervix is simple and effective, while that of the body is beset with difficulty and some danger. He had known the introduction of a bougie to dilate the canal not only give intense pain, but induce abscess of the broad ligaments. He had employed the nitrate of silver and the acid nitrate of mercury.

Dr. GREENHALGH believed that uterine catarrh is due to inflammation of the mucous membrane both of the body and of the canal. In the acute forms of the disease, he would employ the hot-bath, with mercury and Dover's powder; and in the chronic states he would direct change of air and improvement of the general health. He would not affirm that the application of potassa fusa and other local remedies was always improper, but he believed it to be rarely called for. As a rule, he objected to much local interference.

Dr. MACKENZIE was persuaded that the anatomical seat of uterine catarrh was exclusively the cervical canal, and the numerous mucous follicles with which it was studded, rather than the mucous membrane of the body of the uterus. So confident was he on this point, that he would venture to assert that all mucous discharges proceeding from the uterus had their origin in the cervix, and all sanguineous or sero-sanguinolent discharges in the lining membrane of the body of the uterus. Some time ago, he had the opportunity of making several observations upon this membrane in a case in which the uterus was inverted; and he had observed that, whilst it was constantly covered with a sanguineous fluid, no mucus was ever exuded from it; and that, under the influence of mechanical irritation, blood and not mucus was thrown out from it. With regard to internal metritis, and the dependence of uterine catarrh upon inflammation of the cervix uteri, he had great doubt as to the accuracy of some of the opinions which had been expressed by Dr. Tilt.

Internal metritis, in the ordinary sense of the word, he regarded as very rare; and he thought that the immunity of the lining membrane of the uterus from inflammation might be explained by a reference to its anatomical and physiological characters. On the one hand, it was extremely vascular; and on the other, its function being that of separating periodically a certain amount of blood from the system, or something very analogous, and free transudation of blood would take place, and so remove that congestion which was a primary and essential condition of the inflammatory process. The preparations shown as instances of false membrane exuded from the lining membrane of the uterus, as a consequence of inflammation, did not, in his opinion, support this view of their origin. The supposed false membranes appeared rather to be derived from blood which had been poured out into the uterine cavity, and which, having lost its fluid and coloured portions, had become moulded into the shape of the body and neck of the uterus—changes which had no more connexion with uterine inflammation than had the fibrinous concretions often found in the heart and great vessels with inflammation of these organs. Uterine catarrh, also, in his opinion, had no necessary connexion with inflammation of the uterine neck. It was essentially hypersecretion of the mucous follicles of the cervix; and, as such, might have its origin in any of those deranged states of the constitution and of the nervous and vascular systems by which the nutritive and secretory functions generally were liable to be modified or affected. Some time ago, he had a case which illustrated these views, as well as the relative value of constitutional and local treatment; and which clearly indicated that profuse uterine catarrh might occur without any inflammatory lesion of the cervix; whilst the inefficacy of local, as compared with constitutional treatment, was forcibly shown.

SATURDAY, DECEMBER 3RD, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.
EXOSTOSIS ON THE CRANIUM OF AN EPILEPTIC PATIENT.

BY DR. GIBB.

Dr. GIBB exhibited a portion of a parietal bone which had a small exostosis on the inner surface. It had been taken from a woman, aged 40, who had been epileptic from the age of 15. She died in the hospital at Montreal, four days after being admitted labouring under delirium tremens. The symptoms of the latter disease were strongly marked; and she also had epileptic attacks three times on each day of her stay in the hospital. The dura mater appeared quite healthy throughout.

PATHOLOGY AND TREATMENT OF SWELLED TESTICLE.

BY J. L. MILTON, ESQ.

The author had not found neuralgia, tubercle, or carcinoma, as the result of orchitis; all he had found were the common proceeds of inflammation, and he believed that neglected orchitis very often impairs the functions of the testicle. A long time after a so-called cure, the epididymis had been found hard, and, after death, examinations of the testicle, where a similar hardness could be felt through the scrotum, showed induration of the epididymis, contraction, etc. Mr. Holmes Coote had also found the vas deferens contracted, and its walls softened. The author then examined the various theories of the origin of orchitis from gonorrhœa, and rejecting those of metastasis and an erratic disposition of the gonorrhœa towards its decline, he observed that there were no proofs of the doctrine of sympathy; speaking of a case, in which the extremities only of mucous canals became inflamed, Mr. Milton thought that extension of the inflammation took place in every case. The absence of pain in the intervening parts might be owing to their lower organisation; Sir A. Cooper had shown that the inflammation was milder in the lower part of the urethra. Orchitis does not arise when the gonorrhœa is most intense, but when the inflammation has had time to spread backwards. He doubted whether orchitis arose from injecting stimulating medicines.

Mr. Milton suggested treatment by means of preparations of potass and graduated injections. In upwards of six hundred cases of gonorrhœa treated thus, three only had been attacked with orchitis, and in these the treatment had not had a fair trial; he thought antiphlogistic treatment useless, and preferred half-grain doses of morphia and acetate of ammonia, with blistering on the second or third day. He applied hot water to the scrotum, and allowed nutritious diet and stimulants in moderation.

A discussion followed, in which Dr. de Meric, Mr. Hancock, Mr. Dendy, Mr. Weedon Cooke, Mr. Acton, and other gentlemen took part. In the course of the discussion,

Dr. GIBB said that he had seen orchitis treated in the hospital at Montreal by an ointment containing one grain of biniodide of mercury in ten grains of lard. The time required for cure was from twenty-four hours to three days. He had himself employed this plan in two cases with success.

SATURDAY, DECEMBER 10TH, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

FIBRINOUS CONCRETIONS IN THE HEART OF A MAN WHO HAD ATTEMPTED SUICIDE BY HANGING. BY B. W. RICHARDSON, ESQ.

Mr. RICHARDSON exhibited some specimens of fibrinous concretions, taken from the heart of a man who had attempted suicide by hanging. The patient was a tall man, a resident in Mortlake, who on Wednesday, November 30th, suspended himself in a narrow passage, in such a position that the cord did not press on the trachea. He remained suspended for, it was believed, at least a quarter of an hour. When cut down, life was not extinct. After some time, respiration and circulation returned; but there was complete anæsthesia. After some hours, the circulation and respiration were much above the healthy standard; and on the following Friday he died, with "typhoid" symptoms. On examining the body, along with Dr. Willis, Dr. Cormack, and Mr. Brown, Mr. Richardson found firm coagula of fibrin in both the right and the left cavities of the heart, and stretching into the vessels. The brain was much congested; and there was considerable effusion in the arachnoid.

NEW FORCEPS FOR APPLYING LIGATURE TO ARTERIES.

BY DR. DE MERIC.

Dr. DE MERIC exhibited a forceps which had been referred to him by the Council. It was the invention of M. Apostolides, a Greek medical student in Paris. There was an apparatus by which, a noose having been first formed and placed on the forceps, the ligature was pushed down over the artery, and then tied.

MODERN PHILOSOPHY OF CANCER. BY ROBERT DRUITT, M.D.

[This paper will be published as an original communication in this JOURNAL.]

In the discussion, Messrs. Richardson, W. Adams, Pilcher, Weedon Cooke, H. Smith, and Drs. Semple and Snow, took part. Several of the speakers agreed as to the propriety of rejecting the term malignant.

MONDAY, NOVEMBER 12TH, 1853. [PHYSIOLOGICAL SECTION.]

W. TYLER SMITH, M.D., Vice-President, in the Chair.

ON THE COLOURING MATTER OF THE BILE.

BY EDWARDS CRISP, M.D.

Dr. CRISP exhibited numerous specimens of dried bile, taken from various classes of vertebrate animals. His object had been to examine the correctness of the doctrine advanced by Kölliker, that the colouring matter of the bile is formed from the *débris* of blood-corpuscles, which had been destroyed by the spleen. He had found that this view was negated, by the fact that removal of the spleen did not affect the colour of the bile in the manner which would be expected from this theory. In fact, the bile was of a deeper colour in a dog from which the spleen had been removed, than in another in which that organ had been allowed to remain.

NEW COPPER TEST FOR SUGAR IN ANIMAL FLUIDS.

BY C. D. GIBB, M.D.

Dr. GIBB was accustomed to test for grape sugar in animal fluids, by adding from half a grain to two grains of black protoxide of copper, then pouring in liquor potassæ, and boiling for two or three minutes. The liquid turned of a more or less cherry colour, with evolution of oxygen, and the red suboxide of copper was precipitated. The test is very delicate.

MODUS OPERANDI OF NARCOTICO-IRRITANTS. BY JOHN SNOW, M.D.

Dr. SNOW said that all narcotics were more or less irritants, causing redness and heat in most cases when applied to the skin, and general excitement when absorbed in the blood. It was the opinion of many physiologists that these agents acted as stimulants in the first instance, and produced their narcotic effects by exhausting the sensibility; but this view was untenable, first, because the stimulant effects were often absent altogether, and when present they bore no relation to the amount of stupor which might follow; secondly, because excitement often appeared again in the process of recovery, when the insensibility passed off; and lastly because, in the use of volatile narcotics, the coma could be continued or allowed to subside at pleasure, by merely keeping up or leaving off the inhalation, which proved that the excitability was merely suspended, and not exhausted. The connexion between the irritant and the narcotic effects of medicines was of a very close nature, although it was not one

of cause and effect. He considered that both the irritation and the narcotism were caused by one power in the agent applied, namely, the power of diminishing oxidation in the living body. A number of reasons were given to show that narcotics have the power of diminishing and preventing the process of oxidation, on which sensibility, contractility, and the other animal functions, depend. The following are some of them. The amount of carbonic acid gas produced in respiration has been found to be diminished by certain narcotics, as alcohol, ether, and chloroform. The colour of the venous blood is lighter than usual in patients under the influence of the two latter agents, showing a diminution in the changes which take place in the systemic capillaries. When animals are killed in the space of about five minutes by narcotic vapours, the chief symptoms and phenomena are the same as in asphyxia by privation of air. The greater number of narcotics have the effect of preventing combustion, putrefaction, and other forms of oxidation out of the body; their power as antiseptic, etc., bearing a direct relation to their power as narcotics, when they resemble each other in their chemical constitution.

Whilst the diminution of oxidation in the system produced narcotism directly, it indirectly caused irritation, by inducing congestion in the capillaries and small arteries, where sufficient vascularity existed. Dr. Alison, Dr. John Reid, and various others, had shown, by facts which he enumerated, that the circulation through the capillary blood-vessels is assisted by the various changes of composition, etc., taking place in the neighbourhood of these vessels, the chief of which consisted in a process of oxidation. When this process was diminished, the flow of blood through the capillaries was impeded, and these vessels and the smaller arteries become congested, causing the redness and other phenomena of irritation. It was in the most vascular organs, and in persons having most blood, that irritation and excitement were most frequent. Microscopic observations had shown that the circulation through the capillaries was impeded or stopped by the action of opium, carbonic acid gas, and some other narcotics. Narcotico-irritants did not increase either the mental or bodily powers of persons in perfect health, in whatever doses they might be administered; but a small quantity of wine or opium often gave temporary energy to those who were in a state of debility. In such persons, what blood they had loitered chiefly in the large veins, and a slight obstruction to the capillary circulation caused the blood to accumulate a little in the arteries, and the heart was impelled to increased action to overcome the resistance. Under such circumstances, the better supply of blood to the various organs more than compensated for the true narcotic action of the agent employed. From the continued presence of certain narcotico-irritants in the blood for a long period, as in Bright's disease of the kidneys, the left ventricle of the heart often became hypertrophied by its efforts to overcome the resistance to the circulation through the capillaries. It had been lately stated, that the poison which sometimes caused coma and convulsions in this disease was carbonate of ammonia, arising from the decomposition of urea in the blood; and some experiments he had performed on gold fishes showed that carbonate of ammonia was a much more powerful poison than urea.

In the discussion which followed, Mr. Richardson, Drs. Cogswell and Sibson, and other members, took part.

EPIDEMIOLOGICAL SOCIETY.

B. G. BABINGTON, M.D., President, in the Chair.

MONDAY, DECEMBER 5TH, 1853.

THE INDIAN PLAGUE AND THE BLACK DEATH. (COMMUNICATED BY J. O. M'WILLIAM, M.D.) BY AUGUST HIRSCH, M.D., OF DANTZIC.

The author stated that in the whole history of epidemics, there are few epochs more interesting than that of the fourth decennium of our century; for then, within a few years, we find many most important diseases spread epidemically over the globe. These were preceded by agues, which prevailed at the close of the third decennium, and by the influenzas of the years 1831-33. Cholera, which in 1823 had stopped short on reaching the frontier of Europe, overspread with the force of a torrent the Russian empire, and in 1831 entered Germany, where, in the southern parts of the kingdom, it was soon followed by typhoid fever and dysentery. At the same period "sweat fever" appeared in France and Italy, and, for the first time "typhus cerebri" was propagated epidemically. In North America cholera, typhus and yellow fever, raz . Turkey, Western

Asia, Egypt, and the greater part of North Africa, were ravaged by typhoid fever and Oriental plague.

It was just at that period that a disease of a new and most malignant character broke out in the north-west part of Hindostan. Research among the archives of the Medical Board, however, made it evident that the same disease prevailed some years before in those regions; but the attention given to it had subsided soon after the epidemic ceased. The author considers the disease in question to have been a very decided plague, specifically modified; and that, in order to distinguish it from the Oriental plague, it may justly be denominated the "Indian Plague." The first historical report of the outbreak of the Indian plague dates from the year 1815, in the provinces of Kutch and Guzerat, which in the previous year had suffered from terrible famine. Neither the origin nor the course of the epidemic could be distinctly traced, but there is no doubt that the disease already, in May, 1815, had spread over some parts of Kutch, and the district of Wagoor; that it raged in these territories until the following year, and made great havoc among the inhabitants. At the same time the epidemic appeared in Kattywar, whence it spread to Scinde, and in November it reached Hyderabad, where from 60 to 70 persons daily fell victims to the plague. The epidemic entered the north-eastern district of Guzerat in the beginning of 1817, and abated in the fall of the year. With the rainy season of 1819 it burst forth with new vigour, and overspreading the territory which had suffered during the previous year, reached the northern part of Guzerat, and in the east the Zillah of Ahmedabad. With the close of 1821 the epidemic everywhere disappeared; and except the remark of Dr. Rankine, that the plague had been observed in 1823 in the mountainous territory of Kamoon, we have no information of its re-appearance until 1836, when it broke out with great malignity in a country far removed from that above-mentioned. It was then that the disease for the first time attracted general attention, and gave rise to scientific inquiries, and the adoption of sanitary measures. The Radjpootana States were the scene of the ravages of this epidemic; and as the first Report of the disease came from Pali in the province of Marwar, it has obtained the name of the Pali plague, although it is anything but certain that the epidemic originated in that place, for it also raged at the same time (July, 1836) in other districts of that province. After having traversed the greater part of Marwar, the disease passed the chain of hills separating the eastern borders of this province from Meisar, overspread that country, and afterwards the district of Adjmer. Early in 1837, when the epidemic in Marwar had nearly ceased, it appeared in Misserabad, and declined with the rainy season. At the close of 1837, it again invaded Marwar, especially the town of Pali, and continued till the spring of the following year. Since that time, up to 1850, there is no further report of the prevalence of the malady. It was in this year that a fresh outburst occurred at Ghurevhal and Kamorn, in the Himalayan territory. Dr. Hirsch gives a very minute and graphic description of the mode of invasion, and of the general symptoms of the disease. The disease, although a bubonic plague, was distinguishable from the Oriental plague by an attendant pulmonary affection, with hæmoptoe. The mortality was dreadful; the supposition that it was from 75 to 80 per cent. of those attacked being by no means exaggerated. In the town of Pali alone, in a population of 20,000 inhabitants, 4,000 persons fell a sacrifice to the plague in the period of seven months. The disease did not appear to be contagious, nor was it at all influenced by season.

The author adduced strong evidence as to the identity of the Indian plague with the black death of the fourteenth century, which Hecker and other writers had shewn to be a bubonic plague, combined with an affection of the lungs.

Dr. JAMES BIRD had not actually seen the disease; but after a careful examination and comparison of the various accounts to be found in the reports of the Bombay and Calcutta Medical and Physical Societies, and from information derived from other sources, he was satisfied that this Indian disease is a form of sporadic plague, propagated by pulmonary imbibition in the high-walled, crowded towns of India, and not communicated like the ordinary epidemic plague of the Levant, which required malarious influences for its propagation. Dr. Bird had seen cases of plague occurring sporadically in Upper Egypt, when the disease was not epidemic. The natives did not consider this form of the disease infectious; they handled the dead and sick with impunity, and they confidently asserted that it would not spread.

Dr. M'WILLIAM wished to ask Dr. Bird whether attention had been drawn to the conditions under which the disease spread in

India. In Egypt the plague was annihilated both by high and low temperatures, and only spread when the heat was moderate. Did a similar law prevail in India?

Dr. MILROY considered that this paper clearly showed that true plague of the Levant had appeared in India, and that *spontaneously*; for its appearance in an island instead of a maritime district seemed to exclude the possibility of its having been conveyed from the Levant. It was very important to bear this fact in mind, as it shows that this and similar diseases may develop themselves in different countries spontaneously. The fact of the occurrence or absence of hæmoptysis was not a sufficient ground for a distinction between the two diseases. It arises from the same cause as the black vomit of yellow fever, viz., congestion of the capillaries, in the one case of the stomach, in the other of the lungs. Nor is the absence or presence of infection any ground for a distinction. Plague was not nearly so contagious as is generally supposed, and the sporadic cases could easily be explained by the crowded and filthy houses in which the natives live. Attention should be drawn to the simultaneous appearance of plague, cholera, typhus, etc., in different parts. Probably, at certain times, a malarious influence spreads over the whole globe, and causes different forms of disease in different parts of the world.

Dr. J. BIRD, in answer to Dr. McWilliam, observed, that in Egypt the plague disappeared after St. John's day, when the weather became dryer; but he was not aware that any similar law was known to hold in India. He concurred with Dr. Milroy in thinking these different epidemics essentially the same, and varying only in the circumstances in which they occur.

Dr. SNOW observed, that the plague was most prevalent at Gourlah when the temperature was moderate—between 60° and 70° Fahr.; but that cases were also known in cold and in hot weather, as was occasionally the case in Egypt.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

SESSION XXXIII. SECOND MEETING.

WEDNESDAY, DECEMBER 7TH, 1853.

JAMES Y. SIMPSON, M.D., President, in the Chair.

The following officers were elected; *President*: James Y. Simpson, M.D., Professor of Midwifery in the University of Edinburgh. *Vice-Presidents*: T. S. Combe, M.D., John Taylor, M.D., Samuel A. Pagan, M.D. *Ordinary Councillors*: John Gairdner, M.D., Richard J. Mackenzie, M.D., Benjamin Bell, F.R.C.S.E., James Struthers, M.D., Alexander Ziegler, M.D., James D. Gillespie, M.D., J. Matthews Duncan, M.D., Andrew Wood, M.D. *Treasurer*: Robert Omond, M.D. *Secretaries*: W. T. Gairdner, M.D., 18, Hill Street; J. Warburton Begbie, M.D., 21, Alva Street.

PRACTICAL REMARKS ON THE MINERAL WATERS OF HOMBURG.

BY W. SCOTT, M.D.

Dr. SCOTT referred to the comparative ignorance that prevailed in this country as to the waters of Homburg; and he mentioned that Dr. James Johnston had omitted mention of them in his work on the spas of Germany. He would plead these facts as an excuse for bringing under the notice of the Society a few remarks on a German watering place, in which he had resided for some time.

Dr. Scott gave a brief detail of the situation of Homburg, and noted its rapid increase in population. In 1841, it contained only 1071 inhabitants, while in 1852, they had increased to 6000 or 7000. The chief springs were the Elizabethen-brunnen, the Kaiser-brunnen, the Stahl-brunnen, the Sauer-brunnen, and the Bad brunnen. Their chief ingredients were muriate of soda, muriate of lime, and carbonate of iron; which in their varying proportions constituted the peculiarities of the different springs. Thus the Kaiser-brunnen contained half as much more of muriate of soda than the Elizabethen-brunnen, and double the quantity of muriate of lime; and consequently was a stronger water. Again, the Stahl-brunnen contained double the quantity of carbonate of iron found in the first mentioned spring. The Sauer-brunnen was a milder aperient, and less chalybeate, for a similar reason.

Generally speaking, these springs were employed in chronic affections of the skin, scrofula, and syphilitic diseases. Occasionally, however, they were found to be too irritating in certain cases of skin affection. Again, in scrofula, benefit was obtained from adding the lees of salt, which, from the iodine contained in it, appeared to have a good effect. It was chiefly, however, in conjunction with other springs that most benefit accrued from their use.

The season extended from the middle of May to September;

and during this period, from the sheltered situation, the temperature was remarkably regular. The time for taking the waters was from 6 to 9 A.M. The baths were generally taken three hours after breakfast. In the dietary, which Dr. Scott gave at length, he recommended the avoidance of vegetables, as potatoes and fruits.

Occasionally disastrous effects were found to follow the use of the waters. He referred at length to the case of the late member for Peterborough, whose death had occurred in July last. This gentleman had long been suffering from a disturbed state of the bowels, and a variety of treatment was had recourse to in vain. He tried the waters; but they produced a spasmodic affection of the bowels, which led to a fatal issue. The case too of the late Duke of Nassau might also be mentioned, where death suddenly took place after using the bath. As to the so called *Bad-krisis*, with its disagreeable train of symptoms, he thought it might be entirely obviated by giving some mild alterative, or suspending for a time the use of the waters.

In his own experience, he had found the waters of Homburg especially useful in all forms of biliary derangement, and particularly in the dyspepsia resulting from too close attention to business; although, no doubt, a good deal of the benefit obtained was due to the change of scene and mode of living, etc. Also in rheumatism and gout: in hepatic diseases, although perhaps here Homburg was surpassed by some of the thermal springs of Bohemia; in female complaints, in which, next to dyspepsia, the most benefit was obtained: and finally, in chronic catarrhal diseases, and in glandular and hæmorrhoidal affections. As to the affections of the skin; the various forms of herpes and impetigo were found especially tractable. Generally speaking, the waters were contra-indicated in all acute and febrile diseases, in organic diseases of the heart and lungs, and in cases with tendency to congestion of the head. He cautioned against the use of the waters in cases of irritability of the stomach, where it depended on disease of the kidney. In conclusion, Dr. Scott mentioned that Artesian wells were being bored, which would add greatly to the present supply; and recommended to the notice of the Society the late work of Frederic Müller, on the waters of Homburg. The waters of Homburg contained no bromine, and thus differed from those of Kreuznach.

Professor SYME had found that the use of mineral waters generally aggravated hæmorrhoidal affections. As to the case of sudden death mentioned by Dr. Scott, he attached little importance to its having occurred after taking the bath; as patients at these mineral springs were so continually going in and out of the baths, it was no wonder that death should overtake them in one or other of these processes, just as it did other people in their beds.

Professor SIMPSON, in inquiring of Dr. Scott as to the differences subsisting between our own Scotch mineral waters and those of Homburg, stated that in this country the chief ingredient was muriate of lime. He had latterly seen good reason to adopt Sir Robert Carswell's views with regard to fibrous tumours of the uterus; viz., that they were merely a nodose collection of the ordinary tissue of the uterus, and liable to go backwards, or undergo a species of involution, just as took place in the normal uterus after delivery. If this were the case, the beneficial effects of the waters of Kreuznach were easily explained. Cases, however, he had seen which had returned to this country without the slightest benefit; and in such the sustained use of bromide of potassium was followed by marked diminution in the size of the tumours; in one case, fully one half. This salt is more potent than the iodide of potassium; and seems to be useful as a tonic, as well as a deobstruant. In two cases in his practice it produced salivation. Dr. Locock had stated to him that several of his cases had been much bettered by the Kreuznach waters. But in a case which had occurred lately in Dr. Simpson's practice, no good had followed the use of the waters, though the medical attendant at the place thought otherwise.

CONTAGIOUS NATURE OF CHOLERA. BY DR. TRAILL, OF ARBROATH.

This paper consisted of a succinct and remarkably accurate investigation into the history of all the cases of cholera which had occurred in Arbroath, during the very recent visitation of the epidemic. The cases in all amounted to twenty-six, of which fifteen died, eight recovered, and three were still under treatment. Of the twenty-six, four cases were ascertained to have been imported; in thirteen, no communication with infected individuals could be traced; and in nine, the information was faulty. In five of the cases, cholera was only fully devel-

loped after removal to the House of Refuge; but all the cases were affected with diarrhoea. Of the nurses, one died; but all suffered from diarrhoea. Five of the patients were of dissipated habits; two remarkably so: the remainder consisted of children and of persons reputed sober. In the town itself there is a general want of good dwelling places for the labouring classes. The water, which is obtained from wells, is abundant, and the soil rests on dry gravel. The sanitary condition of the town, which is above par, does not explain the occurrence of the disease.

The statement was tested by reference to a neighbouring locality in the town, in nearly precisely similar circumstances as regards sanitary condition, and containing a hundred and thirty inhabitants. Of these, not one took the disease. And a more striking instance was cited in the case of the row of six cottages, where the disease first made its appearance. In all, the drainage was imperfect; but the cottages to the west were more favourably placed than the others. In the four centre cottages, there were twenty-seven persons. In the two end ones, twelve lived. Of the twenty-seven, all but one escaped, and that was an infant. Whereas, of the twelve inhabiting the end cottages, six took cholera, four choleraic diarrhoea, and two suffered from diarrhoea. Dr. Traill did not undervalue the importance of sanitary reform; but he confessed to being convinced, by his late experience, of the contagious nature of cholera.

Professor SIMPSON called on Dr. Tait, of Dunse, to favour the Society with an account of the recent epidemic in that town.

Dr. TAIT stated, that of the ten cases which had occurred, he had only seen eight. Between the first and second cases, no communication could be traced; but the houses were contiguous. The drainage was bad. Case No. 3, lived about one hundred yards from No. 2; he was a railway-guard, and had communication with Newcastle in the discharge of his duties, he suffered from diarrhoea for a day or so, and was drunk the day previous to his seizure. No. 4 was the wife of No. 3. Nos. 5 and 6, the Knoxes, father and daughter, lived in the middle floor of the same house as Nos. 3 and 4, who were waited on by the daughter, and had some clothes washed by her. One old woman who resided on the same floor with Nos. 5 and 6 had no communication with persons labouring under cholera, and escaped—the same is true of three people who occupied the ground floor. No. 7 lived several hundred yards away from the last cases. He was the sexton, and had, on several occasions, assisted the nurse in waiting on those affected. No. 8 was the late Dr. Drysdale, who attended all the cases; but on the day of his seizure was more than usually exposed, as for three hours he had to officiate as nurse, and from the extreme jactitation of the patients, was brought into closer contact with them. No. 9 was a woman who came to attend upon the Knoxes, and was of drunken habits. No. 10 was the wife of No. 7, she assisted occasionally in nursing, she died of the consecutive fever. Case No. 1 was of a delicate frame of body; while case No. 2 was of intemperate habits. The drainage in the neighbourhood of both their houses was very imperfect. Such facts no doubt gave a strong predisposition. He had remarked the immense number of midges which loaded the atmosphere during the prevalence of the epidemic. In Dunse, the average duration of the disease was from twenty-four to twenty-eight hours. The whole duration of the epidemic was seventeen days, and the number of cases of diarrhoea was twenty.

Dr. LOWE of Saughton Asylum, stated that the midges made their appearance before the cholera; but that when it appeared, they were replaced by the aphides, perfectly distinct from the midges, and widely different in habits.

Dr. W. T. GAIRDNER, during the cholera visitation of 1848, had issued circulars to various surgeons throughout the country, requesting reports of the progress of cholera in the affected districts. At first he was inclined to regard the disease as non-contagious; but before many reports had reached him, the evidence as to its contagious properties became to his mind irresistible. No doubt cholera was less contagious than typhus; but the evidence of its contagious properties was precisely similar.

First:—cholera followed the track of Typhus in any given locality; the same houses were attacked, and in the same order; it might be said, however, that the only similarity was, that in both instances dirty places, under bad sanitary conditions, were attacked. But cholera sometimes attacked places by no means the dirtiest and worst in a locality; and even then, the same houses or streets were the seat of both diseases; proving that their mode of propagation is not very different. This was well

illustrated at Mauchline, where the affected locality was limited in extent, and by no means the worst in the town.

Second:—In a large proportion of cases, an importation of the disease could be made out in towns or villages, if not in the first cases, at least before the disease had become epidemic. Even where, as in the case of Stirling, importation was not made out, there was every reason to believe it might have been discovered, had all the facts been known. In this instance, the epidemic was observed gradually to close in on every side, till within a mile or so of the town, and there was no doubt that the first cases that occurred in Stirling, were precisely at that part of the town which had most communication with the nearest affected village in the neighbourhood.

What had we in these reports that was adverse to the doctrine? From Selkirk we had the vague statement, that the communication with the surrounding districts was very limited; in other cases the disease appeared to arise in isolated localities within the town; but it was difficult to construct a strong argument out of these merely negative facts. In Dumfries, in the epidemic of 1832, the medical men opposed the idea of contagion, and in 1848, there were some of them very strong non-contagionists. The first report that was received from Dumfries declared that the patients in their general hospital had remained quite exempt from cholera, although exposed, without any precautions against infection, to the presence of cholera patients, and stated that the attendants upon the sick had remained likewise free from the disease. These statements did not satisfy the medical man who had treated most of the cases in hospital, and who had therefore the best opportunity of knowing the facts. From his report, and from a correspondence in the *Medical Times*, it appeared, that in 1832 no cholera patients were admitted into the hospital; in 1848, however, cholera cases were admitted, and there were separate wards provided; but notwithstanding the utmost care to avoid infection, of five nurses, one took cholera and died, while many of the patients had attacks of diarrhoea. Of the nine medical men of Dumfries, one died, and more than a half of their number were confined with diarrhoea. Two of the twelve special assistant medical men were attacked, and one died. The report from Falkirk by Dr. Hamilton, that from Kilmarnock by Dr. Hood, and the one from Kilwinning by Dr. Craig, were all strong in their evidence in favour of contagion. The small proportion of victims among the general population in the last-mentioned locality, gave strong evidence of the contagious character of the disorder. The first person attacked was the grave-digger, who had attended thirty cholera funerals before his seizure: the second was his father, living in a separate house: the third was his sister-in-law, also in a separate house, and at some distance: the next were her two children; then two married sisters of the first victim; and lastly, the husband of one of these, and the son of the other. This was only one specimen out of many facts which had reached him, similar to those so clearly narrated by Dr. Traill.

Professor SYME drew attention to the facts connected with the removal of the smack *Trusty* from Leith, to the Hope at Queensferry, where one fatal case had occurred among the officers of quarantine.

Professor SIMPSON said, that on the arrival of the smack at Leith, a boat went out to her with a pilot, and brought two individuals on shore; these were the first cases that occurred in Leith. The vessel was now sent to the Hope. The captain having mentioned his fears that cholera-subjects had formed a part of his cargo from London, his cargo was put on one of the Lazarets; the sick and the healthy were removed to the other Lazaret. Two or three of those on board, and among the sailor-nurses took ill. Round about, there were many ships stationed, and some of their crews were affected. Dr. Simpson could only regard the crew of the *Trusty* as so many tons of contagion. Dr. Simpson of York, had mentioned to him that the very reverse of what had taken place at Stirling, had occurred in that city. The cholera was found to radiate from York into all the surrounding villages, as an imported disease. At Knaresborough, however, the medical man had searched in vain for evidence of its importation, but in a cursory visit which Dr. Simpson of York, had paid to the town, he found that the two first patients had lived at the opposite ends of the town, and no communication could at first be traced between them; but it was ascertained that the two had met at an inn where a traveller had died of cholera, and that they had assisted at the secret removal of the body.

Dr. BEGIE had never been impressed with the idea that the ordinary mode of propagation of cholera was by contagion; and the cases in Arbroath related by Dr. Traill, in no measure altered that opinion. No doubt the importation of the first and

second cases from Dundee, where the disease was prevalent, and the occurrence of the third and some of the subsequent cases after communication with the two first, was calculated to lead to the impression that the spread of the disease was by such communication; but when we considered that out of twenty-six cases, comprehending the whole of the epidemic, there were no fewer than nine who had no communication with those first affected, or, so far as he understood, with each other, the evidence failed to satisfy his mind that there was anything more than a coincidence between the occurrence of the disease in Abroath, and the return of the first and second cases from Dundee. Its subsequent spread appeared to him to be from epidemic influence, connected with atmospheric and telluric causes at that time set in operation in the former place, and not to importation. He had long been satisfied that cholera was not contagious in the ordinary acceptance of the term, from his own experience during the first epidemic of the disease in this city in 1832. On that occasion, he had been appointed along with Dr. Hamilton Bell, to the charge of the first hospital for the reception of cholera-patients, and during the six months he had officiated there, no instance occurred of the disease having been communicated to any of the medical men in attendance, or to any one of the establishment of servants, nurses, porters, or to any visitor, of whom there were many. During the whole course of the epidemic in Edinburgh, only one practitioner died of the disease; and he had not attended any cholera-patient, having from the first entertained a great dread and apprehension of its effects on his own person. The occurrence of the disease in Dumfries had been referred to. The invasion of the disease there, was a strong proof of its non-contagious nature; for how could the well known circumstance of forty or fifty cases occurring at the same time, in the course of one night, on the first out-burst of the disease there, be accounted for by importation; or the sudden termination of the epidemic without spreading to other immediately contiguous places?

Dr. MYRTLE gave the result of his experience in the City Quarantine House during the epidemic of 1848, where only two or three cases occurred among many hundred persons drafted from the most wretched quarters of the town, many of them suffering from diarrhoea.

Professor BENNETT thought, from the tenor of the discussion, that the Society was coming to the conclusion, that if cholera was not contagious in masses, it might be so in detail. Now, if a small village were attacked, there appeared to be little difficulty in obtaining evidences of contagion. But in a large town, such as London, the doctrine was not believed in: and the same was the case with regard to India. The strongest argument against the contagious nature of cholera, was the fact that the disease progresses from east to west. Now what is contagion? It is usually regarded as the propagation of disease by touch or contact; while infection includes propagation by means of particles in the air. If the cholera progresses from east to west, it can be by neither of these two ways. Russia has again and again, with its armies of quarantine, attempted to check its advance; and yet the disease has progressed in its usual direction. This has been done three times, and the same result has followed. It never progressed in directions running north and south, or west and east. Cholera cannot therefore be contagious. If studied where it attacks masses, it cannot be proved to progress by contagion; but it is from little villages, where all the inhabitants are known to each other, and where the field of observation is very contracted, that the only arguments of the contagionists are drawn.

Dr. SCOTT agreed with the remarks of Dr. Bennett, and instanced the case of a ship in Bombay Harbour suddenly struck by a land-squall, and in which, in a few hours, eighteen died of a crew of a hundred and forty: on the removal of the infected crew to an island, the disease had as suddenly disappeared.

Professor SIMPSON, in answer to Dr. Bennett, begged to remind him that, as far as mere progress was concerned, the contagious exanthemata, small-pox and measles, had, in their first arrivals from the east, the same history as cholera. Again, cases of cholera had occurred in ships crossing to America; but there was no instance on record of one occurring on the voyage from America to Britain. Again, in no ship starting from England for India, and of course not touching at any infected port by the way, has the cholera ever broken out; although, on Dr. Bennett's showing, it ought to have done so.

Dr. W. T. GAIRDNER objected to the statements of Dr. Bennett, as to the progress of cholera in the mass. If cholera was contagious in detail, then he thought that evidence ten times as strong existed to its contagion in the mass. From India the cholera radiated in all directions; and the law of its progression

was apparently that of human intercourse. It passed from India indifferently to Siam, China, Ceylon, the Punjab, and to Persia. From the latter it proceeded further; and why? because this was one of the great lines of human intercourse. It was conveyed to the island of Bourbon by a ship; and, wherever it crossed the ocean, it followed the track of ships, and landed at sea-port towns, which were always the foci from which islands and isolated countries and continents became infected. If this did not constitute a strong probability that cholera was contagious in the mass, he did not know what could do so.

Dr. ALEXANDER WOOD granted that cholera was not propagated by contagion only; but he was greatly surprised to hear of no contagion. The statements in the paper of Dr. Traill, and the admirable remarks of Dr. Gairdner, contained to his mind irresistible evidence to show that cholera is contagious. It was very strange that Dr. Bennett should try to set this evidence aside. India was the great focus of the disease, and, as every one knew, lay to the eastward of Europe; and of course any disease starting from India, naturally reached us from the east. There was no doubt that cholera was more contagious here than in India. An Indian officer had lately informed him that a body of troops lay encamped, with a river running through the encampment, and separating the infantry from the cavalry. The cavalry hospital was on the same side as the infantry: the disease raged among the cavalry, while the troops on the opposite bank escaped. But the cavalry sentinels stationed round the hospital were seized with the disease; and in the previously healthy villages, where the clothes of the soldiers were sent to be washed, nearly all the inhabitants were seized. How could this be explained, except on the admission that cholera is contagious? The American reports bear similar evidence. Why is contagion so easily proved in villages? Because the communication with the sick can be more easily traced. With regard to cholera, we must come to the same conclusion as we do with regard to other diseases, such as small-pox, etc., etc.: that, though not necessarily contagious, yet they may be so. Dr. Begbie had stated that no attendant, etc., had been attacked in the Cholera Hospital on the Castle Hill during the first six months of the epidemic of 1832; yet cases occurred to show its contagious nature, and the disease spread from the hospital. In Surgeons' Square Hospital, the cholera attacked the nurses, in the proportion of one in five. A short visit of a medical man to a well appointed hospital proved nothing; but friends calling upon the sick in ill-ventilated and small apartments, gave a different result. He was clearly of opinion that, in the Abroath epidemic, the existence of any telluric influence was to a great extent disproved.

LIVERPOOL MEDICAL AND PATHOLOGICAL SOCIETY.

THURSDAY, OCTOBER 20TH, 1853.

JOHN CAMERON, M.D., in the Chair.

DROPSY OF THE UPPER HALF OF THE BODY, FROM A TUMOUR ENCIRCLING AND COMPLETELY CLOSING THE SUPERIOR VENA CAVA. BY JAMES TURNBULL, M.D.

On the 3rd of Sept. 1853, Mr. Blower requested Dr. Turnbull to see in consultation a remarkable case of dropsy of the upper half of the body, which had been under his care for about ten weeks, and had also been seen by various other medical men. The gentleman was twenty-six years of age, of fair complexion, and did not appear of unhealthy constitution. His breath had become rather short about the end of May; and when he first consulted Mr. Blower, it was on account of dyspeptic symptoms and headache. Soon afterwards, however, he had several attacks of severe spasmodic pain at the stomach, which were relieved by the use of hot applications. It was observed that on stooping his face became swollen and livid. The patient also found that he could not button his shirt collar. It was then discovered that the neck and chest were oedematous, and the veins of the chest enlarged and tortuous. All these symptoms had much increased when Dr. Turnbull saw the patient; the difficulty of breathing was so great, that he could not lie down; the face was much swollen; the lips somewhat livid; and the neck, the front of the chest, and the arms, pitted on pressure. There was a distinct line about the margin of the ribs, separating the oedematous from the non-oedematous part. Over the whole front of the chest there was a tortuous network of enlarged veins of deep blue colour, which emptied themselves into the two epigastric veins, which were also much enlarged. Two enlarged veins were also seen along the back

of the chest, where, however, there was scarcely any perceptible œdema.

Physical Signs. Over the centre of the sternum there was very decided dullness on percussion; and there was also more than the ordinary amount of dullness in the region of the heart. This dullness was partly attributed to the œdematous state of the parts. There was dullness over the whole of the lower parts of the left side of the chest; and behind the dullness reached as high as the centre of the scapula. There was also absence of respiration inferiorly, and other signs of effusion. At this period, there were no signs of any considerable effusion on the right side; but a subsequent examination showed that fluid had accumulated here also. The sounds of the heart were natural, but dull and distant; and no impulse could be felt. In the course of the aorta, no pulsation or murmur could be perceived.

Diagnosis. The condition of the veins and the œdema of the upper parts of the body, showed clearly that there was obstruction to the return of the venous blood through the superior vena cava; but the cause of this obstruction was less obvious. The following were considered to be the possible causes:—1. Closure of the veins from the effects of inflammation of the coats. 2. The pressure of an aneurism. 3. Pressure of a cancerous tumour of the lung upon the vein. 4. Pressure of a tuberculous gland upon the vein. There was nothing in the history of the case to lead the obstruction to be attributed to any one of these causes more than to another. There had never been any pain, except when the patient had the temporary spasmodic attacks; and there was no special reason for thinking that it had arisen from inflammation of the vein itself, which would have been the least injurious of the causes of obstruction, seeing that the circulation might have ultimately accommodated itself to it. Aneurism was considered to be one of the most common causes of pressure upon the vena cava; but the course of the aorta had been carefully examined, without any murmur or pulsation being detected. There were no well marked symptoms of pulmonary disease; and the age and appearance did not seem to indicate the probable existence of cancerous disease of the lung or other parts. It did, however, appear not improbable, especially as there was so much dullness over the sternum, that there might be tubercular enlargement of the bronchial glands.

The treatment was directed with the view of promoting absorption of any glandular enlargement or effusion of lymph or serum resulting from inflammatory action. He had, before being seen by Dr. Turnbull, been treated with hydragogue cathartics; the left side had been blistered; and his mouth was slightly affected with calomel. A diuretic pill, containing squill, digitalis, and blue pill, was given twice a day, with the view of maintaining the mercurial action for a short time; and a mixture, containing iodide of potassium and liquor potassæ, was prescribed. These and other means failed in producing any impression on the disease; the quantity of fluid in the left side of the chest increased, and it accumulated in the right side also, producing most urgent dyspnoea. He also complained of a feeling of fulness and pressure at the stomach. On the 25th of September, he died.

EXAMINATION OF THE BODY. On endeavouring to raise the sternum, it was found to be adhering at every part to a large tumour, which occupied the whole of the anterior and extended into the posterior mediastinum. It spread on each side beyond the cartilages of the ribs, covering and adhering to the corresponding portions of both lungs. A very dense portion of the tumour covered the heart; and the tumour and pericardium were inseparably united. It had grown along the large vessels, and the superior vena cava was completely encircled and obliterated by the pressure of a portion of the tumour. A soft fibrinous looking clot appeared to have completed the closure of the vessel. The vena azygos, which entered the cava above the obstruction, was much enlarged. The tumour rested inferiorly upon the diaphragm, and laterally and posteriorly, in which directions it was extending itself, it had a nodulated appearance. It was firm in structure, and could not be broken down with the fingers. Internally it had a variegated aspect, like some kinds of marble, the greater part being of a grayish white colour, with nodules of a more yellow colour. Under the microscope, numerous nucleated cells were visible, but none of the tailed cells so common in most cancerous structures. There could not, however, be any doubt that the tumour was of malignant nature, and growing rapidly.

REMARKS. The most prominent symptoms in this singular case were the varicose enlargement of the veins of the chest, and the dropsy of the upper half of the body, to which part it

was confined until the circulation became generally obstructed by the effusion into the chest and the great dyspnoea. The late Dr. James Carson, jun., brought before this society several years ago two cases of a similar kind, and Dr. Turnbull had the opportunity of repeatedly seeing one of them in the Northern Hospital. The patient had the same varicose enlargement of the veins and œdema of the chest and face as was observed in this case, but he recovered, and was afterwards able to pursue a laborious occupation. The enlargement of the veins, however, continued; showing that the obstruction to the venous circulation must have been permanent. In the other case, the obstruction was produced by pressure from a scirrhus tumour of the lung resting upon the superior cava. Dr. Watson related a case similar to the one now detailed, where the obstruction arose from a large aneurism of the arteria innominata pressing upon the vena cava, at the point where the two great trunks unite to form the cava. Dr. Peacock, in a paper in the *Medico-Chirurgical Transactions*, states that complete obstruction of this vessel is extremely rare, having been so in only three out of nine cases he had been able to collect.

With respect to the nature of the tumour in this instance, it would seem, from its firm structure and nodulated appearance, to have been cancerous, and the abundance of nucleated cells would likewise appear to indicate rapid growth. It may be more difficult to decide in what structure it originated. Its complete incorporation with the pericardium, and the way in which it had extended along the vessels, might seem to show that it had originated in this serous membrane; but it had also extended in a similar way along the pleura pulmonalis and costalis. It was in close contact with the whole of the posterior surface of the sternum, occupying the situation of the thymus gland, no trace of which was observable. It is therefore probable that it may have begun in this body; and Dr. Walshe states that, though no case of cancer of the thymus gland had come under his notice, there could be no reason to doubt that carcinomatous disease of this organ does occur.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH:—SPECIAL GENERAL MEETING.

A special general meeting of the Metropolitan Counties Branch was held on Tuesday, 13th December, at 37, Soho Square. The President, Sir JOHN FORBES, M.D., occupied the chair. The following members were present:—Henry Ancell, Esq. (London); John Bowling, Esq. (Hammersmith); John Rose Cormack, M.D. (Putney); R. P. Cotton, M.D. (London); Benjamin Davies, M.D. (London); Alexander Henry, M.D. (London); C. F. J. Lord, Esq. (Hampstead); John Propert, Esq. (London); B. W. Richardson, Esq. (Mortlake); R. H. Semple, M.D. (London); Edward Waddington, Esq. (London); George Webster, M.D. (Dulwich); Robert Willis, M.D. (Barnes), etc.

The PRESIDENT said, that the meeting had been convened by the Council for two objects; FIRST—To consider what steps ought to be taken with reference to the Vaccination Act; and SECONDLY, to receive and consider the Report of the Medical Reform Committee. In the absence of Dr. Webster, who was to have introduced the first subject, he would suggest that Dr. Semple, chairman of the Medical Reform Committee, should favour the meeting with their Report.

MEDICAL REFORM.

Dr. SEMPLE said, that there was not much of a Report, inasmuch as there had been nothing to do; the Medical Reform Bill not having gone into the House of Commons. The Medical Reform Committee had held one meeting, in accordance with the instructions received from the General Meeting, at which were present a great many veteran reformers. Upon that occasion, the resolutions passed were of a general character, which did not pledge the meeting to support the Bill, and at the same time did not object to it. Dr. Semple then read the following Resolutions adopted at the Meeting of the Committee:

“That this Committee think that it is the duty of the Metropolitan Counties Branch of the Provincial Medical and Surgical Association, to support a Medical Reform Bill, so far as it shall give effect to the great principles of uniformity of edu-

cation, reciprocity of privilege, and the registration of legally qualified practitioners; but that they forbear to express an opinion on the details until an amended Bill is before the Committee.

"That Mr. Hastings, the Secretary of the Medical Reform Committee of the Parent Association, be requested to furnish this Committee with a copy of the amended Bill, as soon as it is possible for him to do so."

They had therefore waited until the amended Bill was laid before them; but although they had waited from that time to the present, namely, from the 27th of May to the present day, they had not yet seen the amended Bill, nor were they aware whether it was in existence. Mr. Hastings, the Secretary of the Reform Committee of the Association, had been requested to attend to-day to give such information as he could furnish.

Dr. OGIER WARD read the Resolution passed by the Council, upon which the meeting was called; also another Resolution passed at the same Council Meeting, to the effect that the Honorary Secretary be requested to write to Sir Charles Hastings, asking him to furnish a copy of the amended Bill. He also read parts of a letter from Sir Charles Hastings, the substance of which was, that he had no objection to the proof of the Bill being seen by him (Dr. Ward), but that it was impossible for it to be made the subject of criticism, as it had not yet received the sanction of the Reform Committee, who had not yet met to consider it. For the convenience of the members of that Committee, who were to meet at Birmingham on the 19th instant, the Secretary's draft had been put in type; but it was at present a strictly private document, and must so remain until the Committee authorized its publication. Sir Charles mentioned that the College of Physicians of London was favourable to the Bill of the Association, and that on all hands there were encouraging signs. He concluded his letter by stating the great necessity of conciliation and mutual concession in settling the great question of medical reform.

Mr. PROPERT thought a great deal of time would be saved, if Mr. Bowling would at once communicate what had transpired between Lord Palmerston and himself within the last few days.

Mr. ANCELL wished to know the object of the present meeting. He understood there was to be a meeting at Birmingham on the 19th, on the subject of a new Medical Reform Bill, or rather an amended Bill. If he had not misapprehended the matter, the object of the present meeting was to consider the propriety of making a communication to the Reform Committee previous to the meeting at Birmingham.

The PRESIDENT thought that, as far as the official announcement went, the objects of the meeting were quite general. The reception and consideration of the Report of the Medical Reform Committee, he presumed, might give rise to propositions to be communicated to the meeting at Birmingham, or anything else connected with the subject.

Mr. ANCELL hoped that the members present would well consider, whether the Bill about to be placed before the Association was a Bill which would give satisfaction in essential particulars. He was prepared to give way in all minor points, but he could not say, following the letter as carefully as he was able, that it appeared to embrace what he deemed to be essential points; for instance, it did not embrace the question of representation or the constitution of the Council, upon which subject the greatest difference of opinion existed when the former Bill was under discussion. He (Mr. Ansell) thought it was most desirable that a Bill should be produced which all parties could agree in, and cordially support, in order to secure its passage through Parliament.

Mr. BOWLING, having been personally referred to, would state what occurred at an interview which he had with Lord Palmerston on Wednesday the 7th inst. He saw his lordship upon the sanitary condition of Hammersmith. After they had completed that business, Mr. Bowling said, "My lord, will you have the kindness to tell me if there is any probability of a Medical Reform Bill being brought into Parliament early next session?" His lordship said, "I will tell you. I have found so much difficulty in the question, that I have contemplated the appointment of a commission to inquire into the whole subject." Mr. Bowling replied, "I am very glad to hear it, my lord, because you must be aware that we are in a very distracted, and uncomfortable state." Lord Palmerston said, "I am quite aware of it." He meant to have asked his lordship if he had any objection to his mentioning to-day, what had passed between them; but when he recollected that there were several other gentlemen present, he did not think any secrecy attached to the conversation. He thought the meeting ought to consider whether it should appoint a deputation, either to wait upon Lord Palmerston, or

to write to him, to ascertain as far as possible, under what conditions he would propose the commission, and who were likely to constitute that commission; and then it would be seen how far it was a commission likely to meet the present state of affairs.

Dr. WEBSTER would state, in reference to what Mr. Bowling had said, that he had had the honour of an interview with Lord Palmerston on the same day; and imbued with the same inquisitive spirit, he also stopped behind, and had some conversation with his lordship. Something very similar passed, as between Lord Palmerston and Mr. Bowling. He (Dr. Webster) said, "I had once the honour of an interview with your lordship on the subject of Medical Reform, might I ask whether there is anything likely to be done, whether the time is approaching, and steps are being taken? I have received an invitation to go down to Birmingham upon this subject, being a member of the Reform Committee." His lordship said, "You are not agreed. The great difficulty has been, that the profession is so disagreed upon the subject." Dr. Webster said, "My lord, I think that seems a reason that is not quite so tenable as it at first sight would appear to be. How can you expect that highwaymen, and those who are robbed should agree with each other?" He did not apply the term in any offensive sense. "We are complaining, and have for years and years been making complaints, of the monopolizing spirit which the Colleges have displayed. How can you expect that we, the aggrieved parties, should in everything bring our ideas to square with those, who have shown themselves, in many respects, unworthy of the powers which they hold? I think really that unless you, my lord, with a strong government take this matter up, and bring forward such a measure as to the government shall seem just, there will be no end to the question. Your lordship will put us off to the Greek Kalends, if you wait till we are agreed." He said, "I did think of appointing a Royal Commission." Dr. Webster did not encourage the idea, because he knew too well the materials of which Royal Commissions are generally composed. He did not like to ask his lordship to go into the materials; he thought that the appointment of a Commission would merely delay the question a great deal longer. All the physicians and surgeons of the different Colleges would be called to give evidence, and the same thing would happen, that has happened before. There have been two or three Parliamentary inquiries, and they have not tended to bring the profession into unity. Dr. Webster also had received a letter from Sir Charles Hastings, in which he said that he did not think the Bill to be in a state to be made the subject of discussion, not yet having passed the ordeal of the Reform Committee. At the end of the letter, Sir C. Hastings had written: "I have received a letter from Dr. Ogier Ward, the Secretary of the Metropolitan Counties Branch, forwarding a resolution requesting a copy of the amended Bill, to bring before the Branch on Tuesday next. Under the circumstances, I do not feel it right to withhold the Bill; but I have written to Dr. Ward, explaining to him that the bill has not received the sanction of the Committee: it was only put into type for convenience.... You will of course receive a proof copy of the bill. I hope you will be able to attend the Branch meeting on Tuesday. You will then explain that the amended Bill cannot well be made the subject of public discussion until it has been formally adopted. I hope you will be able to attend the meeting at Birmingham on the 19th, as it will be very desirable to fix on our plan of proceeding. I can only hope that a conciliatory spirit may prevail relative to those points on which opinions differ; for our opponents will endeavour to persuade Lord Palmerston that we are a divided set, and may drive him from medical legislation next session. I have within these two days had a gratifying proof of great unanimity by the receipt, through their Secretary, of £5 from the Medical and Surgical Association of Gloucestershire, in aid of the funds. I am sorry I cannot attend the Branch meeting." As a member of the Medical Reform Committee of the Parent Association, Dr. Webster would not think it right to say much upon the subject; but, being also a member of this Branch, he thought himself at liberty to express his opinions upon it. His great objection to the last edition of the Bill was the same as that of Mr. Ansell, namely, to the constitution of the superintending or governing Council. One of the principles for which this Association had always contended was a fair representation of the profession in the governing bodies. He could not say that he thought that there had been introduced into the Bill a fair representation. Unless there were a thorough representation of the whole of the profession, instead of sections of the profession, in the Col-

leges, he thought it would be quite unsafe to allow the government to appoint the members of the superintending Council, irrespective of the medical profession. The way in which it was now proposed was especially unjust to the great body of general practitioners; because the corporations would be fully represented, whilst the great mass of the practising surgeons would be unrepresented.

Mr. RICHARDSON (of Mortlake) thought it was very necessary that the Metropolitan Branch should express its opinion to the Reform Committee on the subject of the Reform Bill. He gathered from what took place at a previous meeting, that all who knew anything about the Bill complained that it did not take in the representative principle. Dr. Webster was formerly a little more inclined to compromise than he appeared to be at the present moment. He (Mr. Richardson) thought that the members of the Association would agree with him, that it was fortunate Lord Aberdeen had not allowed the bill to pass last year. Throughout the land, the power and the absolute fairness of the representative principle was fully recognised; and all the members of the Association with whom he (Mr. Richardson) was acquainted, were full of hope that this great principle would soon be introduced into the Association itself. Feeling the importance of keeping in view the necessity of representative Councils, he begged to lay before the meeting the following resolution:—

"That, in the opinion of this meeting, the Medical Reform Bill, to be introduced into Parliament by the Association, ought to be framed on the basis of the representative principle; and that no Bill can give general satisfaction to the profession which shall lead to the constitution of a superintending Council containing a preponderating influence of the Colleges of Physicians and Surgeons."

Mr. ANCELL seconded the resolution.

Dr. WEBSTER explained, that his reason for viewing the Bill less favourably than at a former meeting was, that concessions had been made since that time of which he did not approve.

Mr. BOWLING thought it was impossible to dissent from the motion, inasmuch as it embodied the representative principle, upon which the Reform Committee of the Association was first established, and was bound to proceed. Upon many points, there were different views amongst the members of the profession; but, upon the subject of representation, there never could be two opinions. A preponderating influence of the Colleges in a governing Council would be highly prejudicial to the general practitioners. So long as the Colleges had the power of making rules, and, to a certain extent, establishing the curriculum, so long must the general practitioners find that they were under the debasing influences which they had always experienced. The Colleges declared that it was necessary there should be an inferior grade of practitioners. This had been avowed to the members of successive governments, and it must be submitted to as far as emoluments were concerned. The meeting would not do its duty, if it did not insist upon the representative principle being carried out to the utmost extent.

The PRESIDENT inquired of Mr. Richardson, whether he meant by his motion that the governing body should be constituted on the representative principle.

Mr. RICHARDSON replied, his meaning was that every man in the profession should have a vote in the election of the Council.

Dr. CORMACK observed, that it would be better for the meeting to leave the mode of carrying out the representative principle a little indefinite. The Reform Committee would probably have various suggestions to consider regarding this part of the measure. The best of all representative Councils would be a Council elected by the Colleges, *provided the profession were fairly represented in the Colleges*. If once representation of the profession within the Colleges could be gained, he believed all difficulties would be disposed of.

Dr. WEBSTER had great doubts whether it would be possible to give every member of the profession a vote in the election of the Council; and he agreed with Dr. Cormack, that the more indefinite and general the terms of the resolution were, the better. It was not expedient at present to go into details.

The PRESIDENT asked if the resolution could not be worded, "that no Bill was to be sanctioned which did not recognise the representative principle in the governing bodies."

Mr. RICHARDSON: That is again confining all the power to the governing bodies.

The PRESIDENT supposed that the representative principle would imply, that the governing bodies were to be elected according to some system of representation, though it might not

go to the extent of voting by every individual member of the profession.

Dr. CORMACK suggested the addition of the words, "as at present constituted", to the end of the motion.

Dr. WEBSTER thought that great force would be given to the motion, if the words "the Colleges" were introduced in the body of the resolution before the words "Superintending Council", because great changes would most likely be made in the Colleges by any Bill.

The resolution in the following amended form was carried unanimously:—

"That in the opinion of this Branch, the Medical Reform Bill to be introduced into Parliament by the Association should recognise the necessity of the representative principle, generally extended, in the election of the governing bodies of the Colleges and of the Superintending Council; and that no Bill can give general satisfaction to the profession which shall tend to the constitution of a Superintending Council, containing a preponderating influence of the Colleges of Physicians and Surgeons, as at present constituted."

Mr. LORD said, that in proportion as the elective franchise was extended, it became necessary to look closely at the capabilities and acquirements of the men who were to exercise that franchise. It struck him as being an extraordinary provision, that twenty-one years of age should be the minimum at which a man should be considered capable of entering the profession. He thought a more extended period necessary, in order that a greater portion of early life should be devoted to the laying a solid foundation of knowledge, on which might be reared the capacity of properly exercising the elective franchise for the good of the profession at large; he therefore begged to propose—

"That in the opinion of this meeting, it is expedient that the provision of the former Bill, promulgated by the Reform Committee, which determined the minimum of age at which candidates were rendered admissible into the profession, be altered from 21 to 22 years, in order to allow of a higher standard of qualification in general education, including classics and mathematics, for the profession at large."

Dr. SEMPLE, in seconding the resolution, said that although this was one of the details of the proposed measure, rather than one of its principal parts, he thought it of sufficient importance to demand special attention. Young men were too soon thrown upon the practice of medicine, in this country. The old regulation of the College of Surgeons, that a man must be twenty-two before he had his diploma, was very judicious; because he was enabled to get through his studies, and then, for a year afterwards, to cultivate still more at length the higher branches of the profession, either in the schools of this country or those of the continent: whereas now, a young man of twenty-one, having passed the College of Surgeons upon the basis of a small knowledge of anatomy and still less of surgery, was thrust into the profession. He (Dr. Semple) thought that a year more was of essential importance.

Mr. ANCELL wished to state that this was one of the points on which there was never any difference of opinion in the National Association of medical men, which consisted of four thousand members. That unanimity in favour of twenty-two years instead of twenty-one, was not only on the grounds mentioned by Dr. Semple, but also on the ground that a professional man ought to have secured to him the education of a gentleman and not of a tradesman. Everybody knew that the period from sixteen to seventeen years of age was worth three or four antecedent years. The College of Surgeons made a distinction between members and fellows, but they dropped the age for membership from twenty-two to twenty-one years. He had no desire to impute motives to any one, but the effect of the reduction was palpable, namely, to secure a lower grade of practitioners. The subject was argued by a deputation from the Council of the National Association, and a deputation from the National Institute, with the College of Surgeons, but no reply was ever given as to why the twenty-two years were reduced to twenty-one. Upon that occasion, the great advantages were pointed out, to which no valid objection could be given. A sort of tacit assent had been obtained that the twenty-one would be converted to twenty-two, but now it appeared, if all he (Mr. Ansell) heard was correct, that the Bill was to be proposed with twenty-one years. It was a point of great importance, though it was a matter of detail, which would not affect the principle of the Bill.

The resolution was carried unanimously.

Dr. SEMPLE desired to make a proposition upon the subject of preliminary examination, which he believed to be quite as important as the resolution which had just been passed. He be-

lieved that in all departments of our different public Services—in the East India Company's Service—in the army—in the navy—in the customs, and in a great many other branches, it has become absolutely necessary that those who enter should possess some knowledge of classics and mathematics, of sound English and the rudiments of French—in other words, that they should have a general scholastic education. It was an exceptional fact that our profession was, he thought, the only one in which persons are allowed to practise without possessing any general education. Lamentable ignorance is the necessary result, and great scandal to our profession follows from this inattention on the part of our examining bodies. He was not stating more than the fact, when he said that many persons are sent out as medical graduates from some of our Universities, who are not able to write English; and when those persons pass into the public departments of the army or the navy, the official reports they send forth are a scandal to the profession to which they belong. He was not wishing to make any vituperative remarks. He knew a great deal more than he liked to say, and he would not cast reflections upon individuals or upon public bodies; but this he must say, that it ought to be the desire of every one who wishes well for his profession, that at least the elements of general knowledge should be possessed by medical practitioners, not after they have finished their career at the medical schools, but before they begin it. It was perfectly easy to impose such a test. There was such a test at the universities of Oxford, Cambridge, and London; and other bodies are trying to institute a similar trial. Without specifying any of the bodies which do not require such a test, he would state that there are a vast number of practitioners all over the country who are not required to give any evidence of general education whatever. They pass at once through superficial studies in anatomy, surgery, and collateral branches, and at the end of their term they are ignorant not merely of the elements of Latin, French, and other languages, but, (he said advisedly), they are not able to write correctly their own language. Can we expect our profession to be honoured when such ignorance is not only tolerated, but encouraged? This Branch must give an emphatic expression of opinion, that general preliminary education ought to be insisted upon. He was not requiring that a medical student should be profoundly learned in Latin or Greek or Mathematics; but he did say, that considering the great improvements which have taken place in the conduct of public schools and private schools, and the great mass of information of all kinds which is now diffused throughout the land, and which can be obtained at a cheap rate; if we desire to maintain our character as gentlemen; if we desire to hold rank with the legal profession and the profession of divinity, we must attend to the preliminary qualifications of those who are about to enter our profession. If it is found necessary for a man who is to fight the battles of his country to know something of classics and mathematics; if a man who is about to enter the army or the navy must know something of those branches of education or be rejected from the service; it is still more imperatively necessary in the case of our profession, which is essentially a learned profession, the technicalities of which cannot be understood without the knowledge of reasoning, which is the result of mathematical and logical training. Dr. Semple then proposed the following resolution:—

"That in the opinion of this Branch, the proposed Medical Reform Bill ought to contain a clause, rendering imperative a preliminary examination in classics, mathematics, and general science, before the student commences his medical education."

Dr. WARD seconded the resolution. Instances of the want of the preliminary education spoken of by Dr. Semple had frequently come under his notice; he regarded general education as extremely necessary, not only in the formation of a practical medical man, but in what was perhaps more important—a gentleman.

Mr. ANCELL briefly supported the resolution.

Dr. CORMACK thought that something of the kind pointed at by the resolution, was absolutely requisite. The Pharmaceutical Society was exacting an increased amount of education, and was about to go to Parliament for additional powers. As there was an upward tendency in other bodies, it was high time that the medical profession, when they came before Parliament next session, should take measures to secure and improve their position. There was no doubt the College of Surgeons, by keeping low its standard of education, and the Pharmaceutical Society by raising its standard, tended to cause a return to the state of things which existed in 1815—when there existed upon the one

hand, men profoundly acquainted with their profession, and on the other, at an immense interval below them, a herd of ignorant apothecaries. He thought the public was deeply concerned in the matter: it was a public rather than a professional question, and it was peculiarly the duty of a government to take every means to prevent a relapse to the former state of things, when the services of competent practitioners were only within the reach of the rich. At present a very different state of things prevailed, and the public ought to be shown that it was their interest to secure its continuance, and to prevent the present generation of accomplished practitioners being superseded by mere pharmacists, or by any inferior grade.

Dr. WEBSTER felt quite sure that the authors of the proposed Bill fully intended that a preliminary examination should be passed by all who entered the profession. At the same time, he was of opinion that a declaration of this kind would be useful. The good sense of the profession at large, and of different isolated bodies, was accomplishing that which was now mooted. In illustration, he (Dr. Webster) instanced the voluntary examination at St. Thomas's Hospital, and the examination by the Society of Apothecaries.

The PRESIDENT could not allow the resolution to be put to the meeting, without in a few words expressing his own opinion. He had always felt that the vitality of reform in the profession depended upon making it as much a profession of gentlemen as possible. The influence of classical studies, of the knowledge of science and literature in expanding the mind was perfectly well known. He thought if the year of admission could be raised to twenty-two, and a clause were obtained in the new Act, to oblige a student to be examined before he entered upon the study of medicine, a most important part of the required reform would be gained; because, if the profession consisted of gentlemen with a true sense of dignity in their own persons, there would not be much difficulty in the mere exterior parts of reform; and the members of the profession, from their personal influence, would command the things which they were now soliciting. Whether the examination should necessarily take place before a youth commenced his medical studies, or during the first year might be a matter of detail.

The resolution was carried unanimously.

It was moved by Mr. ANCELL, seconded by Dr. HENRY, and carried unanimously:—

"That a copy of the foregoing resolutions be forwarded by the Secretary to the Reform Committee of the Parent Association, with a request to give to them their most serious consideration."

It was unanimously resolved, that the Reform Committee of the Branch should be requested to continue its vigilance.

THE VACCINATION ACT.

Dr. WEBSTER felt that, if the strict principle of representation had been carried out as regards our own Association, and we had kept a watch at the proper period, the Vaccination Act, which he regarded as injurious to our profession in its present form, would never have been allowed to pass. If our body had been on the alert, and watchful, this question need not have been mooted here to-day. He would not enter into all the details of an Act, which he supposed every gentleman present knew quite as well as he did. He thought the gist of the objections to the Act might be stated in three propositions. First, there are onerous and troublesome duties exacted by the Act, which are not at all remunerative. He need not state the old adage, that "the labourer is worthy of his hire". We do not find other professions anxious to work a great deal for nothing. It has been argued that vaccination was a mere bagatelle, a matter so commonly done for nothing, that we ought not to object to the additional duties which have been laid upon us by this Act. He took quite a different view. He thought that a man has a perfect right, consistently with the rights of the profession, to act gratuitously when he thinks proper. He looked upon this service then as an act of benevolence; but when it is compulsory, it is no longer benevolence. He was not to be told by his neighbour how and to what amount he was to administer his benevolence. It was altogether unconstitutional and contrary to the rights of the subject, to exact that which is exacted by this Act; that is, that we shall perform certain services without compensation for time or skill. The Act obliges us to give repeated certificates, first, to the patient; secondly, to the registrar; and thirdly, from time to time, if we do not think the patient is in a fit state to be vaccinated. In carrying out a measure for the public benefit, care ought to have been taken that private rights were not invaded. The private and just rights of the profession had

been greatly invaded by this measure. We have been fighting a battle with the Insurance Companies; and by perseverance, and firmness, we have brought at least half the London Insurance Offices to pay fees, which were not paid before, to professional men; and if a proper stand were made in the present instance, we should also do good. Many people say that the medical profession is a benevolent profession. It ought to be so; and God forbid that the time should ever come when it shall cease to be so. He was quite sure that many of us have an amount of benevolence forced upon us from circumstances; but he did contend, that we ought not to have onerous duties cast upon us by the legislature. With respect to giving a certificate of the cause of death, it is for the sake of science, and is a great public benefit. Really our good nature ought not to be carried further; and he thought that the time was come when a stand ought to be made. The second point is the miserably low remuneration for the services that are paid for. The minimum of eighteen-pence, which is the general amount of fee paid, looking at the duties which will be exacted from those who contract for Unions, is really a sum which is discreditable to the country to give, and almost so to professional men to receive. Eighteen-pence is the sum which is put down even for paupers. The public very quickly lay hold of these matters; and there is nothing whatever to prevent a person in good circumstances going to contractors. Dr. Webster believed that now a great many do go. Many of his patients had their children vaccinated at the different stations in London, without giving any sort of remuneration whatever. People in really excellent condition in life attend the gratuitous stations, such as Rowland Hill's Chapel, in the south part of the metropolis. He considered eighteen-pence a miserable recompense for the duty to be performed. It was really not estimating either the benefit conferred, or the time and science of the medical man. He thought it altogether inadequate to the occasion. The third point was, that the working effect of the measure will be, that the contracts generally will be made with the Union medical officers, and not with the profession at large. Amongst the guardians there is naturally a bias in favour of the medical men who are employed by the parish. The remuneration itself cannot be an object to any one, apart from the collateral circumstances, such as the introduction to practice, and the publication of the vaccinator's name in the document which the Deputy Registrar hands to the parents of all children born within the parish. Dr. Webster thought the Act calculated to have an injurious effect upon private interests: at all events, it is calculated to create and foster jealousies and heartburnings between medical men. He should like to see union and fraternal feeling existing amongst members of the same profession; therefore, he looked unfavourably upon the new Vaccination Act. It is very crudely put together, and not at all such a measure as a little more time might have produced.

The PRESIDENT. Who has the nomination of the vaccinator?

Dr. WEBSTER. The guardians of the parish. He almost considered that there was a breach of faith with the Vaccination Committee of this Branch. They had had an interview with Lord Palmerston, and he seemed to promise that the measure should not pass last session; but it was passed through the House of Commons, perhaps against the minister's wish, and carried through the House of Lords in a very sudden manner, so that the profession could not be roused to oppose it. This showed at once the want of a representative Council, to which we could apply at any time to bring forward our grievances. This great Association ought to be a centre of union where advice and counsel might be had, and where great things might be done as regarded subjects of importance in medical polity, medical ethics, and scientific questions; but he felt that, in the present constitution of the Association, we had not the benefit which he trusted before long we should have, of a better internal regulation. The Council at present is so scattered abroad, and so irregularly distributed, that it is unworkable; therefore it falls far short of what it might do, if it were put in a more efficient state. He was almost at a loss to know what course to take with this measure. One does not like to fly in the face of an Act of Parliament; but, unless a firm stand be made, we shall have other grievances put upon us. He had therefore drawn up these resolutions, which he would now read:—

"1. That while the Metropolitan Counties Branch of the Provincial Medical and Surgical Association recognises the propriety of a compulsory vaccination Act, which shall be salutary to the public and just to the profession, it cannot but highly disapprove of the Act passed in the late Session of Parliament.

"2. That the amount of compulsory gratuitous medical service

inflicted by this measure, is vexatious, onerous, and unjust; and while the benevolent and unrequited labours of the medical profession will bear ample comparison with those of any other profession, this Branch believes that the time has arrived, when a firm and united stand must be made for the protection of its members and their medical brethren against the late and similar encroachments on their just rights.

"3. That the Vaccination Act being contrary to the political rights of the subject, by requiring important services without remuneration, this Branch considers that the law in its present state will be found impracticable, and recommends the adoption of the most energetic measures for its amendment or repeal.

"4. That a Committee be appointed to wait on Her Majesty's Prime Minister and the Home Secretary, and to adopt such other proceedings with reference to the Vaccination Act as may appear necessary."

It might be a question whether counsel's opinion should not be taken upon the working of this Act, as to how far the government, by putting it into the hands of the Registrar General, have made themselves liable for the expenses which may be incurred. Another thing to be considered, was, whether a case before a county court should not be tried, by way of ascertaining exactly how the matter stands. This might seem a paltry matter of pounds, shillings, and pence. He did not care for any obloquy which might be cast upon him: he brought the matter forward chiefly for the sake of his younger brethren, and on public grounds.

Mr. RICHARDSON in seconding the foregoing resolution, said that he quite agreed in the remarks which had been made by Dr. Webster. He (Mr. Richardson) found the operation of the Act very mischievous. Small tradesmen's wives expected their children to be vaccinated free; and if the medical man refused, they took the children to the public vaccinator, who was paid by the parish, and in many cases he retained them as patients. In his view, the Act was quite unconstitutional, and the parish had no more right to ask for these certificates gratis, than they would have to ask a carpenter to repair the church. It might happen that a child required to be vaccinated six or seven times; and one thing required was impracticable, namely, a certificate that a child was not susceptible of the vaccine disease. Let the meeting imagine how many times a child must be vaccinated, without fee or reward, to prove insusceptibility. He thought there was a very great necessity for appointing a deputation to the Home Secretary upon the subject.

The resolutions were carried unanimously.

It was moved, seconded, and carried unanimously

"That the Committee consist of the following gentlemen: The President, the President-Elect, the Secretary, Dr. Cormack, Dr. Fraser, Dr. Semple, Dr. Webster, and B. W. Richardson, Esq.; with power to add to their number."

PAYMENT OF SUBSCRIPTIONS. The Law of the Provincial Medical and Surgical Association is as follows:—

"Each Member of the Association shall pay One Guinea annually: the Subscription to commence from the 1st of January in each year, and to be considered as due, unless notice of its being withdrawn be given to the Secretary or Secretaries antecedently to the year for which it would be payable; for such Subscription each Member shall receive a copy of all publications issued for the general use of the Members of the Association."

ADVERTISEMENTS.

Three lines and under	-	-	-	50	2	6
Every additional line	-	-	-	0	0	6
Half-a-column	-	-	-	1	10	0
A whole column	-	-	-	2	15	0
A page	-	-	-	5	5	0

A line contains ten words.

Advertisements ought to be delivered and paid for at the office on the Wednesday preceding publication.

Post-Office orders are to be made payable to THOMAS JOHN HONEYMAN 87, Great Queen Street, Lincoln's Inn Fields, London.

MEDICO-METEOROLOGICAL OBSERVATIONS

Taken for the Association Medical Journal.

No. XI.—WEEK ENDING 10TH DECEMBER 1853.

WAKEFIELD. Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. Month and Day.	Barometer.		Thermometers.						Degree of Humidity for the Day.	Wind.			Amount of Cloud for the Day.	Amount and Class of Cloud for the Day.	Rain, Snow, Fog, Frost, Thunder, and Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 a.m.	3 p.m.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.		Direction.	Mean Force for the Day.	Amount of Onset for the Day.						
Dec.	in.	in.	°	°	°	°	°	°		p.m.	a.m.	0-6	am	pm	0-10			
4 S.	29.849	29.870	38.1	27.	32.5	39.5	24.	33.2	0.958	N.	1	1			9.5, cu.		Inf. 2.	[vom. Inf.
5 M.	29.843	29.841	41.8	34.5	38.1	40.7	27.5	35.3	0.934	S.	SSW.	1	10			0.020	Ery. Qu. Fe. Col.	Paralysis.
6 Tu.	29.841	30.010	48.	26.5	34.7	44.	18.5	35.9	0.915	W.	NNW.	1	8	cu.-s. ci.-cu.		0.000	Epil. Sc. Fe. Inf. 2.	Conv. Prem. birth.
7 W.	30.073	30.026	36.4	24.5	30.4	37.	16.5	27.4	0.932	W.	SSW.	1	10		F. fr. h.-fr.	0.008	Di. Br.	Tubercular dis. of the
8 Th.	30.076	30.144	40.8	24.5	32.6	40.5	17.	32.4	0.948	SSW.	WNW.	1	10		Fr. h.-fr.	0.050	Hæmop. Rh. Whit.	Membranes of brain.
9 F.	30.411	30.408	35.1	22.5	28.9	41.5	16.5	23.9	0.900	WSW.	NW.	1	5		Fr. h.-fr.	0.060	Di. 10 p.m. Catarrh.	Chronic dis. of the
10 S.	30.356	30.260	41.3	30.5	35.9	42.2	28.	33.9	0.940	NNE.	NNE.	1	8	ci.-cu. cu.-s.		0.020	Di.	[lungs.
Col..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. *Observer: T. MOFFAT, M.D.*

Dec.																		
4 S.	29.732	29.679	39.5	30.1	34.8	49.5	22.0	36.0	1.000	S.	0	0.5	0		5		0.00	Prem. labour.
5 M.	29.667	29.664	41.1	38.0	39.5	43.0	35.0	39.0	1.000	0	0	0	0		10		0.00	Hæmatemesia.
6 Tu.	29.850	29.878	39.0	33.5	36.0	50.0	23.0	36.0	1.000	0	0	0	0		4, ci.		0.15	
7 W.	29.912	29.875	44.0		32.5	51.0	27.0	37.0	1.000	0	0	0	0		8		0.00	Neuralgia.
8 Th.	29.905	29.998	42.5	34.0	38.2	45.0	29.0	40.0	1.000	0	0	0	0		Fog.		0.00	Hæz. f.
9 F.	30.273	30.132	38.5	31.0	34.7	52.5	20.0	35.0	1.000	0	0	0	0		10		0.00	Diarrhoea 2.
10 S.	30.177	30.070	37.0	28.0	32.5	44.5	19.0	34.0	0.957	0	0	0	0		0		0.00	Diarrhoea, T.

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 100 ft. *Observer: J. W. JEANS, Esq.*

Dec.																		
4 S.	29.838		37.8	27.7	37.8		32.0	36.7	0.974	S.	S.	0			10, ci.-s.	F. mist.		
5 M.	29.767		40.8	37.1	38.9		33.5	35.5	0.948	S.	W.	0			10, ci.-s. ci.-cu. s.	F. mist.		
6 Tu.	29.881		40.2	36.4	38.3		36.3	37.9	0.951	NW.	NBW.	0			10, ci.-s.	Misty, r.	0.010	Dis. of heart, Eff.
7 W.	29.991		39.8	35.1	37.4		35.5	34.3	0.967	N.	SW.	0			10, ci.-s.	Mist, r.	0.045	[p.m.] Ery. 4 a.m. Epil. 5
8 Th.	30.027		38.9	28.2	33.7		29.5	28.8	0.831	SW.	N.	0			10, ci.-cu. s.	F. h.-fr.		Chronic bronchitis.
9 F.	30.304		37.1	30.4	33.7		28.0	28.2	0.905	N.	NE.	0			4, ci.-cu. ci.-s.	H.-fr.		Dropsy.
10 S.	30.231		42.1	30.8	36.5		29.2	34.2	0.975	NE.	E.	0.5			8, ci.-cu. s.		1.010	Bronchitis.

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. *Observer: T. H. BARKER, M.D.*

Dec.																		
4 S.	29.921	29.881	39.6	34.0	36.8	41.0	38.0	37.0	0.976	SE.	ENE.	0.5	0		10	Fog.	1.00	Phthisis.
5 M.	29.862	29.840	43.1	36.5	39.8	45.0	34.0	40.0	0.978	ENE.	ENE.	0.5	0		10	Fog.	1.00	Disease of heart.
6 Tu.	29.941	29.949	42.6	37.0	39.8	44.5	38.0	40.0	0.914	NW.	NNE.	0.5	0		10		1.00	
7 W.	30.034	30.019	44.1	38.0	41.0	47.0	39.0	39.1	0.886	N.	NNE.	1	0		8, cu.-s.		0.02	
8 Th.	29.983	30.121	42.0	27.5	34.7	43.0	31.0	31.8	0.925	NE.	S.	0.5	0		8, s.	Fog.	0.00	Pneumonia.
9 F.	30.305	30.312	42.5	31.0	38.2	42.5	33.5	34.7	0.832	NE.	NE.	0.5	0		3, ci.		0.04	
10 S.	30.265	30.183	41.0	30.0	38.5	43.0	33.0	31.7	0.792	NE.	NE.	1	6		6, cu.		0.03	Pleuritis, T.

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. *Observer: C. L. PRINCE, Esq.*

Dec.																		
4 S.	29.970		48.	28.	38.	55.	26.	33.7	0.956	SE.	SE.	0	3		5, cu.	Fog.		
5 M.	29.943		47.	37.	42.	47.	37.	38.8	0.928	SE.	SE.	1	2		10, ci.-s. n.	Fog.	0.15	T. Epis. Bilious vom.
6 Tu.	30.000		43.	40.	41.5	44.	37.	38.8	0.928	NE.	NW.	0	0		10, s.	Fog.		T. Di. Br.
7 W.	30.070		46.	38.	42.	48.	35.	35.5	0.827	NE.	NE.	0	0		10, s.	Fog.		T. Di.
8 Th.			45.	36.	40.5	50.	31.	38.8	0.928	NE.	NE.	1	1		10, cu. s. cu.-s.			Br. Neu.
9 F.	30.010		44.	35.	39.5	44.	32.	35.5	0.827	NE.	NE.	1	0		10, ci.-s.			T. Inf. Pleuritis.
10 S.	29.948		39.	36.	37.	47.	34.	28.2	0.732	E.	NE.	2	6		10, cu. s.			T. Di.

* On Dec. 8th the Barometer was compared with a standard at the level of the sea: its reading was 266 too high, and the error was corrected.—C. L. P.

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. *Observer: T. SHAPTEY, M.D.*

Dec.																		
4 S.	29.955	29.894	48.8	35.7	42.2	48.8	48.8	39.	0.879	E.	sbe.	1	0		7, s.		.01	
5 M.	29.935	29.939	44.5	35.8	40.1	44.5	44.5	34.5	0.914	N.	N.	2	0		7, cu.-s.		.01	
6 Tu.	30.075	30.084	46.	36.	41.3	47.	46.7	37.8	0.920	N.	NE.	1	0		5, cu.		.00	
7 W.	30.158	30.152	44.2	32.3	38.2	44.2	44.2	38.8	0.928	N.	NE.	1	0		6, cu.		.00	
8 Th.	30.220	30.254	43.5	34.2	38.8	43.5	43.5	36.6	0.916	NE.	NE.	2	0		6, cu.		.01	
9 F.	30.442	30.406	43.	36.4	39.2	43.	43.	25.9	0.444	NE.	E.	2	0		6, cu.		.00	
10 S.	30.280	30.166	41.	31.	36.	41.	41.	33.	0.841	E.	E.	4	1		6, cu.		.00	Pneumonia.

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. *Observer: B. BARROW, Esq.*

Dec.																		
4 S.	29.949		49.4	34.4	41.6	48.0		35.1	0.797	SE.					5			
5 M.	29.852		50.0	34.4	42.1	49.5		45.9	1.000	S.					10			
6 Tu.	29.984		49.0	37.4	43.7	49.0		38.6	0.859	N.					8			
7 W.	30.069		45.0	36.4	40.8	47.0		37.4	0.598	NE.					10			
8 Th.	30.093		44.0	34.4	36.8	45.0		33.5	0.915	NE.								
9 F.	30.206		44.0	33.0	37.8	45.0		37.4	0.858	NE.					6			
10 S.	30.202		40.0	36.4	34.1	41.0		27.5	0.676	NE.					8			

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. *Observer: S. E. HOSKINS, M.D.*

Dec.																		
4 S.	29.857	29.894	48.5	43.5	46.		41.7	0.805	SE.	sbe.	0				7, ci.-cu. s.			Sc. Fe. 2.
5 M.	29.849	29.856	49.	45.	47.		43.8	0.865	wsb.	wsb.	1				6, cu.-s.		.138	
6 Tu.	29.929	29.949	51.	43.	47.		42.7	0.835	nbe.	nbe.	0				8, cu.-s. n.		.055	Inf.
7 W.	30.033	30.027	47.5	45.	46.2		42.8	0.866	nbe.	nbe.	1.5				5, cu. ci.-s. n.		.347	Hæmop.
8 Th.	30.110	30.151	47.5	40.8	44.		39.7	0.803	nbe.	nbe.	1.5				6, cu. ci.-s.			Phthisis, wt. 49.
9 F.	30.348	30.312	47.5	42.8	45.		41.7	0.835	nbe.	nbe.	3				7, cu. ci. n.			Heart dis. wt. 77.
10 S.	30.072	29.994	41.5	40.	41.		33.4	0.793	nbe.	nbe.	3				7, cu. ci.		.152	Inf.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. LI.

LONDON: FRIDAY EVENING, DECEMBER 23, 1853.

NEW SERIES.

STUDENTS' MEDICAL SOCIETIES.

Among the subsidiary plans connected with the improvement of medical education, there are none so generally neglected, and yet none more useful, than the formation of medical debating societies. Probably there is nothing more calculated to develop quickness of thought, or ready power of clothing it in appropriate language, as well as to inspire a wholesome respect for the talents of others, than assisting regularly at the meetings of such a society. As types of the class of societies to which we allude, the venerable Royal Medical Society of Edinburgh, and the old (but, alas! now defunct) Physical Society of Guy's, present themselves to the mind. How many of our readers can reflect with delight on the old associations of the former, during their residence as students in the modern Athens! How many can gratefully look back to the Friday evenings of bygone years, when they listened and took part in the discussions held within the famous Old Hall in Surgeon Square! How many can remember with grateful consciousness that there first germinated that zeal, which has since borne the good fruits of an honourable position and a respected name!

The happy admixture of senior and junior students—of those, whose associations are all future, and of those, who are prepared to take part in the battle of life in earnest—constitutes one of the peculiar characters of such societies as we have referred to. In a society composed exclusively of their seniors, and in which they alone, save by a special act of courtesy, are allowed to discuss the merits of the papers read, the students may indeed *listen* with advantage. Still, the advantage can be only of the passive kind. To derive the full amount of benefit from the debate, the student must feel himself to be an actor in the scene. If he be not conscious that he is an integral part of the society, zealous for its reputation, and anxious for its usefulness, he is apt to become a listless attendant, or, what is far worse, an imperfect critic.

The task of preparing a paper calls upon the student for much more real and profitable work than would be imagined by those who have never undertaken such an effort when *in statu pupillari*. He has not only to call upon all his own resources, but to consult the opinions of all the authorities who have recorded anything worth consulting. Thus a large mass of matter (sometimes crude and undigested, it must be confessed), is often collected. The subsequent task of throwing this into a proper form, examining opposing opinions, and condensing all into the limits of a half-hour's essay, constitutes a mental exercise of no small value. From his previous attendance at the society, he has become somewhat acquainted with some of the peculiar views of the most favourite speakers; hence he has to fortify his own views against their assault, and to prepare for a reply. We are not too old to forget confidential revelations made to us by our foremost comrades, on the eventful occasion of their reading a first paper. We could from truthful reminiscences describe the nervous anxiety,

the sense of the heart becoming suddenly too large for the chest, and the sincere desire for the moment to change places with the janitor. But how entirely were these feelings replaced by calm confidence, when, on finishing the task, words of encouragement or friendly criticism fell from the debaters.

A student is thus taught his own deficiencies, while at the same time he is led to cultivate and place more confidence in his own powers. His respect for his more accomplished fellow students excites an honourable ambition; and a knowledge that the idle have neither welcome nor place in the society stimulates his industry.

Several of the medical schools of the metropolis have now a student's debating society attached to them; but it could be wished that such institutions were more general. There is, however, too often a flatness and want of interest in the debates of some, on account of the students for the most part reflecting the opinions only of their own teachers. Hence a pupil's society, where the students from all the medical schools in the metropolis could assemble, would, if well organised, be a very great addition to the educational resources of our profession in London. The opinions held by the professors and officers of the different schools and hospitals would become better known to the young aspirants; and much of the spirit of unhealthy rivalry, which too often exists, would be softened down and exchanged for mutual respect and confidence.

THE NEW LUNACY ACTS.

THE majority of our readers are aware that, in the last sessions of Parliament, certain alterations were made in the laws relating to the care and treatment of lunatics; and that these came into force on the 1st of November.

One of the most important of these alterations refers to the *manner of wording a medical certificate* authorising the reception of a patient into a lunatic asylum. A medical certificate of insanity being an instrument by which a person may be deprived of liberty, is warily guarded by the law, and rightly placed under very stringent regulations. These regulations are duly set forth in the new "Lunatics' Care and Treatment Act", and have been further explained in a circular of instructions lately issued by order of the Commissioners in Lunacy; but, as many members of the ASSOCIATION may not have seen either of these documents, a few words concerning "medical certificates" may not be misplaced in our pages.

That the instructions appended to the common printed form of certificate, are not sufficiently clear or explicit, is presumable from the fact that a superintendent of a large asylum informs us that he has rarely received a certificate worded as the law requires, since the new Act came into operation. The following are the points to which the attention ought to be directed:—

1. It is not sufficient for a medical practitioner to state simply that he is a physician, surgeon, or apothecary; he must specify at length the *legal qualification*,

- diploma, or license, which entitles him to practise medicine in the United Kingdom.
2. He is required to state, in full, not only the name of the patient, the date of his examination, and the place where the examination took place, but also the habitual place of residence, and profession or occupation (if any) of the patient.
 3. When two or more medical certificates are required (as is always the case with private patients), he must examine the patient "separately from any other medical practitioner"; and state the fact of his having done so in his certificate.
 4. It is indispensably necessary for him to state the fact or facts indicating insanity, *observed by himself*; for a certificate founded *only* upon facts communicated by others, is invalid, and does not authorise the reception of a patient into any lunatic asylum. When the facts observed by the medical practitioner himself are so strong as to leave no manner of doubt as to the patient's insanity, the certificate is valid without the insertion of facts communicated by others. Nevertheless, when additional facts can be obtained, they should be stated in confirmation; and it is then necessary to name and specify the person who communicated them.
 5. The medical certificate need not be written on the day of the patient's examination, but at any time within seven clear days afterwards. The dates of the examination and of the signature must both be given.
 6. A Pauper Lunatic may be received into an asylum with one medical certificate; and the medical officers of unions or parishes are no longer prohibited from signing certificates of pauper lunatics belonging thereto.

The following certificates will serve to exemplify the preceding instructions, the portions in italics being those which the medical practitioner has to write in filling up the usual form.

"I, the undersigned, *William Heberden*, being a *Doctor of Medicine of the University of London*, and being in actual practice as a *Physician*, hereby certify that I, on the *tenth day of December 1853*, at *Fulton Terrace, Birmingham*, in the county of *Warwick*, separately from any other medical practitioner, personally examined *Mr. James Henry White*, of *Fulton Terrace, Birmingham*, gentleman, and that the said *James Henry White* is a *lunatic*, and a proper person to be taken charge of, and detained under care and treatment; and that I have formed this opinion upon the following grounds, viz.:

"1. Facts indicating insanity observed by myself: *His language was altogether incoherent and irrational; he was extremely noisy and excited, shouting, singing, and swearing incessantly; he threatened me with personal injury, and attempted to strike me.*

"2. Other facts (if any) indicating insanity, communicated to me by others: *Helen White, wife of the said James Henry White, informed me personally, that he had been in the state in which I saw him for three days and nights, with scarcely any variation.*

"Signed, name, *William Heberden, M.D.*

"Place of abode, *London St., Birmingham.*

"Dated this *tenth day of December*,

One thousand eight hundred and fifty-three."

"I, the undersigned, *James Purdey Cooper*, being a *Fellow of the Royal College of Surgeons of England*, and being in actual practice as a *surgeon*, hereby certify that I, on the *tenth day of December 1853*, at *No. 14, New Orleans Street, Manchester*, in the county of *Lancaster*, separately from any other medical practitioner, personally examined *Mrs. Mary Smith, wife of John Smith, Esq., cotton manufacturer, of*

No. 14, New Orleans St., Manchester; and that the said *Mary Smith* is a *person of unsound mind*, and a proper person to be taken charge of, and detained under care and treatment; and that I have formed this opinion upon the following grounds, viz.:

"1. Facts indicating insanity observed by myself: *She told me that God had forsaken her on account of her wickedness, and that Satan was coming that same night to carry her off, together with her husband and children.*

"2. Other facts (if any) indicating insanity, communicated to me by others: *Mr. J. Smith, husband of the said Mary Smith, personally informed me that, up to the beginning of last November, she was tranquil, happy, and always religiously disposed; that last night she attempted to strangle herself with a bell-rope.*

"Signed, name, *James Purdey Cooper.*

"Place of abode, *Queen Square, Manchester.*

"Dated this *tenth day of December*,

One thousand eight hundred and fifty-three."

"I, the undersigned, *Thomas Cheselden*, being a *Member of the Royal College of Surgeons of England and a Licentiate of the Apothecaries' Company*, and being in actual practice as a *Surgeon and Apothecary*, hereby certify that I, on the *twelfth day of December, 1853*, at *Newland Hall, in the parish of Hawtree, in the county of Essex*, separately from any other medical practitioner, personally examined *Miss Jane Thomson, daughter of the late Alexander Thomson, of Colchester, solicitor*, and that the said *Jane Thomson* is a *person of unsound mind*, and a proper person to be taken charge of and detained under care and treatment, and that I have formed this opinion upon the following grounds, viz.:

"1. Facts indicating insanity observed by himself: *She has a vacant, unmeaning expression of countenance; seems incapable of answering questions or conversing in a rational manner; frequently laughs without a cause. At the time of my visit she was nursing a doll, and told me it was an angel.*

"2. Other facts (if any) indicating insanity communicated to me by others: *Mrs. Burton, of Newland Hall, sister of the said Jane Thomson, informed me personally that she neglects to take proper care of her person: that when interfered with or offended she becomes noisy, uses bad language, and tears her clothes.*

"Signed, name, *Thomas Cheselden.*

"Place of abode, *Colchester, Essex.*

"Dated this *fifteenth day of December*,

One thousand eight hundred and fifty-three.

Some of the new regulations are open to criticism, particularly that which relates to the *personal observation* of the facts indicating insanity. We have received some important remarks upon this subject from a member, which we reserve for another number.

PROSPECTS OF THE PROFESSION.

LORD PALMERSTON has unexpectedly retired from the Cabinet Council of Her Majesty. It is supposed that he has resigned from dislike to the Representation Reform Bill, which his late colleague, Lord John Russell, is to bring into Parliament. As regards the prospects of our profession, they are not likely to be prejudiced by what has taken place; for to medical questions Lord Palmerston had never greatly bent his mind.

It is generally understood, that in Lord John Russell's Parliamentary Representation Bill, members are to be given to the Universities of London and of Edinburgh; and if judicious efforts be made, some degree of representation may likewise be conceded to the Medical profession. The profession ought to be prepared when the proper time arrives, to state its views on this important subject. Parliament must be told that, the giving of members to the Medical Corporations as at present constituted, would be parallel to vesting the representation of the city of London in the Common Council, a body which bears the same relation to the mass of citizens as do the Colleges to the mass of Medical practitioners—the relation of antagonism.

ORIGINAL COMMUNICATIONS.

ON THE SOURCE OF HÆMORRHAGE IN
PARTIAL SEPARATION OF THE
PLACENTA.

By F. W. MACKENZIE, M.D.Lond., Fellow of University
College, London.

(Read before the Medical Society of London, Dec. 17, 1853.)

THERE are few subjects in obstetric medicine of greater scientific interest, and none of greater practical importance, than that of the anatomical source of hæmorrhage in cases of partial separation of the placenta. Upon its right understanding may be said to depend not only the whole question of the extraction of the placenta, in cases of placenta prævia, but also the general treatment of uterine hæmorrhage in all its several forms; and yet there is probably no subject upon which so much diversity of opinion prevails, or in regard to which mere speculative notions have been more freely allowed to take the place of original observation. With the view of aiding in the solution of this question, I am induced to submit to the Society some investigations which were specially undertaken for the purpose of elucidating it.

On referring to the published writings of various obstetric authorities, it will be found that three different opinions prevail at the present day respecting the anatomical source of hæmorrhage in cases of partial separation of the placenta. The first affirms, that it is principally or wholly uterine; the second, that it is principally or wholly placental; the third, that it is both uterine and placental, the blood escaping partly from the exposed uterine, and partly from the detached placental surfaces.

Further, it will be found that uterine hæmorrhage, whether occurring in connection with partial or entire separation of the placenta, is generally considered to be principally venous. "Uterine hæmorrhage," says Dr. Simpson, "after the separation of the placenta, in any of the stages of labour, is *not arterial* in its character. The utero-placental arteries are numerous, but so long and slender as to become readily closed; first, by the tonicity of their coats; secondly, by contraction of the uterine fibres upon the course of these vessels themselves, as they pass through and amid the uterine structure; and thirdly and principally, by the changes in their tissues produced by the mechanical rupture of their coats,—*torn arteries* being little, if at all, liable to bleed, and the placenta being separated by a true process of *avulsion*. "When the placenta is only separated," says Dr. Radford, "the blood which is lost is chiefly venous." "When the placenta is separated partially from the uterus," Dr. Murphy observes, "any hæmorrhage must arise chiefly from the broken veins, and not from one but from both of their divided extremities." "It is," says Dr. Robert Lee, "from the great semilunar valvular-like venous openings, in the lining membrane of the uterus, and of the arteries which are laid open by the separation of the placenta, that the blood alone flows in uterine hæmorrhage." I have made these quotations for the purpose of showing, that the question at issue is one of a very complex character. It is one which has reference, not only to the organ from whence the blood escapes, but to the particular system of vessels from which it is poured out also.

On reflecting upon these circumstances, I was led to believe that some light might be thrown upon the question, by ascertaining experimentally the source of hæmorrhage in an animal whose placenta, like that of the human female, was both decidual and fetal. A pregnant bitch was accordingly obtained, which had nearly completed the full period of gestation: and it having been placed under the influence of chloroform, the uterus was exposed and opened, and the following observations were made.

I. It was observed, on separating the placenta, that blood flowed freely and continuously from the denuded uterine surface, increasing with the detachment, whilst none escaped from the detached portion of the placenta.

II. That the blood which escaped from the uterus was distinctly arterial, being of a bright arterial character.

III. On rupturing a placenta whilst still partially adherent to the uterus, it was found that a small quantity of dark venous blood escaped from the part torn; but only to a very trivial extent.

These observations were made with different placenta, and uniformly with the same results.

Thus it would appear, in the canine species, that the source of hæmorrhage in cases in which the placenta is partially detached, is exclusively the denuded uterine surface, so long as the placenta is entire: that the hæmorrhage which takes place is of an arterial character; and that although a certain amount of blood may escape from the placenta, if lacerated or torn whilst still partially adherent, yet that this is very trivial in quantity, and of a dark venous character.

Considering, however, the different distribution of the veins in the maternal portion of the placenta in the human and canine species, I am aware that this experiment cannot be regarded as decisive of the source of hæmorrhage under similar circumstances in the former. We know, for instance, that in the human placenta, the utero-placental arteries open into large cells or dilated capillaries in the maternal portion of the organ, between which a free intercommunication exists; whereas in the bitch, the venous vessels of the maternal part of the placenta do not constitute a cellular or cavernous structure, but in form and distribution resemble ordinary veins. These circumstances were particularly pointed out by Dr. Sharpey, to whom I communicated the results of the experiment I have related; and in the course of a subsequent conversation he observed that, in his opinion, the best mode of ascertaining the source of hæmorrhage in partial separations of the placenta in the human female, would be to obtain a uterus to which the placenta was still partially adherent, to inject the hypogastric arteries with defibrinated blood, and to observe whether it escaped from the uterus, the placenta, or from both.

In the early part of April 1853, I had an opportunity of carrying out this suggestion. A poor woman under the care of Messrs. Clark, Norway, and myself, died of hæmorrhage during the progress of a labour, rendered protracted by malposition and impaction of the fetal head. A *post mortem* examination of the body was made on the following day, and as it was found that the placenta was still partially adherent, although much of it had been detached, it appeared to me that it would serve the purpose in view. Accordingly the uterus and placenta were removed to University College, where the following observations were made under the immediate superintendence of Dr. Sharpey.

The uterus, which had been cut off somewhere above its orifice, was first carefully inverted, and several loose unadherent coagula were removed from its interior. It had the appearance of being very exsanguine; and on the surface from which the placenta had been detached, the ramifications of the utero-placental arteries could be plainly seen, but free from any plugging or coagula; about a fifth of the placenta was still adherent. In the next place, the vessels along the cut surface of the uterus were secured by ligatures placed along the line of its division, and the hypogastric and ovarian veins were also secured by ligature. An injecting pipe was now fixed in one of the hypogastric arteries, and some defibrinated blood was steadily injected. The results of the operation were as follows. The blood escaped freely from the orifices of the utero-placental arteries, which had been torn across by the separation of the placenta; none escaped from the torn utero-placental veins, nor did any pass away from the placenta. The injection was continued for some time, but with no variation in the results. It was now thought advisable to ascertain the force with which the blood was injected; and tested by the hæmadynamometer it was found not to exceed that of the heart, acting under ordinary circumstances. In the next place, the opposite hypogastric artery was injected; and in this case it was found, as in the other, that blood escaped freely from the orifices of the torn utero-placental arteries, that

none passed out of the torn utero-placental veins; whilst in this case a small quantity escaped from the surface of the placenta, contiguous to that which was still adherent. The injection was repeated several times with the same results; the great bulk of the injected blood escaped readily from the orifices of the torn utero-placental arteries, a small quantity only came from the placenta, whilst none could be observed to pass out from the torn utero-placental veins, whose orifices were plainly visible and carefully watched. Nor, it should be added, were the vessels plugged with coagula.

Looking then to the results of this experiment, it would appear that the source of hæmorrhage in partial but extensive separations of the placenta is principally uterine, and only slightly placental, and further, that it is arterial rather than venous. It would, however, be too much to assume that the experiments are conclusive as to the source of hæmorrhage in all cases of placental separation. It must be remembered, that in this case the placenta was very greatly detached, and as, consequently, little blood only could have entered it, much could not be expected to have escaped from it; whilst, again, the tonicity of the arterial system could not have been great during life, as evidenced by the little resistance offered by the utero-placental arteries to the escape of the blood injected. Admitting however the full force of these and other considerations, it yet appears to me that the results of this experiment, coupled with those of the one previously related, and taken in connection with various clinical facts, afforded strong grounds for the belief that the principal source of hæmorrhage in cases of partial separation of the placenta is uterine rather than placental, and arterial rather than venous.

What then may be asked are the grounds upon which it is affirmed that these hæmorrhages are respectively either venous or placental? The best reply to this question is probably that given by Dr. Simpson, in the passage I have quoted from his writings. "Uterine hæmorrhage," he observes "after separation of the placenta in any of the stages of labour, is not arterial in its character, because the utero-placental arteries are so long and slender as to become readily closed: 1. By the tonicity of their coats. 2. By contraction of the uterine fibres upon them. 3. Principally by the changes in their tissues, produced by the mechanical rupture of their coats." These probably constitute the entire grounds upon which the opinion in question is maintainable; and I will therefore proceed to consider respectively their nature and validity.

I. The assertion "*that uterine hæmorrhage after the separation of the placenta in any of the stages of labour, is not arterial in its character,*" is one which, so far as I am aware, is not only unsupported by any evidence, but directly at variance with many trustworthy observations. On the 23rd of September, 1853, I had an opportunity of investigating this point, and of satisfying myself that the hæmorrhage which took place from the uterus, between the birth of the child and the expulsion of the placenta, was distinctly of an arterial character. On the 10th of October, 1853, whilst in attendance upon a case of labour, my attention was directed to a rather profuse flow of blood which followed the birth of the child; and I observed, as it passed over the vulva, that whilst the greater part was of a bright arterial colour, a small portion was of a dark venous hue; the striking difference in the colour of the two portions left no doubt in my mind that they were respectively arterial and venous. The same thing was observed in the experiment I have related, in which the placenta was detached from the uterus of the bitch. The blood which flowed freely from the denuded uterine surface was of a bright florid colour, and such as to convince both Mr. Marshall and myself that it was arterial. I further find that the observations I have myself made, as to the character of the blood lost in uterine hæmorrhages, are similar to those which have been made by other medical men; and therefore, in the absence of any evidence to the contrary, we may, I think, conclude that uterine hæmorrhage after the separation of the placenta is rather of an arterial than a venous character.

II. The second point affirmed is, "*that arterial hæmorrhage from the uterus is prevented by the tonicity of the utero-placental arteries*". It is far from my intention to assert that, in a state of health and tranquillity of the circulation, this is not the case; but, under other circumstances, it may be doubted whether the principle in question can be relied upon for the attainment of this object. The tonicity of the arteries, like every other vital property, is liable to be modified or affected by a variety of circumstances; and, regarded as a modification of the principle of contractility, may be supposed to be influenced by the same general causes; to be increased by those which tend to augment the strength and vigour of the body, diminished by those which tend to enervate or exhaust it, and disturbed by those which tend to disturb the nervous and vascular systems. Now, if we consider the circumstances under which uterine hæmorrhages are most liable to occur, we shall find that they are respectively those which tend to enervate or exhaust the constitutional powers on the one hand, or morbidly excite or disturb the vascular system on the other. One of the most alarming cases of *post partum* hæmorrhage which I have ever witnessed occurred in the wife of an eminent obstetric physician, whose nervous system and energies had been prostrated by the unexpected death of her mother about three weeks before the accession of labour. The poor woman, whose uterus was the subject of the experiment I have related, died of internal hæmorrhage consequent upon partial separation of the placenta, when her strength had been exhausted by long parturient efforts; and numerous cases are related of fatal hæmorrhages occurring in women who had been previously anæmic and weakly. On the other hand, every practitioner must have met with profuse uterine hæmorrhage in connexion with morbid excitement of the heart and circulation; and hereafter it will be shown that, of the causes of such excitement, some have a sympathetic, and others a direct mode of operation. Further, I may appeal to the condition of the utero-placental arteries in the case of the patient who died of uterine hæmorrhage, as showing that no plugging or particular contraction of them had taken place during life. Here indeed was a physical demonstration of the condition of these vessels, as they must have existed during life, after fatal hæmorrhage consequent upon partial separation of the placenta, the placenta having been separated during life; and if it can be clearly shown, as it was, that they had neither been so contracted or plugged during life as to prevent the escape of blood from them when injected with no more force than that of the heart's action after death, then it must follow, that neither could they have prevented the escape of blood from them during life, when injected under the ordinary force of the circulation. On these grounds, then, we may venture to doubt the correctness of the dogma, that the tonicity of the uteroplacental arteries is, under all circumstances, capable of preventing the escape of blood from their orifices when torn across by the separation of the placenta.

III. In the next place, it is affirmed, "*that hæmorrhage from the utero-placental arteries is prevented by contraction of the uterine fibres upon the course of these vessels, as they pass through and amid the uterine structure*"—a doctrine which is manifestly at variance with the well known fact, that there is often no direct relation between the degree of uterine contraction and the degree or tendency to uterine hæmorrhage. "The observing practitioner," says Dr. Gooch, "must have been frequently struck by the little proportion that existed between the want of contraction and the degree of hæmorrhage; having found the uterus bulky without any hæmorrhage, and a profuse hæmorrhage without greater bulk of uterus. Nay, further, I have witnessed a profuse hæmorrhage, though the uterus had contracted in the degree which commonly indicates security; and I have ventured to do what is seldom justifiable, separate the placenta before the uterus had contracted, without more hæmorrhage than after a common labour." The correctness of these remarks, and their pertinency to the question under consideration, must, I think, be generally admitted;

but, besides these, two other series of facts may be adduced, in opposition to the doctrine above propounded. First, that, in several instances, the placenta has been spontaneously or artificially separated from the uterus before the birth of the child, and, consequently, under circumstances in which contraction of the uterus could not take place, without any hæmorrhage supervening; and, secondly, that, when it has been attached to the os and cervix uteri, its separation has been effected in many cases without any particular hæmorrhage resulting, although it is affirmed by some anatomists, that there are few or no contracting fibres in the structure of the os and cervix uteri.

IV. The last proposition affirmed—"that hæmorrhage from the utero-placental arteries is prevented by the changes in their tissues produced by the mechanical rupture of their coats, torn arteries being little or at all liable to bleed, and the placenta being separated by a true process of avulsion"—is completely invalidated by the results of the experiment performed upon the pregnant bitch, which I have described in the former part of this paper; for, on detaching the placenta from the uterus, and thereby lacerating or tearing through the utero-placental arteries, arterial hæmorrhage was observed to follow. That is to say, having separated the placenta by a true process of *avulsion*, it was demonstrated that such proceeding was not productive of those changes in the torn coats of the utero-placental arteries which are assumed to follow such operation, and by which, it is alleged, arterial hæmorrhage is prevented. And, to appreciate the full force and importance of this fact to the present inquiry, it is necessary to bear in mind that the placenta of the canine, as of the human species, possesses a maternal as well as a fetal portion; that the utero-placental arteries in both pass from the uterus into the maternal portion of the organ, as do the utero-placental veins from the latter to the uterus; and that the chief difference in the anatomical structure of the two organs consists in the different distribution of the veins in their maternal portions. Accordingly, it must follow, that a separation of the placenta must equally give rise to a laceration of the utero-placental arteries in both species; and if it is clearly shown that hæmorrhage from these arteries is not thereby prevented in the one, it must follow that it cannot thereby be prevented in the other.

I have thus critically examined the several grounds upon which it is alleged that hæmorrhage does not occur from the torn utero-placental arteries in cases of partial separation of the placenta; and, having shown the insufficiency of the data upon which this doctrine has been assumed, I proceed to observe, that if blood does actually escape from these vessels, it must follow that proportionately little will escape from either the uterine veins or the placenta; because, according to the well known laws of hydraulics, fluids circulating in closed vessels will only continue in their regular course when due pressure is maintained upon them. Now, under the circumstances stated, this condition is not fulfilled; and, accordingly, the greater part of the blood entering the utero-placental arteries will escape from their open orifices, rather than be continued onwards into either the uterine veins or placenta. In this respect, it must be borne in mind that the character of the utero-placental circulation must materially differ before and after separation of the placenta. In the former case, the pressure upon the circulating blood is equalised throughout; whereas in the latter, it is unequally distributed, and accordingly there will be a tendency to hæmorrhage where this pressure is removed, or wherever openings exist in the utero-placental arteries.

The correctness of this view is further supported by a variety of circumstances, which go far to prove that the principal source of hæmorrhage in these cases is neither the uterine veins nor the placenta. As opposed to its placental origin, I may mention: First, the character of the blood lost; which, as I have stated, is principally arterial, rather than venous. Secondly, the rapidity with which the blood escapes, and its fluidity in many cases of puerperal hæmorrhage, would tend to show that it was rather poured out directly from the utero-placental arteries, than indirectly from

the placenta. Thirdly, the peculiar cellular, cavernous, or reticulate structure of the maternal portion of the placenta, may be referred to as being calculated to prevent placental hæmorrhage, by producing stagnation and coagulation of the blood in this part of the organ, when separated from its vascular connexion with the uterus. Fourthly, the occurrence of profuse hæmorrhage after the entire separation of the placenta, both before and after the birth of the child, may be referred to as showing that it has no necessary dependence upon this organ. Fifthly, the small amount of blood which escaped from the placenta when the utero-placental arteries were injected in the experiment I have related, affords strong evidence against the placental origin of these hæmorrhages. Whilst, sixthly, the escape of blood from the orifices of the torn utero-placental arteries, by lessening the quantity of blood which would otherwise enter the placenta, affords an additional argument against their placental origin.

As opposed to the venous origin of the hæmorrhage, I may adduce the following facts: First, that the blood lost is for the most part not venous. Secondly, the absence of hæmorrhage in many cases, in which those conditions exist which are most favourable to the occurrence of venous hæmorrhage, namely, relaxed and distended states of the uterus. Thirdly, the absence of hæmorrhage in many cases in which the placenta has been attached and separated from the os and cervix uteri; where the contractile mechanism of the uterus does not exist, by which it is alleged venous hæmorrhage is prevented. Fourthly, the occurrence of profuse hæmorrhage when the uterus is contracted, and when consequently the uterine veins must be firmly compressed. Fifthly, the escape of blood from the orifices of the torn utero-placental arteries; which would equally tend to prevent venous as well as placental hæmorrhage. Sixthly, the fact that no blood was observed to flow from the uterine veins when the utero-placental arteries were injected in the experiment I have related. Seventhly, the normal course of the uterine circulation being from the uterine veins to the vena cava, it must follow that venous hæmorrhage can only occur as the result of a retrograde, and consequently abnormal, movement of the blood.

Upon the whole, then, two things would appear to be certain: first, that no *necessary* relation exists between the degree of hæmorrhage and the degree of separation of the placenta; or, secondly, between the degree of hæmorrhage and the degree of contraction of the uterus; uterine hæmorrhage having been variously moderate or excessive under similar degrees of separation of the placenta, and similarly moderate or excessive under the opposite conditions of relaxation and contraction of the uterus. Can it then be doubted that the absence of, or disposition to uterine hæmorrhage must depend, in many cases, upon other causes than the anatomical connection of the placenta with the uterus on the one hand, or the contractile mechanism of the uterus on the other; or further, that these are to be sought for in the occurrence of arterial hæmorrhage, and the various conditions of the utero-placental arteries, as modified by the general condition of the arterial system? Bearing in mind this view of the case, we can understand how it may happen that, the tonicity of the arterial system being great, uterine hæmorrhage may be prevented when the uterus is most relaxed and when consequently the conditions most favourable to venous hæmorrhage exist; that under the influence of morbid excitation of the heart and arteries, it may be profuse when the uterus is contracted, and when, consequently, venous hæmorrhage would be most effectually prevented; and that its degree may vary in different cases with the same amount of separation of the placenta. Let me however be distinctly understood as speaking of *pathological*, rather than of *physiological* puerperal hæmorrhage, and of its *principal*, rather than of its *exclusive* source; because on the one hand, it can scarcely be supposed, that the placenta can be separated from the uterus, under the most favourable circumstances in child-birth, without some hæmorrhage resulting, which therefore cannot be regarded as pathological; nor, on the other, can it be supposed that

such hæmorrhage should be derived exclusively from the torn utero-placental arteries. It has indeed been experimentally shown that some blood does actually escape from the detached portion of the placenta when the hypogastric arteries are injected, and the quantity so escaping will doubtless vary in different cases, and I have referred to an observation in which venous blood was discharged mixed with arterial, in a case in which hæmorrhage preceded the expulsion of the placenta. It is therefore highly probable, that in all cases the source of hæmorrhage is of a mixed character. But, looking to its source in those which are so considerable as to endanger the safety of the patient, it appears to me that the facts adduced are sufficient to justify the conclusion that it is principally arterial; and that, although blood may simultaneously escape from the utero-placental veins and placenta, the quantity lost by these channels considerably falls short of that which escapes from the torn utero-placental arteries.

In conclusion, we may, I think, deduce from a consideration of these facts some rules of practical importance in the treatment of puerperal hæmorrhages, whether occurring in connection with partial or complete separation of the placenta. In particular, we may learn the importance of treating them upon broader principles than those derived from a consideration of the condition of the uterus or the degree of separation of the placenta; and the necessity of investigating carefully the physiological and pathological states of the nervous and vascular systems, both before and during labour, with a view to the adoption of measures of a preventive, as well as curative character. It is not my intention to enter at length upon this subject; but a brief reference to the principles upon which the prevention of puerperal hæmorrhage should be attempted, will not be inconsistent with the object of this paper.

Apart from the anatomical condition of the uterus and placenta, it will be found in practice that hæmorrhage during labour is liable to be excessive, in connection with two opposite states of the vascular system. In the one, there is morbid excitement of the heart and arteries, directly or sympathetically induced; in the other, there is a state of extreme depression of the circulation dependent either upon atony of the blood vessels, or an impoverished condition of the blood. As both these conditions may exist and be recognised before the accession of labour, I will briefly advert to the curative indications they suggest.

Hæmorrhage occurring during labour, in connection with inordinate excitement of the circulation, has been well illustrated by Dr. Gooch, as well as the treatment it requires, in his paper on a peculiar form of hæmorrhage from the uterus. The patient before the accession of labour was flushed, and had a very full quick pulse. Abstinence from meat, wine, and warm drinks, a cool room, and a saline purgative, diminished but did not remove this state of the circulation, which continued in a considerable degree when the child was born. It was expelled very gradually, and after the removal of the placenta the uterus felt contracted in the ordinary degree. Nevertheless about twenty minutes afterwards, there came on one of the most frightful hæmorrhages which, Dr. Gooch observes, he had ever witnessed. Twelve months afterwards he attended the same patient in a subsequent labour, and was struck on observing the same state of circulation which had preceded the first. The labour proceeded naturally, but was again followed by profuse and alarming hæmorrhage. Reflecting upon these facts, Dr. Gooch was led to believe that the hæmorrhage depended not upon want of contraction of the uterus, but on want of tranquillity of the circulation; and he concluded if she again became pregnant, that a mode of treatment which would cause her to fall in labour with a cool skin, and quiet pulse, would be the best means of preventing a recurrence of the accident. In due time he had an opportunity of testing this practice; and although in the first instance he was unsuccessful, yet in another, by means of an abstemious diet, saline aperients, and the moderate abstraction of blood from the arm before delivery, the

labour was completed without the smallest degree of flooding or faintness. The principle upon which this variety of uterine hæmorrhage should be treated, is sufficiently indicated in these details.

In a second series of cases, it has appeared to me that hæmorrhage during labour has been immediately dependent upon a disordered state of the circulation, excited by functional derangement of the liver and digestive organs. Such patients suffer for some time before labour, from constipation, flatulence, and other symptoms of indigestion; and if the stools are examined, they are found to be of a pale, or clay colour.

Profuse hæmorrhage under these circumstances may either immediately follow the birth of the child, or may continue to recur for some time after labour. In two instances recently attended by me, profuse hæmorrhage followed delivery; and in both the state of the hepatic functions, was such as I have described. The recurrence of hæmorrhage led to an examination of the stools; in each case they were found to be clay coloured, and almost destitute of bile; and on restoring the action of the liver, the disposition to hæmorrhage was in each case removed. From these facts I have been led to believe, that many instances of puerperal hæmorrhage might be prevented by inquiring into the condition of the liver and digestive organs before labour, and adopting such means as would rectify any derangement which might exist.

The second class of cases I have referred to, are those in which puerperal hæmorrhages occur in connexion with an enfeebled state of the circulation; and this, inasmuch as it may have existed long antecedently to labour, is eminently amenable to preventive measures of treatment. It is met with in females whose physical health has been deteriorated or depressed by bodily disease, laborious or unhealthy occupations, or mental anxiety, and comprehends a very numerous category. In these, either from atony of the blood vessels, or an extreme fluidity of the blood, but little or no barrier is opposed to the escape of this fluid; and if preventive treatment has not been adopted, but little good will sometimes result from any other. In all such cases the treatment should be of a prospective character, and directed to the improvement of the health before labour by the employment of such measures, hygienic and medicinal, as will amend the condition of the blood and augment the tone and vigour of the arterial system. In proportion as anæmia preponderates, iron will be indicated; where atony of the nervous and vascular systems is the more prominent condition, strychnia should be preferred; whilst in cases in which both these pathological elements coexist, a combination of both remedies will answer best.

As regards curative treatment, I would wish more especially to direct attention to the advantages likely to be derived from the employment of galvanism in these cases; not, indeed, locally applied to the uterus, but employed in a more general and diffusive manner, with the view of imparting increased tone to the arterial system at large. This, I believe, may be accomplished by passing somewhat powerful single currents from the upper portion of the spinal cord through the uterus. The opportunities I have had of observing the action of galvanism in obstetric practice, induce me to think favourably of it in these cases, and some investigations commenced with the view of determining its power in arresting arterial hæmorrhage support this opinion: whilst it must not be forgotten, that several cases have been published in which uterine hæmorrhage has been thus speedily arrested. I will only add, that if my view of the source of hæmorrhage in cases of partial separation of the placenta is confirmed, it will prove a most valuable auxiliary in the treatment of placenta prævia; simultaneously tending to the arrest of hæmorrhage, and the dilatation of the uterus.

Chester Place, Hyde Park Gardens, Dec. 1853.

BRIEF CONSIDERATION OF MR. GAMGEE'S EXPERIMENTAL INQUIRY INTO THE EFFECTS OF INJECTING PUS INTO THE VEINS OF ANIMALS.

By HENRY LEE, Esq., F.R.C.S., Surgeon to the Lock Hospital, Assistant-Surgeon to King's College Hospital, etc.

IN THE ASSOCIATION JOURNAL for December 9th, Mr. GAMGEE has entered into a critical inquiry of the most recent opinions concerning the local effects of injecting pus into veins; and has entered at length into a consideration of my experiments upon the subject, which, he has done me the honour to say, "were, ever since their announcement, regarded as marking an era in the progress of knowledge of purulent infection."

The limits necessarily assigned to a communication to a medical journal forbid even a passing consideration of the whole subject; but Mr. Gamgee's experiments and observations afford some particular points well worthy of attention.

With regard to the principles themselves, they have been fairly stated to the profession, and have been reprinted and adopted in some of the most widely circulated surgical works in the English language. They must stand or fall by the test of public experience; but I cannot for a moment allow (as appears to be inferred by Mr. Gamgee) that the conclusions arrived at depend upon the accuracy of any one set of experiments.

Already have the descriptions of *subacute* and *acute phlebitis* given way to the descriptions of the local effects of inflammation of veins, and that general contamination of the blood to which the name *pyohemia* has been given: affections essentially distinct in their nature, but which may nevertheless frequently co-exist in the same case. As an instance of the truth of these remarks, I may refer to the differences observable between the chapter on Injuries and Diseases of the Veins, in the fifth edition of Dr. Druitt's excellent *Manual of Surgery*, published in 1851, and that in the sixth edition, which has just appeared.

With these observations, then, I must dismiss the general subject, and confine myself to the particular points mentioned in Mr. Gamgee's interesting inquiry.

The first sentence selected by Mr. Gamgee for especial criticism, and twice published for that purpose, is as follows:—"The simple experiment of mixing some pus with healthy recently drawn blood will at once show that such a combination cannot circulate in the living body. It will be found that the blood coagulates round the globules of pus, and forms a solid mass, which will adhere to the first surface with which it comes in contact."

It must be evident that, in this sentence, the relative "which" refers to its antecedent "solid mass", and not to the globules of pus; and it would be therefore most unfair to draw from it the additional conclusion, that no time was occupied in forming the solid mass, or that pus could, under no circumstances, be made to pass along the blood-vessels. If such an inference could have been drawn from a single sentence, it might surely have been corrected by other statements in the same work (*On Phlebitis*, etc.). Thus, at page 43, I write, that the experiments show that pus has a tendency to coagulate the blood; and that, from this cause, "its progress is arrested in some part of the circulating system"; and at page 24 I state that, "where purulent or other fluids have been directly injected into the blood, the examination of the blood or of the vessels will by no means indicate the presence of foreign matter, nor will inflammation of the vein through which the fluid has passed be by any means invariably produced." Finally, I have myself detailed four cases in the work referred to, in which pus was injected into the veins without producing any characteristic local morbid appearances. It appears, therefore, strange to me, that Mr. Gamgee should have inferred from my writings that I was of opinion that pus could never be made to pass into the circulation, and that he should have endeavoured to prove, in supposed opposi-

tion to my experiments, that "the circulation of pus with the blood is perfectly possible".

"To argue, as Mr. Lee does," continues Mr. Gamgee, "from the fact that, out of the body, blood coagulates round pus, therefore such a combination cannot circulate in the living body, is about as warrantable as it would be to predicate from the observation, that pure blood coagulates in a basin, it therefore cannot remain fluid in the ventricles of the heart."

With this criticism, though somewhat complicated, and manifestly inappropriate, as applied to a peculiarity in the mode of coagulation, I have, on the whole, not much fault to find, since Mr. Gamgee has himself furnished the evidence that vitiated blood, to which alone my experiments referred, will not always remain fluid in the ventricles of the living heart.

"A mixture of two drachms and a scruple of good pus, diluted with an equal quantity of tepid water, was injected", says Mr. Gamgee, "into the right jugular vein. I had no sooner done this, and transfixed the lips of the orifice with a pin, than the horse began to heave at the flanks, after which he staggered a few moments, and fell; when down, he breathed laboriously thirty-eight times in the minute, and, with scarcely a struggle, and not more than two minutes' delay, expired. . . The jugular vein and the right cavities of the heart were filled with dark coloured currant jelly-like clotted blood. . . From the manner the experiment was conducted, the introduction of air into the vein was impossible. On examining the blood from the right side of the heart, I discovered on it a very large number of corpuscles, measuring, on an average, one two-thousandth of an inch in diameter, and having nuclei not distinguishable from those of pus-cells. So numerous were they, that it was impossible to count them."

As the horse has only one jugular vein on each side, the blood returns to the heart through it, when unobstructed, with something like the same velocity that it passes from the heart through the carotid artery: a period of four or five seconds is the utmost time that the blood would, in the ordinary course of the circulation, take to pass through the heart from the jugular vein; yet, in Mr. Gamgee's experiment, the pus is found mixed with the clotted blood in the heart, after an interval of two minutes, without reckoning the time consumed in completing the experiments, or the interval during which the circulation may have gone on after apparent death. By what power, then, I ask, were these pus-globules detained in the heart? and what was the cause of the sudden death which occurred in this case?

This experiment of Mr. Gamgee's is the more interesting, as it coincides exactly with an experiment recorded in a very able and interesting paper by Dr. Mackenzie, in the last volume of the *Medico-Chirurgical Transactions*. At page 200, Dr. Mackenzie states: "The femoral vein of a dog was exposed on the 15th of June, 1852, and half an ounce of pus, slightly diluted with water, was slowly injected into it towards the heart. In rather more than a minute, the dog seemed distressed; the abdominal and respiratory muscles became convulsed; and respiration ceased within two or three minutes. On making a *post mortem* examination shortly afterwards, the vena cava and the abdominal and thoracic veins were found generally turgid with blood. On opening the right iliac vein, a stream of dark coloured fluid blood poured out; and, on continuing the division of the veins upwards, the blood was still found to be fluid, with the exception of two or three small coagula, which were found about the middle of the cava. The right auricle contained a thin black coagulum, and small fibrinous coagula were scattered over and between the columnæ carnea of the right ventricle, which contained a minute yellowish looking matter, closely resembling the pus which had been injected."

A third case, in which the injection of a putrid fluid produced analogous symptoms, is detailed at length in the *Medical Times* of the 3rd instant.

What is it, I again ask, that produces the sudden and alarming symptoms in such cases? There is no animal

poison known which is so sudden in its operation ; and that pus, simply as such, produces no such symptoms, we have abundant proof from those cases in which it has passed without obstruction in the course of the circulation.

In a Report of a Committee of the Edinburgh Physiological Society of the 9th of January, 1853, upon some experiments undertaken at the instigation of Professor Bennett, it is stated, that fresh and healthy pus was slowly injected towards the heart into the jugular vein of a donkey. A slight obstruction was at first perceived, and the vein above the ligature could be seen to be somewhat swollen. This swelling, on being felt, was very soft, and, on pressing the vein from below upward, the mixed blood and pus was readily pushed before the finger. When all obstruction to the passage of pus from the syringe was removed, the syringe was again filled, and another ounce of pus was injected, without occasioning any further local effects. The animal was then allowed to get up, and exhibited no change in its normal condition whatever. The same was the subject of a second experiment, a fortnight later, having been perfectly well in the interval. Six inches of the jugular vein were now exposed, and an ounce of perfectly healthy pus was then slowly injected downwards towards the heart. Another syringe full of pus was then injected. The animal presented no unusual symptom whatever during the next four days.

To what, then, are to be attributed the sudden and fatal effects observed in Mr. Gamgee's and in Dr. Mackenzie's cases? I answer, to the coagulation of the blood in the heart. It is to this that are to be ascribed the sudden and fatal results in the cases which these gentlemen have recorded; and to the absence of any such result, that the corresponding absence of symptoms must be assigned in the last mentioned experiments.

Thus, I conceive that, while it is fully demonstrated that, in certain cases, pus may pass into the circulation without producing any very manifest inconvenience, that, in others, it will produce coagulation of the blood in the lining vessels, and a train of consequent symptoms which will vary according to the locality in which such stagnation has taken place. What the circumstances are which, in one case, will determine this effect, and in another not, will form the subject of a separate inquiry. For the present, I must content myself with having shown, as I believe, from independent evidence derived from experiments undertaken to illustrate other and different views, that the doctrine which I first published in 1849 is not devoid of foundation; and that the propositions which I then endeavoured to establish,—namely, that pus and some other morbid fluids, when mixed with the blood, have a tendency to produce its coagulation, and that this tendency is often more quickly manifested in the body than out of it,—have been fully demonstrated.

15 Dover Street, Piccadilly, Dec. 13th, 1853.

DESCRIPTION OF A NEW BEDSTEAD FOR DIRTY INSANE PERSONS.

By JAMES G. DAVEY, M.D.

[Read before the Anniversary Meeting of the Provincial Medical and Surgical Association, August 11th, 1853.]

Among the insane there are, and always must be, even in the best regulated of asylums, and with the greatest care and attention, a considerable number whose mental existence is reduced to so low an ebb, that the calls of nature are either not heeded, or are kept in abeyance by an inordinate cerebral excitement, or by some absorbing and abnormal impulse, which involves the volition of the party affected in disorder and irregularity (*mania*). These constitute what in asylum parlance are called *dirty patients*; and, for their management and accommodation, various plans have, at different times, been suggested. In the olden time, this class of patients was very summarily dealt with. A little loose straw, and that not over clean, was

thrown into the corner of a damp and dirty cell; and the poor lunatic was fortunate indeed to have this exchanged when it was needed. At a less distant period, the straw was put into a coarse kind of sacking. After the lapse of time, however, both the loose straw and the coarse straw mattresses were abandoned, and their place was supplied by the common *stretcher*. This consists only of a stout piece of canvas extended over a framework of wood, of the length and breadth of the *crib*, and into which it is received. This arrangement is not unattended with much danger, inasmuch as violently disposed persons commonly remove the stretcher, and use it as a weapon of offence; or not infrequently break it into pieces, and do more or less mischief in and about the dormitory. To meet these grave objections, various ingenious plans are devised to fasten or lock the stretcher to the crib or bedstead.

Two objections are made, and very properly, to these stretchers: one is, that the canvas, if sufficiently strong, is not porous enough to allow the urine to escape; it is, therefore, retained more or less about the person of the patient, and risk is thereby incurred of sores: the other is the time and labour demanded, not only to wash and dry the stretcher for further use, but to carry it to and from the laundry and the wards.

The first objection has been met by piercing holes in the canvas, similar to those which tailors are in the habit of making on the back parts of waistcoats, to enable us, in physiological phrase, to adapt the containing to the contained parts. The due escape of the animal fluids, however, leaves yet the second objection untouched; and to remove this very serious business, in a lunatic asylum containing any number of patients, is the especial purpose of the *cane* bedstead, to which I would here call attention.

By referring to the drawing, it is seen that the whole depth of the *crib* is divided into two parts, an under and an upper, by the cane flap or partition which intersects it in its whole length and breadth. On the one side of the interior of the crib, the cane flap or shifting bottom is held on hinges; and, on the other side, it fastens with a kind of spring lock, which is opened from the outer side or exterior by a key of a peculiar construction. The specific value of the above arrangement consists in the employment of *cane* in the stead of canvas. This material, from the great abundance of silica which it contains, mixed with vegetable matter, offers a non-absorbing surface to the urine; and all the washing, therefore, which it requires may be performed by a damp piece of flannel, which may be used daily by the ward-attendants themselves in the dormitory, as the crib stands, with scarcely any trouble. (Figs. 1 and 3.)

Fig. 1.

Fig 2.

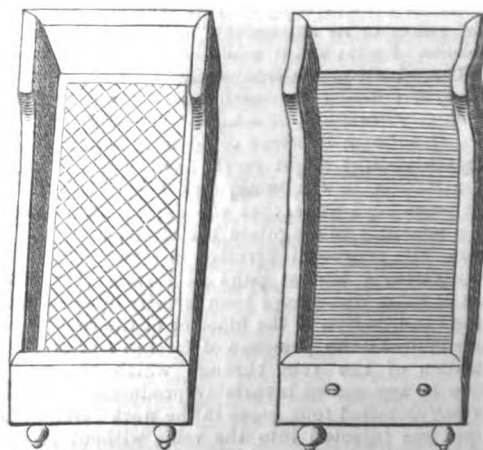


Fig. 1 represents the bedstead with the cane flap put down, and in position for use. On the cane flap the bedding is placed. N.B. The finer the canework the better.
Fig. 2 represents the bedstead with the canvas expanded by the rods placed on either side; and which, passing from the head to the foot-board, preserve the same in situ.

The lead which lines the interior and bottom of the crib must of course be kept perfectly clean, as is done under any other circumstances. The addition of the ordinary drawer, containing a common chamber utensil, either of earthenware or gutta percha, would together constitute an admirable piece of furniture for the lunatic asylum.

Fig. 3.

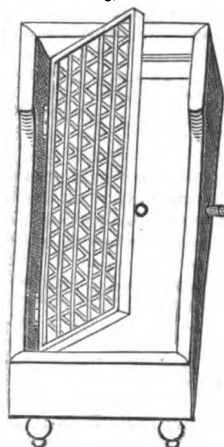


Fig. 4.

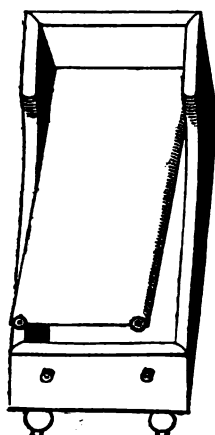


Fig. 3. In this drawing the cane flap is raised on its hinges; on one side is shown the bolt withdrawn, by means of which the flap is secured by an appropriate key, in its right place, when in use.

Fig. 4. In this drawing the canvas, with the rods, by means of which it is extended, is raised, in order to show its relation to the contiguous parts. Like the cane flap, the canvas divides the depth of the bedstead into two unequal parts.

There is another form of bedstead, which is doubtless greatly to be preferred to the canvas stretcher above referred to; but I think myself it is inferior to the cane bedstead here submitted for inspection. Its peculiarity consists in a contrivance which allows of the ready separation of the canvas from the framework to which it is attached in the crib; the frame itself being a fixture, or a part of the crib. The canvas, in this instance, may be described as a common kind of sack, equally open at either end. This is slipped on or off certain iron rods, which secure it, as required; and these are attached by a joint on each side to the upper and interior part or head of the crib, and are continued to the lower and interior or foot of the same. These rods are perfectly close to its sides, where, at points corresponding to the said joints superiorly, they fall into grooves on the interior of the foot-board, which proceed from the centre to the sides of the crib. The canvas or sacking, being slid on the iron rods, is readily extended across the bedstead; and on it of course the patient lies. The whole is secured by two common screws, which are reached from the outer side and foot of the bedstead. A piece of canvas, six feet by two, is more conveniently carried to and from the laundry and the wards, and much more easily washed and dried, than the frame or stretcher could possibly be. (Figs. 2 and 4.)

I am bound to acknowledge the assistance given to me, in matters of detail, in the contrivance of these two cribs or bedsteads, by Mr. Holman, the engineer of the County Asylum at Colney Hatch, whose mechanical ingenuity is of no ordinary kind.

Care should be taken not to fix either the *cane flap* or the *iron rods* too near the top of the crib, else the patient will lose the security the crib affords him. Those among the insane who are *hopelessly* of dirty habits, are, as a rule, more or less helpless and imbecile or demented. I may add, that dirty patients, in asylums for the insane, are not infrequently put to sleep on mattresses covered with oiled silk or India-rubber sheeting; and, in the centre of each mattress, and of its coverlid, there is commonly a hole through which the animal fluids *may* pass away. But not only do these *not* answer the purpose intended, but the urine is retained in parts about the surface, and so keeps

the posteriors of the patient saturated with moisture: moreover, their expense is very great.

In conclusion, I may remark, that both the kinds of crib are in use at the Colney Hatch Asylum, and, I am told, at the Asylum at Hanwell. I am assured, too, that, at the former institution, they continue to be highly approved.

Northwoods, Bristol, Aug. 8th, 1853.

BIBLIOGRAPHICAL NOTICES.

A TEXT-BOOK OF PHYSIOLOGY. By Dr. G. VALENTIN, Professor of Physiology in the University of Berne. Translated and Edited from the Third German Edition, by WILLIAM BRINTON, M.D. Part II. London: 1853.

WE have already noticed in favourable terms the First Part of the translation of VALENTIN'S PHYSIOLOGY by Dr. BRINTON. The whole work is now before us, and we can conscientiously speak in its praise. It is described by Dr. Brinton as an abridgement, by Dr. Valentin, of the last edition of his larger systematic treatise, the "Lehrbuch der Physiologie."

The book is divided into nineteen chapters, which treat successively of Organization and Life, of Organic and Animal Functions, of the Physical and Chemical Properties of the Body, of Digestion, Absorption, Circulation, Respiration, Evaporation, and Secretion; of the Vascular Glands, by which term the author designates the spleen, the suprarenal capsules, the thyroid and the thymus glands; of Nutrition, Animal Heat, Locomotion, and the Voice; of the Functions of the Senses, of Innervation; and lastly, of Generation and Development.

To offer any detailed opinion upon the merits of Professor Valentin as a physiologist may be deemed superfluous, when we consider the high reputation which he already enjoys upon the Continent. We shall therefore only remark that he possesses those qualities of mind, natural and acquired, which render him a trustworthy authority in matters of science. He is fully acquainted with the literature of physiology and with the collateral sciences on which its principles are founded; and he has moreover enriched his pages with many ingenious experiments devised and executed by himself. He is a calm and dispassionate critic of the many disputed points in physiology; and his own views are always based upon extensive knowledge and correct reasoning.

We do not by any means affirm that, as a Treatise on Physiology, the present work is decidedly superior to other books upon the same subject, especially the works of Müller and of Carpenter; but as this department of science is one which is continually changing its features, in consequence of recent discoveries in histology and chemistry, of the different aspects in which the same truths may be presented to different minds, and of the institution of new experiments, a work on this subject coming from a philosophic writer and experimentalist is always acceptable; and Valentin's present contribution to physiology is one of the highest order. Modern physiology is like a kaleidoscope, in which the most dissimilar objects appear to be heterogeneously jumbled together before the ordinary observer; but it is the province of intellect to collect and arrange the scattered elements, to reduce them to system, and to unite them into a coherent and harmonious scheme. This has been done in Valentin's Text-Book, which is therefore to be recommended as a safe and useful guide to the student and the practitioner.

To Dr. Brinton a considerable meed of praise is likewise due; the translation is carefully and neatly performed, and the notes appended to the text, although few, are well-timed and judicious.

There are no fewer than five hundred illustrations interspersed throughout the volume, on wood, copper, and stone, and some of these are of the most elaborate character, and are executed with great accuracy.

We regret that our limits do not allow us to give an abstract of the whole work, and it would be unjust to the author and the translator to give isolated extracts from its pages. The latter course would be the more unfair, as the aim of the author has apparently been to arrange his materials in logical succession; and the selection of random passages could no more give an idea of the composition of the book, than the exhibition of some loose bricks could afford a specimen of the architecture of a house.

DRUGGISTS' HAND-BOOK OF PRACTICAL RECEIPTS: A Manual for the Chemist and Medical Practitioner, comprising the London Pharmacopœia in English, etc. By THOMAS F. BRANSTON. 12mo. pp. 256. Liverpool: 1853.

This work is likely to prove useful to those for whose use it is intended.

PERISCOPIC REVIEW.

SURGERY.

DISLOCATIONS OF THE ANKLE BELOW THE ASTRAGALUS.

Dr. PAUL BROCA has contributed a memoir on this subject to the third volume of the *Mémoires de la Société de Chirurgie de Paris*. He enters at great length into the history of what he terms *sub-astragalian* dislocations. The displacements of bone which occur in the tarsal region are so numerous and varied, that M. Broca thinks it necessary to establish subdivisions and a methodical nomenclature. He divides them into three classes; but before proceeding to describe them, he gives an anatomical view of the relations of the astragalus to other bones.

The astragalus may be described as the key of the ingenious mechanism of the ankle; it is the bone which receives directly the weight of the body and transmits it to the other bones of the tarsus. Notwithstanding its small size, it articulates with four different bones, and its numerous articular surfaces take part in all the movements of this complicated region. Three supposed articulations are grouped, as it were, around the astragalus; the first is the tibio-tarsal, which is almost the exclusive seat of flexion and extension; the second is the *sub-astragalian*, under which term the author comprises, not only the two astragalo-calcæan junctions, but also the astragalo-scaphoid connexion. In the movements of this triple articulation, the astragalus, fixed to the bones of the leg, remains immovable, and the rest of the tarsus moves below it, so as to carry the point of the foot inwards or outwards, which constitutes adduction and abduction. The third articulation is the medio-tarsal. The astragalus and the calcaneum, constituting a solid mass, furnish a double articular surface on which the anterior range of the tarsus rests. The movements of flexion and extension are here very obscure, those of adduction and abduction hardly exist; but this articulation is the principal seat of those movements of torsion, which elevate one of the edges of the foot by depressing the other. The three articulations of the ankle may be moved together or singly; and they may therefore be dislocated separately or all at once.

M. Broca divides the dislocations into four groups: 1. The *tibio-tarsal* luxations, of which he does not here treat; 2. The *subastragalian* luxations, in which the astragalus preserves its relations with the bones of the leg, while the rest of the foot is carried in a variable direction; 3. The *medio-tarsal* luxations, in which the posterior range of the tarsus preserves its relation with the leg, while the anterior range is displaced altogether or in part; 4. The *luxations of the astragalus properly so called*, in which this bone, by a complex movement and as a result of extreme violence, is expelled from the cavity which it occupies without the other bones of the foot losing their mutual relations. This classification, says the author, is not an imaginary one, but is founded on real distinctions. The memoir is divided into two parts, one of which treats of sub-astragalian, and the other of medio-tarsal luxations.

The luxation of the os calcis has very rarely been observed; and, even after examining the recorded cases, M. Broca is induced to doubt the reality of this accident. Of the existence of

dislocations below the astragalus there can be no doubt; and the case of Mr. Carmichael is related, in which it is shown that that distinguished surgeon, meeting with an accident on horse-back, dislocated the os calcis backwards, the astragalus retaining its position. This kind of dislocation is distinguished from the luxation of the foot backwards, first, by the presence, on the dorsum of the foot and in front of the bones of the leg, of a round projection formed by the head of the astragalus; and secondly, by the absence of the tumour which is formed by the pulley of the astragalus behind the bones of the leg, when the whole of the foot is displaced. The lateral luxations of the subastragalian articulations are less rare than the luxation backwards; and the author has collected nineteen cases of this displacement. The signs of the luxation outwards are the following: the foot is in general carried in an abduction more or less considerable, or it may even take an entirely transverse direction; the external edge of the foot is almost always elevated, and the internal edge rests on the ground. When there is a wound, it is situated on the inner edge of the foot, below or in front of the internal malleolus, and allows the head of the astragalus to project; the tendon of the tibialis posticus is pushed backwards or torn; the posterior tibial artery is distended or torn. The following are the signs of the luxation inwards:—the foot is carried in the direction of adduction, its internal edge is more elevated than in the normal condition, which produces to a certain extent the form of talipes varus. When there is a wound, it is situated on the outer side of the foot, below or in front of the external malleolus. The tendons of the extensor communis are pushed back over the inner side of the head of the astragalus, which rests in general upon the dorsal surface of the cuboido-scaphoid articulation. The two most essential signs of these luxations are derived from the position of the astragalus in relation to the malleoli, and from the state of the movements of the foot. Whenever the head of the astragalus has preserved its normal relations to the bones of the leg, which fact may be always easily ascertained, the existence of a subastragalian dislocation is certain. The integrity of the tibio-tarsal articulation gives an important functional sign; for the movements of extension and flexion of the ankle, which are abolished in the tibio-tarsal luxations, and in the total luxations of the astragalus, are preserved in the subastragalian luxations.

The indications of treatment must be deduced from the foregoing considerations. When there is no wound, the reduction must be attempted as soon as possible. The extending forces must be applied at once to the dorsum of the foot and the projection of the heel, and must be exerted in a direction parallel to the axis of the leg. Counter-extension is to be made upon the leg, which ought to be flexed upon the thigh, in order to relax the gastrocnemii muscles. If manual force should fail, recourse must be had to pulleys. But it may happen that the reduction is impossible; and in such cases some authors have advised the use of incisions to relieve obstacles; but M. Broca thinks that such treatment is inadvisable. When there is a wound the case is more serious, and some surgeons have recommended amputation; but this can only be adopted in rare cases. The reduction of the luxation must be attempted, but it unfortunately fails more frequently than in luxations uncomplicated with a wound. The division of the soft parts, or the section of certain tendons may facilitate the replacement of the bones; but in spite of this, the luxation often remains irreducible, and it becomes necessary to extract the astragalus. The removal of this bone permits the straightening of the foot; and of eight patients who have undergone the operation, six have recovered. Removal of the astragalus is a less severe operation than amputation of the leg, and it presents the advantage of preserving the functions of the limb.

The latter part of M. Broca's memoir is devoted to the consideration of the *medio-tarsal* luxations, by which term are denoted the displacements which occur between the first and the second row of the tarsal bones; namely, in the articulation called Chopart's. The luxation will be *total* if the scaphoid and the cuboid bone are displaced simultaneously; and *partial* if one only of these bones be luxated. The conclusion at which the author arrives, is that nothing authorises us to admit the reality of the total medio-tarsal luxation, and that the dislocations of the scaphoid bone which have been described by some surgeons, are really subastragalian luxations. M. Broca criticises very ably the cases of astragalo-scaphoid luxations described by Boyer, Roux, Astley Cooper, and others, and considers that they are all incorrectly designated, and that by a more accurate diagnosis of these displacements remedial measures might be more successfully employed.

ON THE TREATMENT OF ERECTILE TUMOURS BY A NEW METHOD OF LIGATURE.

In the third volume of the *Memoires de la Société de Chirurgie* of Paris, there is a paper on the Treatment of Erectile Tumours, by M. RIGAL. After reviewing the different methods hitherto employed in the treatment of these affections, M. Rigal recommends the ligature as the preferable proceeding, employed in a manner peculiar to himself. It consists in using a multiple ligature, the loops of which are tied beneath strong pins, and thus strangle the tumour without running the risk of allowing the least part of it to escape. The following is the plan described by M. Rigal, in one of his recorded cases. A sewing needle of sufficient strength was carried across the tumour and beneath it, drawing the two ends of a thread through the puncture. A second needle was passed in the same manner below the tumour; their passage thus divided the tumour into three parts of about equal size. Each of the threads was then cut off close to the needles, and thus there were two ligatures free in each of the passages. Then a small and rather strong curved needle was plunged below the upper extremity of the tumour, and was made to pass out on the opposite side. The two extremities of one of the threads were then firmly tied below the needle; the same proceeding was taken at the other end of the tumour. The middle part was perforated by another needle, and one of the upper, and one of the lower threads were tied together beneath it, thus completely strangulating the middle portion of the tumour. The interlacement of the threads, although easily demonstrated by diagrams, is however too complicated for verbal description; but it is sufficient to state, that when the threads are all drawn tightly together, the result was the separation of the erectile tumour from the surrounding parts. The ends of the pins were removed by the cutting pliers. The tumour daily acquired a deeper and deeper brownish tint; it hardened as it became dry. Soon afterwards, the furrow marking the line of strangulation began to ulcerate, pouring out a few drops of well conditioned pus; and on the eighth day, the erectile tissue dropped off spontaneously, bringing away the pins and the loops of thread. Although the number of the ligatures and of the pins requires to be varied according to the size and the situation of the tumour, the principles of the operation remain always the same; and no deviation was adopted in any of the operations of M. Rigal, who illustrates his observations by the record of seventeen cases, all of which were successful.

The conclusions arrived at by M. Rigal are the following; namely, that the ligature above described, and which M. Rigal calls the *ligature à chaîne enchevillée*, constitutes a new method for the removal of erectile tumours; that it is applicable not only to pedunculated tumours, but also to morbid productions reposing upon broad bases; that it may be employed upon all the regions of the face and trunk; that it prevents the hemorrhage which accompanies or immediately follows a sanguinary operation, and that which may probably result from the falling of mortified tumours; that its efficacy, its safety, and the little influence which it exercises upon the economy, appear to depend directly upon the energy of the constriction, on the instantaneous isolation, and the immediate death of the parts comprised within the double enclosure of its knots; that the scars which result are firm, moveable, and of a remarkable smoothness, and are obtained by the aid of very simple dressings; that the operation is rapidly performed, and that the presence of the pins causes no pain, even in children; that this kind of ligature permits the operator to spare a more or less considerable portion of a moveable structure, such as the lips and the eyelids, even when two thirds of the thickness of these organs have been involved; and that, although it may not be adapted for every case, it will yet be found the most appropriate treatment in a great many instances.

RESEARCHES ON THE INCOMPLETE LUXATION OF THE TIBIA FORWARD.

In the same volume from which we have taken the above, a paper on this subject is communicated by M. DÉSORMEAUX, illustrated by a case which came under his notice at the hospital Bon Secours. The patient became accidentally entangled in some machinery, by which accident direct violence was applied to the region of the knee, and a partial dislocation of the knee forward was the result. The luxation was reduced, but the patient subsequently died of consecutive disease. On examining the knee-joint, it was found that the articular capsule was uninjured, but it contained a little serosity mixed with blood; the ligamentum patellæ, the lateral ligaments, and the posterior and semilunar ligaments were healthy, and the crucial ligaments

were infiltrated with blood. M. Désormaux considers the principal symptoms of this luxation, to be the projection of the tibia forward, permitting the anterior part of the glenoid cavities of this bone to be distinguished by the touch; the projection of the condyles of the femur in the popliteal space, and the consequent increase of the antero-posterior diameter of the articulation, the absence of real shortening, and the position of the patella, the anterior surface of which looks forward and upwards, and presents remarkable depressions at its sides. The best method of reduction consists in the flexion of the limb, combined with a slight extension.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

PREPARATION OF PERCHLORIDE OF IRON.

In the *Bulletin Générale de Thérapeutique* for May 15th, and the *Lancet* for June 18th, is given M. BURIN DUBUISSON'S formula for preparing the perchloride of iron.

"Take of sulphate of iron of commerce (emerald colour), two pounds; water, six pounds; pure iron filings, the fifth part of a pound; sulphuric acid, half an ounce: put the whole into an enamelled cast-iron vessel, and leave the latter upon the sand-bath until gas is no longer given off; filter, add to the fluid half a pound of liquid hydro-sulphuric acid, and allow to rest for twelve hours. Put, after that time, the solution upon the fire, boil for half an hour, and filter. To the filtered liquid add six ounces and a half of pure concentrated sulphuric acid; and place the mixture into an enamelled cast-iron vessel, which should be but half filled. Boil, and add in small quantities, pure nitric acid, until it causes no longer the escape of red fumes. Remove the vessel from the fire, add to the fluid twenty-five or thirty times its weight of cold water, and the whole of the iron will be precipitated in the state of peroxide by the addition of a slight excess of ammonia. Wash the precipitate by decantation with pure water a great many times, and dry it in the air by spreading it in thin layers upon linen.

"This dry and pulverised oxide is then calcined to redness in a large and shallow iron vessel, so that the temperature may not rise too high. This is the martial saffron of the shops, which is, in fact, pure peroxide of iron when prepared as above.

"The perchloride of iron is then obtained in the following manner:—Take of the peroxide of iron, resulting from the process just described, six ounces and a half; pure and white hydrochloric acid, two pounds; mix, and allow the action to go on without fire for five or six hours; then put the vessel on a water-bath, and boil until the almost complete solution of the oxide is obtained; this should be done in a porcelain capsule, weighed beforehand. The liquid is decanted to separate the undissolved oxide, and the former is carefully evaporated upon the water-bath, constantly stirring, to the consistence of thick syrup, which is then weighed. Half this weight of distilled water is then added, the heat is kept up for a few moments, and the whole is thrown on the filter. The capsule and the filter should now be washed with a quantity of water equal to that used in the last place, and to the first fluid obtained, as much of the second is added to get a mixture of the density of from 43.5 to 44 degrees.

"By proceeding in this manner, a very limpid fluid is obtained, with a slight acid reaction, but perfectly pure, having reached the maximum of saturation, and always identical. It may be kept without any of the salt being thrown down, provided the bottle be well stoppered; the colour is dark-brown when the liquid is looked at in full, and of a greenish-gold colour when held to the light, or seen in a thin stratum. Five or six drops of this fluid, mixed with the white of an egg diluted with six drachms of water, are sufficient to coagulate the whole into a mass in the space of fifteen seconds. This mass firmly adheres to the bottom of the glass when the latter is turned up, and takes a pretty long time before it slowly drops, when the watery parts begin to run off, as the serum separates from coagulated blood."

SULPHATE OF ZINC AS AN ANTISEPTIC.

M. FALCONET recommends a solution of sulphate of zinc for preserving animal substances subject to early decomposition, such as the brain and intestines; he states that they thus retain their characters unaltered, by contraction or otherwise, and that the steel instruments employed in operating on the substances thus injected are not injured by the liquid employed.

EDITOR'S LETTER BOX.

TRANSACTIONS, OR A WEEKLY JOURNAL?

LETTER FROM T. HERBERT BARKER, M.D., TO THE EDITOR.

SIR,—Many readers of the JOURNAL must have noticed a hint that the old members of the ASSOCIATION felt regret that the volume of *Transactions* should have been discontinued. I cannot join in such regret; and when you are informed that, at Oxford, I was one of the minority in the division on the Journal question, you will give me credit for sincerity in the statement of my present opinions. At one time I was fully satisfied with the *Transactions* and a fortnightly Journal; but it now appears to me that the value of the Journal, in every point of view—not only in its weekly instead of its fortnightly issue, but also in its literary, scientific, and medical character,—has so much increased, as to render the publication of *Transactions* quite superfluous. It cannot be doubted that a volume of *Transactions*, as well as the weekly Journal, would be very acceptable to the members; but it is unreasonable to ask both for a guinea. To my mind, the wonder is, how we can get so much paper and printing, not to speak of literary talent, for so small a sum. But it is so necessary that a volume of *Transactions* should be published, as well as a weekly Journal? for the latter affords to the longer papers, essays, addresses, etc., a medium as eligible as the former. Probably some would be inclined to state, that the essays, addresses, etc., would be forgotten in the Journal, and can only be kept from oblivion in a volume of *Transactions*; but, in truth, is not a volume of the Journal as likely to be reached from the book-shelf as a volume of the *Transactions*? It is true, that long essays would have to be inserted piecemeal (as is done, for example, with Mr. Ancell's papers); but then the integrity of papers so divided is not thereby destroyed; and the permanent value of our annual volume is much increased by its containing elaborate articles.

It appears to me that the whole strength of the ASSOCIATION should be thrown into the Journal. It is the most tangible *quid pro quo* that I know of in any society. If other associations—such as the British Association for the Advancement of Science, or the Royal Agricultural Society—had the materials with which they could commence and sustain a weekly journal for their members, instead of the *Transactions* (frequently of very spare habit, it must be confessed) which they issue, it would lead to a much more successful state of things. It is often a source of regret and complaint, that a better return for the subscription is not made in these societies. In our own Association, for our guinea subscription, we have, in addition to the advantages belonging to simple membership—which must not be too lightly estimated—a weekly Journal, which, in many hundreds of cases, saves the subscription to another periodical, which it could do very seldom if published fortnightly. The medical man requires a publication giving the medical intelligence of the week, in order to keep *au courant* with the progress of medical science.

It is not necessary that any invidious comparisons should be made between the past and present editorial conduct of the Journal, or between our own ASSOCIATION JOURNAL and other medical periodicals. For one, I will merely add, that, although I voted at Oxford against any change, I would now decidedly prefer the present to the former regime; and I am greatly mistaken if the vast majority of members have not the same preference. If so, let us all combine cordially and perseveringly to sustain and increase the value of the Journal; let us try to double the number of members of the Association, by offering, as we can now do, the inducement of a TRULY VALUABLE WEEKLY JOURNAL; and we shall thus do good service to the profession and to the community. Very valuable materials have during the current year been laid before the members—materials well worth binding and preserving. There has been a good combination of the advantages of promptness of publication with solidity and permanence of value; and the current topics of the profession have been judiciously brought before our view, and have occasionally given rise to instructive and free discussions among the members. In fact, I submit it to the readers, if they have not had a goodly allowance of the truly solid and useful, interspersed with a fair supply of lighter articles.

One subject of very great congratulation is to be found in the fact that many of the foremost of our metropolitan brethren have cordially joined us, and have given a powerful support to our Journal by enriching its pages with their own contributions.

It is my belief that, if the general and individual advantages which flow to the profession from having a good weekly Journal, as a recognised organ, were generally known and appreciated as they ought to be, the number of members of our noble Association would soon be more than doubled. You will, therefore, much oblige me by inserting these remarks in an early number.

I am, etc.,

T. HERBERT BARKER.

Bedford, December 19th, 1863.

MEDICAL ETHICS.

LETTER FROM C. RADCLIFFE HALL, ESQ., TO THE EDITOR.

SIR,—The subject of medical ethics is occupying the attention of the ASSOCIATION, and with so energetic a leader as Mr. Michael, no doubt the committee will produce all that is possible in the form of a code of ethical laws. But feeling less sanguine than many as to the extensive utility of such a code, when we have obtained it, I would just glance at the object we seek, and at the nature of the means for gaining it.

Our object is, I presume, to lessen the frequency of what we call unprofessional conduct either towards the public, or towards each other. Now, if the question of unprofessional conduct were in most instances distinctly one of right and wrong, unquestionably a set of express laws would be as useful and as necessary as are the general laws of the realm. But there is no parallelism. The professional question at issue is far more commonly one of feeling and of gentlemanly propriety than of mere right and wrong. It is found to be impossible and quite unnecessary to reduce the behaviour of the more polished members of society to any express rules. You cannot codify good manners. All that ethics can teach us individually, is, "to do as we would be done by". To carry out this simple golden rule, is a matter of inherent principle, not of ethical laws. We probably, none of us, err from ignorance. In a given case, the "black sheep" knows full well how the golden rule would direct him. Why then does he err? Just like all other men, because he acts worse than he thinks. Will any code of ethical laws prevent this? Not unless it could comprise every form of deviation from strict professional behaviour. May it not rather—if it have any influence at all—lead the so disposed to say, in an equivocal case, "this is not forbidden in the code, therefore I may do it."

Again, in what appear to be unprofessional acts, so much depends upon the minute circumstances of the case, so much upon considerations known only to the parties immediately concerned, that none, save the most glaring departures from correct conduct, could with justice be brought under the power of ethical laws. Very different, therefore, in effect is the working of an ethical society from that of a mere *litera scripta* of ethics. A number of unbiassed gentlemen, having all the particulars of the case closely investigated and thoroughly discussed, will seldom fail to arrive at a correct judgment.

Dr. Percival, when practising at Manchester, wrote the classical work on medical ethics. The work was well digested and arranged, and elegantly written. Of our professional brethren in that important city, how many have ever read the "Code of Medical Ethics"? and how many ever refer to it in any case of a questionable nature! Some ten years since, Manchester established a Medico-Ethical Society. Of its utility and practical influence I have personal knowledge.

But it is replied, we cannot everywhere have a Medico-Ethical Society. I fear, also, we shall not everywhere have a printed code of ethics attended to. We must carry our ethics within our breast. What is required is, that every professional man be a professional gentleman. With the golden rule as our principle, a certain amount of delicacy of feeling and refinement of manners will suffice to lead us pleasantly and correctly through every dilemma in which the question of ethics arises. With these, the code will be little thought of; without these, the code will be little used.

The problem is—Given a professional man, to ensure his being a professional gentleman. Neither medical reform, nor a code of medical ethics, nor legislation of any kind can work it. The article must be of self-manufacture. Let us have the code when prepared, but meantime let each of us determine within himself never to do in the practice of his profession what is in itself wrong, nor even what may appear to be ungentlemanly. The phrase is vague, perhaps, but its very elasticity is an advantage, and we all know what it means. And if it should happen that we are not all ourselves gentlemen (the reader, of course, excepted), let us take care that the next generation of professional men shall be, by insisting on their undergoing such an extensive

and liberal preparatory education, as shall make it easier for them to be gentlemen than anything else.

Having small faith in the results of medical reform, and (judging from myself) believing that the only reform which will do us any good is self reform, and feeling no confidence in the usefulness of a code of ethics, further than as a general guide for Medico-Ethical Societies, I hazard these cursory remarks, because I believe the truth that self-guidance and not code-guidance must govern us, is in some danger of being overlooked in the ardour of our search after ethical laws.

I am, etc., C. RADCLIFFE HALL.

Torquay, Dec. 15th, 1858.

[Laws do not secure obedience; but their existence is nevertheless useful in all communities and societies, whether public or private. Medico-ethical laws are not expected to be more universally respected than other laws; but they are expected, at least, to be sufficient to keep the Association freer than it has been from charlatans and advertising empirics. Some of the scandals under which we labour are so palpable as to be grasped by laws perfectly simple and easily enforced. EDITOR.]

MEDICAL METEOROLOGY.

LETTER FROM GEORGE F. BURDER, M.D., TO THE EDITOR.

SIR,—Will you allow me a few words in justification of the remarks I made in a former letter upon the medico-meteorological tables published in the Journal?

Dr. Barker's statement, that he has failed to find in my letter any legitimate objection to the method adopted, or any suggestion of a sounder method in its place, would have come with greater force, if his subsequent remarks had not shown that he has altogether misconceived the purport of my letter. It would, indeed, be a "strange kind of logic", which should "prefer *weekly* rather than *daily*, or *twice daily* observations, because it is impracticable to make *hourly* observations"; but scarcely stranger than that Dr. Barker should be able to discover any such preference in my remarks. In reference to this point, it will be sufficient to refer such of your readers as feel any interest in the matter, to my previous letter; and meanwhile to suggest to your correspondent (if he will not consider it a "frivolous objection"), that what is worth answering, is commonly worth understanding.

Dr. Barker is manifestly in error, when he states that any plan embodying the substance of my suggestions has been adopted, and has failed. Or, if the statement be correct, and if it be true that no constant connexion is discoverable between the *weekly* prevalence of particular diseases and the *weekly* means of the various atmospheric elements, surely this should be an argument for relinquishing the inquiry altogether, rather than for rushing into a system, which, without promising the discovery of any additional truth, only multiplies the chances of error. But where, I would ask, are the records of any medico-meteorological observations, conducted with accuracy, on a sufficiently extensive scale, by competent observers, and afterwards worked out by persons accustomed to such inquiries? The Registrar-General's returns are doubtless of great value as far as they go; but, having reference to deaths alone, of necessity do not supply the desideratum here referred to.

There are so many diversified aspects under which questions of this class may be discussed, and so many sources of error against which it is necessary to guard, that, in writing upon the subject, it is difficult to avoid being led into a controversy tediously minute and technical. Yet there are one or two points to which I must request permission to refer.

The superiority of a plan laying stress upon the precise hour of the commencement of a disease, over one taking cognizance of longer periods of time, rests upon two assumptions; namely, first, that it is usually possible to ascertain the precise hour of seizure; and, secondly, that it is reasonable to look for the atmospheric cause (if there be any) in the indications of the meteorological instruments at that hour.

With regard to the *first* point, it will, I think, be admitted, that in the great majority of cases it is *not* possible to ascertain so exactly the period at which a disease commenced. Even in those cases in which the advent is (apparently) most sudden, it is common to find that there have been premonitory symptoms of a much less certain date. Moreover, the errors liable to arise from this source are, by their nature, not self-compensatory. If it seem "frivolous" to urge as an objection, that a disease alleged to have commenced at 3 P.M., may in reality have dated from noon, the frivolity must be laid to the charge of those who insist upon this precision as a main feature in their scheme.

The *second* assumption is, I venture to think, not more tenable than the first. If atmospheric influences do play a part in the generation of disease, it seems reasonable to suppose that this effect must be in some measure proportioned to the continuance of these influences. Changes of temperature, it is well known, are not fully felt within doors until many hours, or even some days, have elapsed; and as, probably, the great majority of persons pass a larger part of their time within doors than in the open air, and very many persons pass nearly the whole of their time within doors, is it not much more reasonable to look for a connexion between the mean temperature of a number of days taken together and the prevalence of diseases during that period, than to insist on the precise point at which the thermometer stood at the hour when each disease first showed itself by symptoms? Even in the case of barometric and other changes, which are felt simultaneously within doors and in the open air, is it not reasonable to suppose that a certain interval should be required for the development of the effects of such changes upon the human frame? And, hence, is it not more reasonable to expect the truth to come out by a comparison of weekly periods, than by a comparison of any number of isolated observations, even although readings of all the instruments may have been taken at the exact hour when each disease was supposed to commence? If cold have a tendency to induce bronchitis, and a thousand cases of this disease are under consideration with a view to determine the point, is it more likely that the truth will come out by a series of comparisons founded on the reading of the thermometer at the very hour when each attack was said to have commenced, or by a series of comparisons in which the cases are massed into weekly periods, and the mean temperature of each of these periods stated? If, again, a high temperature have a tendency to generate cholera, and cases are before us for analysis, is it not more reasonable to expect to bring out the connexion between the two by a comparison of weekly periods as before, than by a classification, in which each case would stand opposite to the reading of the thermometer at the hour of its occurrence? By the latter method, the inquiry is limited as much as possible to the *instantaneous* effects of temperature; by the former, its effects would be recognised whether they were more or less immediate.

Dr. Barker replies to one of my objections by saying, that, if I were "practically acquainted with meteorology", I should know that "barometric and thermometric changes are not ordinarily so sudden and abrupt, but that observations twice daily will give ample guidance for correct conclusions." This I take to mean either that the diurnal variations, being small, may be practically disregarded, or that the kind of change indicated by a comparison of the two observations, may be assumed continuous throughout the day. In either case, where is the advantage of the *hourly* method of recording diseases? If, for example, the atmospheric conditions to be placed against the occurrence of a disease at 8 P.M. are only those obtained by the readings of the instruments at 9 and 3, what medico-meteorological deduction can be drawn from a knowledge of the *hour* of its occurrence, over and above those which may be drawn from a knowledge of the *day* of its occurrence? In the case of the *thermometer*, it may perhaps be said that by the application of the established corrections for mean diurnal range, the temperature at the hour in question may be approximately determined; but to this case, I have only to apply the objections which have been already urged.

To the table which is put forward by Dr. Barker as a specimen of the method of observation required, I should have made no further allusion, if I had not been invited to do so. As it is, I need scarcely do more than refer your readers to the table itself, where, if they have not already examined it, they may be as puzzled as I was at finding that, out of 24 instances in which, by the ordinary construction of per centage tables, the *sums* should amount to 100, only 12 fulfil even approximately that requirement. Thus, of 100 cases of epistaxis, we are told that 50 occurred with ozone, and 25 with no ozone. Of 100 cases of pleurisy, we are told that 0.5 occurred with a west, and 1.4 with a north-west wind; no cases occurring when the wind was in other directions. The only explanation I could suggest for these discrepancies (and, I admit, a very far-fetched one) was, that the calculation included all the cases of epistaxis and of pleurisy that had occurred within a given time, and that, out of these, only 75 per cent. in the one case, and less than 2 per cent. in the other, had been observed in their connexion, respectively, with the presence of ozone, and with the direction of the wind. Even this solution, however, failed me as I read on, and found that, of 100 cases of epistaxis, 37 occurred with an

increase, and 74 with a decrease of barometer readings! that, out of 100 cases of toothache, 19 occurred with an increase of barometer readings, and 80 with a decrease! and, above all, when I came to the last line, and read that, out of 100 deaths from all causes, 76.2 occurred with a north-west wind, 52.3 with an east wind, 42.3 with a north-east wind, 36.0 with a west wind, 35.1 with a north wind, 25.5 with a south-east wind, 25.1 with a south wind, and 24.1 with a south-west wind!!

In conclusion, as Dr. Barker appears the less pleased with my previous remarks on the ground of their containing no positive suggestion of value, I may perhaps be permitted to observe, that the detection of an error, although a humbler, and commonly a thankless office, may nevertheless be as real a service to the cause of science, as the suggestion of an improvement. But I have no wish to exaggerate the importance of my suggestions. If they are of any value, they will speak for themselves; and I should be sorry to overstep the bounds of diffidence proper to one "practically unacquainted" with the subject.

I am, etc.,

GEORGE F. BURDER.

Clifton, Nov. 20th, 1853.

MEDICAL STUDENTS.

LETTER TO THE EDITOR.

SIR,—Perhaps, as one of the medical students of Guy's Hospital, I may claim and obtain space in your Journal for a few remarks upon Mr. Davies' letter of December 9th.

I and my colleagues are not aware of any attempt having been made to "convert us as a class into an organised hypocrisy": we are even doubtful as to the exact meaning of the phrase employed. We think that the object and design of our little Association was clearly set forth in Dr. Golding Bird's Christian letter, which recently appeared in your columns.

Never having, in our school days, met with the expression "saponaceous piety", in any classical English writer, we have passed it by, as unworthy of the pen of any member of a liberal profession; and have hoped that some accidental or intemperate haste accounted for its appearance in Mr. Davies' letter.

Far from such an Association tending to divert us from the proper and direct study of medicine, I was grateful to find that all the gentlemen I met there were distinguished by the propriety of their general conduct, conversation, diligence in attention to all the duties of medical students, and that none of us had ever been known to distract the attention of a public teacher by negligence or disrespect; that many with whom I had opportunities of personal intercourse and conversation entertained deep convictions of the responsibility of their calling and profession; and that the motive which led them, thus early in their career, diligently and exactly to perform the duties devolving upon them, was a firm persuasion of the religious obligation so to perform those duties.

It was also very satisfactory to find that the gentlemen who presided over our first meeting were distinguished for their acquirements in science (one loaded with honours from the London University), whose lives have hitherto been free from all approach to selfishness, or unworthy of the principles by which they profess to be actuated.

The subjects introduced to that meeting, for consideration and thought, were by no means the best method of "worming ourselves into families". Far from that: they were the loftiest and noblest principles of morality and religion. The intelligence and information displayed in expanding these to their remote and daily application, though perhaps not quite equal to Mr. Davies' ideas of the capacity of medical students as a class, would, I am sure, have delighted and benefited him as much as they did me. These were affectionately and earnestly pressed upon us; their value and importance were illustrated; and a united wish was felt that our future course through life might be guided by such elevated morality, and humble and conscientious performance of our duties, as the laws of God clearly required.

I think we all were convinced that unkindness to our fellow-students, and in future to our professional brethren, was expressly forbidden to us; that we were not at liberty, even in thought, to attribute unworthy and base motives to them, much less to publish such to the world. We thought also, in reflecting on the tendency of such teaching and advice as was now afforded, that the records of our own profession testified historically the truth of Professor Marx's observation, "that all the great men who had left a permanent impression on our science have been as conspicuous for their religious and moral excellence as for their scientific attainments." If such men are intended by Mr. Davies in his designation of "Mawworms and

Cantwells" (though these are by no means harmonious names), we think that the more our profession abounds with such, the more devoted, generous, disinterested, and enlightened, that profession will become.

We think also that Mr. Davies, on reflection, will find true, what medical testimony almost universally affirms, that a day of rest, even physically, is right, advantageous, and necessary, for the delicate and complicated organisation of man. We think we have found the advantage of rest mentally from the pursuit of professional knowledge, at stated intervals; and Mr. Davies must allow us here, though only medical students, to oppose our own individual experience to his, modestly, yet firmly, as a sufficient answer.

We also cordially agree in the declaration of the medical men who have publicly given utterance to their opinion, that we have no right to devote the sacred rest of the Christian sabbath to the study of Pott or Hunter, or to the pursuit of pleasure and of journeys, too often terminating in sad and ruinous scenes of debauchery.

We also think that we are practically safer at the close of the week in a Bible class, than in incurring the risk of a temptation to the opera, the theatre, or the casino. Instead of loss, we believe that we gain fresh impulse and invigorated motive to renewed and increased diligence in our hospital duties during the ensuing week.

Mr. Davies must allow us to calm his fears and apprehensions of our being led astray by our teachers and advisers; he must allow us to believe, until he or some other shall convince us to the contrary, that the only persistent, constant, safe motive to diligence in our present studies, to honourable, kind, and liberal intercourse with society, are here brought before us with intelligent care for our welfare and future happiness; and we also think that even Mr. Davies, in his calmer moments, will acknowledge the truth of a rule which we are daily taught in the wards of Guy's Hospital, that the abuse of a remedy is no argument against its legitimate and necessary application.

The time allotted to my medical studies is now almost expired; and with regret I shall leave those lecture-rooms and wards where so much research and knowledge have been freely unfolded before me, and where the condescension and urbanity of the medical officers of the hospital on all occasions have produced feelings of obligation and gratitude which can never be effaced. In addition to all these claims upon my respect and gratitude, I have now superadded an interest and care for me in my progress in knowledge of a still higher kind. I am now reminded and encouraged to believe that to all my possible skill and knowledge of my profession may be added the additional excellence of humble Christian piety—a guide through life, a safeguard from the evils of life, and a support in that hour which awaits even a medical man—the hour of his death.

I inclose my name and address.

I am, etc.,

A MEDICAL STUDENT OF GUY'S HOSPITAL.

December 13, 1853.

MEDICAL STUDENTS.

SECOND LETTER FROM FRANCIS DAVIES, ESQ., TO THE EDITOR.

SIR,—“Profound ignorance” I plead guilty to; I unhesitatingly deny that I have objected to proper examination of the Scriptures at suitable seasons. I do object to medical pupils becoming scripture teachers, as it must necessarily interfere with their professional duties. I hate hypocrisy, and will attack the monster whenever I have a chance of grappling with it.

“Fallit enim vitium, specie virtutis et umbrâ,
Cum sit triste habitu, vultuque et veste severum.” JUVENAL.

Trusting I shall never see our Journal merged in the *Evangelical Magazine*,

I am, etc.,

FRANCIS DAVIES.

Pershire, December 12, 1853.

P.S. Your coarse remarks at the end of my letter “require no comment”.—F. D.

[The “coarse remarks” to which Mr. Davies refers will be found at p. 1090. EDITOR.]

CONDITION OF THE FETAL HEAD AT BIRTH.

LETTER FROM EDWARD W. MURPHY, M.D., TO THE EDITOR.

SIR,—I do not wish to interfere in the least in the controversy between Messrs. King and Gaye, on the question respecting the “condition of the foetal head at birth”. I only desire

[* That is, of the results of the Young Men's Christian Association. Ed.]

to explain to them, and to the readers of the JOURNAL, one single point regarding the use of the stethoscope previous to the operation of craniotomy, which Mr. King seems to have misunderstood. He considers it "awful practice" to wait for the death of the child (as ascertained by the stethoscope) before we make up our mind to operate. He considers, where there is a high degree of ossification of the fetal head, the child *in utero* would be likely to retain the vital spark longer than the maternal constitution would hold out; therefore, to be waiting for stethoscopic diagnosis, and listening with the stethoscope till the mother becomes "an inert and lifeless mass", would be "awful practice, and trifling with a valuable life intrusted to our care." (ASSOCIATION JOURNAL, Dec. 9th.) So it certainly would; but is such a practice ever advocated?

Mr. King, however, has fallen into the error of supposing that the practice is advocated. He is speaking of cases where the head of the child is above the brim of the pelvis, where it suffers no great pressure, and when its life is not in much danger.

The professor, to whom I think he alludes, has never recommended such a practice under such circumstances. If, on the contrary, in cases where the head of the child is wedged in the deep conical cavity of a highly ossified pelvis, when the waters are long discharged, when it is impossible to use the forceps, it is then that the death of the child takes place before any symptoms dangerous to the mother arise; and it is then that the stethoscope is most valuable, because by its means the longest possible time is given to nature to expel the child; and it is at once delivered the moment its death is ascertained.

The practitioner is thus relieved from the responsibility of an unnecessary sacrifice of human life, which Mr. King admits to be "awful practice".

For a more clear explanation of my meaning, I can only refer Mr. King to my Lectures (p. 189), in which I advocated the use of the stethoscope "when the head is so impacted in the pelvic cavity, that it would be too hazardous to her safety to attempt delivery by the forceps, and the alternative that remains is to perforate the head, to remove as much of the brain as possible, and to extract the child by means of the crotchet or craniotomy forceps." In these remarks, I have made no allusion to the cases in which an ossified head is above the brim of the pelvis. I am, etc.,

EDWARD W. MURPHY.

12, Henrietta Street, Cavendish Square, Dec. 10th, 1853.

TREATMENT OF POSTERIOR DISPLACEMENT OF THE LENS.

LETTER FROM JAMES DIXON, ESQ., TO THE EDITOR.

SIR,—I have just read, in the JOURNAL of this day (p. 1087), a notice of a paper "On the Treatment of Posterior Displacement of the Lens", which was recently published by me in the *Lancet*. The writer of the notice observes, that by "posterior chamber", Mr. Dixon means the chamber of the vitreous body", as if I were peculiar in attributing such a meaning to the term. I am quite aware that some anatomists describe as "posterior chamber" the space between the iris and the lens; but the words are used by all the standard writers on diseases of the eye, as synonymous with "chamber of the vitreous humour", just as I have employed them. The space between the iris and lens ought surely to be distinguished as "posterior aqueous chamber", and the term "posterior chamber" restricted to the larger space behind the lens.

The writer of the notice says also, that "there is no particular novelty in the operation proposed"; and adds, that he has "performed similar operations, and seen them performed, in like cases, and with rather more success." As the subject has for me a peculiar interest, inasmuch as I wrote my paper under the impression that the operation I described had originated with myself, I should feel particularly obliged if the writer of the notice would, at his earliest convenience, inform me through your columns, where, when, and by whom, the operations he witnessed were performed, and whether any published reports of them are to be met with. I am, etc.,

JAMES DIXON.

Green Street, Grosvenor Square, Dec. 9th, 1853.

RECENT BLACK-BALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

LETTER TO THE EDITOR.

SIR,—The astounding fact that a distinguished graduate of the University of London had been refused admittance into the Royal Medical and Chirurgical Society on the ground of not

being qualified, has given rise to an able article from your pen, as well as a meeting of the committee of the London graduates. All who wish the liberal principles upon which this great national university is founded to be fully developed, will rejoice to learn, by the notice of last week, that the committee have decided to take immediate steps to secure the same license to practice for their degrees, which is enjoyed by the degrees of Oxford and Cambridge; and that the senate of the university will adopt a similar course. Nor does there appear any doubt but this will be granted, when we remember that the University of London was founded upon the express covenant with the ministry of the day, that the London degrees should have all the rights and privileges (not of an ecclesiastical order) enjoyed by the degrees of Oxford and Cambridge.

There are, however, certain circumstances connected with this recent transaction which ought to be known, in order that the facts may be duly estimated. For the first time since the granting of the charter to the society, the qualifications of the gentlemen proposed were considered by the council, previous to their names being submitted to the fellows for the ballot. An exception was taken in the council by some of the fellows of the College of Physicians, that an M.D. of the University of London did not qualify the holder to be elected a fellow of the society. This objection was fully discussed, and no motion being made it was considered the objection could not be maintained. After such a decision, it was thought that all would follow the usual course, and consider the members of council as bound by the decision of the majority. But such was evidently not the feeling of the fellows of the College of Physicians alluded to. They succeeded in obtaining a sufficient number of black-balls, on the ground that the candidate was not qualified. It was easy for those gentlemen, armed by the weight of their positions in the Society, thus to influence the election; but whether it was honest or honourable to do so, admits of a great doubt.

Apart from the decision of the council, which ought to have been binding on its members, the statement that the candidate was not qualified could only have reference to two points,—either he was not qualified according to the laws, or by the usages of the society. In both these points, however, the allegation will be found to be incorrect. The law states that "the fellows shall consist of physicians, surgeons, and general practitioners." There is no rule that the fellows must belong to this college or to that; whilst the conventional term "general practitioner" evidently shews that the law was intended to have the widest interpretation. The usages of the society, again, have been to admit qualified medical men without reference to the source from whence they derived their qualification; which is clearly shewn by examining the list of the present fellows. Amongst these there are many who practise as physicians, and who not only do not belong to the College of Physicians, but who do not hold any medical qualification from an English source. Some even only possess the M.D. of a foreign university; but what is still nearer to the question at issue, graduates of the University of London, holding only this qualification, and practising in London, have been previously admitted fellows, without any question being raised as to their qualification.

Further, if the last balloting list be examined, the conduct of these gentlemen appears still more extraordinary. A young student who has just passed the College of Surgeons is considered qualified and admitted a fellow; but a distinguished provincial practitioner, who is an M.D. of the London University, as well as a member of the College of Surgeons, is refused in consequence of a statement circulated in the society to the effect that he was not qualified. It is also very strange that in this same list a licentiate of the College of Physicians is put down as an M.D. of the University of London, who is not an M.D. of any university whatever!

Now no one will deny that it is in the power of any fellow of this society to use the secret agency of the ballot in order to gratify a purpose which he may be ashamed to avow. And all are aware that it is in the power of the society to alter the laws according to the will of the majority. But whilst the laws of the Society remain as they are, it appears almost incredible that gentlemen should league themselves together to injure a younger member of the profession, simply because he happens to be a graduate of the Metropolitan University. If I mistake not, the proposed new charter for the College of Physicians gave to the very men, of whom I complain, the irresponsible power to keep out or admit a large body of physicians who do not at present belong to this College. If this be an example of the way in which the power will be exercised, it behoves the

profession to look carefully into this question, before they subject themselves to unmerited defamation, from the capricious conduct—to use the mildest term—of the individuals referred to.

I am, etc.,
M.D.LOND.

December, 1853.

[We have omitted a sentence contained in the MS. of the above letter of M.D.LOND., because it mentions the names of the gentlemen who are supposed to have taken the lead against Dr. Ransom. In condemning the conspiracy, we did not at first think it necessary to name the conspirators; and we are still of opinion, that as they may regret their conduct, it is better not to do so. The black-balling of Dr. Ransom is not approved by the College of Physicians, nor has it the sanction of the Royal Medical and Chirurgical Society, nor of its Council. It is simply the result of a plot of four or five individuals who have undue influence in both institutions. EDITOR.]

TREATMENT OF CHOLERA.

LETTER FROM G. K. H. PATERSON, ESQ., TO THE EDITOR.

SIR,—There are few, I believe, if any, in the profession, who have not observed that certain impaired states of the constitution are at all times highly prone to take on disease, more particularly during the prevalence of epidemics, from deficiency in the resisting powers of nature; and such are found to make up, generally, a large number of cholera patients. Hence arises their comparatively small chance of recovering when attacked.

I was some time since very forcibly impressed, when reflecting on the apparent deficiency of iron in the blood of persons whom I knew previous to their being attacked with cholera in 1849, with the remarkable fact, that blacksmiths were not, as far as my experience and inquiries have gone, seized with cholera during the time it prevailed. I have thought that they might owe their immunity to the inhalation or absorption of the almost imperceptible particles of iron floating around, and to its oxidation in the blood. This fact has led me to infer, that one obvious cause why so many of the lower classes especially are attacked is a previously existing deficiency of iron and saline matters in the blood, or spæmic condition. When such blood is under the influence of the cholera poison, an imperfect arterialisation immediately commences, which goes on augmenting in proportion to the loss of these materials in the circulation.

In regard to whatever means may be used as a cure, there cannot be the least doubt that the method by which the resisting powers of nature endeavour, often successfully, to expel "foreign morbid matters" from the system is the only true guide that can ever lead to the effectual administration of a remedy fitted alike to counteract the dangerous tendency of the cholera poison, and to assist in throwing it off by the kidneys and alimentary canal.

Believing, then, that the cholera poison is of a highly depressing and malignant nature, it has appeared to me that the sulphates of iron, magnesia, and quinine, and creasote, in combination, from their ascertained physiological actions, are calculated to do great good as a preventive, if not curative remedy, in cholera and diarrhoea. My own success, although limited, makes me desirous of drawing to this treatment the attention of the profession. I am in the habit of prescribing nearly as follows:—

Sulphate of iron, 26 grains.
Sulphate of magnesia, 8 drachms.
Dissolve in water, 4 ounces.
Sulphate of quinine, 30 grains.
Aromatic sulphuric acid, q. s.
Creasote, 5 to 10 drops.
Water, 4 ounces.

Both preparations are now to be mixed together. One or two tablespoonfuls are given repeatedly.

I am, etc.,
GEORGE K. H. PATERSON.

Errol, October 27th, 1853.

TREATMENT OF CHOLERA.

LETTER FROM H. W. REED, M.D. TO THE EDITOR.

SIR,—Perhaps the experience of cholera during a ten years' residence in India, may not be unacceptable to your readers. The following treatment I have found useful, and it has not unfrequently been successful. Immediately upon the first appearance of the disease give a mustard emetic. Do not mind

its being instantaneously rejected; repeat it; and even again, should neither remain longer than three or four minutes in the stomach. If the emetic remains, it will be unnecessary to give another. Since the severity of the symptoms are generally suspended for a time under this management, you have now the opportunity of giving other remedies, without the discouragement of finding them immediately ejected as formerly. Next give half a grain of the muriate of morphia, and three grains of nitrate of potash, every half hour till the pulse increases in vigour and volume, and reaction becomes steady. The first dose of morphia may even be three-quarters of a grain or a grain; or half a grain may be repeated in a quarter of an hour. The case, it must be remarked, is dangerous, and admits not of delay; while to prevent a return of vomiting and collapse is most important. This effected, there is a probability of safety to the patient. Should the vomiting return, try the emetic again, or frequently moisten the tongue with a concentrated solution of morphia. The effect produced, and not the quantity of morphia administered, must form the criterion for its repetition. Sulphuric ether at the same time may be advantageously inhaled from a handkerchief; it tends considerably to allay pain and spasm.

During the course of the disease, at all times allow the patient to satisfy his thirst with copious draughts of water, in which a drachm of carbonate of soda to the quart is dissolved. It will be rendered more grateful and better adapted for the condition of the stomach by the further addition of citric acid. Do not be deterred by its being rejected two or three times, still encourage the patient to drink freely. Foment the stomach with hot turpentine on flannels, or apply large mustard poultices made with turpentine; rub the extremities assiduously with flannels, which may be soaked in turpentine and water. In addition, the bed should be artificially warmed; the spirit lamp so made for that purpose is perhaps the best method. Sixty or eighty drops of laudanum, in an ounce of any bland fluid, may be thrown up the rectum. This should be retained as long as possible, and not repeated unless it has escaped.

The reaction which succeeds in a favourable case to the first violence of the disease is sometimes severe and complicated, and will require its appropriate management.

In cases of British cholera, the morphia and ether, with the mustard externally, will generally be found to succeed in a few hours, even though the disease be attended with cramps and incessant vomiting. No case of cholera can receive a fair chance without the constant presence and unremitting attention of the practitioner.

I am, etc.,

H. WILSON REED, M.D.

Handsworth, Birmingham, October 26th, 1853.

TREATMENT OF CHOLERA.

LETTER FROM WILLIAM I. COX, ESQ., TO THE EDITOR.

SIR,—Dr. Cormack, in doing me the honour to allude in his paper on Cholera (*JOURNAL*, p. 991), to a report of cases published by me in the *Lancet* (January 26th, 1850), says, "five are mentioned as having been treated with sulphuric acid generally in combination with Dr. Ayre's method", etc. This is evidently an accidental error of quotation. The words in the *Lancet* are as follow: "Cases on Dr. Ayre's system, modified by co-administration of sulphuric acid, ice, etc. = 54:—deaths = 13."

In the March number of the *London Journal of Medicine* for 1852, is a report of a paper on the same subject, which I read before the Epidemiological Society, with an abstract of sixty-five cases so treated, with the result of only fourteen deaths. The following table will, however, give at a glance the sum of my experience in the treatment of the malady.

Cases treated by stimulants and opium	17	—	10 deaths.
" " stimulants alone	5	—	3 do.
" " salines	4	—	4 do.
" " calomel on Ayre's system, sulphuric acid and ice	84	—	16 do.

Total 110 33

An analysis shows that the ratio of mortality resulting from the calomel and acid treatment was 19·05 per cent.; while that from other modes, ranged from 50 to 80 per cent. The above cases were all of undoubted cholera. With respect to choleraic diarrhoea, I may mention, that during the past four months I have treated 81 cases (with sulphuric acid alone), with a result of only two deaths.

I am, etc.,

WILLIAM I. COX.

Kensall Town, November 15, 1853.

DR. WEBSTER'S RECENT SPEECH ON THE VACCINATION ACT.

LETTER FROM GEORGE WEBSTER, M.D., TO THE EDITOR.

SIR,—I observe that one or two errors occur in the report of the remarks which I made on bringing forward my resolutions on the Vaccination Act, at the meeting of the Metropolitan Counties Branch of our Association.

I. Though I alluded to the unwieldy and irresponsible General Council of the Association, and its inutility as to any great question affecting the profession, I also said that such a subject came very appropriately after that of medical reform, seeing that the supineness of the medical corporations and their neglect of our interest were practical lessons, which showed the necessity for that reform we had just been discussing. Under a *real* representative system of government in the Colleges and in our Association, such an abomination as the Vaccination Act could not have been perpetrated.

II. I am made to say "eighteen pence is the sum which is put down *even* for paupers", which, as it stands, would not be understood by those not present. The President had asked me, when I mentioned that paltry sum as the fee for vaccination and its attendant trouble, "whether that was for paupers?" My reply was, "Only for paupers," but that it was insufficient even for them; and that such a *minimum* fee became, in fact, the general one in Union practice, and naturally affected all other fees for the same services.

III. In further stating that many respectable people now took advantage of the gratuitous vaccination system, at the different stations in London, connected with the National and other Societies, and that I had no doubt this Bill would very much extend the evil, I am reported as saying that "many of my patients had their children vaccinated at these stations." None of my patients have done this. What I said was, that "*many persons*" did it, and the plan under the new Act of foisting the names of these union or parish vaccinators, upon the parents of every child that comes into the world in future, will have the effect of deceiving the public into the idea that these are the only true, proper, and legitimate vaccinators; and that all others are bunglers.

I may state, in conclusion, that I have conversed with many of the most respectable Medical Practitioners in London, and the course they mean to pursue with respect to this Act, is to have nothing to do with the numerous certificate books sent to them, but by a passive procedure render the act *impracticable*, and thus demonstrate the folly of compulsory injustice.

Considering this plan worthy of all encouragement, and imitation, I am, etc., GEO. WEBSTER.

Dulwich, Dec. 20, 1853.

THE INQUIRY REGARDING GRATUITOUS SERVICES.

LETTER FROM THOMAS CHARLES, ESQ., TO THE EDITOR.

SIR,—Favour me with space to say a few words to numerous correspondents, with whom individually I cannot communicate.

1. The subscriptions to the gratuitous medical services committee, will be acknowledged (with your permission), in the Journal.

2. From the answers hitherto received, I have every reason to expect that a very valuable report will be prepared. I only wish that gentlemen, especially those who advocate things as they are, would be a little less vague in their replies. The committee sincerely desires to produce an impartial and complete report; but if the gentlemen above referred to, do not send more precise answers, giving statistics and stating facts as much as possible, the report will, of necessity, have the appearance of being one-sided. Opinions are valuable, but the committee are still more anxious to obtain facts.

3. Perhaps, there ought to have been a question concerning gratuitous services in connection with Insurance Offices. Of course, opinions and information on this subject would be much esteemed by the committee.

I am, etc. THOS. CHARLES,
Honorary Secretary to the Committee.

5, Lower Belgrave Place, Dec. 21, 1853.

MEDICO-ETHICAL COMMITTEE.

LETTER TO THE EDITOR.

SIR,—Might not the labours of the Medico-Ethical Committee be greatly promoted by members of the Association transmitting their views to the sub-committee who are now at work?

I am, etc., D. W.

[The suggestion is a good one. EDITOR.]

NEWS AND TOPICS OF THE DAY.

OBSCENE BOOKS AND PRINTS. TWO TRIALS IN THE COURT OF QUEEN'S BENCH [Wednesday, December 7th, 1853].

I. THE QUEEN *v.* DUNCOMBE. Mr. Watson, Q.C., and Mr. Clarkson, appeared for the prosecution. The defendant appeared in person.

This was an indictment preferred by the Society for the Suppression of Vice, charging the defendant with the publication of an obscene and indecent book. The defendant lived at No. 7, West Street, St. Martin's Lane. On the 7th October, he sold a book containing some prints to a person employed by the Society, for the sum of two guineas. This book was handed to the jury, and seemed fully to satisfy them of its obscene character.

The defendant addressed the jury, and excused himself upon the ground, that the witness who had proved the purchase of the book, had been nearly twenty times to his shop to purchase other articles (which was not denied by the witness), and that he had been induced to procure the book in question by the offer of a large sum. He vehemently protested that no man had a right to go with his pocket full of money, and tempt a poor man to sell such works.

The foreman of the jury having delivered the verdict of *Guilty*, added a recommendation to mercy.

Lord Campbell, with great warmth, exclaimed, "Mercy! Sir? I should like to know upon what ground? I trust not, for the sake of trial by jury. Recommend to mercy a man who sells poison!"

Several of the jurymen here said they had not agreed to recommend the defendant to mercy.

The foreman said, the ground upon which he wished to recommend the defendant to mercy was, that he believed he had been entrapped into the sale.

Mr. Watson said he would clear up that point, by proving a previous conviction, and what was found in his house when the defendant was taken into custody.

Lord Campbell deferred sentence.

II. THE QUEEN *v.* CANNON. This was a similar prosecution. The defendant wished to retract his plea, and plead *Guilty*.

Mr. Watson said it was in the discretion of the court whether the defendant should be allowed to do so.

Lord Campbell said it would be better to hear the evidence.

Proof of publication on the 29th October, 1852, was then given, and the defendant was found *Guilty*.

Lord Campbell said he was now ready to hear anything the defendants (Duncombe and Cannon) had to say in mitigation of punishment.

Duncombe then put in an affidavit, in which he stated that the convictions which would be put in against him had taken place several years ago, and that the articles seized in his house were locked up.

It was then proposed to put in the convictions, and to give other evidence in aggravation.

Lord Campbell said he should not punish the defendant for what was passed, but the evidence would assist him (Lord Campbell) in apportioning the punishment for the offence of which the defendants had been now convicted.

Evidence was then given, that when the indictment was found against Duncombe, he was arrested, and his house searched. There were found in his house 294 obscene prints, 64 obscene books, 573 obscene songs, 601b. weight of obscene letter-press, and 311lb. weight of stereotyped obscene letter-press.

The defendant said these were all locked up in his drawers, which were forced open by the police.

The Secretary of the Society for the Suppression of Vice produced the record of Duncombe's previous conviction, and proved his identity.

With respect to the other defendant, Cannon, it was proved that in the house occupied by him, there were 2,115 obscene prints, 9 copper-plates, 81 obscene books, and other matters of a most disgusting description.

Lord Campbell made some strong observations upon the moral guilt incurred by the two defendants, which his Lordship observed was greater than that of housebreakers. They sought to earn their bread by corrupting the morals of the people. If they had been led into one solitary act, as was at one time supposed by some of the jury, there might have been room for a lenient sentence; but it was now clear that they were regular traders in obscenity, and had been so for years. Their crime

deserved a very severe punishment; but, as it was in law only a misdemeanour, the sentence upon each of them respectively was, that they be confined in the House of Correction for the county of Middlesex, and kept to hard labour, for the space of two years.

BOARD OF LUNATICS IN PRIVATE ASYLUMS. GREGORY v. BROOKES. [COURT OF QUEEN'S BENCH, November 30.] Mr. Keating, Q.C., and Mr. Maude, appeared for the plaintiff; and Mr. Serjeant Wilkins for the defendant.

The plaintiff, John Gregory, was a barrister, residing in Harley Place, and also the proprietor of a private lunatic asylum at Wyke House, Brentford. The defendant was a parliamentary agent, formerly carrying on business in Bridge Street, Westminster, and residing in Titchfield Villas, Regent's Park. The action was brought to recover for the board, etc., of an insane lady, whom the defendant in January last had placed as a patient at Wyke House. The plaintiff claimed to be paid at the rate of £3:3 a week. The defendant, on the other hand, said he had agreed to pay only at the rate of £2:2 per week. It appeared that the arrangement had been made with the defendant by Dr. Ramsay, the head of the establishment, who stated that he had informed the defendant of the terms, which varied from £2:2 to £5:5 a week, according to the nature of the accommodation and attention required. The charge made was at the rate of four guineas a week for the first four weeks, and three guineas a week for the subsequent period; the lady having had the privilege of a separate room, and other advantages.

The defence was, that the defendant had agreed with Dr. Ramsay that the lady should be boarded at two guineas a week. The defendant said he had expressly stated this at the time the arrangement was made. He added that, as the lady was addicted to cutting up her clothes, he had cautioned Dr. Ramsay not to let her have the keys of her boxes; but that, in defiance of this caution, Dr. Ramsay, without his authority, in the course of three months, supplied her with mercery, lace, and other goods, to the value of £10 odd, which formed one item in the plaintiff's present bill.

Lord Campbell, in summing up the case to the jury, said, the question was, whether the plaintiff was entitled to be paid a reasonable sum for the care of this lady, or whether a special contract had been proved by the defendant? Both the parties were highly respectable; but he (Lord Campbell) thought the defendant was labouring under a hallucination when he said he had made the agreement spoken of. The defendant was not clear whether the agreement was for £2:2 or £2 a week, or for £100 a year. With respect to the goods supplied, his lordship thought that part of the claim could not be resisted. One item the plaintiff could not recover, and that was a fee of two guineas, which had been charged for Dr. Ramsay's attendance upon the defendant, merely to inform him of the terms of the establishment.

The jury found a verdict for the plaintiff for the amount claimed, *minus* the two guineas.

THE VACCINATION ACT IN THE CROYDON UNION. The following advertisement recently appeared in the newspapers:—

"Croydon Union. The Guardians of this Union, not having received any application for the office of Vaccinator for the several parishes within the Croydon district, are still open to an offer from any qualified medical man. It is believed that the population of the district exceeds 25,000; and the Parliamentary amount of remuneration will be in each case, within two miles, 1s. 6d., beyond that distance, 2s. 6d. Further particulars may be obtained on application at my office. Applications must be addressed to me on or before Monday, the 28th instant; and candidates are requested to attend the meeting of the Board at the Workhouse, Duppa's Hill, Croydon, on the following morning at 10 o'clock precisely. (By order of the Board.)

"ALFRED G. BLAKE, Clerk to the Guardians.

"George Street, Croydon, Nov. 22nd, 1853."

In accordance with the above notice, the Guardians assembled on the 28th ultimo. The following minute of what took place has been made public.

"Present:—W. S. Owens, Esq. (Chairman), Messrs. Simpson (Vice-Chairman), Edwards, Farley, Gutteridge, Inkpen, Newton, Reynolds, and Truscott.

"Tuesday being appointed (as per advertisement) for receiving applications from medical gentlemen desirous of being appointed public vaccinators, Mr. Blake reported that he had only received one application, viz., from Mr. Tipple, who was

desirous of being appointed to the Mitcham district. For the Croydon district, he had received no application whatever.

"It was moved and seconded, that Mr. Tipple be appointed vaccinator for Mitcham, on the terms, etc., already stated. Carried unanimously.

"Mr. Edwards was still of opinion (and which he had expressed on a former occasion), that it was desirable to send circulars to the various hospitals of London, for applicants to be appointed. Looking at the extent of the district, numbering now 30,000 souls, such circulars might bring down not one but ten young men, properly qualified to fill the office, who would be willing to undertake its duties. The appointment, he considered, would be a valuable introduction to private practice. He really thought there appeared to be an unwillingness to adopt his suggestion, for fear of giving offence to some persons. For himself, as a guardian, he knew no one, and should, for the reasons he had stated, suggest that that course be adopted.

"In reply to a question, Mr. Blake said that the total number of births in Croydon last year was 744, of which number 437 were vaccinated by the parochial officers.

"Mr. Randolph apprehended that the number of children that would be vaccinated by the public vaccinator in the Croydon district alone during the first year of his appointment would not be less than 600; and moved that 'Mr. Edwards's suggestion be at once adopted.' Carried unanimously."

The following letter appeared on the 17th instant:—

"TO THE EDITOR OF THE SURREY STANDARD.

"SIR,—Sitting as a member of the Croydon Local Board of Health on Tuesday evening last, I was compelled to hear a letter read, purporting to be from the Croydon Board of Guardians, '*requesting that parishioners should be employed by the board in preference to non-parishioners*', in carrying out the large works now in operation for the drainage of the town. You may judge of my surprise at finding that *this* should come from the same Board of Guardians who had on the previous Tuesday elected a stranger as public vaccinator, in preference to the local and resident *rate-paying* medical practitioners, who had indignantly, and, I think, very properly, refused to accept what the guardians chose to denominate in their advertisements '*The Parliamentary Fee*', in other words, the lowest scale allowed by the act, and, I am informed, lower in amount than offered by any other board. I am sorry to say that the terms were accepted for the Mitcham district by a practitioner of long standing, and tendered for by the partner of the senior practitioner of Croydon, who, by the way, considers himself a champion of the profession. This gentleman, however, was not elected, because he had the *audacity* to withhold his application (during the STRIKE, as it was facetiously termed by members of the board) until after the advertisements were published. The fees offered by the Croydon Board of Guardians are one shilling and sixpence for each successful case within two miles of the town, and two shillings and sixpence beyond that distance. This entails the additional necessity of writing three certificates. If unsuccessful, the pay is *nil*. The amount of labour can be judged by any one, knowing that there are thirty-five miles of high road in this parish only.

"I bring this before the public that they, and the profession especially, may see how far the *influence and control of Boards of Guardians* extend. I would complain less, but for want of truthfulness in the whole proceedings of the board, viz., a gentleman is persuaded to risk his reputation, and probably a large outlay of capital, in the expectation that he is to have the introduction to private practice by 600 cases of parochial vaccination. There are sixteen or seventeen general practitioners in Croydon, many of whom have done, and will continue to vaccinate the poor gratuitously [query, will not more do so now?], and will these practitioners, even supposing their patients permit it, allow any Jack Noakes or Tom Stiles to enter their houses at the bidding of any board?

"I am, etc., VERITAS."

ARTIFICIAL PROPAGATION OF SALMON IN THE TAY. The works for the artificial propagation of salmon in the river Tay, at Stormont Bleachfield, on the property of the Earl of Mansfield, and agreed to at a recent meeting of the salmon fishing proprietors, are now completed. There are 300 breeding boxes in all, and two ponds for the reception of the young fry. The works were executed under the superintendence of Peter Brown, Esq., civil engineer, Perth. Operations commenced some weeks ago, under the superintendence of Mr. Rams-

bottom, of Clitheroe, Lancashire, a distinguished pisciculturist, who arrived in Perth on Tuesday, and proceeded on Wednesday morning to Stormontfield. Several gentlemen belonging to the district, as well as from a distance, were present to witness the first operations in trying the experiment of artificially propagating salmon, which has been so successful both in France and Ireland.

MEDICAL ATTENDANCE ON THE POOR IN PARIS. The *Moniteur* of November 22nd published an article of which the following is a translation:—

"An important and salutary innovation in the Administration of Public Aid has been introduced under the direction of the Emperor. Hitherto, a poor person, when attacked with illness, has been scarcely able to obtain relief in any other way but by admission into a hospital; and in this he has not always been able to succeed, on account of the great number of strangers who come by rail from all parts of France, and even from other countries, and who occupy, in the hospitals of Paris, the beds intended for the poor of that city.

"This state of affairs, which continued to become worse, revealed a want which M. Davenne, Director of Public Aid, has provided for by organising the visitation of the sick poor at their own houses. The Council of Supervision and the Municipal Council eagerly adopted this project, which, after having been approved by the Prefect of the Seine, has received the sanction of the Minister of the Interior.

"The following is a very summary account of the new arrangement.

"The number of medical attendants at the *bureaux de bienfaisance* is fixed at 159; they will be distributed among the twelve *arrondissements* in proportion to the indigent population. Their services will no longer be gratuitous: they will each receive a salary of 600 francs (£25) in the central quarters, and of 1,000 francs (£42:13:4) in those parts, such as the *quartier Pepincourt*, the Invalids, Petit Pologne, etc., where the indigent circumstances of the population do not give an opportunity of making a practice, while the distance to be traversed increases the labour of visiting. There will also be in each *arrondissement* paid midwives.

"The medical attendants will be presented by the *bureau de bienfaisance*, and proposed by the Director of Public Aid: they will be elected for six years, and will be capable of re-election.

"Stations will be appointed in the different quarters, at which patients may consult medical officers who will be bound to attend at fixed days and hours, and to remain as long as they may be required to give advice. A member of the *bureau de bienfaisance* will be present on each occasion. The medical attendants will visit at their own houses those who may not be able to attend.

"A register will be opened at the office of each bureau, in which will be inserted the names and residences of all the patients, the date of the commencement of their treatment, and all other necessary information.

"Patients with acute diseases will be visited at least once a week by an administrator or commissioner of public aid, who will enter on a schedule such observations as may occur to him, principally with regard to the medical attendance which the patients are receiving.

"A committee, composed of the president or of a vice-president of the bureau, of a governor or commissioner, of the treasurer of the bureau, and one of the medical officers, will meet every week, to debate on subjects regarding attendance on the patients, and especially on the visiting lists. They will determine what aid it may be proper to afford, in medicine, food, linen, etc., or even in money. In urgent cases, the president may in the intervals advance such aid as is absolutely needed, and of this he shall render an account to the committee.

"Persons not enrolled as paupers, such as needy workmen, persons with large families, or those who are in any way very destitute, will be attended at their own houses, either at their own request, or at the requisition of the mayor or one of the administrators of the bureau in their district, or at the instance of the director of public aid.

"We pass over all in the new regulation which relates merely to administrative measures. We have desired to show the benefit which the poor population of Paris will derive therefrom.

"In future, the hospitals, being disencumbered, will be open for isolated individuals, for strangers attacked with illness at a distance from home, for all persons labouring under severe affections, whose treatment requires the assiduous and devoted care of learned physicians and kind nurses. But the parent of a family will no longer be obliged to leave his domestic hearth, and

to abandon his children, or to leave his daughters exposed to the dangerous suggestions of misery. He who has been prevented from applying to the hospital by a feeling of repugnance will no longer be exposed to suffer without comfort, or to die without help. Again, in many cases, the progress of disease will be arrested by the seasonable administration of remedies, and recovery will be more prompt and sure.

"This useful organisation is already in force in the fifth *arrondissement*, where it has been introduced by M. Vée, formerly mayor, now one of the two inspector-generals of public aid; and the good which has been produced from it is an earnest of the success which may be expected from an extension of the measure into all the quarters of Paris.

"The new regulation will come into force on January 1st, 1854." (*L'Union Médicale*, 22 Novembre, 1853.)

MEDICAL LEGISLATION. MR. BRADY, M.P. for the county of Leitrim, has made known his intentions of bringing into Parliament during next Session two important measures;—viz., a Medical Registration Bill, and a Bill to Amend the New Vaccination Extension Act.

MEDICAL SOCIETY OF LONDON. The following paper is announced.

Saturday, January 7th. The Excretions as Guides to the Administration of Remedies. By Henry W. Fuller, M.D.

ROYAL COLLEGE OF SURGEONS:—PASS LIST. Members admitted by the Court of Examiners on the 16th December:—Messrs. Henry Elmhirst Baxter, Tickhill, York; William Fisher Favell, Sheffield; William Heron, St. Andrew's Street, Dublin; William Frederic Hewington, Hertford; Andrew Harvey, Penzance, Cornwall; Francis O'Donnell, Ballygarry, county Tipperary; Thomas Terry, Bath; John Tearne Holden, Hull, Yorkshire; George Richard Scobell, Henley-on-Thames; James Golden Punch, Cork; Richard Jukes Worthington, Llancaiach, Glamorganshire; William Duke Tidd Ticehurst, Hon. East India Company's Service, Bombay; and James Champion Penny, Fulham.

OBITUARY.

[*An asterisk is prefixed to the names of those who at the time of their decease were Members of the Association.]

MERCER, William, M.D., late Lecturer on Anatomy in the Edinburgh Extra-Academical School, at Edinburgh, on 8th December.

PHILP, John, M.D., at Kirkcaldy, N.B., on 8th December.

TRANT, Nicholas, Esq., at 5, Kennington Oval, aged 42, on 14th December.

TO CORRESPONDENTS.

LETTERS. The length and the number of the letters which we receive is a constant source of embarrassment to us. If our correspondents would endeavour to write with more brevity, it would greatly facilitate our arrangements. We have at present unpublished letters on Cholera, Vaccination, Medical Students, and Gratuitous Advice—subjects upon which a large amount of space has already been bestowed—more than sufficient to fill two ordinary numbers of the Journal. The writers will see that we cannot insert these communications without omitting others upon subjects of equal importance. Some of the letters on Medical Students we have, however, reserved for publication.

MR. GUTHRIE'S STATISTICS OF STUDENTS. We have been favoured with a communication from a distinguished surgeon, in which he has drawn our attention to the errors existing in Mr. Guthrie's statistics, on which we offered some comments a fortnight ago. It appears that Mr. Guthrie has assumed that every fresh registration is equivalent to the entry of a new student, whereas every student is compelled to register several times in the course of his career.

MEDICAL METEOROLOGY. Mr. Milner (of Wakefield) requests us to state that he will be happy to furnish any gentleman who may wish to commence a series of meteorological observations, with all the information he can give him.

BINDING THE VOLUME. The numbers ought not to be bound hastily, lest the printing be injured; but sets ought to be completed at once, as the stock is very low. Cases for binding are being prepared. Members wishing copies of numbers to replace those which they have lost, can be supplied either through a bookseller, or by sending the price of the numbers required to the office in stamps.

MEDICO-METEOROLOGICAL OBSERVATIONS*Taken for the Association Medical Journal.***No. XII.—WEEK ENDING 17TH DECEMBER 1853.****WAKEFIELD.** Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.
Observer: W. R. MILNER, Esq.

1853. Month and Day.	Barometer.		Thermometers.							Wind.		Amount of Ozone for the Day.	Amount and Class for the Day.	Hail, Snow, Fog, Frost, Thunder, and Lightning, Aurora, Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.	Mean Force for the Day.						
Dec.	in.	in.	°	°	°	°	°	°		a.m.	p.m.	0—6 am pm	0 — 10 9, cu.-s. 10, n. cu.-s. 10, n. s. 9.5, ei. cu.-s. s. 10, n. cu.-s. 10, n. ci. cu.-s. 9.5, cu.-s.	Snow. Snow.	in.	[Br. Catarrh. Col. — vom. Di. Inf. Inf. Br. Catarrh 2.	Cancer of breast. Sc. Fe. and Dropsy.
11 S.	30.140	30.023	37.9	30.7	34.2	37.7	29.	33.2	0.958	E.N.E.	E.	2.5			0.000		
12 M.	29.876	29.805	33.6	25.5	29.5	32.7	21.8	29.5	0.978	E.	E.	2			0.030		
13 Tu.	29.600	29.440	43.8	32.2	38.	42.7	31.	37.3	0.975	N.	N.	1			0.164		
14 W.	29.381	29.331	43.	32.	37.5	43.2	29.	33.5	0.940	N.E.	N.E.	2.5			0.000	Catarrh, Inf.	Cerebral congestion,
15 Th.	29.374	29.323	43.3	35.2	39.2	43.5	33.	31.8	0.939	N.	W.	2.5			0.139	Catarrh, Inf. Boil 2.	[Ulcer of the womb,
16 F.	29.319	29.380	39.1	29.7	34.4	39.	28.8	34.2	0.957	NNW.	NNW.	1.5			0.045	Di. Catarrh [Conv.	[Exhaustion after
17 S.	29.637	29.602	40.8	34.2	37.5	45.2	31.5	34.8	0.931	NNW.	NNW.	1			0.013	Conv. Qu. Col. — vom.	[premature labour.
Col..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. **Observer: T. MOFFAT, M.D.**

Dec.	11 S.	29.913	29.820	33.5	33.7	33.2		27.4	0.821	SSE.	SSE.	2	0		10	0.00	Cyn. T. Men.
	12 M.	29.654	29.579	31.5	29.5	30.5		29.7	0.937	SSE.	SSE.	1.5	0		10	0.00	Neu. Epilepsy.
	13 Tu.	29.391	29.206	33.5	29.0	31.2		31.1	0.900	0	0	0	0		10	0.00	Diarrhoea.
	14 W.	29.133	29.144	41.5	33.0	37.2		37.2	0.937	E.	E.	1	0		10	0.25	Hæmop. 2, Epilepsy.
	15 Th.	29.273	29.202	36.5	29.5	33.0		30.2	0.838	N.E.	NNW.	2	1		10	0.00	
	16 F.	29.229	29.314	37.5	34.5	36.0		33.2	0.876	NNW.	NNW.	1	0		10	0.00	Influenza.
	17 S.	29.521	29.504	38.0	31.5	34.7		32.2	0.876	0	0	0	0		10	0.00	Toothache, Lumbago.

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. **Observer: J. W. JEANS, Esq.**

Dec.	11 S.	30.017		34.1	32.8	33.4		32.1	0.856	E.	ESE.	2	5		10, ci. cu.-s.	0.010	Hooping Cough.
12 M.	29.807			39.0	30.4	31.7		29.5	0.876	SE.	WSW.	0.5	10		10, ci.-cu. s. ci.-cu.		Br. Pneu. [Conv.*
13 Tu.	29.482			41.2	29.8	35.5		27.0	0.949	E.	SE.	1	1		10, ci.-cu. s.		Ty. Ulcer heart & bow.
14 W.	29.178			40.3	39.9	40.1		34.5	0.913	E.	E.	2	2		6, ci.-cu. ci.-s.		Mania, Dis. of liver &
15 Th.	29.194			31.7	31.4	33.1		30.0	0.813	NE.	NNE.	2	2		10, ci.-cu. s. ci.-s.	Sn. sl.	Hydroceph. [bowels
16 F.	29.232			31.5	32.0	31.6		32.1	1.000	ESE.	S.	0	0		8, ci.-cu. s.	Sn. sl.	
17 S.	29.522			35.4	25.4	30.4		22.8	0.916	N.	W.	0	0		10, ci.-s.	Sn. mist.	Ut. Hæm. 4 a.m.

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. **Observer: T. H. BARKER, M.D.**

Dec.	11 S.	30.078	29.986	33.6	31.0	32.3	33.0	25.4	0.752	E.N.E.	E.N.E.	1	6		7	Fr. sn.	1.00	
12 M.	29.896	29.813	35.0	29.0	32.0	37.0	32.0	28.8	0.823	S.E.	S.E.	1	0		8	Snow.	0.00	Phthisis, Struma.
13 Tu.	29.549	29.416	43.0	30.0	36.5	42.0	30.5	36.0	0.822	N.E.	N.E.	1	0		8	Frost.	0.00	Hydrothorax.
14 W.	29.227	29.228	42.5	34.0	40.2	42.5	37.5	35.2	0.839	N.E.	N.E.	2	0		7, cu. cl.		0.00	Diarrhoea.
15 Th.	29.231	29.197	31.0	31.0	32.5	32.0	27.0	31.1	0.835	N.N.E.	N.	1	6		10	Fr. sn.	0.00	Apoplexy.
16 F.	29.325	29.401	32.5	28.5	30.2	32.0	32.8	0.795	N.E.	N.E.	0.5	0		4	Fr. sn.	0.00	Di. Pleuritis, Agua.	
17 S.	29.698	29.628	37.0	20.0	28.5	35.0	21.0	28.4	0.863	N.N.W.	N.N.W.	0.5	0		7	Fr. sn.	0.00	Apoplexy (5 hours). [Croup.]

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. **Observer: C. L. PRINCE, Esq.**

Dec.	11 S.	29.813		31.	29.	30.	31.5	25.	17.	0.645	E.N.E.	NE.	3	4		10, cu.	Frost.	
12 M.	29.677			10.	31.	35.5	44.	29.	27.	0.836	E.	E.	2	2		10, ci.-s. n. cu.-s.		Inf. 2, Cho. Neu.
13 Tu.	29.205			48.	33.	40.5	49.	28.	36.6	0.859	SE.	SE.	2	3		7, ci.-s. cu. n.		Men. Ague.
14 W.	29.910			46.	38.	42.	51.	35.	36.6	0.859	F.	E.	2	5		6, various.		T. Fe.
15 Th.	29.025			33.	28.	30.6	31.	28.	23.1	0.783	NE.	N.	3	1		10, ci.-s. n.	Snow.	T. Cho. 2.
16 F.	29.083			31.	24.	27.5	36.	19.	17.8	0.715	N.	N.	1	1		2, ci.-s. n.	Snow.	DI.
17 S.	29.435			34.	18.	20.	34.	13.	15.	0.668	N.	NE.	1	0		8, ci.-s. n.		

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. **Observer: T. SHAPTER, M.D.**

Dec.	11 S.	30.026	29.951	40.9	30.	35.4	41.2	29.7	28.3	0.874	E.	E.	4	1		8, cu.		[Pneumonia.
12 M.	29.820	29.713	45.	33.2	39.1	45.	31.	33.4	0.795	S.E.	SE.	3	0		7, cu.		.01	Rigor, followed by
13 Tu.	29.412	29.235	49.	35.7	42.3	49.	35.7	34.5	0.914	E.	SE.	3	2		8, cu.		.04	Rigor, followed by
14 W.	29.123	29.195	44.	28.	36.	42.8	23.	36.6	0.859	E.	E.	3	2		8, cu.		.35	[Typhoid fever.
15 Th.	29.447	29.379	40.	30.2	35.1	40.	27.3	32.3	0.729	NNW.	N.	2	0		6, cu.	Snow.	.03	[Inflam. of liver.
16 F.	29.450	29.508	42.3	32.7	37.5	42.	28.3	34.	0.840	N.	N.	2	0		4, cu.		.00	Rigor, followed by
17 S.	29.708	29.753	43.7	29.	36.3	43.7	24.	32.5	0.916	N.	N.	3	1		3, cu.	Wind.	.02	

BYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. **Observer: B. BARROW, Esq.**

Dec.	11 S.	30.017		41.0	29.4		40.0		25.8		NE.		1.0			10		
12 M.	29.845			44.0	29.4		43.0		31.0		SE.		0.5			7		
13 Tu.	29.390			51.0	37.4		50.0		41.3		NE.		1.0			10	0.08	
14 W.	29.068			46.0	40.4		45.5		38.0		NE.		0.7			10		
15 Th.	29.200			44.0	27.4		42.0		27.9		NE.		1.0			7	Snow.	
16 F.	29.315			43.4	30.4		40.0		32.5		N.		0.5			10		
17 S.	29.669			41.0	25.9		40.0		20.8		E.		0.5					

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. **Observer: S. E. HOSKINS, M.D.**

Dec.	11 S.	29.821	29.845	39.	34.	36.5		29.5	0.764	N.E.	ESE.	1	2		8, cu.-s.			Br. DI.
12 M.	29.730	29.590	43.	33.5	38.2		35.4	0.797	S.E.	NE.	2	1		4, cu. ci.-s.				Br.
13 Tu.	29.236	29.178	50.	39.	44.5		44.8	0.867	ESE.	ESE.	3	3		6, cu. ci.-s.				Di. 2, Fe.
14 W.	28.872	28.950	48.5	45.	46.7		45.8	0.865	NE.	N.E.	3	3		6, ci.-s.				Dys.
15 Th.	29.257	29.234	41.	36.	38.5		29.	0.703	N.E.	N.W.	2.5	2.5		6, cu. ci.-s. n.				Di.
16 F.	29.340	29.389	43.	35.5	39.2		36.5	0.827	N.W.	NNW.	2	2		8, cu.-s. n.	Sleet.			Di. 2, Br.
17 S.	29.654	29.666	44.	38.5	41.2		32.	0.680	N.W.	NNW.	1	1		6, cu. ci.-s.	Sleet.			Fe. Di. Vom.

ASSOCIATION MEDICAL JOURNAL.

EDITED BY JOHN ROSE CORMACK, M.D.

No. LII.

LONDON: FRIDAY EVENING, DECEMBER 30, 1853.

NEW SERIES.

ONE THOUSAND EIGHT HUNDRED AND FIFTY-THREE.

THE close of this year is a proper occasion upon which to glance back at its principal features, and to express the grateful sense which we entertain of the friendly and indulgent manner in which our editorial endeavours have been received. It is not, however, in mere compliance with a customary routine of the season, but with sincere pleasure, that we now tender our hearty and respectful thanks to our colleagues. We commenced our labours by soliciting "co-operation, sympathy, and generous indulgence"; and with all of them we have been most liberally favoured. Though we must confess that the editorial office has proved more onerous than we expected, we must also admit that the performance of its duties has been much more agreeable than we could possibly have anticipated. In all truthfulness we can say, that these duties have been to us a source of real pleasure. The confidential intercourse which we have enjoyed during the past year with so many valued professional correspondents, of all ages, classes, and schools, we have constantly felt, and now gratefully acknowledge as in itself affording no small recompense and reward.

When we entered upon office in January last, there existed in the horizon of the ASSOCIATION many appearances of an unpropitious character, which were peculiarly depressing to our feelings, because we knew, and because the whole profession knew, that they were indications of circumstances which were calculated to alienate a large and influential body of members. We feared that the translation of the JOURNAL to London—the event out of which arose our appointment to the editorship—had been accomplished by so narrow a majority, and after so warm a debate, as to surround our course with innumerable and inevitable difficulties: and, in truth, a glance at our private correspondence of December 1852, and a retrospect of the events and controversies recorded in the Journal of that year, show us even now, that our many fears and anxieties had a justifiable foundation. Participation in these fears, however, by the well-wishers of the Association, prevented their realization, by causing not only a prompt and a general amalgamation of individual opinions, but an increased zeal on behalf of the common good. What was seen by the prophets of evil as a certain cause of disruption and severe trial has proved only a strong stimulant to closer fraternity, and a broad shield from threatened adversity. We expected—and not unreasonably—that our task was to be, for a time at least, to steer the Journal bark amid the surge and swell of contending passions; whereas, it has been far otherwise, and, with the favouring breezes of conciliation, confidence, and kindness, we have hitherto been permitted to navigate her prosperously and peacefully through quiet waters. There has been none of that adverse party spirit which was predicted in so many documents, public and private, as the precursor of constant squalls, and of a

great storm which could not fail to wreck the untried vessel and her too daring crew upon the shoals of Swansea. On the contrary, our endeavours to act faithfully have been received with nearly equal encouragement, and have met with nearly equal support, from those who belonged to the majority and to the minority in the famous division at the Oxford meeting to which we have already referred. Personally, we recognise in this confidence a cause for present gratitude, and a claim upon our greatest exertions for the future. As regards the ASSOCIATION, the spirit of co-operation to which we have referred cannot but be considered as an encouraging sign of essential unity, generous feeling, and augmented power.

These, however, are topics which must be reserved for subsequent discussion. At the close of a year and of a volume, it is more appropriate to give a summary of past events than to anticipate the questions which are looming in the horizon of the future.

Under this impression, we here present to our readers a short chronology of the most remarkable Association and medical occurrences and landmarks of 1853. This can be done without occupying much space, as the copious index which we publish to-day will enable every one to refer to the particular page of the Journal in which the events are described or commented upon.

January 7. The first number of the present weekly series of the ASSOCIATION JOURNAL appeared.

January 11. The First General Meeting of the Metropolitan Counties Branch was held at the Hanover Square Rooms.

January 28. The Journal contained articles which originated important discussions upon the following subjects.

1. Religious Tests in the Scottish Universities.
2. University and Medical Representation in Parliament.
3. Gratuitous Medical Services.
4. Injustice of the Income-tax to the medical profession.

February 18. The Journal contained the report of the honourable acquittal by a court-martial of a medical officer, from the charge of "conduct disgraceful to the character of an officer and a gentleman, in having subjected himself to the indignity of being publicly kicked": [*i.e.*, declining to fight a duel.]

March 1. Anniversary meeting of the Royal Medical and Chirurgical Society, at which a discussion and an event took place, illustrating the peculiar policy and ethics of its Council.

March 11. The first alarm regarding the new Vaccination Act was sounded in the Journal by Mr. King.

March 12. Professor Orfila died at Paris.

March 18. A deputation of the ASSOCIATION, headed by Sir Charles Hastings, waited upon Lord Palmerston to present to his lordship the draft of a Medical Reform Bill, and to request him to introduce it into Parliament as a Government measure.

March 20. Dr. Robert James Graves died at his residence in Dublin.

April 1. No. 1 of a new quarterly journal of medicine appeared in Glasgow, viz., *The Glasgow Medical Journal*.

April 7. Dr. Snow administered chloroform to the Queen in labour. This event, which was first made public through the ASSOCIATION JOURNAL (April 15), gave rise to an important discussion in our pages.

June 7. The "Irish Medical Association" was formed at Dublin upon the model of our own institution.

June 17. An article on the "Strongholds of Quackery in the Fourth Estate" appeared in the Journal; which, in the first place, led to discussions in the Journal and elsewhere; and

then to the establishment, on the 9th Dec., of a society for the suppression of immoral advertisements. The frame-work of this society is nearly completed; and its public operations will commence during the early part of next Parliamentary session.

June 24. Dr. A. P. Stewart announced through the Journal that 640 medical men of London had signed a petition to Parliament, against opening on Sundays, for gain, the Sydenham Crystal Palace. This announcement, and our comments upon it, gave rise to an important discussion in this and other Journals.

July 6. The Earl Manvers laid the foundation stone of the Medical Benevolent College at Epsom, *vice* His Royal Highness Prince Albert, who was confined by an attack of measles.

August 10 and 11. The Twenty-first Anniversary of THE ASSOCIATION was held at Swansea, under the presidency of Dr. G. G. Bird of that town. The new Journal scheme was approved: and a new Medico-Ethical Committee was appointed, composed of the old committee and all the Branch Secretaries.

August 15. The Compulsory Vaccination Act was read a third time in the House of Lords.

August 18. Mr. Bransby Blake Cooper died suddenly at the Athenæum Club.

September 7—15. The Twenty-third Anniversary of the British Association for the Advancement of Science was held at Hull, under the presidency of Mr. Hopkins.

September 30. The threatened invasion of Cholera was discussed at length, for the first time, in the Journal.

October 7. The ASSOCIATION JOURNAL published the first of its weekly Medico-Meteorological Tables.

October 10. The Physiological Section of the Medical Society of London held its first meeting.

October 18. The East Surrey Cholera Society held its first meeting, under the presidency of Dr. Willis.

October 21. The Journal contained complete Statistics of Association Membership.

November 3. The Medico-Ethical Committee of the Association and the Gratuitous Medical Services Committee of the Metropolitan Branch held a conference in London.

November 8. Dr. Ransom was blackballed at the Royal Medical and Chirurgical Society.

December 23. The Journal contained a suggestion (likely to be carried out), to establish in London a Students' Medical Society, for students of all the metropolitan schools.

To many, the perusal of the foregoing brief chronology has doubtless suggested much of what we are about to recapitulate: but nevertheless we may be allowed to give as it were a bird's eye view of what will be found, in various forms, scattered over the pages of this volume, regarding *the causes which prevent the profession of medicine from taking its proper place in public estimation.*

These causes, as we have repeatedly shown, are of two kinds, viz.: 1. *The External*, which have their origin beyond the pale of the profession; and *the Internal*, which have their sources within our own ranks.

The EXTERNAL CAUSES are as follows:—

1. Ignorance of the public, and of those who teach religion, in matters relating to natural science, to the functions of the animal body, and to the preservation of health.
2. Want of representation of the medical profession in Parliament; and, in consequence, on the one hand, the crude and oppressive medical legislation which is inflicted upon us, by new Acts; and on the other, the absence of legal protection for the qualified medical practitioner, and a positive protection for the quack.

The INTERNAL CAUSES are numerous, but the chief of them may be comprehended in the subjoined summary:—

1. Want of uniformity in the education of qualified medical practitioners, and the rivalry of Examining Boards and Medical Schools.
2. Puffing by biographies, books, and advertisements.
3. Underselling our neighbours, and rendering medical services gratuitously to persons who do not stand in need of such alms.
4. The jealousies and unprofessional practices which result from the division of the profession into rival classes, and from the multiplication of special forms of practice.

5. The want of an universally acknowledged code of Medical Ethics, and of a Court of Honour to administer such a code.

This, we admit, is a gloomy catalogue; but we are not among those who give way to despair when we contemplate it. On the contrary, in our Pandora's box, Hope is to be found at the top as well as at the bottom. It is needful, however, that we should from time to time subject ourselves to the penance of looking faithfully at the worst side of medical affairs. It is only by so doing that we can advantageously reconnoitre the battle-ground; keep a steady, watchful eye upon the position of those who oppress us; and so discipline our scattered forces, that our weapons may be always directed against the enemy, and never against our own ranks. We may well be hopeful of the future, when we reflect on the increasing symptoms of unity, revival, zeal, and reformation, which now pervade the Association. If a few succeeding years be as healthful as that which is now closing, we cannot doubt that, ere long, noble and permanent reforms shall be achieved. In the extension, organisation, and purification of the Association, now going on, exist the germinating seeds of future peace, prosperity, and power. That the good work may be carried on with success and vigour, let us unite in maintaining the ASSOCIATION JOURNAL as a free and open arena for the discussion of all subjects connected with medical polity and science; and let us, above all things, strive to make Association membership the unerring test of professional respectability.

THE NUMERICAL STRENGTH OF THE ASSOCIATION DURING 1853.

On the 21st of October, we published a carefully prepared list of the members of the ASSOCIATION, brought down to the 15th of that month. It was compiled with much labour, and corrected in proof by Branch Secretaries and others who kindly aided us in various parts of the kingdom. Some slight errors, which escaped detection, are corrected in the current number. Our object, however, in now returning to the consideration of the numerical strength of the ASSOCIATION, is not merely to rectify a few comparatively trifling mistakes, but to bring down to the close of the year our statistical account of the membership during the currency of 1853. Our colleagues in all quarters thanked us so warmly for our first attempt, and expressed so strong a desire to be kept regularly supplied with information similar to that which it contained, that we have resolved to publish, at suitable intervals, lists of ADMISSIONS, DEATHS, and RESIGNATIONS. The more abundantly information is supplied regarding the state of the ASSOCIATION, the greater interest will members take in its affairs.

On the 15th of October, there were on the list the names of 1926 members, whose subscriptions for 1853 were either paid or due. Since that date, 21 new members have entered. The names and place of residence of these 21 gentlemen are given in the following table.

I. NEW MEMBERS SINCE 15TH OCTOBER.

NAME AND RESIDENCE,	COUNTY.
ANDERSON, W. J., Esq., Welbeck Street, London	Middlesex.
BINDLOSS, James B., Esq., Prestwich	Lancashire.
COUSINS, Edw., Esq., Camden Town, London	Middlesex.
DAVIES, Benjamin, M.D., Brewer St., London	Middlesex.
ERICHSEN, John, Esq., Professor of Surgery in University College, and Surgeon to University College Hospital, Welbeck Street, London	Middlesex.

FENNELL, Edwin, Esq., Wimbledon	- Surrey.
GLEESON, Edward, Esq., Knutsford	- Cheshire.
HARDINGE, Henry, M.D., Sackville Street, London	- Middlesex.
HODSON, George, Esq., Egremont	- Lancashire.
JEANS, J. W., Esq., Grantham	- Lincolnshire.
KESTEVEN, W. B., Esq., Upper Holloway	- Middlesex.
KIRKHOUSE, —, Esq., Clydach	- Glamorgan.
LITTLEJOHN, H. D., M.D., Edinburgh	- Edinburgh.
LODGE, Charles, M.D., Camberwell	- Surrey.
MAHOOD, George, M.D., Enniskillen	- Fermanagh, Irel.
MILNER, William R., Esq., Wakefield	- Yorkshire.
NICHOLSON, John, Esq., Hexham	- Northumberland.
QUAIN, R., Esq., F.R.S., Professor of Clinical Surgery in, and Surgeon to, University College Hospital, Cavendish Sq., London	- Middlesex.
REID, R. B., Esq., Bootle	- Lancashire.
SCOTT, William, Esq., Thornely	- Durham.
WINCHESTER, W. H., Esq., London	- Middlesex.

By adding to the 1926 names formerly published the 21 now given, we have the total names on the roll for 1853, viz., 1947.

We have no means of ascertaining the number on the roll for 1852; but after it had been purged of the names of members who had died and resigned, it contained 1467 names, which were carried at 31st December to the roll of 1853. It is by contrasting the number of members which we are now about to carry over to 1854, with those which we received in January from 1852, that we can most accurately estimate the increase in the *numerical strength* of the Association, which has taken place during 1853. The augmentation in *moral power* can only be fully estimated by a scrutiny of the individual names which have been lost and gained. Resignations and deaths are of necessity in such a body as ours not always real losses, either morally or financially, though they are losses numerically. Again, resignations are sometimes caused by a renunciation of the medical profession; and not unfrequently are only temporary withdrawals, from change of residence, and other slight causes. With these remarks, we must leave the moral valuation to our colleagues, and content ourselves with placing before them a dry numerical estimate.

II. RESIGNATIONS [45] DURING 1853.*

NAME AND RESIDENCE.	COUNTY.
*ALLAN, John, M.D., Islington	- Middlesex.
*APPLETON, John G., Esq., Luton	- Bedfordshire.
*AYRES, Philip B., M.D., Wandsworth Road	- Surrey.
*BATTERSBY, R., M.D., Torquay	- Devon.
*BULLEY, F. A., Esq., Surgeon to the Hospital, Reading	- Berkshire.
*BURGESS, T. H., M.D., London	- Middlesex.
*BUTTER, John, M.D., F.R.S., Plymouth	- Devon.
CARR, William, Esq., Gomersall, near Leeds	- Yorkshire.
COAR, T. T., Esq., Oxford	- Oxfordshire.
*COCKBURN, Archibald W., M.D., Kensington	- Middlesex.
CORNISH, Francis S., Esq., Kingsbridge	- Devon.
DIXON, Thomas, Esq., Preston	- Lancashire.
*FULLERTON, John, Esq., Islington	- Middlesex.
*GARROD, Alfred B., M.D., Professor of Materia Medica in University Coll., London	- Middlesex.
GRIFFITHS, Richard, Esq., Worcester	- Worcestershire.
GRUBB, P., Esq., Warminster	- Wiltshire.
HURT, Samuel, Esq., Mansfield	- Nottinghamshire.
*HUXLEY, J. E., M.D., Medical Superintendent of the Maidstone Asylum	- Kent.
KENDRICK, J., M.D., Consulting Surgeon to the Lying-in Charity, Warrington	- Lancashire.
LAWTON, J., Esq., Chiddingfold, Godalming	- Surrey.
*LOGAN, W., Esq., Milngavie	- Stirlingshire.
*LIDDESDALE, John, Esq., Hungerford	- Berkshire.
*MASKELYNE, Henry, Esq., Faringdon	- Berkshire.
*PENNINGTON, Thomas, Esq., Liverpool	- Lancashire.
*PHILSON, William, M.D., Baldock	- Hertfordshire.

* An asterisk is prefixed to the names of new Members of 1853.

*POLLOCK, Geo. D., Esq., Assistant Surgeon to St. George's Hospital, London	- Middlesex.
RANKING, W. Harcourt, M.D., Physician to the Hospital, Norwich	- Norfolk.
RENDALL, Robert, Esq., Wadebridge	- Cornwall.
SKINNER, William, Esq., Manchester	- Lancashire.
SMART, John C., M.D., Scarborough	- Yorkshire.
SOUTHCOMB, W. T., Esq., Southmolton	- Devon.
SPETTIGUE, John, Esq., Exmouth	- Devon.
*SPICER, N. W., Esq., London	- Middlesex.
SPOONER, E. O., Esq., Blandford	- Dorset.
*SYME, James, Esq., F.R.S.E., Professor of Clinical Surgery in the University of Edinburgh	- Edinburgh.
*SYMES, James F., Esq., Axminster	- Devon.
*TAYLOR, J., Esq., Queen's Road, Bayswater	- Middlesex.
*TOVEY, Charles H., Esq., Maidstone	- Kent.
*TRAVERS, Benjamin, Esq., jun., London	- Middlesex.
TWINING, Edward, Esq., Hull	- Yorkshire.
*WALL, Cavendish, M.D., Dudmaston, Bridgnorth	- Shropshire.
WALTON, H. Haynes, Esq., Assistant-Surgeon to St. Mary's Hospital, London	- Middlesex.
WEST, Thomas, M.D., Daventry	- Northamptonsh.
WORSHIP, J. Lucas, Esq., Riverhead, Sevenoaks	- Kent.
WRIGHT, E., M.D., Shipston-on-Stour	- Worcestershire.

III. DEATHS [18] DURING 1853.*

AINSWORTH, James, Esq., Consulting Surgeon to the Royal Infirmary, Manchester	- Lancashire.
*BARLOW, W. F., Esq., Resident Medical Officer to the Westminster Hospital	- Middlesex.
BATT, Edwin Augustus, Esq., Witney	- Oxfordshire.
CHAMBERS, R., M.D., Physician to the Royal Free Hospital, London	- Middlesex.
CREASY, William, Esq., Edenbridge	- Kent.
DYER, Thomas, Esq., Ringwood	- Hampshire.
FOOKES, Robert, Esq., Stalbridge	- Dorset.
HILL, Joseph, Esq., Knottingley, Ferrybridge	- Yorkshire.
*JAMES, W., M.D., Bristol	- Gloucestershire.
MINES, William, Esq., Diss	- Norfolk.
OUTLAW, Andrew M., Esq., Wellingborough	- Northamptonsh.
*SCOTT, John, M.D., Physician to the Queen for Edinburgh	- Scotland.
SIBBALD, William, M.D., Physician to the Infirmary, Maidstone	- Kent.
STEED, George, M.D., Vice-President of the Association, Southampton	- Hampshire.
STILWELL, Arthur, M.D., Hillingdon	- Middlesex.
*TOMS, William, Esq., Kingsbridge	- Devon.
*WING, Richard, Esq., Barrow-on-the-Hill	- Leicestershire.
WINTLE, F. T., Esq., Oxford	- Oxfordshire.

During 1853, 18 members died, and 45 resigned, making the total loss 63. The following figures will make the state of the case very distinct:—

Members received from 1852	-	1467
Members entered during 1853	-	480
Total members of 1853	-	1947
Resignations and deaths	-	63
To be carried to 1854	-	1884

IT APPEARS FROM THE ABOVE STATISTICS, THAT AFTER MAKING THE REQUIRED DEDUCTIONS FOR DEATHS AND RESIGNATIONS, WE COMMENCE 1854 WITH MORE MEMBERS THAN WE HAD AT 31ST DECEMBER, 1852, BY NO LESS A NUMBER THAN 417. This is far beyond the success which was anticipated by the most sanguine friends of the new system.

On the 1st of January, a list of new members will be formally added to the roll, far exceeding the loss during 1853 by deaths and resignations. This is very encouraging: but it must not be forgotten, that the power and usefulness of the Association cannot be increased by the mere increment of numbers. Membership must be the test of respectability; and irregular practitioners must be weeded out, should any such still remain within our ranks.

A list of new members for 1854 will be published in an early number.

IV. THE NEW MEMBERS FOR 1853.

BERKSHIRE.

Barker, W. R. H., Esq. Wantage
 Bellis, Benjamin, Esq. Maidenhead
 Blomfield, T. A., Esq. Reading
 Brown, G. D., Esq., Resident
 Surgeon to the Hospital Reading
 Bulley, F. A., Esq., Surgeon
 to the Hospital Reading
 Izod, Freeman, Esq. Mortimer, Reading
 Kennard, David, Esq. Lambourne
 Lidderdale, John, Esq. Kintbury, Hungerford
 Luce, J., Esq. Swallowfield, Reading
 Martin, John, Esq. Abingdon
 Maskelyne, Henry, Esq. Faringdon
 Maurice, T. B., Esq., Sur-
 geon to the Hospital Reading
 Moxhay, William W., Esq. Reading
 Royston, Christopher, Esq. Newbury
 Vines, Charles, Esq. Reading
 Weight, Edward, Esq. Wokingham
 Wilesworth, Henry, M.D. Newbury
 Young, William, B., Esq. Reading

CHESHIRE.

Bury, J. Esq. Chester
 Gleson, Edward, Esq. Knutsford
 Godden, Joseph, Esq. Oxtou, Birkenhead
 Gorst, Robert E., Esq. Rock Ferry, Birkenhead
 Kenderdine, T. R., Esq. Macclesfield
 Maund, Henry, Esq. Chester

CORNWALL.

Brougham, Stephen, Esq. Falmouth
 Guppy, T. Stokes, Esq. Falmouth
 Littleton, Thomas, M.B. Saltash
 Moyle, M. P., Esq. Helston
 Rogers, H. J., Esq. Callington

CUMBERLAND.

Graham, John, M.D. Brampton
 Irving, William, Esq. Penrith
 Nixon, Robert, Esq. Wigton

DERBYSHIRE.

Black, Cornelius, M.D. Chesterfield
 Dix, John, Esq., House Sur-
 geon to the Infirmary Derby

DEVONSHIRE.

Balman, Thomas, M.D. Torquay
 Battersby, R., M.D. Torquay
 Bencher, Henry, Esq. Swimbridge, Barnstaple
 Bradshaw, William, Esq. Torquay
 Evans, James, Esq. Torquay
 Pollard, W., jun., Esq. Torquay
 Roper, C. H., Esq. Exeter
 Stewart, William, Esq. Torquay
 Toms, P., M.D. H.M.S. Royal George, Plymouth
 Toms, William, Esq. Kingsbridge [Died 18 Sep.]

DORSETSHIRE.

Williams, Wm. Henry, Esq. Sherbourne

DURHAM.

Clark, Hugh, M.D. Ferry Hill
 Macfarlane, Robert, M.D. Bishop Auckland
 Scott, William, Esq. Thorneley

ESSEX.

Allison, W. J., Esq. Great Hford
 Brown, Thomas, Esq. Saffron Walden
 Cary, William H., Esq. Woodford
 Collins, Frederick, M.D. Woodend
 Doherty, James, Esq. Harlow
 Mingay, Charles, Esq. Dedham
 Tones, Francis, Esq. Havering atte Bower

GLOUCESTERSHIRE.

Allard, William, Esq. Tewkesbury
 Greig, Charles, Esq. Bristol
 Harrison, John, Esq., Sur-
 geon to the Royal Infir-
 mary Bristol
 Hawkins, Thomas, Esq. Bristol
 Herapath, W. Brd., M.D.,
 Surgeon to St. Peter's
 Hospital Bristol
 James, W., M.D. Bristol [Died Oct. 11, 1853]
 Lawrence, Thomas, Esq. Bristol
 Matthews, John, M.D., late of Stow-in-the-Wold,
 new address not received
 Prior, F., Esq. Tewkesbury
 Smith, Nathaniel, Esq., Con-
 sulting Surgeon to Bristol
 Royal Infirmary
 Stanton, Clifton
 Wm. M.D., Physician
 to St. Peter's Hospital Clifton
 Williams, W.W., M.D., Super-
 intendent of the County
 Lunatic Asylum Gloucester

HAMPSHIRE.

Ball, Richard D., Esq. Heckfield
 Bentham, Samuel, Esq. Southsea
 Bishop, John, Esq. Monk Sherborne, Basingstoke
 Burnett, C. M., M.D. Alton
 Elliott, J. Henry, Esq. Andover
 Harvey Alexander, M.D. Southampton
 Hill, Robert S., Esq. Basingstoke
 Jackson, Alfred, M.B. Portsmouth
 McIntyre, John, M.D. Odiham
 Nicholls, J. Osmond, Esq. Basingstoke
 Shortland, J., Esq. Winchester
 Webb, Charles, Esq. Basingstoke

HERTFORDSHIRE.

Davies, John, M.D., Physi-
 cian to the Infirmary Hertford
 Drage, Charles, Esq. Hatfield

Garlike, T. W., Esq. Rickmansworth
 Godson, Charles, Esq. Barnet
 Philson, William, M.D. Baldock
 Woodhouse, John, Esq., Sur-
 geon to the Infirmary Hertford

HUNTINGDONSHIRE.

Hemming, J. H., Esq. Kimbolton

KENT.

Blackwell, Thomas, Esq. Cranbrook
 Brown, Frederick J., M.D. Chatham
 Gilbert, George R., Esq. Sydenham
 Gorham, John, Esq. Tunbridge
 Grayling, George, M.D. Sydenham
 Huxley, J. E., M.D., Medical
 Superintendent to County
 Lunatic Asylum Maidstone
 Ray, George, Esq. Milton, Sittingbourne
 Richardson, William, M.D. Tunbridge Wells
 Satchell, W. C., Esq. Tunbridge Wells
 Tovey, Charles H., Esq., late of Maidstone; new
 address not received
 Turner, A. F., Esq. Fort Pitt, Chatham
 Wilkinson, —, Esq. Sydenham

LANCASHIRE.

Ackerley, Richard Y., Esq. Liverpool
 Allen, Richard, Esq. Fishergate, Preston
 Bardsley, Sir Jas. L., M.D.,
 Consulting Physician to
 the Royal Infirmary Manchester

Barnes, Edward, Esq. Leyland, Preston
 Beardsley, Amos, Esq. Ulverstone
 Beever, W. W., Esq., Surgeon
 to the Royal Infirmary Manchester
 Bennett, T. W., Esq. Manchester
 Bickersteth, E. R., Esq. Liverpool
 Billing, John H., Esq. Longsight, Manchr.
 Bindloss, James B., Esq. Prestwich
 Browne, Henry, M.D., Physi-
 cian to Royal Infirmary Manchester
 Callon, William T., Esq. Liverpool
 Chadwick, S. T., M.D. Bolton-le-Moors
 Chapman, William, Esq. Garstang
 Collins, James, M.D. Liverpool
 Crighton, Joseph, M.D. Salford, Manchester
 Davis, G. M., Esq., Surgeon
 to the Northern Hospital Liverpool
 Falloon, Edward L., Esq. Everton, Liverpool
 Fletcher, F. D., Esq. Liverpool
 Fletcher, J. S., Esq. Manchester
 Galt, John, Esq. Ashton-under-Lyne
 Gaskell, Richard A., Esq. St. Helen's
 Gill, George, Esq. Liverpool
 Glazebrook, N. S., Esq. West Derby, Liverpl.
 Grindrod, John, M.D. Seaford
 Hakes, James, Esq. Liverpool
 Haldan, Bernard, Esq. Preston
 Halliday, John, Esq. Seacombe, Liverpool
 Hodgson, Thomas, Esq. Liverpool
 Hodgson, George, Esq. Egremont
 Hopwood, R., Esq. Staleybridge
 Hulme, Henry, Esq. Liverpool
 Imlach, Henry, M.D. Liverpool
 Inman, T., M.D., Physician
 to the Northern Hospital Liverpool
 Johnson, James, Esq. Kirkdale, Liverpool
 Jukes, Charles, Esq. Manchester
 Leach, Abraham, Esq. Waterhead, Manchester
 Leather, Peter W., Esq.,
 Surgeon to the Workhouse Liverpool
 Leete, A. O., Esq. Newton-le-Willows
 Lister, C., Esq., Surgeon to
 the Fever Hospital West Derby, Liverpool
 Lyon, E., M.D., Consulting
 Physician to the Royal
 Infirmary Manchester
 Masfen, G. B., Esq. Manchester
 Mather, Thomas, Esq. Ashton-in-Mackerfield
 Murray, James, M.D. Oldham
 Newcombe, Henry, Esq. Littleborough, Rochdale
 Ogden, James, M.D. Manchester
 Pendlebury, James, Esq. Bolton
 Pennington, Thomas, Esq. Liverpool
 Ramsev, Robert A., M.D. Westwood

Reed, R. B., Esq. Bootle
 Rix, Charles James, Esq. Manchester
 Seville, J. H., Esq. Mossley, Ashton-under-Lyne
 Slack, Henry W., Esq. Liverpool
 Spinks, C. N., Esq. Warrington
 Steele, Arthur B., Esq. Liverpool
 Stookes, Alexander, Esq. Liverpool
 Swift, Henry, Esq. Liverpool
 Taylor, James E., Esq. Whitworth, Rochdale
 Turner, William, Esq. Liverpool
 Vose, James R. W., M.D.,
 Physician to the Infirmary Liverpool
 Wilkin, George, M.D. Liverpool
 Woollam, George, M.D. Ashton-under-Lyne

LEICESTERSHIRE.

Benfield, T. W., Esq., Sur-
 geon to the Infirmary Leicester
 Bradshaw, J. B., Esq. Quorndon
 Buck, John, Esq., Superint.
 of the County Lunatic Asylum Leicester
 Cooper, A., Esq., Surgeon to
 the Dispensary Leicester
 Derington, William, Esq. Leicester
 Eddowes, J. H., M.D. Loughborough
 Fewkes, John M., Esq. Great Glen

Gill, John, Esq. Syston
 Hudson, Henry, Esq. Somerby
 Hunt, John, Esq. Thurnby
 Hunt, Samuel, Esq. Loughborough
 Irwin, W. C., M.D. Leicester
 Keal, John, Esq. Melton Mowbray
 Ludlow, T. S., Esq. Sapote, Hinckley
 Macaulay, T., Esq., Surgeon
 to the Infirmary Leicester
 McIlrea, Edward, Esq. Claybrook
 May, William, Esq. Leicester
 Nuttall, H., M.D. Syston
 Ody, John, M.D. Market Harborough
 Orton, William, Esq. Narborough
 Palmer, John, Esq. Loughborough
 Paterson, T. W., Esq. Ibatock
 Prosser, H. F., Esq. Leicester
 Robinson, J. P., Esq. Syston
 Shaw, G., M.D., Physician to
 the Infirmary Leicester
 Spencer, J. H., Esq. Leicestershire
 Spencer, T., Esq. Earl Shilton, Hinckley
 Stallard, J. H., Esq., Sur-
 geon to the Dispensary Leicester
 Whitechurch, Nathaniel, Esq. Melton Mowbray
 Wing, R., Esq. Burrow-on-the-Hill [Died 16 June].
 Wright, Samuel, Esq. Mount Sorrel

LINCOLNSHIRE.

Barber, E., Esq., Surgeon to
 the Infirmary Stamford
 Hewitt, John, Esq. Spalding
 Jeans, J. W., Esq. Grantham
 Leppington, H. M., Esq. Great Grimsby
 Mitchinson, G., Esq., House
 Surgeon to the Infirmary Lincoln
 Morley, John, Esq. Barton-upon-Humber
 Moxon, J. B., Esq. Brigg
 Sadler, Joseph, Esq. Winterton
 Sharples, William, Esq. Horncastle
 Snow, James, Esq., Surgeon
 to the Hospital Lincoln

MIDDLESEX.

Aikin, Charles, Esq., Southwick St., Hyde Park
 Allan, John, M.D., Physician to the Islington
 Dispensary, 23, Milner Street, Islington
 Allan, James B., M.D., Kensington
 Ansell, Henry, Esq., Surgeon to Westminster
 General Dispensary, 3, Norfolk Cres., Hyde Pk.
 Anderson, W. J., Esq., Welbeck Street, London
 Ashley, W. H., M.D., Surgeon to Kensington Dis-
 pensary, 8, Boyne Terrace, Notting Hill
 Barlow, W. F., Esq. [Died 24 June]
 Bartlett, W., Esq., Surgeon to Kensington Dis-
 pensary, Ladbrooke Lodge, Ladbrooke Sq., Notting Hl.
 Beck, Snod, M.D., Physician to the Farringdon
 General Dispensary, Langham Place
 Bell, William, M.D., 33, George St., Hanover Sq.
 Bennett, Henry, M.D., 3, Cambridge St., Hyde Pk.
 Bennett, J. Risdon, M.D., Physician to St. Thomas's
 Hospital, 15, Finsbury Square
 Bird, Golding, M.D., Assistant-Physician to Gay's
 Hospital, 48, Russell Square
 Bird, James, M.D., 27, Hyde Park Square
 Bowman, E. B., M.D., Dalston
 Bowman, W., Esq., F.R.S., Professor of Physiology
 in King's College, 3, Clifford St., Bond Street
 Bright, J. R., M.D., 12, Cambridge Sq., Hyde Pk.
 Bryant, W., Esq., Bathurst Street, Sussex Square
 Burgess, T. H., M.D., Half Moon Street, Piccadilly
 Butler, Wm., Esq., 10, Lower Islington Terrace,
 Park Road, Pentonville
 Chippendale, John, Esq., Surgeon to the Farring-
 don General Dispensary, 10, New Cavendish St.,
 Portland Place
 Clifton, Nathaniel, Esq., 38, Cross St., Islington
 Cockburn, Archibald, M.D., Kensington
 Cogwell, Chas., M.D., 3, Bernard St., Russell Sq.
 Cooper, White, Esq., Ophthalmic Surgeon to St.
 Mary's Hospital, 19, Berkeley Square
 Cotton, R. Payne, M.D., Assistant-Physician to the
 Hospital for Consumption, Clarges St., Piccadilly
 Cousins, Edward, Esq., Camden Town
 Cox, W. L., Esq., Kensal Town
 Curling, T. B., Esq., Surgeon to the London Hospi-
 tal, 37, New Broad Street
 Darling, George, M.D., 6, Russell Square
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Elam, John Edward, Esq.,Bradford
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Williams, Henry, Esq.,Llanrwst
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Scott, John, M.D., Physician to the Queen for Scotland, Edinburgh [Died May 3]
Syme, J., Esq., Professor of Clinical Surgery in the University,Edinburgh [Resigned April 22]
Adamson, John, M.D.,St. Andrews
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AUTOBIOGRAPHICAL ADVERTISING: BOTH SIDES OF THE QUESTION.

FOR several reasons, it was our intention to have deferred farther remarks upon autobiographical advertising; but as we have received some plausible objections to our opinions, we think it right before the volume closes to exhibit to our readers both sides of the question.

On the 25th of November, we wrote thus:—

"It grieves us to say that in our day the system of pamphlets and circulars adopted by Colbatch and other noted London empirics of the last century, has been revived with even more than its pristine effrontery. Members of our profession of various sorts and conditions, (excusing themselves by the paltry plea of fear of injury from the jibes and slanders of unscrupulous writers), have stooped to write and revise their autobiographies and biographies; and in some cases, regarding which we have information, to circulate by hundreds a self concocted history of self, illustrated by a portrait of self, paid for by self. It would be shallow hypocrisy in us to denounce the minor transgressions of commercial men, and make no allusion to the autobiography system which is now degrading our profession, and so widely corrupting the tone of medical society. It is, we hesitate not to say, unprofessional advertising in its most sickening, most demoralising, and most flagrant form."

We felt the justice of the appeals which were constantly being made to us to endeavour to procure at least an abatement of what we knew to be seriously lowering the profession of medicine in the estimation of the public. We therefore expressed with perfect frankness our sentiments upon the subject, in the article from which the above is quoted, as well as incidentally in recent numbers of the *ASSOCIATION JOURNAL*. Mr. TOWNSEND thinks that our remarks are "injurious"; and as he assigns reasons for so thinking, we publish his letter. His defence of autobiographical advertising is, we think, open to criticism; but in the mean time we shall leave our readers to form their own opinion of its value.

"London, 20th December, 1853.

"DEAR SIR,—You are too hard upon the autobiographers.

"Do they not inform us that they are of noble and ancient lineage; and that the ample domains of their ancestors, who came over with the Conqueror, were confiscated during the wars of the Commonwealth? Such, at least, appears to be the general history of those who have not lost vast wealth by the failure of a bank. Surely, such misfortunes entitle the nobly descended sufferers to proclaim their merits, and to appear before the public on the pages of a Medical Book of Beauty, unscathed by the injurious remarks in which you have wantonly indulged in two recent numbers of the *JOURNAL*."

"I am, etc., JACOB TOWNSEND,

"A lineal descendant of OLD DR. TOWNSEND,
the sole inventor of real Sarsaparilla."

A revised edition of this "Medical Book of Beauty" has been advertised. Shall we review it?

MR. GAY, HIS BIOGRAPHY, AND THE ROYAL FREE HOSPITAL.

WE find in the pages of a cotemporary the following correspondence, which, in justice to Mr. GAY, we think it right to republish in the *ASSOCIATION JOURNAL*. We need scarcely add, that our remarks upon autobiographies referred generally to the system now or lately in vogue, and was not directed against particular individuals. We have reason to know that our remarks have been well received, and that they have already abated some of the evils connected with a method of advertising which we felt, in

common with all our correspondents, to be a grievous scandal to the profession of medicine.

THE SECRETARY OF THE ROYAL FREE HOSPITAL TO MR. GAY.

"Royal Free Hospital, July 15, 1853.

"DEAR SIR,—In conformity with a Resolution adopted by the Committee of Management of this Hospital, I take the liberty of submitting to you the following questions:—

"1. Was the manuscript or proof of your Biography, published in a Medical paper of the date of the 30th of March last, seen by you previously to its publication?

"2. Did you supply any part of that Biography?

"3. If that Biography was published without your knowledge or sanction, have you written to the publisher to complain of any statements or allegations it contained?

"If you will favour me with an early reply I shall be obliged, and am, dear Sir, yours, etc.

"John Gay, Esq."

"W. H. FENN."

MR. GAY'S ANSWER TO THE ABOVE.

"Finsbury-place South, July 19, 1853.

"DEAR SIR.—In reply to your note of the 15th, relative to a Biography of myself which has recently appeared in a Medical periodical, I beg to make the following observations:—

"I supplied the Editor of that Journal with the simple facts of the places of my birth and education, and with such references to my own writings and other works as were required for the compilation of that Biography.

"I am not in any way responsible for the personal or general observations which it contains. I did not either supply or suggest them; I did not see them in manuscript or proof; nor was I aware of their nature prior to their publication.

"I have not complained to the Editor of any statements or allegations contained in that Biography.

"I am, yours truly, JOHN GAY."

PROSPECTS OF THE PROFESSION.

SINCE the publication of a paragraph, entitled "Prospects of the Profession," in our last number, Lord Palmerston has amicably arranged all differences with his colleagues. As a successor had not been appointed, his Lordship had never actually parted with the seals of office. The prospects of the Medical Profession are therefore, so far as can be known, exactly the same as they were before Lord Palmerston's temporary misunderstanding with the other members of the cabinet.

As regards the Medical Reform scheme of the Association, we believe that matters progress favourably; but we have not yet received an authorized version of the Bill for publication in the *JOURNAL*; nor indeed have we received any official communication from the Reform Committee. In these circumstances, members desirous to obtain information or to offer suggestions are requested to send their communications direct to the Secretary of the Committee.

BIBLIOGRAPHICAL NOTICES.

THE PHYSICIAN'S, SURGEON'S, AND GENERAL PRACTITIONER'S VISITING LIST, DIARY, ALMANACK, AND BOOK OF ENGAGEMENTS FOR 1854: upon a Plan furnished to the Publishers by F. S. HADEN, Esq. London: 1853.

THIS is a *vade mecum* of real utility: in fact, after four years' daily use of its predecessors, we feel that *Smith's Visiting List* is an absolute necessary of professional life. We have no particular wish to see anything in the book altered, except the title, which is unnecessarily clumsy. The single word "MEDICAL" would be as expressive, and far more easily pronounced than the present triple prefix to "VISITING LIST". As the blank pages which follow "Ob-

stetric and Vaccination Engagements", for MEMORANDA, must be used for very various purposes by different persons, we think it would be much better to leave the pages without any headings. We have never yet turned these pages to the uses for which they are inscribed, and, among many of whom we have inquired, we have not found one who considered that there was the slightest value in printing such headings as "Certificates given", "New Discoveries", "Extracts", "Advertisements", "Addresses of Patients and Others", "Addresses of Nurses", "Bills asked for", etc. Everybody has his own method of classifying memoranda; and the classes of memoranda required by different persons are very different. For this reason, we submit, that a space for a heading to be written on would be much better than the printed headings which we have quoted.

ACCOUNT OF CASES OF EPIDEMIC CHOLERA TREATED BY HOT WATER APPLICATIONS. By F. A. BULLEY, Surgeon to the Royal Berkshire Hospital. pp. 34. London: 1853.

MR. BULLEY describes in a very satisfactory way some cases of cholera, in which the benefit of warm applications to the surface is demonstrated. The pamphlet is highly creditable to its author, and deserves to be regarded as a good contribution to the literature of cholera therapeutics.

SURGICAL ANATOMY. By JOSEPH MACLISE, Fellow of the Royal College of Surgeons. [Second edition.] Fas. I and II. Folio. London: 1853.

THIS is the second issue of a work which has acquired great and well merited popularity, from its possessing in a high degree the recommendations of elegance, accuracy, and economy.

EDITOR'S LETTER BOX.

MEDICAL CERTIFICATES OF INSANITY.

LETTER FROM JOHN WARWICK, Esq., TO THE EDITOR.

SIR,—The new Act of Parliament "for the Regulation of the Care and Treatment of Lunatics" (16 and 17 Vict., cap. 90), enacts important changes in the matter of Medical Certificates of Insanity. Section 46 of the former Act (8 and 9 Vict., cap. 100) allowed the medical practitioner to certify the insanity of a person upon the information of a third party: it ran as follows:—"That every physician, surgeon, or apothecary, signing such certificate, shall specify therein any fact or facts (whether arising from his own observation, or from the information of any other person) upon which he has formed his opinion," etc.

Section 3 of the new Act repeals the foregoing, and substitutes the following for it:—

"Sect. 10. Every physician, surgeon, and apothecary, signing any certificate under or for the purposes of this Act, shall specify therein the facts upon which he has formed his opinion that the person to whom such certificate relates is a lunatic, an idiot, or a person of unsound mind; and distinguish in such certificate facts observed by himself from facts communicated to him by others; and no person shall be received into any registered hospital or licensed house, or as a single patient, under any certificate which purports to be founded only upon facts communicated by others."

Hence it follows that a certificate of lunacy, founded wholly upon facts communicated by a third party, will no longer authorise the reception of a lunatic into any asylum. The design of this change in the law is praiseworthy, it being intended to afford additional protection to the liberty of the subject, and some doubtful lunatics may be gainers by it; but whether the change is equally calculated to afford protection to the family and friends of a supposed lunatic, and to society at large, time will show.

It is to be presumed that our legislators, and those who directed their judgment in this matter, had sufficient reasons for making so important an alteration; and it would be instructive to know what those reasons were. Did the former regulation

on this point lead to grave abuses? Were many persons unjustly confined in asylums under it? If such was the case, the belief generally entertained by persons interested in the subject is erroneous; for it has always been reported that the Commissioners in Lunacy have met in their visitations with very few instances of sane persons improperly received into an asylum upon false or dishonest medical certificates. For my own part, I entertain serious apprehensions that the change in question will prove productive of mischievous, perhaps fatal, results.

There is a species of insanity, in the language of the day, termed *emotional*, which comprises the "moral insanity" of Dr. Prichard, and the numerous varieties of *instinctive* or *impulsive* madness. It is a form of the disease which seems to affect the passions more than the intellect, and which manifests itself rather by action than in language. It is frequently productive of phenomena which more closely resemble the effects of moral depravity than of intellectual aberration, and furnishes those painful cases in which justice is called upon to define the boundaries of human responsibility. It is mainly in its relation to this particular class of mental derangement that I consider the recent change in the law respecting medical certificates to be injudicious. No kind of insanity is so difficult to detect in its latent form—none more dangerous and distressing in its active manifestation. The objective symptoms of the malady are frequently not only sudden in their invasion, but also of brief duration; the subjective indications being faint and obscure, and often carefully and cunningly concealed. The unfortunate sufferer is usually sensible of his own mental infirmity, but retains sufficient self-control to hide it from others, and especially from strangers. Many of these *apparently rational* individuals urgently require the curative treatment which a well conducted asylum best affords; but, under the new Lunacy Act, it will be difficult in certain cases to obtain, by personal observation, sufficient indications of insanity to warrant their consignment thither.

To illustrate this difficulty, I will briefly relate the leading particulars of a few cases which have come under my notice in the course of practice.

CASE I. A married lady, of brilliant talents, and highly accomplished, became maniacal during an attack of fever. The stage of excitement lasted for a period, and then gradually subsided, leaving her apparently free from any mental lesion. After much consultation, she was set at liberty, when it became apparent that, although her intellect had recovered, her moral sense was irretrievably lost; for she at once voluntarily commenced leading a life of debauchery, and soon brought herself to an untimely end. In the midst of her wildest excesses, this lady remained so free from intellectual aberration, that no medical practitioner could have certified her fitness for confinement in an asylum, unless he could personally have become acquainted with her depraved behaviour.

CASE II. A single lady, of cultivated mind, somewhat eccentric, but showing no particular delusions, rational in conversation, and usually correct in conduct, is liable at intervals to be seized with an uncontrollable impulse to commit violence upon others. Whilst under the influence of this impulse, she will assault any person near her, and, at different times, has injured various members of her family. The paroxysm lasts only a few minutes; she then becomes calm and rational, and denies all knowledge of the preceding act. The difficulty of certifying from personal observation, in such a case, is obvious.

CASE III. A gentleman, having an hereditary predisposition to insanity, married a high minded and excellent lady, some few years older than himself. For awhile he was a devoted husband; he then grew indifferent, and subsequently commenced treating his wife with deliberate and systematic cruelty. At the same time, he became very intemperate, and indulged in all kinds of excesses. His conduct towards his wife was so notorious, that his servants and neighbours all considered him deranged; yet he laboured under no delusions, and was so rational in conversation, that a physician of eminence refused to certify him as insane, when requested to do so by his family. From personal knowledge, I have no hesitation in pronouncing this gentleman to have been a dangerous lunatic; yet the law, in its present state, would not permit his reception into an asylum.

CASE IV. A gentleman, possessing many polite attainments, a fair amount of intellectual culture, and an amiable wife, was afflicted with a diseased activity of the sexual instinct. He would make improper overtures to every female whom chance threw in his way, and, whenever an occasion offered, would gratify his filthy and depraved propensities in a manner and to an extent barely credible. Public morality and private decency

require that such a person should be confined; yet this gentleman had no positive delusions, and had such command over his language and behaviour as would have rendered the detection of his malady a very difficult matter, had he himself sought to conceal it.

CASE V. A gentleman, a few months after marriage, conceived unfounded suspicions of his wife's fidelity. Actuated by this feeling, he treated her with great harshness and severity, and frequently resorted to personal violence. Finally, he made an attempt upon her life. Yet, during this time, he conducted himself rationally towards other persons, and manifested no other delusion. Ultimately, further symptoms of insanity developed themselves, and he was placed under restraint. In this gentleman's case—by no means a solitary instance—the testimony of the wife was for a time the sole evidence of his mental malady; yet, as the law now stands, such evidence would be insufficient to procure the confinement of a person so affected.

CASE VI. A gentleman, suffering from gastric derangement, but apparently free from any mental affection, attempted self-destruction by strangulation. Fortunately, he was observed, and prevented accomplishing his purpose. Immediately afterwards, he positively denied all suicidal intention, and appeared rational and collected. A person in this state of health should undoubtedly be placed under such surveillance as an asylum alone affords; but this step could not be legally taken under the recent enactment, which virtually restricts the proof of insanity to the personal testimony of a medical practitioner.

CASE VII. A farmer, unmarried, some of whose relations were insane, contracted intemperate habits at an early age. He was naturally passionate and impulsive, and obviously deficient in stability of purpose and power of self-control. At times, he grew sullen and reserved, and carried a razor in his pocket. When about forty years of age, he began to evince a dislike to his mother, with whom he resided; and frequently made use of alarming language towards her. On one occasion, he proceeded to actual violence, dashing a loaf of bread in her face, and threatening to cut her throat. He was not intoxicated at the time. After this, he was placed in an asylum, under medical certificates which would not now be legal; but, neither at the time of his admission, nor during the four months of his detention, did he betray the slightest symptom of disordered intellect. His mind seemed ill regulated, and he was fretful and discontented; but he manifested no delusion, and always conversed and conducted himself in a rational manner. In this case, the impulse to violence was clearly induced by indulgence in spirituous liquors; but it did not proceed immediately from intoxication, and was not the result of delirium tremens.

If further illustration were needed, I could relate other examples, but I think I have quoted a sufficient number of cases to exemplify the subject-matter of this communication, and to substantiate the grounds of my misgiving touching the unfavourable operation, in certain cases of impulsive insanity, of the late changes in the law relating to medical certificates.

I am, etc. JOHN WARWICK.

Laverstock House, near Salisbury, Dec. 22nd, 1853.

MEDICAL METEOROLOGY.

LETTER FROM T. HERBERT BARKER, M.D. TO THE EDITOR.

SIR,—If any one had required me to mention a scheme of scientific investigation the least likely to excite controversy, I should have named the plan of recording *daily* meteorological observations side by side with the cases of diseases and deaths occurring on those very days, as pre-eminently *non-controversial*. It appears, however, that I am mistaken; and that, however unexpected and distasteful it may be, I am most unwillingly drawn into a controversial style of writing.

On carefully looking through Dr. Burder's last letter, I find very little additional matter to notice. If the first letter displayed a "strange kind of logic", the second shows no very great improvement in logical style. Your correspondent has somewhat shifted his ground. In his *first* letter there was no allusion whatever to the difficulty of getting precise information of the commencement of diseases; *now*, however, he advances this objection in a formal and logical style.

If your correspondent at first laid himself open to the charge of knowing but little of practical meteorology, it now appears that his practical acquaintance with diseases is as slight. There can be no doubt that the *precise day of seizure of most of the acute diseases—yea, the very hour of many of them—can be correctly and rigidly ascertained*. Where we have the slightest doubt as to the precise day, the disease is not recorded.

I deny that "changes of temperature are not fully felt within doors until many hours, or even some days, have elapsed."

Let your correspondent ask the first meteorological friend he meets, if we may not have a difference of 20°, or more, in the temperature of two consecutive days or nights; then let him ask any judicious housewife if she would have the same amount of fire kept up within doors, with the temperature as indicated by the thermometer one day at 50°, and another at 30°; or if she would use the same amount of bed-clothing for her children one night, with the temperature at 40°, or more, and another at 20°. Let him then inquire of some practical medical friend, if he had not observed every member, or a majority of the members, of large families, rise in the morning indisposed, having retired in perfect health the night before; again, if he had not frequently met with an almost sudden accession of many cases which had occurred within doors during the preceding few hours: if he had not observed numerous cases in some particular streets, in some parts of towns, in whole villages, coming on simultaneously, and within doors, during a single night; and if he had not so frequently noticed these coincidences, as to attribute them to atmospheric changes. He will, moreover, inform your correspondent that these changes will show themselves within doors, much sooner than he seems inclined to think they do. Every practical man will be familiar with so many instances of this kind, that it will be unnecessary to dwell further upon the point.

Your correspondent must bear in mind that our plan is that of *daily*, not *hourly*, observations; although occasionally, during extraordinary meteorological fluctuations, or during periods of unusual progress of disease, *hourly* observations would be desirable.

We prefer the record of *daily* observations and diseases and deaths. If your correspondent prefer *weekly means*, he may adopt that plan; he may, moreover, make our tables subservient to his own purpose, if he will take the trouble to deduce the *weekly means* from our daily observations. We have not done this, because we think the daily plan embraces all the advantages of the other, and some grand excellencies besides.

For the table of figures which your correspondent criticises, I was indebted to Dr. Moffat of Hawarden, and therefore leave that gentleman to meet the objections in his own satisfactory manner.

"Hawarden, December 24th, 1853.

"MY DEAR SIR,—It appears by a letter in the ASSOCIATION MEDICAL JOURNAL of to-day, that two errors have been discovered in a table in an article on Medical Meteorology, which appeared in that Journal a few months ago. The errors are accidental. On referring to the original tables, I find that the numbers are—epistaxes, with increase of the readings of the barometer, 37·5; with decrease, 62·5; with ozone, 50·0; with no ozone, 50·0; and toothache, with increase of the barometer readings, 19·4; with decrease of the readings, 80·6.

"It also appears that the author of the letter does not understand the wind columns of the table. I beg therefore to offer the following explanation. The numbers in these columns are not the *per centage of cases of diseases and of deaths with the directions of the wind*, they are the *number of cases for 100 times the wind was in each point of the compass*. The necessity for such an arrangement must be obvious to everybody. For example—from the following table, *without noticing the number of times the direction of the wind was from each point*, it would appear that the number of diseases with a W. wind, are the same as those with a S.E. wind; and that the number of deaths are greater with a S. than with a N. wind. But, *taking the number of times the wind was from these points into the calculation*, how different the result appears.

TABLE.

Points of the compass..	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
No. of times the wind was from each point..	40	30	20	100	100	170	160	150
Number of diseases....	0	0	0	80	0	0	80	0
Number of deaths....	60	0	0	0	70	0	0	0
Per cent., or number of diseases for 100 times the wind was.....	0	0	0	80	0	0	50	0
Per cent., or number of deaths for 100 times the wind was.....	150	0	0	0	70	0	0	0

"I trust this table will be intelligible.

I am, etc.

"Dr. Barker."

T. MOFFAT."

To conclude; I cannot admit that your correspondent has detected any error in reference to the main designs of our plan.

nor has he favoured us with any suggestions of the least value that I can discover. If he still thinks *weekly means* are the more valuable, he can procure them for himself. We do not think so, and therefore do not adopt them.

Apologizing for thus troubling you, I will merely add, that unless something very specially requires notice, I shall not again trouble you on this subject. I am, etc.,

T. HERBERT BARKER.

Bedford, 26th December, 1853.

MEDICAL STUDENTS.

LETTER TO THE EDITOR.

SIR,—As one of the oldest medical teachers in London, I hope you will permit me to express my entire sympathy in your remarks on the proposal of Dr. Golding Bird, for promoting the religious training of medical students. I can bear my testimony to the great improvement that has in this respect taken place in the metropolitan schools in the last quarter of a century, not only as regards the students, but also their teachers; ribald jests and profane allusions, which in former years occasionally debased the professorial chair, would now, if hazarded, receive rebuke rather than applause in all well-ordered institutions. As an indication of the deep change that has for years been progressing, I may state, what you, Sir, are doubtless acquainted with, that many distinguished teachers, London and provincial, are anxious to establish a Christian Medical Society, with branches in each school; and when it is known that such sentiments as are expressed by "A Medical Student of Guy's Hospital" (see p. 1138 of this Journal) extensively prevail among the body of pupils at large, we may well hope that, under the Divine blessing, the effort now being made will be crowned with success. Your readers will not, I feel assured, allow their judgment to be warped by erroneous representations as to the objects of such an association. For myself, I can conceive of no proposal more promising, not only as regards the medical student, but society at large, than one which aims at diffusing among the rising members of our influential profession, the precious truths of Christianity. That the habitual study of the revealed word of God, and a zealous desire to communicate to others a saving knowledge of the gospel of peace, is neither incompatible with the highest attainments in science, nor with the most conscientious discharge of professional duties, might be shown by many brilliant examples in this and other countries. It is thus that the studies and pursuits of our profession are consecrated; and happy will it be for mankind when the truth of the aphorism enunciated by the illustrious founder of electro-magnetism, Oersted, is recognised by every professor of the healing art, that "the man of science must ever look upon his pursuits, if he understands them rightly, as a constant exercise of religion." With much respect, I am, etc.,

F. R. S., AND A MEMBER OF THE ASSOCIATION.

Christmas Day, 1853.

MEDICAL STUDENTS:—AN EXPLANATION.

LETTER FROM FRANCIS DAVIES, ESQ., TO THE EDITOR.

SIR,—If you will have the goodness to insert this note, I do not intend to intrude myself again on your notice.

In the first place, if I have written one word that has given pain, I beg to retract it, and to express my sorrow. The purport of my letter has been so much misunderstood, that I am most anxious to explain what I really meant.

What I object to is, that Medical Students should trench on the duties of another profession, for which I contend they are wholly unfit. I never did object to their attending sedulously to their religious duties, at proper times and suitable seasons. I did not advise them to read Percival Pott or John Hunter on Sundays. I do not think these names are to be mentioned without respect: John Hunter was one of the greatest men this world ever saw; and Pott the most classical and elegant of surgical writers.

I am an old Arctic voyager; I have also served on the Coasts of Africa, and North and South America—and under too strict a disciplinarian for me ever to inculcate insubordination to existing authorities. I hold that students should implicitly obey their teachers.

I have recently received very many tracts, pamphlets, and sermons, with quantities of good wishes; but not one of the senders has had the manliness to add his name. I fancy I could not have been a very inattentive pupil: I was cotemporary with the present President of the College of Surgeons, who

deservedly stands at the top of that profession of which I am the humblest member.

I am, etc., FRANCIS DAVIES.

Parsloore, Dec. 28th, 1853.

[The previous letters of Mr. Davies will be found at pages 1090 and 1138. EDITOR.]

TO CORRESPONDENTS.

THE SECRETARIES OF THE BRANCHES will much oblige the Editor by forwarding immediately to him the names of all the officers of their respective Branches, for publication in the first number for the ensuing year.

ADDRESSES OF MEMBERS. Members who desire any change to be made in the addresses of their Journals, are earnestly desired to communicate the same, without delay, to the publisher, Mr. Honeymann. Gentlemen who propose new members ought to furnish the correct postal addresses *distinctly written*.

ECONOMY IN BINDING THE VOLUME. Members and others can be supplied with STRONG CASES, lettered on the back, for binding the volume completed by the present number. Price at the office, or through any bookseller, ONE SHILLING AND SIXPENCE. Gentlemen may for HALF-A-CROWN have a case and also their numbers bound up in it. Carriage must be paid both to and from the office. As the stock of some of the numbers is nearly gone, gentlemen who wish to complete their sets are recommended at once to purchase the numbers they require, either at the office, or through a bookseller.

ERRATA IN LIST AT p. 915, AND CHANGES OF ADDRESS.

[The words within brackets ought to be inserted.]

BANNING, T. H., M.D., late of Oswestry, has removed to Widnes, Warrington, Lancashire.

BARRATT, Joseph G., M.D., late of Ross, Herefordshire, has removed to Bath.

BEEVER, William W., Esq., Manchester, should have had *c* prefixed to his name.

BROWN, C. F., Esq., late of Bathford, Bath, has removed to Carlton Villas, Clifton.

BROWN, G. D., Esq. [Resident Surgeon to the Hospital], Reading.

BUCKLEY, A. G. H., Esq., late of Rugby, has removed to Market Harborough, Leicestershire.

BUSH, W., M.D., late of Weston-Super-Mare, has removed to Rosen Vale, Ludgvan, Penzance, Cornwall.

COLLINS, Frederick [M.D.], Wanstead, Essex.

COLLYNS, William, Esq., of Harlow, Essex, removed to Drewsteignton, near Exeter.

CORLEY, Robert R., Esq., Lanehead, Suffolk; read CARLEY, R. R., Esq., Laxfield, Framlingham, Suffolk.

COTTON, Charles, M.D., Lyme Regis, having resigned in 1852, and re-entered in 1853, ought to have had *n* prefixed to his name.

COWAN, C., M.D., [Consulting] Physician to the Hospital, Reading.

ELLIS, H. W. T., Esq., Crowle Hall, [by Bawtry] Lincolnshire.

FIELD, John J., M.D., late of Torquay, has removed to Oxford.

GODFREY, Race, Esq., late of Islington, has removed to Bath.

HARRISON, I., Esq., [formerly] Surgeon to the Dispensary, Reading.

HUGHES, [William] Esq., Llanrwst, Denbighshire.

IKIN, J. Ingham, Esq. [Lecturer on Anatomy and Physiology, Surgeon to the Hospital for Women and Children], Leeds.

IZOD, Freeman, Esq. [Mortimer], Reading.

JONES, J., Esq., Amman Iron Works [Llanelli], Carmarthen

KEMPTON, P. Tertius, Esq., late of Brierly Hill, Dudley, Worcestershire, has left England.

LANE, C. H. Butler, M.D., late of Brighton, has removed to Newton Bushel, Devon.

MASFEN, William E. [M.B.], Stafford.

O'CONNOR, William, M.D., late of George Street, Portman Square, has removed to Montague Street, Montague Square.

OGLE, William, Esq., late of Cambridge, has removed to Chester Terrace, Eaton Square, London.

PRICE, Jones, Esq., Rhyl, Flintshire, should be JONES, Price, Esq.

POWELL, R. H., M.D., late of Edwards Street, has removed to Somerset Street, Portman Square.

ROBERTS, P. N., Esq., late of Denbigh, has left that place.

SCHOLFIELD, E., M.D., Doncaster. For "Consulting Surgeon", read "Consulting Physician".

SOMERVILLE, Charles [M.D.], Walsall, Staffordshire.

TAYLOR, Robert [Esq.], Guildford Street [Surgeon to the Central London Ophthalmic Hospital].

VERTUE, [Francis] Henry, Esq., Southwold, Suffolk.

MEDICO-METEOROLOGICAL OBSERVATIONS*Taken for the Association Medical Journal.***No. XIII.—WEEK ENDING 24TH DECEMBER 1853.****WAKEFIELD.** Lat. 53.40.50 N.; Lon. 1.30.26 W.; Height of Cistern of Barometer above the Mean Sea Level, 115 feet.*Observer: W. R. MILNER, Esq.*

1853. MONTH and DAY.	Barometer.		Thermometers.								Wind.		Amount of Ozone for the Day.	Amount and Class of Cloud for the Day.	Hail, Snow, Fog, Frost, Thunder, and Lightning, &c. Zodiacal Lights, &c.	Rain in the previous Twenty-four Hours.	DISEASES.	DEATHS.
	9 A.M.	3 P.M.	Maximum for the Day in the Shade.	Minimum for the Day in the Shade.	Mean Temperature for the Day.	Maximum for the Day in the Sun.	Minimum for the Day on the Grass.	Temperature of the Dew-Point for the Day.	Degree of Humidity for the Day.	Direction.	Mean Force for the Day.	Amount of the Day.						
Dec.	in.	in.	°	°	°	°	°	°		a.m.	p.m.	0—6	am/pm	0—10		in.		
18 S.	29.569	29.520	37.6	28.7	32.1	39.2	25.5	29.5	0.900	SSE.	E.	2.0		9, cu.-s.		0.000	Spasm, Di., Sc., Fe.	
19 M.	29.648	29.595	38.1	31.7	34.9	43.7	29.	33.4	0.938	ENE.	ENE.	2.5		8, ci.-cu. cu.-s.	Frost.	0.027	Catarrh, Br. [Catarrh	[following Pneu.
20 Tu.	29.796	29.838	38.1	34.5	36.3	38.	32.	34.8	0.931	ENE.	ENE.	1.0		10, s.	Mist.	0.075	Br. Fe. Di. Cyn. T.	Effusion on the Brain,
21 W.	30.059	30.064	38.9	34.2	36.5	38.5	32.5	33.5	0.915	NNE.	NNE.	1.5		9.5, cu.-s.		0.025	Sc. Fe. Cyn. T. Catar.	Pneu. Phth. Hemop.
22 Th.	30.199	30.199	40.5	30.5	35.5	40.2	24.	33.4	0.901	NE.	NE.	2.0		9, cu.-s.		0.014	Conv. Ery. Di. Catar.	Disease of the Sto-
23 F.	29.900	29.870	43.3	31.7	37.5	49.	28.	33.7	0.864	WNW.	NE.	2.0		9, cu.-s. ci.-cu.		0.010	Pneu. Catar.	Asthma, Br. [mach
24 S.	30.180	30.217	41.	31.	36.	42.	28.2	33.5	0.884	N.	N.	1.5		8.5, cu. cu.		0.025		Dis. Heart, Lum. Abs.
Col.	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17

HAWARDEN. Lat. 53.11.0 N.; Lon. 3.2.0 W.; Height of Cistern, 260 ft. *Observer: T. MOFFAT, M.D.*

Dec.																		
18 S.	29.352	29.242	31.5	32.0	33.2			28.8	0.894	SSE.	E.	2	6	10		0.00	Toothache.	
19 M.	29.240	29.376	36.0	28.0	32.0			27.4	0.821	ENE.	ENE.	2	1	7, ci. ci.-s.		0.00	Toothache.	
20 Tu.	29.634	29.690	34.5	31.0	32.7			31.1	0.913	0	0	0	0	10		0.00	Toothache.	
21 W.	29.931	29.926	36.5	33.0	34.7			32.7	0.916	NE.	ENE.	1	0	10	[sn.	0.00		
22 Th.	30.082	30.068	36.5	33.5	35.0			31.7	0.877	NE.	NE.	1	0	10	Ha. fr.	0.00		
23 F.	29.834	29.794	40.0	33.5	36.7			31.7	0.878	NW.	NW.	1.5	0	10, ci.		0.15	Diarrhoea.	
24 S.	30.068	30.090	37.0	32.0	34.5			33.0	1.000	0	0	0	0	5, ci.-cu.	Sn. fr.	0.15	Epistaxis.	

GRANTHAM. Lat. 52.54.52 N.; Lon. 0.39.0 W.; Height of Cistern, 190 ft. *Observer: J. W. JEANS, Esq.*

Dec.																		
18 S.	29.511		33.2	32.1	32.5			30.8	0.892	SSE.	ESE.	2		8, ci.-cu. s.	So. ha.		Epis. 6 p.m., Hem.	
19 M.	29.444		35.0	28.1	31.5			25.5	0.850	ESE.	ESE.	1.5		8, ci.-cu. s.			[from serous ef-	
20 Tu.	29.680		35.0	33.1	34.1			31.5	0.905	E.	E.	0.5		9, ci.-cu. s. ci.-s.	Sl. rn.		[fusion, 3 a.m.	Convulsions.
21 W.	29.943		35.5	33.9	34.8			32.5	0.934	NE.	NE.	0.5		10, ci.-cu. s.	Sl. rn.	0.090		Disease of Brain.
22 Th.	30.074		36.4	33.1	34.7			32.3	0.942	NE.	NE.	0		10, ci.-cu. s.		0.110		
23 F.	29.767		40.8	33.1	36.9			31.5	0.894	NNW.	N.	0		8, ci.-cu. s.	Snow.	0.040		
24 S.	30.040		37.1	33.1	35.1			31.3	0.956	NNE.	SW.	0.5		4, ci.-cu.		0.010		

BEDFORD. Lat. 52.8.0 N.; Lon. 0.1.51 W.; Height of Cistern, 100 ft. *Observer: T. H. BARKER, M.D.*

Dec.																		
18 S.	29.624	29.538	31.5	28.5	30.0	35.5	29.0	28.8	0.926	ESE.	ESE.	1	4	6, ci.-cu.	Frost.	0.00		
19 M.	29.489	29.508	36.0	28.0	32.0	35.0	28.0	27.1	0.776	ESE.	ENE.	1	0	7	Frost.	0.00	Rub. Inf.	Tabes (from birth),
20 Tu.	29.721	29.764	36.0	30.0	33.0	36.5	31.0	29.1	0.822	NE.	NE.	1	4	9	Snow.	0.00	Rub. Lumbago.	[Hydroceph. (fr. birth)
21 W.	29.900	29.963	36.5	30.5	33.2	37.0	31.0	28.5	0.764	NE.	NE.	1	6	10	Snow.	0.00	Rub. 2.	Hæmoptysis.
22 Th.	30.073	30.094	37.0	31.5	34.2	37.0	32.0	28.5	0.764	NE.	NE.	2	0	10	Snow.	0.00	Rub. Br. Lumbago.	
23 F.	29.868	29.800	42.0	30.0	36.0	41.5	30.0	33.3	0.808	NW.	N.	1	6	5, cu. ci.	Frost.	0.00	Rub.	Fever, Influenza.
24 S.	30.068	30.120	38.5	30.0	34.2	39.0	30.7	31.1	0.790	NE.	NE.	2	0	7		0.00	Eucephalitis, Di.	

UCKFIELD. Lat. 50.58.59 N.; Lon. 0.5.0 E.; Height of Cistern, 180 ft. *Observer: C. L. PRINCE, Esq.*

Dec.																		
18 S.	29.416		35.	27.	31.	36.	23.	25.9	.864	SE.	SE.	2	1	0, various.	Frost.		T. Pneu. Inf.	
19 M.	29.238		36.	29.	32.5	38.	26.	22.3	.720	SE.	E.	2	1	10, ci.-s. n. cu.				Conv. (at 7 months).
20 Tu.	29.406		37.	30.	33.5	37.	28.	24.8	.926	E.	NE.	1	5	10, s. cu.			Icterus, Inf. Di.	
21 W.	29.650		37.	34.	35.5	37.	32.	31.2	.836	NE.	NE.	1	5	10, s.			Toothache.	
22 Th.	29.710		35.	31.	33.	37.	30.	31.6	.951	NE.	E.	3	6	10, ci.-s. n.			Cyn. L. Inf.	
23 F.	29.622		39.	31.	35.	40.	29.	32.5	.916	N.	N.	2	2	10, ci.-s. n.	Sn.		Bilious vom., Per-	
24 S.	29.730		38.	31.	34.5	40.	30.	31.6	.951	NE.	E.	2	3	10, ci.-s. n.	Sn.		[tussis.	

EXETER. Lat. 50.45.0 N.; Lon. 3.41.0 W.; Height of Cistern, 140 ft. *Observer: T. SHAPTER, M.D.*

Dec.																		
18 S.	29.448	29.308	45.	41.	43.	45.	41.	39.8	.927	SW.	SE.	4	9	9, n.		.67		
19 M.	29.258	29.395	44.	33.2	38.4	43.3	31.9	41.	.970	SE.	SE.	3	2	9, n.	Ice.	.78		
20 Tu.	29.714	29.752	58.2	34.5	36.3	38.2	34.6	32.	.859	E.	E.	2	0	8, n.		.08	Malign. Sore Throat.	Bronchitis.
21 W.	29.988	29.998	27.3	33.2	36.2	37.3	31.9	35.5	.917	E.	NE.	2	3	9, cu.		.00		
22 Th.	30.109	30.096	37.7	32.7	35.2	37.7	30.7	30.	.886	E.	E.	3	1	7, cu. s.		.03	Malign. Sore Throat.	
23 F.	30.066	29.950	41.	34.	37.5	41.	30.	29.5	.764	N.	N.	2	0	8, cu.		.03		
24 S.	30.148	30.180	40.	27.3	33.6	39.7	22.7	29.5	.764	NE.	NE.	2	0	6, cu.	Ice.	.00		

RYDE. Lat. 50.45.0 N.; Lon. 0.4.46 W.; Height of Cistern, 110 ft. *Observer: B. BARROW, Esq.*

Dec.																		
18 S.	29.564		41.0	27.4	36.1	40.6		30.8	0.734	SE.				10				
19 M.	29.379		39.0	34.4	37.5	38.0		37.7	0.926	NE.				10		0.10	Inflam. of bladder	
20 Tu.	29.734		40.0	30.4	35.1	38.0		33.8	0.916	NE.				10		0.20	[man.]	
21 W.	29.905		38.0	34.4	36.8	37.0		28.0	0.703	NE.				10				
22 Th.	29.915		35.0	32.4	34.1	34.0		31.3	0.836	NE.				10				
23 F.	29.929		37.0	32.4	35.1	37.0		31.0	0.838	NE.				10			Pneumonia in child,	
24 S.	30.021		38.0	36.4	36.8	37.0		31.0	0.898	NE.				9			[15 m.	

GUERNSEY. Lat. 49.33.0 N.; Lon. 2.40.0 W.; Height of Cistern, 123 ft. *Observer: S. E. HOSKINS, M.D.*

Dec.																		
18 S.	29.427	29.313	43.5	38.	40.2			38.6	.859	SE.	SSE.	4		8, cu.-ci.				
19 M.	29.206	29.273	47.5	40.	43.7			42.8	.897	SE.	SSE.	3		10, cu. n.		.138		
20 Tu.	29.581	29.630	45.	42.5	43.7			41.8	.894	ESE.	NBE.	1		6, cu. ci.-s.		.027		
21 W.	29.812	29.816	45.	41.5	43.2			38.5	.827	NE.	NBE.	2		7, cu.-s.	Hail.		Di. Feb. remit.	
22 Th.	29.896	29.909	40.	37.	38.5			34.	.840	ENE.	ENE.	3		8, cu.-s.	Hail.	.138	Br.	
23 F.	29.943	29.819	41.	36.	38.5			34.5	.825	NNW.	WNW.	1		8, cu.-s.	Sleet.		Cr.	
24 S.	29.928	29.981	41.	37.5	39.2			32.2	.737	NBE.	NBE.	3		7, cu.-s. n.	Hail, sl.	.069	Neu. Inf. Rheumat.	

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